

71-18,287

SAIN, Laurence William, 1912-  
A STUDY OF SELECTED FACTORS ASSOCIATED WITH  
HIGH SCHOOL DRIVER EDUCATION PROGRAMS IN THE  
UPPER PENINSULA OF MICHIGAN.

Michigan State University, Ph.D., 1970  
Education, curriculum development

University Microfilms, A XEROX Company, Ann Arbor, Michigan

A STUDY OF SELECTED FACTORS ASSOCIATED WITH  
HIGH SCHOOL DRIVER EDUCATION PROGRAMS  
IN THE UPPER PENINSULA OF MICHIGAN

By

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A THESIS

Submitted to  
Michigan State University  
in partial fulfillment of the requirements  
for the degree of

DOCTOR OF PHILOSOPHY

Department of Secondary Education and Curriculum

1970

## ABSTRACT

### A STUDY OF SELECTED FACTORS ASSOCIATED WITH HIGH SCHOOL DRIVER EDUCATION PROGRAMS IN THE UPPER PENINSULA OF MICHIGAN

By

Laurence William Sain

The primary purpose of this investigation was to select certain factors for study which seem to have an important bearing on the effectiveness of driver education programs and to make recommendations for changes that would result in program improvement.

The secondary purpose was to discover the weaknesses of the existing programs and to compile information that would be valuable to both high schools and institutions of higher education for the improvement of driver education programs in the Upper Peninsula of Michigan.

In order to accomplish these goals it was decided to use a three-fold approach which included a study of the school programs, teacher qualifications, and the student driver.

Of the fifty-seven high schools in the region, fifty-five participated in the study. Driver education

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instructors from all of these schools were interviewed. Students from all of these schools who had satisfactorily completed the driver education course, had become licensed drivers, and established a driving record were interviewed and tested as to their driving record, knowledge, and personal attitudes. These interviews and tests were used to evaluate the effectiveness of the driver education programs in the schools.

One hundred thirteen teachers and 1,264 students participated. This represented 98 per cent of the driver education teachers and 96 per cent of the high schools engaged in driver education in the Upper Peninsula of Michigan.

From the questionnaires for program evaluation the following information was recorded and after comparison with national standards these recommendations were made:

1. Recommendation: Increase driver education requirements to forty-five clock hours of classroom and eight clock hours of laboratory instruction.

Most schools (74 per cent) provide only minimum hours of instruction as required by the state for reimbursement.

2. Recommendation: Encourage all high schools to correlate laboratory and classroom instruction.

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About one-half (51 per cent) of the schools correlate laboratory and classroom instruction.

3. Recommendation: Require schools to keep programs up-dated through use of current material<sup>1</sup>

Ninety per cent of the schools were using textbooks and materials that were more than five years old.

4. Recommendation: Encourage teachers and students to actively participate in community traffic safety activities.

Less than 20 per cent of the teachers or programs are involved in community related safety activities.

5. Recommendation: Require schools to offer the program during the regular school day for a full semester.

About one-half of the schools do not offer driver education during the regular school day for a full semester.

6. Recommendation: Encourage schools to utilize resource people and related information.

About one-fourth of the programs do not make use of resource persons and related information.

7. Recommendation: Urge schools to investigate the possibility of cooperatively developing the use of program aides.

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Practically no schools use simulation, range programs, or programmed instruction for program enrichment.

8. Recommendation: Encourage schools, financially if possible, to carry out follow-up studies of their graduates.

No schools were making follow-up studies of their driver education graduates.

9. Recommendation: Urge schools to provide for parent-teacher consultation on student progress.

Parents are not involved and are poorly informed on student progress.

10. Recommendation: Limit class size to allow opportunities for group discussion and interaction.

Classroom instruction in many schools is carried on in very large groups.

The interviews on teacher qualifications revealed the following information:

1. 63.7 per cent of the teachers had minimum qualifications.
2. 30.1 per cent of the teachers had average qualifications.
3. 6.2 per cent of the teachers had higher qualifications.
4. 4.4 per cent of the teachers were teaching driver education full time.

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5. 95.6 per cent of the teachers were teaching driver education part time.

#### Recommendations

1. Provide additional state funds for operation of driver education programs including teacher reimbursement.
2. Encourage universities to offer more than the basic courses for teacher preparation in driver education.
3. Encourage universities and the State Department of Education to provide more in-service training programs.

The interviews, tests and inventories revealed the following information on students:

1. Students had only a fair knowledge of traffic laws, rules, and regulations.
2. 16.5 per cent of the students had violation records.
3. 21.1 per cent of the students had accident records.
4. 94.5 per cent of the students believed that driver education had helped them to become better drivers.
5. 14.1 per cent of the students failed to develop proper attitudes.

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Recommendations

1. More emphasis be placed on learning and understanding laws, rules, and regulations.
2. More emphasis be placed on accident causation and prevention.
3. More stress be placed on group discussion and interaction for the development of better attitudes.



## ACKNOWLEDGMENTS

To Dr. William A. Mann, my major advisor, my friend, and Chairman of my Guidance Committee.

To the other members of my Guidance Committee:  
Dr. Charles Blackman, Professor Gordon Sheehe, and  
Dr. James Costar.

To the Northern Michigan University Board of Control and the Administration for encouragement by granting a sabbatical leave for advanced graduate study.

To the superintendents, teachers and students who cooperated with me in this study.

Finally to my wife, Olive, whose patience, assistance, confidence, and encouragement were a source of inspiration enabling me to finish this thesis.

L. W. S.

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## CHAPTER I

### INTRODUCTION

#### Rationale

With the ever increasing concern for traffic safety; as evidenced by the comments of the general public, law enforcement officials, automobile manufacturers, insurance company officials, educators, and officials of the state and national governments; it behooves us to reassess and re-evaluate what is already being done in the name of traffic safety and driver education.

As a result of this, the controversy stirred up by Ralph Nader's Book, Unsafe At Any Speed,<sup>1</sup> and some of our national legislators' congressional speeches, the Highway Safety Act of 1966 was enacted as Public Law 89-564. One of the requirements of this law is that each state must:

. . . provide for comprehensive driver training programs, including (1) the initiation of a state program for driver education in the school system or for a significant expansion and improvement of such a program already in existence, to be administered by appropriate school officials under the governor as set forth in sub-paragraph (a) of this paragraph; (2) the training of qualified school instructors and their certification; (3) appropriate regulation of other

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<sup>1</sup>Ralph Nader, Unsafe At Any Speed (New York: Pocket Books, 1966).

driver training schools and the certification of their instructors; (4) adult driver training programs and programs for the retraining of selected drivers; and (5) adequate research, development and procurement of practice driving facilities, simulators, and other similar teaching aids for both school and other driver training use.<sup>2</sup>

Michigan has had, since 1956, compulsory driver education for all new drivers under eighteen years of age and permissive county driver improvement schools. Because the Federal Highway Safety Act specifically states, "for significant expansion and improvement of such a program already in existence," many educators are seeking ways and means to do so. The question exists, what improvements are needed? Some point to the low teacher qualification requirement and suggest that the raising of standards for approval would be a positive step in the right direction as this should insure a better understanding of highway traffic safety problems and could result in the development of more comprehensive driver education programs in our schools. Other educators point to the shocking fact that teenagers, who should be our better drivers, have the greatest percentage of our fatal accidents among the various age groups. They appear to believe that more time should be required for maturation and the development of driving skills. There are still others who are concerned with the attitudes of drivers on our highways. It is

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<sup>2</sup>National Highway Safety Act of 1966, Public Law 89-564. Congressional Record, Vol. CXII (Washington, D.C.: Congressional Library, 1966).

their belief that driver and traffic safety education should begin at an earlier age and be spread over a longer period of time in order that there be more opportunity for development of good driver attitudes.

Although Michigan was one of the pioneer states to institute compulsory driver education in 1956, little had been done by the State until 1966 to improve the quality of teacher certification or the programs of the various schools. The initial program was established very hurriedly due to the public and legislative concern for the ever increasing mayhem and death on Michigan highways. As a result of this sudden implementation of the program it took on the aspect of a "crash program" which has never been thoroughly relinquished even after a decade of operation. One phase of the "crash program" was the immediate necessity for approval of teachers to carry it out. This resulted in very low standards (a certified secondary teacher with two semester hours of preparation in driver education) for teacher approval. It also provided a "grandfather clause" which allowed teachers who had had forty clock hours of instruction under the American Automobile Association (no official college credit) to become approved driver education instructors.

Because of these sub-standard qualifications many administrators and so-called driver education teachers have looked upon it as a "moon-lighting" job to supplement

the teacher's salary. In many schools it is considered a sub-standard subject, taught completely outside of the daily school program, and receives little or no academic credit. Also due to the sub-standard qualifications, administrators who were justifiably attempting to economize, were able to employ poorly qualified teachers at low salary rates and still meet minimum state requirements and qualify for state reimbursement. This did very little to create interest or improvement and generally resulted in only a minimum program.

Because the death rate dropped during the following years, whether or not it was due to driver education or other laws and regulations enacted at the same legislative session, there appeared to be a "laissez-faire" policy adopted until 1966. At this time approval requirements were increased to four semester hours by July 1, 1967, six semester hours by July 1, 1968, and to eight semester hours by July 1, 1972. This does not meet the requirements of the North Central Association of Secondary Schools and Colleges, a minor of twenty semester hours, for teaching an academic subject in the curriculum of an approved high school. It is also surpassed by many other states who watched Michigan as an experiment and then entered the field at a later date. It is probable that the state requirements will be increased eventually to at least a minor in driver education and what is now approval will become certification. However, one provision which is



still included in the new certification code for teacher approval tends to serve as a hampering effect. That is the continuation of the "grandfather clause" which allows those teachers already engaged in teaching driver education to continue even with the minimum qualifications of 1956. Perhaps continued pressure of the state and national organizations plus that of professional educators can assist in hastening the raising of the standards and the elimination of the "grandfather clause."

A recent study made by the staff of the Michigan State University Highway Traffic Safety Center, How to Improve Driver Education in Michigan,<sup>3</sup> found among many other weaknesses, that teacher qualifications were inadequate, that laboratory and classroom sessions were not taught concurrently, that most schools were only meeting minimum requirements for reimbursement, and that classes were too large to encourage group discussions and interaction which could assist in the development of good attitudes.

While the Michigan State University study is a very comprehensive analysis of how to improve driver education in Michigan, it was the belief of the investigator that as it was conducted in such breadth, covering

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<sup>3</sup>Michigan State University Highway Traffic Safety Center, How to Improve Driver Education in Michigan (East Lansing, Mich.: Highway Traffic Safety Center, Michigan State University, 1966).

the entire state with only a sampling of each area, that it might fail to present a true picture of the programs taught in the Upper Peninsula of Michigan.

The Upper Peninsula of Michigan is unique in many ways as compared to the metropolitan areas as well as the suburban areas of the state and as a result some of its problems are different from those which are representative of the state as a whole. Thus different methods and procedures for program improvement might be required.

Some of the differences which could be important factors in determining what should be considered are: many small high schools, mostly rural communities, greater distances from resource centers, differences in driving conditions such as lack of freeways and traffic congestion, climatic conditions, and school finances.

The Upper Peninsula is noted for its number of small high schools resulting in high instructional cost per pupil because of the low teacher-pupil ratio. This could be one of the factors responsible for the employment of teaching personnel with minimum qualifications and programs which meet only the minimum requirements.

The differences in traffic conditions are directly related to being mostly rural communities. The Upper Peninsula student learns to drive under situations that are not representative of the state and nation as a whole. He learns on streets and highways that are not heavily

congested, has little experience with one-way streets or expressways, and has not had sufficient experience with the various traffic signs and controls common in metropolitan areas. Yet, after he is licensed, he is expected to be able to drive anywhere in the state or nation as a qualified driver.

The long distance from resource centers is another problem of the area. It makes it difficult for interested teachers to improve themselves by taking additional courses and attending in-service training programs to up-date themselves in the field, it poses problems for higher educational institutions to offer field courses as the distances create a hardship for the instructor as well as students, and it also results in classes too small to be economically feasible. Many of the high school programs are in operation during the summer thus keeping the teacher occupied when advanced courses are being offered at various institutions of higher education.

Climatic conditions affect the programs. Some schools offer no winter programs except classroom, thus denying the students an opportunity to learn to drive under adverse conditions which they must face as licensed drivers. Due to heavy snows range and off-the-street programs have limited use unless teachers are properly taught and motivated as to their use.

Finances have been mentioned briefly but perhaps further clarification is necessary. Smaller schools result in smaller budgets for each area of instruction and many schools attempt to present the course as economically as possible which results in low teacher reimbursement. The well-qualified professional and interested driver education teacher is not attracted to accept such a position when more challenging and remunerative opportunities are available. As a result only the "moonlighter" is available. This generally results in low standards and poor quality instruction.

#### Purpose

It was the purpose of this study to investigate selected factors recognized in the Michigan State University study, which seem to affect the quality of driver education programs in the high schools of the Upper Peninsula of Michigan. Although it may appear that the study takes a negative approach to the problem by studying weaknesses rather than strengths, it was believed that recommendations for improvements could only be made if the probable weaknesses were identified and investigated.

It was already known, because of the author's close association with teachers and programs in the area, that there was a great diversity in the manner in which various school programs were presented. These differences stemmed from many sources, i.e., administrative procedures, school

size, facilities, finances, teacher qualification and availability, local prejudices, and environment. It remained to be determined which of these diverse procedures exhibited either strength or weaknesses and thus pave the way for suggestions for improvement.

#### Statement of the Problem

In viewing the traffic safety problems of the seventies as compared to the middle fifties many changes have occurred. Changes which have not been met by present driver education programs. Many of the high schools are still operating programs in the same manner as at their first inception. Some of the changes which must be considered in recognizing the need for program improvement are:

1. The driving task has become more complex because of higher speed, kinds of highways, more drivers, and more vehicles.
2. More students desire driver education because "wheels" are now a status symbol in our affluent society with the two-car family.
3. New methods and techniques for teaching driver education have been developed.
4. State reimbursement has not kept pace with the increase in teacher salaries.
5. Broader curriculums present scheduling problems.

In order to recognize and identify the causes for some of the weaknesses and to be able to make suggestions for improvement it was decided to use a three-fold approach. The three-fold approach would include a study of: (1) the school program, (2) teacher qualifications, and (3) the student driver.

The school programs were to be surveyed and the results compared to national standards of policies and practices established by recognized leaders in the field of driver and traffic safety education.

Teacher qualifications were determined through a questionnaire which showed the amount of professional preparation and interest in the field of driver and traffic safety education. These results were compared to the amount of preparation required to teach in other academic fields. It was expected that better qualified teachers would present better programs that would produce more competent and knowledgeable traffic citizens.

The students were evaluated as the product of the program. They were interviewed as to their driving records and experience, tested for knowledge, and inventoried as to their personal attitudes. These results were used to determine the effectiveness of the programs and to assist in pointing out the various weaknesses.

### Significance of the Study

Michigan's driver education program, as originally conceived, has been recognized by educators, parents, and traffic safety specialists as one of the best in the nation. It has served as a model for many other states in establishing their programs. It was enacted a full decade before the enactment of the Federal Highway Safety Act of 1966 which made driver education the obligation of every state in the union. It established a legal basis for driver education, set minimum requirements, and provided for reimbursement to the schools for the students participating. However, those who are interested in the program and are associated with it realize that there is need for improvement. It is only through continuous study and research that improvement can occur. No program can rest on its laurels but must be constantly reevaluated through research and an application made of its findings. Technological and societal changes occur at a rapid pace and every program must be prepared to fulfill the needs created by these changes.

No one has ever been able to state that the thirty clock hours of classroom instruction and six hours of laboratory instruction (established as minimum standards) are sufficient to prepare drivers adequately for the complicated task facing them on our streets and highways. A study which takes an unbiased look at programs and

compares them to recognized national standards should be beneficial in assisting in program improvement.

It has long been the policy of the schools, administrators, and state certification agencies to accept the requirements of the North Central Association, which approves or disapproves schools and their programs in this geographical area, as the minimum requirements for the teaching of any academic subject. The minimum requirement at present for teaching such a subject is a teaching minor of twenty semester hours in that field. The requirements for initial approval to teach driver education in the State of Michigan have long violated this requirement, thus relegating the subject to that of an extra-curricular activity or at most a sub-standard subject.

The Michigan Driver Education Association, the American Driver and Traffic Safety Education Association, and many professional educators have been repeatedly recommending the raising of certification standards for driver education teachers as one means to assist in the improvement of high school programs. However, as no satisfactory evidence could be found to enable them to substantiate their claims, it was felt that such a study as this could furnish more information in this area. Also, it could be used to influence certification agencies to recognize the need for well-qualified teachers in driver education and would result in the raising of



standards and the elimination of the "grandfather clause" at the earliest possible moment.

The information gathered in this study should be valuable to all institutions of higher education, especially Northern Michigan University which is the chief source of supply of driver education instructors in the geographical area studied, for the purpose of improving and modifying their teacher-preparation programs and services which should result in the improvement of high school driver education teachers and their programs.

#### Delimitations

It was recognized by the author that the results of this study could not be treated statistically because of the uncontrolled variables which would affect its validity. Such uncontrolled variables as:

1. Varying support from administration.
2. Lack of facilities and equipment.
3. Size of the school systems.
4. School and local environment.
5. Attitudes of parents and the general public.
6. Teacher's personal attitudes and performance.
7. Availability of well-qualified teachers.
8. School finances.
9. Lack of a clear definition of the driving task.

It is possible that there might have been other hidden variables which would have an even greater effect on the results.

While in many instances a well-qualified teacher through his initiative, ambition and foresight will be able to overcome many of these variables; it was the belief of the author that the majority being minimally qualified teachers, would lack the knowledge and incentive to do so.

In order to narrow the scope and attempt to make it more meaningful the study:

1. Was confined to only those schools operating driver education programs in the Upper Peninsula of Michigan.
2. Involved only those teachers who were participating in the complete program (classroom and laboratory).
3. Was concerned with the professional preparation of the teachers and their professional interest in driver education.
4. Was concerned with the high school program as to how it compared with national standards and the type of product that it produced.
5. Involved a sampling of the students from each high school who had satisfactorily completed the driver education course and had established a driving record of not more than two years.

These were either junior or senior high school students.

6. Was concerned with the student's driving record as to months of driving experience, miles driven, violations, and accidents.
7. Was concerned with the student's attitude toward driver education, his knowledge of driving regulations, and his personal attitudes.

#### Definition of Terms

In order that a better understanding of the study may be realized the following terms are identified by definition as they were used in this study:

Teacher.--The person or persons responsible for both phases of the driver education program in the school program.

Program.--The complete driver education program including both classroom and laboratory instruction.

Teacher-Preparation.--The amount of formal instruction in driver education or related studies that a teacher has had to prepare himself for approval or certification to engage in the teaching of driver education.

Formal Instruction.--Preparation (college credit) in driver education, traffic safety, and other related fields of instruction.

Minimum Qualifications.--That amount of formal instruction originally necessary, now protected by the "grandfather clause," to obtain initial approval from the State Department of Education to teach driver education. (Two to four semester hours or less.)

Average Qualifications.--Those requirements now necessary under the present improvement program for initial approval. (Six to eight semester hours.)

Higher Qualifications.--That amount of formal instruction over and above the eight semester hour requirement, such as a minor or more.

Student.--One who has successfully completed a driver education course, has become a licensed driver, has established a driving record, and is still in high school.

Driving Record.--The record that the student has established as a licensed driver.

Approval.--Permission from the State Department of Education to teach driver education in Michigan.

Certification.--Requires at least a teaching minor of twenty semester hours in the area to be taught.

Correlation.--The procedure of teaching both phases of the driver education program concurrently.

Maturation.--The process of maturing or developing into a more nearly finished product. As teaching the course over a longer period of time to allow for this development.

## CHAPTER II

### REVIEW OF LITERATURE

The review of literature relevant to this study was confined to that which had been published during the past decade. It was necessary to consider literature which dealt with the various aspects of the driver education program which were related to the problem as well as with views on educational standards in general. This review included such topics as program standards, teacher approval and certification, student evaluation, attitudes, maturation, and other related information.

#### Literature on Program Standards

One of the best references discovered for driver education program standards, their improvement and development, was published by the National Commission on Safety Education. This was the result of the Fourth National Conference on Driver Education which brought together many of the nation's foremost driver educators. It does not attempt to establish rigid rules and regulations for a standardized guide but rather sets guidelines for the teacher to follow as stated in its introduction:

This report reflects the result of a search for more effective processes to enhance the growth of driver education. Rather than prescribe static forms and rigid criteria, the Conference endeavored to evolve guidelines that will stimulate imaginative practices as driver education develops in response to the technological discoveries of the future.<sup>1</sup>

It sets up purposes, suggests criteria for learning experiences, develops organization for instruction, discusses methods and techniques of instruction, recommends the use of innovations and traffic safety activities, and comments on materials and equipment. Although it does all of this it still leaves the way clear for teachers to demonstrate their own initiative, versatility, and ingenuity to accomplish the same. It does, however, recommend certain minimum standards as to the number of clock hours for both classroom and laboratory instruction. It further recommends equivalencies for the use of simulators, range programs, academic credit, student selection, grade placement, and licensing. In fact, it may be considered as the best guide available in program standards as it is the thinking of specialists and is closely followed by all recently published teacher-preparation textbooks, such as

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<sup>1</sup>National Commission on Safety Education, Policies and Practices for Driver Education and Traffic Safety (Washington, D.C.: National Education Association, 1964).

the one by Aaron and Strasser<sup>2</sup> and another by the American Automobile Association.<sup>3</sup>

Literature on Teacher Certification  
in General

The literature on teacher certification can be both confusing and enlightening in that most writers on the subject are not always in agreement as to the amount of formal teacher preparation necessary for the efficient teaching of any one subject. This is not only true of authors but of institutions of higher learning and state certification agencies as well.

James B. Conant in his book, The Education of American Teachers,<sup>4</sup> points out that certification requirements vary in all of the states and are constantly in a state of revision and what is true today may not be true several years hence. He further contends that professors of various subject fields are jealous of their fields and exert much pressure on certification requirements in their favored fields. Conant recommends that teachers be

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<sup>2</sup>James E. Aaron and Marland K. Strasser, Driver and Traffic Safety Education (New York: MacMillan Co., 1966).

<sup>3</sup>American Automobile Association, Teaching Driver and Traffic Safety Education (New York: McGraw-Hill Book Co., 1965).

<sup>4</sup>James B. Conant, The Education of American Teachers (New York: McGraw-Hill Book Co., 1963).



certified primarily as elementary or secondary teachers but that the teacher should be assigned only in that area for which he has prepared himself satisfactorily. He believes that a teacher cannot teach efficiently in several fields as the result of only a baccalaureate degree. He is concerned with the lack of opportunity to do student teaching in more than one area, thus resulting in a poorly prepared teacher. Conant believes that universities and colleges should have "freedom" in the certification of teachers but must also accept "responsibility" for the quality of their products. Although Conant is one of education's severest critics, he has done considerable investigation and observation of higher education in the United States and his views must be considered in the ever-changing educational process.

James D. Koerner<sup>5</sup> is concerned with the limited amount of actual experience and knowledge required for certification in all fields of teaching. He feels that most teachers lack the essential background necessary because of requiring, what he labels, unessential education courses. He presents factual evidence from various college curriculums which show that from 35 to 50 per cent of credit for baccalaureate degrees is derived from education courses and practically no liberal arts

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<sup>5</sup>James D. Koerner, The Miseducation of American Teachers (Boston: Houghton Mifflin Co., 1962).

credit is required for advanced graduate degrees in education. Here again is shown the concern for more preparation in the specialized field.

In the summary of the book, Improving Teacher Education in the United States, published by Phi Delta Kappa, Don Davies, Executive Secretary of the National Commission on Teacher Education and Professional Standards, lists four prospects for improvement of teacher certification. Among them is one for "more relevant preparation." He further clarifies it by stating:

Effective subject-matter preparation is another important side of the training-relevance question. Morris Cogan demonstrates the importance of rejecting the cliché's about "good solid majors" and "excellence" and searching for better questions and better answers to old questions about subject-matter preparation.<sup>6</sup>

This, too tends to re-enforce the recommendations of more and better preparation for all fields of teacher certification.

Lucian B. Kinney discusses the lack of uniformity in certification practices throughout the states. He also discusses the difference between approval and certification. He describes approval as an emergency, temporary status until certification requirements are met. He further points out that this can be a continuing process until there are sufficient numbers of certified teachers

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<sup>6</sup>Stanley Elam, Improving Teacher Education in the United States (Bloomington, Ind.: Phi Delta Kappa, 1967).

to make approval unnecessary. In his final chapter titled, "Certification and Professional Autonomy," he champions the cause that a profession is responsible for the quality of its membership. He compares the teaching profession to that of the medical and legal professions which set their own standards rather than having a state board or other agency to determine what standards should be. He further states:

. . . if we are convinced of the seriousness of the situation then it is our professional responsibility to convince the public of the dangers presented by the unqualified teacher in the classroom and explain the measures to exclude them. The task is one of education, first with the profession, and then with the public.

Before embarking on any ambitious project to establish its control over the quality of its membership, the professional membership in education must itself be convinced, and be prepared to convince the public, that it is better to leave a classroom unstaffed than to employ a teacher with substandard preparation. If this is not the case, no process of licensure is needed because no profession exists. There is no backdoor entry to a genuine profession.<sup>7</sup>

Thus Kinney places the blame back on the profession itself for substandard qualifications and like Conant stresses "freedom" and "responsibility" of the profession.

In the Journal of Research and Development in Education, Joseph C. Bledsoe of the University of Georgia is concerned with the personality characteristics and teaching performance of beginning teachers in relationship to certification status. He has found that regardless

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<sup>7</sup>Lucian B. Kinney, Certification in Education (Englewood Cliffs, N.J.: Prentice-Hall, 1964).

of certification standards beginning teachers look to their immediate superior, the principal, for assistance and direction. Thus, the success or failure of communications between these two individuals has much to do with the effectiveness of the educational programs. He points out that beginning teachers often view the principal as the key person in solving school problems and also as the one who determines what and how a subject is taught. He states that the principal's behavior represents the full range of the continuum and therefore can have an adverse effect as well as a beneficial one or it can lie somewhere in between. He writes as follows:

Teachers sought help from the Principal with instructional problems relating to classroom organization and subject content. A conflict of philosophy, a lack of effective two-way communication, a lack of time for providing help, and a lack of knowledge and skill in instructional leadership stood in the way of securing as much help as desired in problem areas.<sup>8</sup>

This would appear to indicate that principals should be more knowledgeable of the content and problems of the various fields offered within their high school curriculum.

From the same journal, Iva D. Brown and Fred W. Brown of the University of Southern Mississippi state:  
"Reliable knowledge concerning teacher effectiveness is limited and fully valid methods of measuring teacher

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<sup>8</sup>Joseph C. Bledsoe, "Personality Characteristics and Teaching Performance of Beginning Teachers as Related to Certification Status," Journal of Research and Development in Education, II, No. 1 (Fall, 1968), 44.

competencies are yet to be devised."<sup>9</sup> Even though they make this statement they appear to feel that a study made by Combs in 1965 presents some valuable information on teacher effectiveness in his five major areas of perceptual organization of a good teacher:

1. Rich, extensive, and available perceptions about his subject field.
2. Actual perceptions about what people are like.
3. Perceptions of self leading to adequacy.
4. Accurate perceptions about the purpose and process of learning.
5. Personal perception about appropriate methods for carrying out his purpose.<sup>10</sup>

Of these Combs found that pupils ranked being knowledgeable as the most important. Again this appears to reenforce the theme of more formal teacher-preparation.

Gardner, in his book, Excellence, comments on standards. He acknowledges that there are adverse as well as favorable standards that affect a teacher's effectiveness or excellence. He states:

Standards! That is a word for every American to write on his bulletin board. We must face the fact that there are a good many things in our character and in our national life which are inimical to standards--laziness, complacency, the desire for a fast buck, the American fondness for shortcuts, reluctance to criticize slackness, to name only a few.

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<sup>9</sup>Iva D. Brown and Fred W. Brown, "Variations on a Theme by Combs: The Professional Education of Teachers," Journal of Research and Development in Education, II, No. 1 (Fall, 1968), 50.

<sup>10</sup>Ibid.

Every American knows in his heart that we must sooner or later come to terms with these failings.<sup>11</sup>

One could interpret from this that Gardner is concerned with personal attitudes of the individual regardless of whether he be a teacher, craftsman, politician, or what have you.

Louis Filler, in his treatise on Horace Mann on the Crises of Education, appears to believe that Mann established some valuable criteria for the requisites of a good teacher which are:

1. Knowledge--thorough, critical and always at command.
2. Art of teaching or aptness to teach. (How to teach.)
3. Experience.
4. Good behavior or citizenship.<sup>12</sup>

This would tend to infer that standards had not changed very rapidly and would signify that knowledge is still of considerable importance.

Howard Pollock, in The Trouble With Our Schools, condemns unqualified instructors. He writes: "Unqualified instructors teaching unfamiliar subjects is one of our major troubles."<sup>13</sup>

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<sup>11</sup>John W. Gardner, Excellence (Evanston, Ill.: Harper and Row, 1961), pp. 158-59.

<sup>12</sup>Louis Filler, Horace Mann on the Crises of Education (Antioch Press, 1965), pp. 69-75.

<sup>13</sup>Howard X. Pollock, The Trouble With Our Schools (New York: Vantage Press, 1964), p. 259.

Frederick Mayer, in The Perspective for Education, states:

The fundamental problem of Education is the problem of life. Education, to use the German term, depends upon Lebensanschauung (life view) more than on Weltanschauung (world view). The task of the teacher is not merely to transmit knowledge, but to create an awareness of the possibilities of life.<sup>14</sup>

This statement could be used as a strong argument for an effective driver education program.

Mayer further continues in The Goals of Education:

The deadly danger in teaching is routine. Routine can be conquered only as we grow and develop in insight. A mediocre instructor can make any subject dull. A great teacher can make the most minute details significant.<sup>15</sup>

In Professional Preparation, prepared by the National Education Association, it is contended that:

A responsible profession concerns itself with the standards of service its members provide. It must assume the responsibility for protecting the public against the incompetent practitioners.<sup>16</sup>

In a series of papers prepared by the National Commission on Teacher Education and Professional Standards

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<sup>14</sup>Frederick Mayer, The New Perspective for Education (Washington, D.C.: Public Affairs Press, 1962), pp. 137-39.

<sup>15</sup>Frederick Mayer, The Goals of Education (Washington, D.C.: Public Affairs Press, 1960), p. 93.

<sup>16</sup>National Education Association, Professional Preparation (Washington, D.C.: National Education Association, 1960).

and titled The Certification of Teachers,<sup>17</sup> the following quotations were taken:

T. M. Stinnett, Executive Secretary of the Commission states:

We must in a professional manner, secure in the knowledge that this is our field, that we have spent our lives studying it, that we ought to know more about it than anyone else in the world; proceed to set up provisions which will assure everyone of this vast clientele, a qualified teacher in the future.

Lucian B. Kinney, Professor of Education at Stanford University, states:

Control of admission to membership is both the earmark and obligation of a profession. This responsibility is inherent in the importance of its service to society. The consequences of incompetence are severe and far-reaching, but only the members of the profession itself can appraise qualifications prior to results.

There is a need for a definition of a good teacher; most present definitions are hazy.

Suggested avenues for action:

1. Statewide accreditation programs.
2. Statewide program building.
3. Certification requirements around the accreditation program.

Herman Cooper, Executive Dean of State University of New York, writes:

Requirements for a good teacher:

1. Knowledgeable of subject matter.
2. School psychologist.
3. Behavior and learning diagnostician.
4. Measurement expert.
5. Guidance worker.
6. A student of American values.

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<sup>17</sup>National Commission on Teacher Education and Professional Standards, The Certification of Teachers (Washington, D.C.: National Education Association, 1965).



7. A broadly educated person.
8. A scholar in his teaching field.

Ralph W. McDonald, President of Bowling Green

State University, offers the following:

Three tools available to teachers for raising to a professional level:

1. Minimum requirement of college graduation for admission to practice.
2. Sound accreditation of colleges and universities that engage in teacher preparation.
3. Requirement of professional preparation for admission to national and state associations of teachers.

It is definitely valid to say that the adoption of high standards of certification will tend to reduce teacher turnover and increase the supply of qualified teachers.

Francis S. Chase, Professor of Educational Administration of the University of Chicago, states: "We need careful study leading to re-definition of what is meant by a qualified teacher."

Robert H. Morrison, Assistant Commissioner for Higher Education of New Jersey, writes: "The certification process should be strengthened by using democratic procedures in developing standards, in formulating regulations, and in appraising colleges."

From these professional educators one can infer that they tend to believe that knowledge and personal attitudes are the most important aspects of teacher qualifications. They also appear to be in agreement that it is the responsibility of the profession to determine what standards should be set for teacher qualifications for certification in the various fields.

Literature on Teacher Preparation  
for Driver Education

One of the most important publications in the field of teacher preparation and certification for driver education is that published by the National Committee on Safety Education, Policies and Guidelines for Teacher Education.<sup>18</sup> It is the result of a conference of the nation's foremost driver educators who were assembled for the purpose of establishing policies and guidelines for preparation and certification in their field. It deals with the following: Elements of the Traffic Problem, Curriculum for Professional Preparation and Growth, College and University Responsibilities, and State Department of Education Responsibilities. Above all it emphasizes a "Body of Knowledge" which is further emphasized in a deposition in the appendix written by Dr. William A. Mann, Professor in the College of Education at Michigan State University, which specifies such a "Body of Knowledge" that could never be successfully achieved by the minimum requirements needed for initial approval in Michigan. It recommends, as a minimum requirement for teacher certification, an undergraduate minor in the field of driver and traffic safety education. If such a

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<sup>18</sup> National Commission on Safety Education, Policies and Guidelines for Teacher Preparation and Certification in Driver and Traffic Safety Education (Washington, D.C.: National Commission on Safety Education, National Education Association, 1965).

recommendation was adopted, teacher education standards for driver education would become comparable to those of other educational fields. As this is the result of the thinking of national experts in the field it is accepted by and recommended by other writers in recent publications.

#### Literature on Student Evaluation

Dunn<sup>19</sup> developed a knowledge test on safe driving practices to differentiate between violators and non-violators. He was able to validate statistically this test as a predictive instrument for the purpose of evaluating beginning drivers. Dunn's test was selected for use in this study.

Kenel<sup>20</sup> validated the Mann Inventory as a predictive instrument of student behavior. It was validated by the process of comparing the results of the questionnaire with observed driving behavior. It was further investigated as to whether the observed behavior categories were reflected in the student's subsequent driving record. As a result the Mann Inventory was selected as one of the

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<sup>19</sup>LeRoy W. Dunn, "An Experimental Study of Selected Traffic Safety Concepts and Their Ability to Differentiate Violators from Non-violators" (unpublished Ph.D. dissertation, Michigan State University, 1962).

<sup>20</sup>Francis C. Kenel, "The Effectiveness of the Mann Inventory in Classifying Young Drivers Into Behavioral Categories and Its Relationship to Subsequent Driver Performance" (unpublished Ph.D. dissertation, Michigan State University, 1967).

instruments utilized for the evaluation of students in this study.

Long<sup>21</sup> investigated various tests for knowledge, attitudes, and skills of students of driver education and by comparing their validity and reliability she recommends that certain ones should be used in evaluating student competencies in those areas. One would expect to find in this piece of literature newly developed and validated tests; however, such was not the case. It was merely a survey of the various tests now in existence and through comparison the author comes up with recommendations of tests to be used which she believes to be the most valid and reliable for student evaluation.

A list of competencies that a student should achieve as the result of having completed a driver education course was developed. This list included competencies for attitudes, skills, and knowledge. She recommended that teachers should use these lists of competencies for determining what should be taught and that they should consider using the evaluative instruments available for pre- and post-testing of students to determine whether these competencies had been achieved.

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<sup>21</sup>Teresa L. Long, "Development of Instruments for the Evaluation of Driver Education" (unpublished Ph.D. dissertation, University of Texas, 1965).

### Maturation and Attitudes

Cummins and Fagin<sup>22</sup> define maturation as: " . . . the interaction between developing physiological functions and experiences." They further clarify it by stating: "Learning passes into maturation and maturation becomes the basis of further learning."<sup>23</sup> "At best, hurrying and forcing the child at a rate in advance of his maturational readiness is a waste of effort."<sup>24</sup>

Edwards and Scannel<sup>25</sup> state that maturation is reinforced by discussion of experiences in the classroom.

These statements would seem to indicate the need for correlation of laboratory experience and classroom discussion as a basis for maturation. Another indication would appear to be that maturation cannot take place in a short period of time but is the result of having sufficient opportunity for thought and application of what has been learned which then becomes the basis for further learning.

Mouly<sup>26</sup> recognizes the importance of attitudes in the educative process by the following statement:

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<sup>22</sup>W. D. Cummins and Barry Fagin, Principles of Educational Psychology (New York: Ronald Press, 1954), p. 151.

<sup>23</sup>Ibid., p. 151.

<sup>24</sup>Ibid., p. 162.

<sup>25</sup>Allen J. Edwards and Dale P. Scannel, Educational Psychology (Scranton, Pennsylvania: International Textbook Company, 1968).

<sup>26</sup>George J. Mouly, Psychology for Effective Teaching (New York: Holt, Rinehard and Winston, 1961), p. 342.

Educators are becoming progressively more aware of the importance of attitudes in the over-all educative process. Whereas up to the turn of the century, schools existed primarily, if not solely, for the purpose of imparting knowledge and skill, it has become evident that attitudes that come as by-products of whatever is taught are often of much greater importance than the primary learning from the standpoint of both academic progress of the learner and the effect it will have throughout his life.

He continues:

In view of the importance of attitudes, the school, if it is to fulfill its responsibility to society, cannot escape from its responsibility in embarking upon a deliberate campaign to influence for good the attitudes of children.<sup>27</sup>

In attempting to explain how attitudes develop Mouly states:

Attitudes tend to develop incidentally, gradually and generally unconsciously. They arise as by-products of the experiences the child undergoes and, conversely, everything that goes on in the classroom as it affects the child leads to the formation on his part of certain attitudes.<sup>28</sup>

Attitudes can be developed most successfully through meaningful participation in worthwhile activities designed to influence attitudes. . . . Similarly attitudes underlying moral behavior are not developed by preaching and having rules memorized but by providing the child with practice in integrating moral concepts into his total behavior patterns and, whereas part of this integration must involve a verbalization of the basis for one's behavior.<sup>29</sup>

These statements not only point out the importance of the development of good attitudes in any educative process, but would appear to agree with the statements concerning time needed for maturation.

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<sup>27</sup>Ibid., p. 344.

<sup>28</sup>Ibid., p. 346.

<sup>29</sup>Ibid., p. 347.

McGlade<sup>30</sup> expresses very strongly the difficulties in measuring attitudes:

To date, no driver attitude inventory has been developed which can separate, within acceptable margins of error, the accident-free from the accident-repeating driver. (Footnote): I would like to go on record, parenthetically, in stating that no self respecting attitude measurement specialist would ever expect results to be even remotely close to perfection. In contrast, accident prevention specialists have demanded just such a tool. Given the current state of the art, attitude assessment in particular and social-psychological measurement in general, are far from perfection.

This would indicate the difficulty encountered in measuring attitudes and also points out that any instrument used for this purpose could be indicative but certainly not conclusive evidence for evaluation.

#### Other Related Literature

The staff of the Michigan State University Highway Traffic Safety Center made a very comprehensive study, How to Improve Driver Education in Michigan.<sup>31</sup> This report developed recommendations for improvement of all phases of the driver education program from the responsibilities of the legislature, state department of education, school administration, institutions of higher education, the school program, teacher certification, to student

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<sup>30</sup>Francis S. McGlade, Adjustive Behavior and Safe Performance (Springfield, Ill.: Charles C. Thomas, Publisher, 1970), p. 82.

<sup>31</sup>Michigan State University Highway Traffic Safety Center, How to Improve Driver Education in Michigan.

evaluation. It surveyed programs representative of all schools in the State of Michigan. The parts of the study important to this research were: program standards, teacher qualifications, and student evaluations. Definite recommendations were made for the improvement of programs along the lines of national standards developed by "Policies and Practices." It recommended as a minimum for teacher qualifications, a teaching minor in the field of driver education and traffic safety. It further recommended standards for student achievement and evaluation. This was one of the most comprehensive and thorough studies, treating all phases of driver education, discovered by this investigator.

Lorenzen<sup>32</sup> studied the driving records of driver education teachers in California. His study recommends a closer surveillance of the driving records of teachers for the purpose of initial and continuing certification of driver education teachers and shows the need for such continued surveillance.

A study, Summary of Results of Studies Evaluating Driver Education, published by the National Commission on Safety Education,<sup>33</sup> summarizes numerous theses and

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<sup>32</sup>Ed F. Lorenzen, "A Study of Driver Records of California Public School Driver Instruction Teachers" (unpublished Ph.D. dissertation, Michigan State University Automotive Safety Foundation, Washington, D.C., 1968).

<sup>33</sup>National Commission on Safety Education, Summary of Results of Studies Evaluating Driver Education



dissertations on driver education evaluation. While the studies were consistent in establishing favorable conclusions on trained drivers versus untrained drivers, it concluded that better criteria other than violations and accidents be established for future studies.

It was learned that the Educational Testing Service was working on an evaluation project for driver education programs. This investigator was informed that the work was as yet incomplete and was not available at the present time. However, the following quote from an abstract presented at a driver education symposium should help to reveal its intent:

As a general principle, any proposal for the evaluation of driver education and training programs must be sufficiently specific to provide a clear guide as to the course to follow, but general enough to allow sufficient degrees of freedom for the investigator to be able to work effectively, including the exploration of some unforeseen avenues. It should not be implied that the plans under development are unalterable. Quite the contrary; because they are still in the formative stage, suggestions or reactions of this symposium will have an influence on our final recommendations.<sup>34</sup>

The above quote would indicate that the evaluative instrument or instruments should not be too narrow or confining. It would also indicate that the instruments are not near

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(Washington, D.C.: National Commission on Safety Education, National Education Association, 1961).

<sup>34</sup>Harry H. Harman, Toward a Comprehensive Plan for Evaluation of Driver Education and Training Programs, Educational Testing Service, 1968, Abstract.

completion and that suggestions were welcomed for its perfection.

### Summary

An effort was made to keep the review of literature current by utilizing only that which had been published since 1960. The reasoning for this should be obvious in that much of the earlier research in driver education has been severely criticized as to its lack of sophistication. This has led to less quantity and more quality research.

The following observations were made as a result of this investigation:

1. The literature reviewed on program standards appeared to re-enforce strongly the recommendations of interested driver educators throughout the country, which it should, as it is the result of the thinking of the most prominent driver educators in the nation.
2. The literature on teacher certification, which considered certification of teachers in general in all areas of education, provides additional proof that driver educators are in accord with those in other areas of education. The philosophy of "freedom" and "responsibility" of the profession for establishment of its own standards for certification was especially noteworthy. Another aspect stressed by many

of the authors was the need for sufficient formal preparation so as to produce knowledgeable instructors.

3. The literature reviewed which was specifically for certification of driver education teachers was consistent with that for teachers in general. Therefore the recommendations for certification of high school driver education instructors could not be considered exorbitant or unjust.
4. The literature on student evaluation was found to be vague and uncertain in most instances. The two studies completed at Michigan State University,<sup>35</sup> appeared to present the more positive view towards a satisfactory testing program by establishing and validating predictive instruments. Others were content to use tests already existing which have not proven to be altogether satisfactory.
5. The literature on maturation appeared to reinforce the recommendation of classroom and laboratory correlation along with the need for

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<sup>35</sup>Dunn, "An Experimental Study of Selected Traffic Concepts and Their Ability to Differentiate Violators from Non-violators"; Kenel, "The Effectiveness of the Mann Inventory in Classifying Young Drivers into Behavioral Categories and Its Relationship to Subsequent Driver Performance."

the course to extend over a longer period of time for maturation to occur. It also pointed out the difficulty encountered in measuring attitudes.

6. In other related areas of literature the most comprehensive study was that made by the Michigan State University Highway Traffic Safety Center Staff,<sup>36</sup> which was concerned with the improvement of all phases of the driver education program in Michigan. It appeared to be more positive in its recommendations and more thorough in its investigation than most of the other research.

Most of the literature reviewed was concerned with some phase of this study and bears directly upon the study in that it provides the standards for evaluation of the programs as well as establishing valid tests for student evaluation. It further agrees that violations and accidents alone are not valid criteria for the evaluation of student driving records.

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<sup>36</sup>Michigan State University Highway Traffic Safety Center, How to Improve Driver Education in Michigan.

## CHAPTER III

### METHODOLOGY AND PROCEDURE

In order to make this comparative study manageable the following decisions were made: first, limit the scope of the study; second, limit the size of the geographical area; third, select recognized standards for measuring teacher qualifications; fourth, select criteria that would satisfactorily evaluate the physical aspects of the high school programs; and fifth, select criteria that would effectively evaluate the product of the program, the driver.

#### Selection of Geographical Area

The Upper Peninsula of Michigan was selected as the area to be surveyed because it was believed, as stated in Chapter I, that it was somewhat unique and quite different from the urban and suburban areas of the state. It was the opinion of the investigator, that by limiting the size of the area, a more complete survey could be made and thus a more realistic picture would result. Although there are some differences in school size within the area, it was

felt that problems would likely be more nearly similar within these boundaries than in the entire state.

Another reason for the selection of this area was the fact that Northern Michigan University is the chief source of supply for teachers of Driver Education in the Upper Peninsula and the author was interested in how this University can assist in the improvement of the high school programs.

#### Program Evaluation

In order to evaluate the effectiveness of traffic safety education it was necessary first, to evaluate the various aspects of the program and second, the product of the program, the driver. It was believed that a well-defined picture of each school's program would be developed by utilizing these two factors.

The questionnaire for the evaluation of the various aspects of the programs was developed from the Michigan State University study, How to Improve Driver Education in Michigan and Policies and Practices for Driver Education and Traffic Safety Education published by the National Commission on Safety Education, both of which were reviewed in Chapter II.

From the above mentioned Michigan State University (MSU) study and the National Commission on Safety Education (NCSE) publication the following ten recommendations

were selected as criteria for evaluating the high school programs:

1. (MSU)--The minimum hours of classroom instruction be increased from thirty to forty-five clock hours and the minimum for the laboratory instruction be increased from six to eight clock hours.
2. (NCSE)--Correlation of classroom and laboratory instruction to provide satisfactory articulation.
3. (NCSE)--Materials and equipment should be up-to-date and in agreement with current educational practice.
4. (NCSE)--Consideration should be given to student participation in community projects such as surveys, interviews, observation projects and opinion polls.
5. (NCSE)--It is recommended that the standard high school driver and traffic safety education course extend over a full semester (ninety hours).
6. (NCSE)--Consideration should be given to the use of visiting specialists and resource persons.
7. (NCSE)--Periodic analyses of statistics on accident and moving violation records acquired by graduates are recommended.

8. (NCSE)--Innovations such as team teaching, programmed instruction, simulation and multiple-car range instruction are recommended for possible use in driver and traffic safety education.
9. (MSU and NCSE)--Parents should be well-informed concerning the program. Students should have written parental approval and frequent parent-teacher consultations are advisable.
10. (MSU and NCSE)--Ample opportunity should be provided for small group discussion and no more than four students in the automobile for on-the-street laboratory instruction.

A questionnaire was formulated which could be completed by the teacher or filled in by a personal interviewer. Each of the fifteen questions in the questionnaire were to be compared separately to national standards and to the recommendations made in the Michigan State University study. The comparison was not for the purpose of rating each school separately but rather to determine what percentage of the schools exceeded or failed to exceed minimum standards. The questionnaire dealt with the following items: classroom and laboratory instruction, integration or correlation of the two phases, currency of textbooks, community involvement, when



program is offered, length of course, film strips and films, pamphlets, resource persons, driving experience, programmed instruction, student records, informing parents, and class size. It was believed that some indication of program weaknesses would become evident by a comparison of these selected items with national recommendations.

#### Teacher Qualifications

A questionnaire was developed that would effectively measure teacher qualifications. The following references, reviewed in Chapter II, were used as guidelines:

1. Policies and Guidelines for Teacher Preparation, published by the National Commission on Safety Education, 1965.
2. How to Improve Driver Education in Michigan, published by Michigan State University Highway Traffic Safety Center, 1966.

The requirements of the North Central Association, which sets standards for teacher certification in this geographical area were also considered.

Formal teacher-preparation, college credit, was considered as the principal factor in the evaluation of teacher qualifications. The following items were used in the questionnaire: teacher certification, driver education credit, credit in related courses (general safety, auto mechanics, etc.), other course credit that would improve their preparation (guidance and counseling, advanced

psychology, learning theory, etc.), and inservice training courses.

Another factor also taken into consideration was whether the instructor taught driver education full-time or part-time. This would tend to indicate whether or not there was special interest in or dedication to driver education and traffic safety.

The factors selected were chosen first, because they represented some of the most frequent recommendations of the foremost traffic safety experts in the nation and, secondly, because they represented measurable, controllable factors which when tabulated would produce valid information for analysis.

The following classification of standards of teacher-preparation was established for the evaluation of teacher qualifications for the purpose of this study:

- a. Minimum qualifications.--A certified teacher with two to four semester hours or less of college credit in driver education, no recent refresher courses, and are protected by the "grandfather clause."
- b. Average qualifications.--A certified teacher with six to eight semester hours of college credit in driver education and acceptable related areas, recent refresher course, and were meeting present requirements for initial approval.

- c. Higher qualifications.--A certified teacher with more than eight semester hours of college credit in driver education and acceptable related areas, recent refresher courses or inservice training. These would be mostly teachers specializing in the field with a minor or more.

The above standards were more fully explained in the definition of terms in Chapter I.

#### Student Evaluation

The testing of students was considered to be a necessary and most important part of program evaluation as the purpose of the driver education program is primarily that of producing drivers who are good traffic citizens. In the process of developing such traffic citizens it is hoped that competent, knowledgeable, courteous, skillful, and conscientious drivers are the result. Regardless of how good the physical aspects of the program appears, the results depend upon how well the objectives are achieved and that can only be determined by an evaluation of its product, the driver.

The following criteria were selected for the evaluation of the students:

- a. Amount of Exposure.--The number of months' driving experience and the approximate number of miles driven.

- b. Number of Deviations.--The number of traffic violations and accidents in which the driver was involved.
- c. Attitude Toward Driver Education.--Either positive or negative and determined by whether or not the student believed that driver education had been beneficial to his driving.
- d. Knowledge.--Is the student knowledgeable concerning traffic laws and safe driving practices?
- e. Personal Attitudes.--It is the belief of most traffic safety experts that a person drives as he lives, therefore personal attitudes were considered as an acceptable criterion.

The months of driving experience were determined by the length of time that the student had been a licensed driver. These were set up in three categories as, one to six months, seven to twelve months, and thirteen or more months. In no instance, using junior and senior students, were more than twenty-four months of driving experience recorded.

To determine the approximate number of miles driven the student was asked to estimate how many miles he usually drove each week and this was multiplied by the number of weeks that he had been a licensed driver. It was realized that there was a possibility of error by such calculations

but it seemed to be the most satisfactory method by which this factor could be determined.

The number of deviations, violations and accidents, were accepted from the student questionnaire. However, several from each school were cross-checked with local and state police records and were found to be in accord with those records. In fact, the students were prone to report even minor accidents on their questionnaires which had not been reported to law enforcement officials. Therefore this criterion on the questionnaire was considered more informative for evaluating this phase than were the official records. Violations and accidents were first tabulated in three division, 0, 1-3, and 4 or more, but as there were so few who had more than three it was cut to two division of 0 and 1-4.

Attitudes toward the driver education program were secured by simply asking the question, "Do you feel that driver education helped you to become a better driver?", and why or why not. The students could be expected to be frank in answering this question as they were informed that only the investigators would read the answers.

To test the knowledge of the students as to traffic laws and safe driving practices, the knowledge test validated by Dunn and quoted in the review of literature was selected as the best available knowledge test. It was evaluated by placing the students into either of two

groups, those who scored 66 per cent or more in the top group and those below 66 per cent in the second.

Dunn's study was concerned with a general population group including persons who had had no driver education background as well as those who had. It was concerned with all ages and primarily with violators. It was therefore necessary to arbitrarily select a cutoff score for this sample which included only driver education graduates. The cutoff score of 66 per cent was considered very liberal but it was decided that it was preferable to err in favor of the student rather than vice versa. It was also believed that by giving credence to the National Drivers test presented on television in past years that 66 per cent would be higher than the average knowledge of the nation's drivers.

Selection of a questionnaire for the measurement of personal attitudes was a very important step as national experts in traffic safety are generally in accord that this is one of the most important objectives in the development of a good traffic citizen and therefore could be a significant factor in the student evaluative process. After considering many personal attitude tests and surveys, the Mann Inventory, which was validated by Kenel's study, was selected for use in this study. The method of scoring recommended by the author was used.

### Basic Assumptions

The investigation of these selected factors was based on the following assumptions:

1. Weaknesses do exist in the present high school driver education programs of the Upper Peninsula of Michigan.
2. There would be a variation of program standards, teacher qualifications, and student drivers.
3. Minimum standards do not produce the desired effect (competent traffic citizens).
4. High school driver education programs are not meeting student needs as well as expected.
5. Relevant areas would be identified on which future studies could be based.

### Procedure

A list of high schools in the Upper Peninsula of Michigan which were operating approved driver education programs was secured from the State Department of Education along with a list of superintendents of these schools. Further information relative to the high school programs was not available from this source.

Permission from each superintendent to use this school in the study was accomplished by a letter stating the purpose of the study, pointing out that no school or student would be identified in the study, and requesting

permission to include his school in the study. After several follow-up letters, phone calls, and personal contacts permission was secured to include fifty-seven of the fifty-eight high schools in the area.

Following receipt of approval, letters were sent out to each driver education teacher in charge of the high school programs. This letter again stated the purpose of the study, noted that permission had been granted by the superintendent, and requested the teacher's cooperation. It also requested the names of other teachers involved in the driver education program in that school. A teacher qualification questionnaire as well as a checklist for the physical aspects of the driver education program was enclosed in this first letter to be completed and returned. Upon receiving the names of the other teachers involved, letters were sent to each of them with a copy of the teacher qualification questionnaire to be completed and returned. Replies were received from all fifty-seven of the high schools after numerous follow-up letters, phone calls and personal contacts.

In order to eliminate biases on the part of the investigator, it was decided that it would be important to the validity of the study to have others interview and test the students. For this purpose a group of future teachers of driver education, who were members of advanced driver education classes, were trained in administering



the student questionnaire, knowledge test, and Mann Inventory. They were also given the responsibility of contacting the teacher in charge to arrange a date and time to administer the test that would be convenient to school personnel, students, and interviewer. The author sent a letter to each teacher in charge informing him of these arrangements. For the most part the interviewers reported that they were well-received and cooperation was excellent. As a result, interviews were completed in fifty-five of the fifty-seven high schools. One of those in which no interviews were obtained had no licensed drivers in the high school.

Interviewers were supplied with mimeographed copies of the questionnaire, knowledge tests, and inventories along with instruction sheets for administering the same.

The interviewers were instructed to contact the teacher in charge of the driver education program to arrange a time for the survey and request the teachers to inform the students that a survey was being made to attempt to determine the effectiveness of driver education. They were further requested to have as many volunteers as possible to participate in the survey. In most instances these groups were complete junior and/or senior classes. The variation in numbers resulted from the size of the school.

The interviews were conducted in group situations. After the interviewer was introduced he explained that the survey would consist of a questionnaire, knowledge test, and an attitude survey. He distributed the questionnaire first and requested that it be left face down until all were distributed and instructions given. The students were then told that each question would be explained and answered one at a time. It was explained that accurate answers were needed in order to make the study meaningful. They were also asked to be frank with their answers as no one would be identified in the study and only the investigator would read them.

After each question was fully explained the students were requested to record their answers. Example: to the question, "How many miles have you driven?" it was broken down into how many miles do you drive per week and then multiply by the number of weeks you have been driving, etc.

Immediately after the collection of the questionnaires, the knowledge test was administered. The students were informed that this area was being tested to attempt to discover how their knowledge of laws, rules and regulations compared with older drivers who had not had driver education. It was pointed out that it was believed that they, the students, would be more knowledgeable than the general driving public.

When the students had completed the knowledge test they were allowed ten minutes to move about before the administration of the Mann Inventory. The students were informed that many of the questions in this survey would not appear to apply to driving an automobile but that it was believed by many safety specialists that our feelings, beliefs, and personal attitudes have a great influence on how we act and react behind the wheel of our automobiles. Therefore it was necessary that they answer each question to the best of their ability. They were also informed that when they had completed the questions they were to state how they felt about answering the questions. When this was completed the surveys were collected and thanks were expressed to both teacher and students for their participation.

After the interviews and tests were concluded each interviewer was provided with correction stencils and information for scoring the tests and inventories. All of the tests were rechecked by the investigator. The results of the questionnaires, test scores, and inventory scores were then tabulated by the investigator.

Twelve hundred sixty-four students were interviewed and tested in the fifty-five high schools participating. The number from each school varied according to the school enrollment with as few as eleven in smaller schools and up to thirty-five in large schools. The size of the sample in each school had to be dependent upon the school

personnel. They were requested to have as many as possible of their licensed drivers participate. They were also instructed that a suitable cross-section could not be obtained if the students were hand selected. In most instances excellent cooperation was obtained and whole classes were present for the interview and tests. Participation was placed on a voluntary basis and no student was compelled to participate which eliminated those who might falsify the study by prejudiced answers. It was the belief of the investigator that this procedure produced a satisfactory sample for the comparisons carried out in this study.

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF DATA

#### General Information

There are fifty-eight high schools in the Upper Peninsula of Michigan offering state-approved driver education courses to youth under eighteen years of age. Of these fifty-eight high schools, fifty-seven participated in the first survey questionnaire or 98.3 per cent. One hundred fifteen (115) teachers were contacted with questionnaires concerning their qualifications and program standards. Of these 113 responded or 98.26 per cent of the teachers engaged in Upper Peninsula high school driver education programs participated.

Fifty-five of the original fifty-seven schools participated in the student evaluation tests, questionnaires, and inventories. Of the two schools not participating, one had no licensed drivers and the other was a small school which would produce little influence on the obtained results. This resulted in 96.5 per cent of all the schools being represented in the student evaluations. Twelve hundred sixty-four (1,264) students were interviewed and tested in the survey.

### Program Evaluation

A review of the results from the program evaluation questionnaire (see Table 1) shows that: (1) 74 per cent of the schools were meeting only the minimum classroom instruction requirements of the state department for reimbursement; (2) 79 per cent of the schools were providing the minimum of an average of six clock hours of behind-the-wheel instruction; (3) integration or correlation of classroom and laboratory instruction was being carried out by approximately one-half or 51 per cent of the schools; (4) currency of textbooks which would tend to indicate up-dating of the program, revealed that 10 per cent of the schools were using textbooks which were ten or more years old, 65 per cent were using books five to nine years old, and only 25 per cent were using books with copyrights during the past five years; (5) only 23 per cent of the high school programs attempted to involve students in concerning themselves with community problems for traffic improvement; (6) only 25 per cent of the schools offer the program during the regular school day and as a part of the regular school program, 26 per cent offer it only as an extra-curricular activity after school hours or during the summer, and 49 per cent offer a combination of regular program, after school, and summer programs; (7) 46 per cent offer the course as a partial subject of twelve weeks or less duration, while 56 per cent offer it over an

TABLE 1.--Program evaluation.

Question	Number of Schools	Per cent
1. Classroom instruction:		
a. 28-30 clock hours	42	74
b. 32-36 clock hours	13	23
c. More than 36 clock hours	2	3
2. Driving instruction:		
a. Average of 6 clock hours	45	79
b. 6-8 clock hours	8	14
c. More than 8 clock hours	4	7
3. Integration of classroom & lab.:		
a. Yes	29	51
b. No	28	49
4. Currency of textbooks, copyright:		
a. 1956-60	6	10
b. 1961-65	37	65
c. 1966-69	14	25
5. Community involvement:		
a. Yes	13	23
b. No	44	77
6. When program is offered:		
a. Regular day	14	25
b. Summer or after school	15	26
c. Combination	28	49
7. Length of course:		
a. 7 weeks or less	15	26
b. 8-12 weeks	11	20
c. More than 12 weeks	31	54
8. Films and film strips:		
a. Some	42	74
b. None	15	26
9. Pamphlets used:		
a. Some	40	70
b. None	17	30

TABLE 1.--(cont'd).

Question	Number of Schools	Per cent
10. Resource persons used:		
a. Some	12	21
b. None	45	79
11. Type of driving experience: Dual control car, on the street	57	100
12. Programmed instruction:		
a. Some	3	5
b. None	54	95
13. Student records:		
a. Class	17	30
b. Individual	40	70
c. Follow-up	0	0
14. Parents informed by:		
a. Letter	23	40
b. Consultation	11	20
c. Report card	23	40
15. Class size:		
a. Classroom		
Under 30	33	58
Over 30	24	42
b. Laboratory		
2-4 students	47	82
5 or more students	10	18



eighteen week period; (8) 74 per cent use films and film strips to reenforce program objectives; (9) 70 per cent use pamphlets and outside readings to keep the program current; (10) 21 per cent involve the public through the use of resource persons; (11) almost 100 per cent make use of the dual-control automobile in on-the-street programs as the laboratory experience, indicating a lack of simulation installations or ranges for off-the-street activity; (12) programmed instruction is almost non-existent in this area as only three schools or 5 per cent use any of it; (13) no schools have records from follow-up studies, 70 per cent keep individual records, and 30 per cent only the class records; (14) only 20 per cent were consulting with parents, 40 per cent informed them by letter and 40 per cent relied on report cards to keep parents informed; (15) 42 per cent had classroom groups over thirty and 18 per cent had laboratory groups of five or more students.

#### Teacher Qualifications and Program Standards

Of the 113 participating teachers, 63.7 per cent had only minimum qualifications, 30.1 per cent had average qualifications, and 6.2 per cent had higher qualifications (see Table 2). Five schools had one or more teachers with higher qualifications, twenty-seven schools had one or more teachers with average qualifications, and forty-two schools had one or more teachers with only minimum

TABLE 2.--Data on teacher qualifications.

Number	Per cent	Total Per cent
57 Schools surveyed		
115 Teachers contacted		
113 Teachers participating		
72 Teachers with minimum qualifi- cations	63.7	
34 Teachers with average qualifi- cations	30.1	
7 Teachers with higher qualifi- cations	<u>6.2</u>	100
5 Teachers teaching D.E. full-time	4.4	
108 Teachers teaching D.E. part-time	<u>95.6</u>	100

qualifications. Twenty-seven schools had only teachers with minimum qualifications engaged in their programs. Schools, depending on their size, varied from one to eleven in the number of teachers engaged in their programs.

Table 2 also shows that only 4.4 per cent were employed full-time as driver education teachers and most of the others taught it over and above their regular class loads for which they received extra remuneration.

#### Student Evaluation

The results of the student questionnaire, test, and inventory are compiled in Table 3. The data show that most of the students participating in the study had

TABLE 3.--Data on students.

Number of schools	55		
Number of students	1,264		
Months of driving experience:	<u>1-6</u> 192 15.2%	<u>7-12</u> 470 37.2%	<u>13+</u> 602 47.6%
Thousands of miles driven:	<u>0-1</u> 420 33.2%	<u>1-5</u> 411 32.5%	<u>5+</u> 433 34.3%
Violations:	<u>None</u> 1056 83.5%	<u>1-4</u> 208 16.5%	
Accidents	<u>None</u> 924 73.9%	<u>1-4</u> 340 26.1%	
Attitude toward D.E.:	<u>Pos.</u> 1194 94.5%	<u>Neg.</u> 70 5.5%	
Knowledge test:	<u>5-20</u> 200 15.8%	<u>21-29</u> 1064 84.2%	
Attitude MI score:	<u>0-35</u> 1086 85.9%	<u>36-75</u> 178 14.1%	
Evaluation of driving record:	<u>Good</u> 992 78.5%	<u>Ques.</u> 91 7.2%	<u>Poor</u> 181 14.3%

Note: Students from fifty-five out of fifty-seven high schools in the Upper Peninsula participated or 96.5 per cent.

1,264 students were interviewed and tested  
 23 schools had scores that grouped themselves low on the Mann Inventory  
 12 schools had scores that grouped themselves high on the Mann Inventory  
 20 schools had scores that grouped themselves evenly above and below the mean on the Mann Inventory

been licensed for more than six months; 15.2 per cent for one to six months, 37.2 per cent for seven to twelve months, and 47.6 per cent for more than twelve months. Very few students had been licensed for more than twenty-four months. The miles of driving experience which would indicate the amount of exposure were fairly well distributed into three categories: 33.2 per cent had driven 1,000 miles or less, 32.5 per cent had driven between 1,000 and 5,000 miles, and 34.3 per cent had driven over 5,000 miles.

The drivers with violation-free records were clearly in the majority. Eighty-three and five-tenths per cent had no violations and 16.5 per cent had from one to four violations. As stated previously most of these had only one or two violations and as there were so few with more than two violations no division was made in this group. As this information was recorded it was noted that students with violations were most often residents of larger cities or towns or lived adjacent to areas where State Police Posts were established while those who resided in small towns or very rural areas had relatively few or no violations.

There were fewer drivers with accident-free driving records than those with violation-free records. Seventy-three and nine-tenths per cent of all the drivers interviewed were accident free while 26.1 per cent had had one

to four accidents. Many of these accidents were of a minor nature and did not involve reporting to law enforcement officials and therefore were not investigated nor were any summonses issued. Here again it was observed that accidents were more prevalent in areas where traffic was heavier such as in larger cities and towns while those students from remote rural areas were more likely to be accident free. It was also noted that many accidents and violations were companion occurrences.

A very large majority, 94.5 per cent of the students interviewed, had a positive attitude toward driver education in that they believed that it had helped them to become better drivers. Those who did have a negative attitude scored well above the cutoff score on the Mann Inventory denoting a relationship to this and other personal attitudes. The Mann Inventory is scored by counting the number of points away from the acceptable answer or answers and as a result a high score denotes poor or questionable attitudes while a low score (thirty-five or lower) denotes fair to good personal attitudes.

Most of the students tested had at least a fair knowledge of safe driving practices and traffic laws and regulations as was indicated by the results of the knowledge test. Eighty-four and two-tenths per cent had a score of 70 per cent or better which when compared with national averages would indicate fairly knowledgeable drivers.

The Mann Inventory, which was used to evaluate student attitudes, was first used with norms which had been established approximately ten years ago and produced rather startling results, 50.5 per cent of all the students tested had poor or questionable attitudes. Upon consultation with the author and viewing the results discovered in other schools using the instrument recently, it was decided that more realistic results would be obtained by calculating the mean and the standard deviation and making the cutoff score one standard deviation above the mean. Dr. Mann attributed this need for changing norms to ". . . loosened controls by parents who have become increasingly uncertain of their roles in the child's development."

The mean thus established was 24.8 and the standard deviation was 10.8. Adding one standard deviation to the mean produced a cutoff score of 35.6, thus any score under 36 was considered as indicating satisfactory attitudes.

By using these norms it was found that 14.1 per cent of the students tested had poor or questionable attitudes. These results were more nearly in line with results that should be expected. It was observed while recording the grades that some of the school's scores tended to cluster themselves below the mean while others tended to cluster around or above the mean. In all twenty-three schools' scores were clustered below, twelve above, and the remainder (twenty schools) around the mean. Upon

examination it was discovered that those clustering below the mean tended to be the schools located in more rurally segregated environments or those which have been noted for exceptionally high disciplinary standards. Those which tended to cluster above the mean were noted to be generally located in the more populous areas. It would appear from these observations that environment has an important bearing upon the attitudes of the individual, which would include the home, the school, and the community. It would appear to indicate that the parents and the school in more rural areas still continue to exert considerable influence on youth as compared to more metropolitan areas where youth are influenced by more and varied stimuli. These influences seem to develop such firmly imbedded attitudes that the educational process fails to develop as much change as educators would like.

As a further analysis of the Mann Inventory, students' tests were also checked as to their being undercontrolled (aggressive) and overcontrolled (constricted). This analysis was made by using information furnished by the author of the Inventory. It was discovered that 106 or 8.4 per cent of the students tested could be classified as undercontrolled and 92 or 7.3 per cent as overcontrolled. It was observed as these data were being recorded that most of the undercontrolled or aggressive individuals were from the more densely populated areas while most of the

individuals who qualified as overcontrolled or constricted were more likely to be from the rural areas.

Again from Table 3 it can be observed that by using violations, accidents, attitudes toward driver education, knowledge, and personal attitudes and giving them equal value that 78.5 per cent of the students tested had good driving records, 14.3 per cent had poor records, and 7.2 per cent had questionable records. This gave a total of 21.5 per cent with questionable or poor attitudes. These ratings were determined by the following method: if a student was rated as poor in three or more of the five categories, violations, accidents, attitude toward driver education, knowledge, and personal attitudes, he was considered to have a poor record. If he was poor in two areas his record was considered questionable. If his rating was poor in only one or no area his record was recorded as good.

#### Program Effectiveness Evaluation

In Table 4 the program effectiveness was evaluated by knowledge alone. In this evaluation if all of the students scored above 70 per cent the program was rated as good, if 75 per cent or more achieved that score the program was rated as fair, and if less than 75 per cent achieved the cutoff score the program was rated as poor. According to these data two schools were rated as having



TABLE 4.--Program effectiveness by knowledge.

Number of Schools	Program Ratings		
	Good	Fair	Poor
55	2	46	7

Key: Good program: All of the students achieved a score of 70 per cent or above.  
 Fair program: 75 per cent of the students achieved a score of 70 per cent or above.  
 Poor program: Less than 75 per cent of the students achieved a score of 70 per cent or above.

good programs, forty-six schools had fair programs, and seven schools had poor programs.

In Table 5 program effectiveness was rated by violations and the same formula for evaluation was used as in the preceding table. The following results were obtained: of the fifty-five schools surveyed eight were rated as having good programs, thirty-seven as having fair programs, and ten as having poor programs. It was noted in recording these ratings that most of the schools receiving poor ratings were located in the larger cities or in locations where State Police Posts were established nearby. This seems to indicate that schools located in areas where a higher degree of law-enforcement was maintained probably would have students charged with more violations than those located in extremely rural areas where the degree of law-enforcement was very low or almost nil.

TABLE 5.--Program effectiveness by violations.

Number of Schools	Program Ratings		
	Good	Fair	Poor
55	8	37	10

Key: Good program: Students had no violations.  
 Fair program: 75 per cent of the students had no violations.  
 Poor program: More than 25 per cent of the students had violations.

Table 6 shows program effectiveness ratings according to accident records. In this table it can be seen that of the fifty-five schools surveyed; two schools were rated as having good programs, thirty schools had fair programs, and twenty-three schools as having poor programs. As mentioned previously accident records and violation records appeared to be held by the same individuals, thus, the same inference could be drawn for them as was drawn for violation records. However, it was noted that there were some individuals who reported minor accidents which had not been investigated by law enforcement officers and hence no summonses were issued. This would account for more students having accidents than those having violations.

When rated for program effectiveness according to personal attitudes in Table 7 the following results were obtained: ten schools were rated as having good programs,

TABLE 6.--Program effectiveness by accidents.

Number of Schools	Program Ratings		
	Good	Fair	Poor
55	2	30	23

Key: Good programs: Students had no accidents.  
 Fair programs: 75 per cent of the students had no accidents.  
 Poor programs: More than 25 per cent of the students had accidents.

TABLE 7.--Program effectiveness by attitudes.

Number of Schools	Program Ratings		
	Good	Fair	Poor
55	10	37	8

Key: Good program: All students had good attitudes.  
 Fair program: 75 per cent or more students had good attitudes.  
 Poor program: More than 25 per cent of the students had poor attitudes.

thirty-seven schools as having fair programs, and eight schools as having poor programs. The size of the school system or community did not appear to affect these results in that small schools as well as large school systems received similar ratings. This could in all probability be attributed to the fact that when checked for over-controlled and undercontrolled it was found that there were approximately the same number of each (overcontrolled 7.3 per cent and undercontrolled 8.4 per cent). As the overcontrolled were mostly from small schools in very rural areas and the undercontrolled from larger schools in more densely populated areas it would appear that one group offset the other as each would tend to deviate from the well-adjusted individual with good personal attitudes.

Table 8 is a composite of Tables 4, 5, 6, and 7 and program effectiveness was rated according to an average of the combined ratings of the four tables. As it was not always possible to average the four and find definitely that a program was absolutely poor, good or average the ratings were considered to be placed on a continuum. As an example if a school program had two fair ratings and two poor it was considered to be placed on the continuum somewhere between fair and poor and was given a rating of P-F. However, as it could not meet the standards of a fair program adequately it would then be classified as a poor program because it would be below fair on the

TABLE 8.--Composite of program effectiveness ratings.

Number of Schools	Program Ratings		
	Good	Fair	Poor
55	1	41	13

Key: Good program: Had three out of four good ratings.  
 Fair program: Had three out of four fair ratings.  
 Poor program: Had two out of four poor ratings.

continuum. This process was applied to the final ratings of the fair and good programs also. If, however, any school program had three ratings out of four that were in the same category and only one rating higher or lower the majority rating was used.

## CHAPTER V

### SUMMARY

It was the purpose of this study to investigate selected factors which appear to affect the quality of driver education programs in the high schools of the Upper Peninsula of Michigan. It was hoped that such a study would provide information for high schools as well as institutions of higher education for the improvement of high school programs and the teacher preparation programs.

The study was concerned with one geographical area, i.e., the Upper Peninsula of Michigan, in order that a relatively complete survey could be made and significant results evolve. It was further believed that such an area would provide uniform conditions of environment, school size, finances, facilities, equipment and economic status, thus providing relatively equitable groups for comparison.

Questionnaires were utilized to gather information on school programs, teacher qualifications, and the student drivers. After the information was secured it was compared to state and national standards to discover weaknesses, recommend improvements, and generate hypotheses for future studies.

In carrying out the study 98 per cent of the schools and 98 per cent of the teachers engaged in high school driver education in the Upper Peninsula of Michigan participated. Over twelve hundred students who were licensed drivers with one to twenty-four months of driving experience were interviewed and tested. It was assumed that comparative analyses could be made from these data.

#### Data and Recommendations

From the questionnaire for program evaluation the following information was gathered and compared with the ten evaluative criteria enumerated in Chapter III on Methodology and Procedure. The following comparisons were made with those recommendations:

1. The minimum hours of classroom instruction be increased from thirty to forty-five clock hours and the minimum for laboratory instruction be increased from six to eight clock hours.

Most of the schools (74 per cent) provide only the minimum hours of instruction in both classroom and laboratory as required by the state for reimbursement. According to the above recommendation the minimum of thirty clock hours of classroom instruction and six clock hours behind-the-wheel are insufficient for covering the necessary material and allowing for maturation to occur.

2. Correlation of classroom and laboratory instruction to provide satisfactory articulation.

Only about one-half (51 per cent) of the schools correlate laboratory instruction with classroom instruction. It is the belief of most traffic specialists that this is necessary to provide opportunities for discussion of learning experiences which occur in the laboratory.

3. Materials and equipment should be up-to-date and in agreement with current educational practice.

Ninety per cent of the schools surveyed were using textbooks and materials that were five or more years old. This would tend to indicate a lack of up-to-date materials for a subject which is constantly in need of improvement to keep pace with the ever-changing technology and societal needs.

4. Consideration should be given to student participation in community projects such as surveys, interviews, observation projects and opinion polls.

Very few teachers or programs (23 per cent) are involved in community related safety activities which shows a lack of interest and dedication to the subject.



5. It is recommended that the standard high school driver and traffic safety education course extend over a full semester (ninety hours).

About one-half of the schools do not offer driver education during the regular school program as a regular subject and for a full semester. Most specialists agree that this does not develop a good learning experience nor allow for maturation.

6. Consideration should be given to the use of visiting specialists and resource persons.

About one-fourth of the programs do not make use of resource persons and visiting specialists for related information. As driver and traffic safety education is a broad field and no one person can be expected to be knowledgeable in all areas, the use of resource persons not only produces good learning situations but develops good public relations.

7. Periodic analyses of statistics on accident and moving violation records acquired by graduates are recommended.

The questionnaire indicated that no schools were making follow-up studies of their driver education graduates. Specialists agree that more studies of this type are needed for

program improvement. Such studies help to show whether driver education is meeting student needs and whether it has a lasting effect.

8. Innovations such as team teaching, programmed instruction, simulation and multiple-car-range instruction are recommended for possible use in driver and traffic safety education.

Practically all of the schools were teaching the laboratory phase in dual-control cars in on-the-street programs. While this type of instruction with actual experience is excellent, there are other methods such as simulation, range and programmed instruction that could be used to enrich the program by providing more comprehensive experiences, and result in some economy of operation. Schools could cooperate in such enterprizes.

9. Parents should be well-informed concerning the program. Students should have written parental approval and frequent parent-teacher consultations are advisable.

Indications from the data gathered show that parents are involved very little in the programs and that they are not properly informed of the student's progress. Less than half of the parents are informed in any other manner

than by a report card. This would appear to be inadequate for the cooperation needed between parent and teacher for the successful culmination of the learning process.

10. Ample opportunity should be provided for small group discussion and no more than four students in the automobile for on-the-street laboratory instruction.

Classroom instruction in many of the schools is carried on in very large groups. While this may be satisfactory for some phases of the subject matter such as films and resource persons, and then in the hands of a skillful teacher, opportunities should be provided for small discussion groups to allow for interaction to facilitate attitudinal change.

The information on teacher qualifications revealed the following information:

1. 63.7 per cent of the teachers had only minimum qualifications.
2. 30.1 per cent of the teachers had average qualifications.
3. 6.2 per cent of the teachers had higher qualifications.
4. 4.4 per cent of the teachers were teaching driver education full time.

5. 95.6 per cent of the teachers were teaching driver education part time.

This information would tend to indicate that most of the teachers had minimal or average qualifications. This could stem from a number of reasons, i.e., economy of operation (low salaries do not attract the well qualified teacher), "moon-lighting" job (teachers only interested in supplementing salaries), sub-standard subject status (serves to dull incentive for program or teacher improvement), few universities offering courses above minimum requirements (teachers lack opportunities for improvement), and lack of in-service or extension programs for teachers (distances make it difficult to service the area). As a result the following recommendations are made:

1. Provide additional state funds for operation of driver education programs.
2. Encourage teachers to improve themselves by offering salaries equivalent to that for other academic courses.
3. Universities be encouraged to offer more than the basic courses for teacher preparation in driver education.
4. Universities and State Department be encouraged to provide more in-service programs and extension courses.

The interviews, tests, and inventories revealed the following information on students:

1. The students had only a fair knowledge of traffic laws, rules, and regulations.
2. 16.5 per cent of the students had violation records.
3. 21.1 per cent of the students had accident records.
4. 94.5 per cent believed that driver education helped them to become better drivers.
5. 14.1 per cent failed to show good attitudes.

This information resulted in recommending:

1. More time and emphasis be placed on learning and understanding laws, rules, and regulations in order that students might become more knowledgeable drivers.
2. More emphasis should be placed upon accident causation and how they can be avoided.
3. Programs should be developed to better prepare students and to justify their belief in the value of the driver education program.
4. More stress be placed on group discussion and interaction for the development of better attitudes.

The Composite Picture

In viewing the information which was gathered in this survey of Upper Peninsula high school driver education programs the following composite picture developed:

1. A majority (63.7 per cent) of the teachers engaged in teaching driver education have only minimum qualifications.
2. Most teachers (95.6 per cent) teaching driver education are only part-time teachers whose interests lie in other subject matter fields.
3. Most of the high schools (70.2 per cent) operate programs that meet only minimum standards.
4. Approximately one-half of the schools do not correlate classroom and laboratory instruction.
5. Most of the students (94.5 per cent) have a positive attitude that driver education has helped them to become better drivers.
6. Students with violation and accident records tend to come from more congested areas or areas with better enforcement.
7. About one-fifth (21.5 per cent) complete the course without having developed good attitudes.
8. Most of the students (84.2 per cent) have a fair knowledge of laws, rules, regulations, and safe driving practices.

9. More than 50 per cent of the programs are taught outside the regular class program and are of short duration.

### Conclusions

The analysis of these data tend to indicate the need for program revision in order that the high school driver education courses may more effectively attain their goal, i.e., conscientious traffic citizens.

Because these data show that most of the school programs in driver and traffic safety education do not approach the standards of performance recommended by the best informed traffic safety specialists, it can be concluded that they tend to indicate a need for program revision. Such revision is necessary in order that schools may more effectively attain their goal.

When numbers one and two of the composite picture are considered, the large percentage of teachers with minimum qualifications and serving as part-time teachers, it would appear that there is both a lack of interest in the subject and little realization of its importance. This could only result in the lowering of its status in relation to other school subjects. It would also appear that most teachers look upon it as a "moon-lighting" job for which they receive additional reimbursement to supplement their regular salaries. This could only result in sub-standard performance and a lack of incentive for improvement.

Number three which shows the large percentage of schools with programs that meet only minimum standards, would seem to indicate that teachers and administrators were only interested in qualifying for the State reimbursement and not with the quality of the program.

Numbers four and nine, which indicate that approximately one-half of the schools do not integrate classroom and laboratory instruction nor include it in the regular school program, would appear to indicate that very little effort is expended in scheduling classes during the regular school day. There would also appear to be a lack of concern for class size for group interaction in the classroom as a result of the experiences in the laboratory whether it be range, simulation or on the street.

Number seven, which indicates that better than 21 per cent of the students fail to develop good attitudes, would appear to indicate that more emphasis is needed in the area of responsibility, judgment, and personal attitudes. Dr. William A. Mann, author of the inventory used in this study, stated by personal letter to the author of the study the following:

Scores on the Attitude Survey have been shown to be changed little by a Driver Education class. This results from the nature of the items which tend to get at underlying factors rather than immediate response. It is difficult to change the underlying factors in ordinary classroom situations unless the instruction and other experiences are specifically aimed at this problem. Hence, the value of the instrument is in determining the composition of the student group as a guide to the instructional process and to identify particular individuals who require extra attention.



This could be due to the fact that most driver education teachers are too concerned with skills and knowledge and are lacking in understanding of how to develop good attitudes. Even if they are interested in this development, the time allotment and procedures used in most of the classes would make it almost impossible to provide comprehensive concentration on this phase. It would also appear to indicate that few driver education teachers have the in-depth preparation for understanding and utilizing such procedures. It would therefore appear that better qualified teachers, along with course re-organization and increased time allotments, could, over a period of time, reduce the number of students with poor or questionable attitudes after course completion.

Number five, which shows that most of the students believe that driver education has helped them to become better drivers, is somewhat different from the rest of the facts discovered in this study and should provoke much thought on the part of educators. If the type of program now in existence can produce this much faith of students in what it does for them, surely a more comprehensive, in-depth program would better justify this faith and result in the development of traffic citizens who more nearly approach the excellence which our mobile society needs for the decrease in traffic accidents, injuries, and fatalities.

Number six would appear to indicate that violations and accident records are not valid criteria for comparison as environment and exposure would tend to have a definite effect on these two factors. The reason for this conclusion was due to the fact that while tabulating the results it was discovered that both violations and accidents were more likely to be found among the students who were living in the more densely populated areas where there was a greater degree of law enforcement. Therefore they were not considered valid criteria for comparing these students with those from very rural areas with a lesser degree of law enforcement and traffic congestion.

Number eight would appear to indicate that more time should be spent on laws, rules, and regulations in order that students who complete driver education courses would be more knowledgeable.

#### Weaknesses of the Study

There were several factors which affected the data used in this study contributing to the impossibility of obtaining valid conclusions by statistical analysis. They are here recognized and presented in order that future investigators designing similar or related studies might find them helpful.

1. One of the most important factors was the lack of adequate objective measuring devices. It has long been the contention of researchers

that no one has ever successfully defined the driving task and as a result no one has been able to develop a satisfactory and valid instrument for its measurement. Thus, the results can be considered only as indicative.

2. Another factor which made significant comparison difficult was the fact that no school programs were completely staffed with teachers having similar qualifications and no teacher in such instances had the complete program. It was a case of fragmentation. As a result no one teacher could be credited with the excellence or lack of it in a school program involving more than one teacher.
3. Because the study was confined to a certain geographical area it included communities with varying degrees of population and law enforcement. These variations made valid comparisons between programs impossible. A comparison of selected like communities with comparable programs would have been better.
4. The questionnaire on program standards revealed another factor recognized as a weakness of this study. Upon examining the results of the questionnaire it was discovered that a majority (70 per cent) of the programs in operation met

only minimum standards set by the State Department of Education for reimbursement. It has been recognized in the Michigan State University Study and in National Policies and Practices that the minimums of "30 and 6" are inadequate to develop good traffic citizens.

5. Another variable difficult to control would be administrative fiat. It was ignored in this study but does have an important effect on the school program. The administrator is responsible for all school programs and can control them by the finances budgeted for them. In the case of driver education the program is often geared financially to state reimbursement.
6. Characteristics of the teacher was another variable which was uncontrolled in this study. The very nature of this variable makes its use almost prohibitive. The initiative, interest, versatility and other personal factors along with driving record present only a small fraction of the scope necessary for this measurement. Some phases might have been measured but no instrument or standards have as yet been developed that successfully measure what makes a good teacher.

### Implications for Future Studies

Some related areas that this study seems to point out for further investigation are (the exact titles and hypotheses are left to the ingenuity of the investigator as these will be determined by the approach taken):

1. Teachers' Driving Records. Perhaps an investigation of these drivers' records would present a better understanding of why some teachers provide better programs than others.
2. Teachers' Personal Attitudes. Such an investigation should show the type of individual who is a successful teacher. It would tend to present a clearer picture of the type of individual who becomes a successful teacher, perhaps regardless of formal preparation. This could be an invaluable aid in the selection of teachers of driver education in the future.
3. Relationship of the Driving Record to Exposure and Enforcement. An investigation of these factors might make for a better understanding of driving records and as a result make the evaluation of students by their driving records more meaningful.
4. Positive and Negative Attitudes of Students. Such a study would necessarily entail the why,

causes, and development of attitudes. It could be valuable in developing new programs as well as improving old ones. Perhaps it could assist in answering as to when driver education should begin and when it should end as far as the school is concerned.

5. Academic Record Versus Driving Record. Some studies have already been made in this area but there is a definite need for more comprehensive and sophisticated investigations to make it more meaningful to educators and the general public.
6. Traffic Safety Knowledge of Students. This could be done by pre- and post-testing of students over a number of years and would give some indication of the value of the driver education program by determining what knowledge the average student gains from the course. It could be used in determining what priorities exist.
7. Parents' Attitudes Toward Driver Education. This could be a revealing study because parental attitudes are often reflected in the students' attitudes. Such a study might also investigate the effect of the student's participation in driver education on the parents' driving habits. Often ideas adopted

in the home are a result of the student's educational experiences. This could be carried out using various intellectual and economic levels. Perhaps as a result it could be determined where there is a greater need for concentrated efforts for improvement.

8. Enforcement, Its Nature, Extent, and Effect.

This should be a valuable study and stems from the feeling that the author developed while interviewing students, that the teenager as a group is often persecuted by the traffic law enforcement officer. It is the opinion of the author that this group is watched more closely than more mature individuals and are not fairly dealt with in all situations. This type of study could be valuable in improving law enforcement programs as well as serving toward a better understanding of youth for law enforcement and its problems.

9. A Replication of This Study. If it were done an attempt should be made to control the variables and avoid the weaknesses recognized in the previous chapter. If such were done it could possibly result in more conclusive results.

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## APPENDIX

November 27, 1968

Superintendent of Schools

Dear

I am on sabbatical leave from Northern Michigan University to complete work on a doctoral dissertation in the field of Driver and Traffic Safety Education. I am on the doctoral program at Michigan State University. Dr. William A. Mann of the College of Education is chairman of my graduate committee.

The dissertation will be concerned with teacher qualifications and the effectiveness of high school programs in the Upper Peninsula of Michigan. Its primary purpose is to secure information whereby we at Northern may be better able to modify and improve our courses, program, and services so that we may more efficiently serve the teachers and high schools of the Upper Peninsula of Michigan.

I am requesting permission from you to include your school system in the study. The study will require Driver Education teacher questionnaires and interviews as well as interviews and testing of high school students who have successfully completed the course and are now licensed drivers. No school, teacher, or student will be identified in the study as all information will be grouped. Each school's identity will be held strictly confidential. Copies of the abstract of the study will be made available to participating schools upon the completion of the project.

I hope that you will see your way clear to grant this permission as I would like to include all schools in the Upper Peninsula. A self-addressed, stamped envelope is enclosed for your convenience. An early reply will be appreciated.

Sincerely,

Laurence W. Sain  
Associate Professor  
Industrial Education  
Northern Michigan University

-----  
Permission is granted to include our school in the study\_\_\_\_\_

Permission is not granted to include our school in the study\_\_\_\_\_

School\_\_\_\_\_ Supt.\_\_\_\_\_ Date\_\_\_\_\_



Driver Education Instructor

Dear

I am conducting a study of teacher qualifications and high school driver education programs in the Upper Peninsula of Michigan. This is being done as one of the requirements of the doctoral degree through Michigan State University. I am hoping that the information collected through this study will assist us at Northern to modify and improve our courses, programs, and services so that we may better serve the teachers and high schools of the Upper Peninsula.

I have received permission from your Superintendent to include your school in the study and trust that I may have your cooperation. No teacher, school, or student will be identified in the study as all information will be grouped. Each person, student, and school's identity will be held strictly confidential.

Please fill out the enclosed blank or blanks at your earliest convenience and return to me. A stamped, self-addressed envelope is enclosed for your reply.

Your prompt attention to this letter will be greatly appreciated and will facilitate the gathering of the necessary data for the completion of the project.

Sincerely,

Laurence W. Sain  
Associate Professor  
Industrial Education  
Northern Michigan University

P.S. Please enclose a list of other teachers in your school system engaged in the teaching of driver education.

L.W.S.

## TEACHER QUALIFICATIONS

Name \_\_\_\_\_ Birthdate \_\_\_\_\_

School \_\_\_\_\_ County \_\_\_\_\_ City \_\_\_\_\_

Type of Teaching Certificate presently held \_\_\_\_\_

Operator's License No. \_\_\_\_\_ Expiration Date \_\_\_\_\_

Driver Education Courses Taken	Where Taken (College)	Length of Course	Sem. Hrs. Credit	Year Taken
1.				
2.				
3.				
4.				
5.				
6.				

Courses Taken  
in Related Areas

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

Other Courses

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

Do you teach Driver Education full time? Yes \_\_\_ No \_\_\_

Number of periods per day in D.E. classroom \_\_\_ Driving \_\_\_?

Do you teach D.E. during regular day \_\_\_, Before or after  
school \_\_\_, Summer \_\_\_?

## CHECKLIST FOR DRIVER EDUCATION PROGRAM

Check the items that are most nearly indicative of your Driver Education program.

School \_\_\_\_\_ City \_\_\_\_\_

Person filing report \_\_\_\_\_ Title \_\_\_\_\_

1. Classroom Instruction:

- a. 28 to 30 clock hrs. \_\_\_\_\_,  
b. 32 to 36 clock hrs. \_\_\_\_\_, c. More \_\_\_\_\_.

2. Driving Instruction:

- a. Av. of 6 clock hrs. \_\_\_\_\_,  
b. 6 to 8 clock hrs. \_\_\_\_\_, c. More \_\_\_\_\_.

3. Is classroom instruction integrated with driving instruction? Yes \_\_\_\_\_, No \_\_\_\_\_.

4. Textbook used \_\_\_\_\_ Copyright Date \_\_\_\_\_

5. Are students involved in community traffic studies and surveys? Yes \_\_\_\_\_, No \_\_\_\_\_.

6. When is the program offered?

Part of regular school program \_\_\_\_\_,

Before or after school \_\_\_\_\_,

Summer \_\_\_\_\_, Combination \_\_\_\_\_.

7. Length of the course:

one sem. \_\_\_\_\_, 9-12 wks. \_\_\_\_\_, 6-8 wks. \_\_\_\_\_,

4 weeks or less \_\_\_\_\_.

8. List at least five films or film strips used:

- |          |          |
|----------|----------|
| a. _____ | d. _____ |
| b. _____ | e. _____ |
| c. _____ | f. _____ |

9. List at least five pamphlets used:
  - a. \_\_\_\_\_ d. \_\_\_\_\_
  - b. \_\_\_\_\_ e. \_\_\_\_\_
  - c. \_\_\_\_\_ f. \_\_\_\_\_
10. List resource persons participating in the program:
  - a. \_\_\_\_\_ c. \_\_\_\_\_
  - b. \_\_\_\_\_ d. \_\_\_\_\_
11. Type of driving experiences included in the course:
  - a. Simulation\_\_\_\_\_
  - b. Off-street driving range\_\_\_\_\_
  - c. On-the-street\_\_\_\_\_
  - d. Night driving\_\_\_\_\_
  - e. Winter driving\_\_\_\_\_
  - f. Special hazards\_\_\_\_\_
  - g. Emergency situations\_\_\_\_\_
12. Programmed instruction: Yes\_\_\_\_, No\_\_\_\_
13. Records: (student progress)
  - a. Individual\_\_\_\_, b. Class\_\_\_\_, c. Follow-up\_\_\_\_\_.
14. Parents and other teachers informed by:
  - a. Letter\_\_\_\_, b. Consultation\_\_\_\_,
  - c. News Media\_\_\_\_\_.
15. Class size:
 

Classroom: 16-20\_\_\_\_, 20-30\_\_\_\_, Over 30\_\_\_\_\_.

Laboratory or Car: 2-4\_\_\_\_, 5 or more\_\_\_\_\_.

March 3, 1969

Dear Fellow Driver Educator:

It is now time for the final phase of my survey of the driver education programs of the Upper Peninsula of Michigan.

This will consist of a short questionnaire and two tests for high school students who have successfully completed the course and have been driving for six months or more. In most cases this will be Juniors or Seniors who are still in your high school. This will be done in a group session and will not take more than an hour or an hour and a half to complete.

The two tests consist of a short knowledge test and Mann's Personal Attitude Survey. Both have been validated in previous studies to show that they do differentiate between good drivers and potentially poor drivers.

These questionnaires and tests will be administered for the most part by Senior and/or Graduate students from my classes who will have been instructed as to how it should be done. These students will contact you within the next few weeks to make arrangements for the interviewing and testing program.

We would like the group to consist of from ten to thirty-five students, depending upon the size of your school, and should be a fairly representative cross-section in order to have meaningful results.

I hope that we may have your cooperation for this final phase.

Sincerely,

L. W. Sain  
Associate Professor  
Industrial Education Dept.  
Northern Michigan University

INSTRUCTIONS FOR ADMINISTERING STUDENT  
QUESTIONNAIRES AND TESTS

1. Selection of school or schools by choice or assignment.
2. Contact the supervising Driver Education Teacher to make arrangements. Personal contacts are best, telephone is next best, but if necessary arrange by mail. Be sure that you have the date and time correct. Be on time for the appointment!
3. Ask for ten to thirty-five students, depending upon the size of the school. Be sure to get a definite commitment as to number of students and time of the meeting. Request from me the number of questionnaires, answer sheets, and test booklets needed in writing sufficiently in advance so you can become acquainted with the materials.
4. Explain to the students that the tests and questionnaires are being used in every high school in the U.P. and that they are to be a part of a research paper in driver education. School and student names will not be used in the study.
5. Administer the questionnaire first going over each question as it is filled in to be sure that it is understood. Truthful answers are necessary in order to have meaningful results. Collect questionnaires as soon as completed. (About 1/2 hour.)
6. Administer the Attitude Survey. (About forty minutes.)
  - a. Write only on the answer sheet. There are no right or wrong answers. Cross out letter that reflects your feelings best.
  - b. Collect all test booklets and answer sheets.
7. Administer Knowledge Test. (About twenty minutes.)
  - a. Write only on the answer sheet.
  - b. Cross out T for true and F for flase whichever is correct in the first part and cross out letter of the statement which best answers the question in the second part.
  - c. Collect all test booklets and answer sheets.
8. Thank the Instructor and the students for participating.

L. W. Sain, Researcher

## QUESTIONNAIRE FOR STUDENTS

Name \_\_\_\_\_ Birthdate \_\_\_\_\_ Sex: M \_\_\_ F \_\_\_

School \_\_\_\_\_ County \_\_\_\_\_ City \_\_\_\_\_

Date D.E. course completed \_\_\_\_\_ Date Licensed \_\_\_\_\_

License number \_\_\_\_\_ Expiration Date \_\_\_\_\_

How many months have you been driving? \_\_\_\_\_

Estimate how many miles you have driven \_\_\_\_\_

Have you received any traffic tickets since being licensed?

Yes \_\_\_ No \_\_\_ If the answer is yes, what were they for?

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

If more than four list on the back of sheet.

Have you been involved in accidents since being licensed?

Yes \_\_\_ No \_\_\_ If answer is yes answer the following:

How many accidents? \_\_\_ How many were you to blame for,

that is how many were you ticketed for? \_\_\_ How many

were not reported because they seemed to be of a minor

nature? \_\_\_ How many were other persons ticketed for?

\_\_\_\_\_

Do you feel that Driver Education helped you to become a

better driver? Yes \_\_\_ No \_\_\_ Briefly state why or why

not.

Knowledge Test Score \_\_\_\_\_ Attitude Test Score \_\_\_\_\_

ANSWER SHEET FOR DRIVER EDUCATION  
KNOWLEDGE TEST

Name \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_

Month's Driving Experience \_\_\_\_\_

DO NOT WRITE ON THE TEST FORM.

I. Cross out the correct answer. T for true and F for false.

- |        |         |         |
|--------|---------|---------|
| 1. T F | 7. T F  | 13. T F |
| 2. T F | 8. T F  | 14. T F |
| 3. T F | 9. T F  | 15. T F |
| 4. T F | 10. T F | 16. T F |
| 5. T F | 11. T F | 18. T F |
| 6. T F | 12. T F |         |

II. Select the best answer and cross out the letter on this answer sheet.

- |          |          |           |
|----------|----------|-----------|
| 1. A B C | 5. A B C | 9. A B C  |
| 2. A B C | 6. A B C | 10. A B C |
| 3. A B C | 7. A B C | 11. A B C |
| 4. A B C | 8. A B C | 12. A B C |



## ANSWER SHEET FOR PERSONAL ATTITUDE SURVEY

Name \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_ Mo.'s Driv. Exp. \_\_\_\_\_

MO NOT MAKR ON THE TEST BOOKLET

There are no correct or incorrect answers. Mark according to your feelings. Cross out the letter that you feel answers it best.

A. Always B. Usually C. Sometimes D. Rarely E. Never

- |               |               |               |
|---------------|---------------|---------------|
| 1. A B C D E  | 22. A B C D E | 43. A B C D E |
| 2. A B C D E  | 23. A B C D E | 44. A B C D E |
| 3. A B C D E  | 24. A B C D E | 45. A B C D E |
| 4. A B C D E  | 25. A B C D E | 46. A B C D E |
| 5. A B C D E  | 26. A B C D E | 47. A B C D E |
| 6. A B C D E  | 27. A B C D E | 48. A B C D E |
| 7. A B C D E  | 28. A B C D E | 49. A B C D E |
| 8. A B C D E  | 29. A B C D E | 50. A B C D E |
| 9. A B C D E  | 30. A B C D E | 51. A B C D E |
| 10. A B C D E | 31. A B C D E | 52. A B C D E |
| 11. A B C D E | 32. A B C D E | 53. A B C D E |
| 12. A B C D E | 33. A B C D E | 54. A B C D E |
| 13. A B C D E | 34. A B C D E | 55. A B C D E |
| 14. A B C D E | 35. A B C D E | 56. A B C D E |
| 15. A B C D E | 36. A B C D E | 57. A B C D E |
| 16. A B C D E | 37. A B C D E | 58. A B C D E |
| 17. A B C D E | 38. A B C D E | 59. A B C D E |
| 18. A B C D E | 39. A B C D E | 60. A B C D E |
| 19. A B C D E | 40. A B C D E | 61. A B C D E |
| 20. A B C D E | 41. A B C D E | 62. A B C D E |
| 21. A B C D E | 42. A B C D E | 63. A B C D E |

## DRIVER EDUCATION KNOWLEDGE TEST

Answer all questions on the answer sheet. Do not write on test form. The first group of statements are to be answered true or false. The second group are multiple-choice in which you select the correct answer.

- I. Mark True or False by crossing out the correct letter on answer sheet.
  1. It is unlawful not to stop and exchange information if one is involved in an accident.
  2. The need for trained drivers increases with the rise in traffic volume.
  3. When approaching a school bus stopped on the highway, to load or unload passengers, one should slow down and pass with care.
  4. The effects of alcohol on one's driving can be compensated for by one's driving skill.
  5. New headlights will increase a driver's visibility, thus eliminating the need to reduce one's speed at night.
  6. Pedestrians have the right-of-way at all times.
  7. In educating the future driver, a great deal of emphasis should be placed on attitude development.
  8. When approaching an intersection, one should look left then right and then back left again before proceeding across.
  9. The faster one drives, the more likely he is to have an accident.
  10. Pedestrians who disregard traffic regulations should be punished.
  11. A comfortable sitting position in the driver's seat is important to safe driving.
  12. A vehicle has more traction on gravel surfaces than any other type.
  13. Driving is a social task.

14. The posted speed is the safe speed and maximum speed at which one can drive at all times without being arrested.
15. "Dragging" from stop lights is not as dangerous as open highway racing.
16. Most accidents happen at intersections.
17. When the right wheels slip off the pavement the driver should pull them on immediately.

II. Select the best answer and mark out that letter on answer sheet.

1. Driver A meets a school bus on a four-lane undivided highway discharging passengers. Driver A should:
  - A. Proceed with caution.
  - B. Stop and wait for the flashing red lights to be turned off.
  - C. Stop, honk his horn and then proceed.
2. Driver A is traveling on a black-top highway. This road does not have a posted speed limit. Driver A's speed should be governed by:
  - A. The ability of his vehicle to operate at high speeds.
  - B. His driving skill.
  - C. Road conditions and the traffic around him.
3. Driver A is driving at night and he approaches Driver B traveling in the opposite direction. Driver A should:
  - A. Move to the right in order to give more room.
  - B. Reduce speed.
  - C. Dim headlights.
4. Driver A approaches Driver B who is traveling 50 mph. on an open country road. A wishes to overtake and pass B. While waiting to pass A should stay:
  - A. Three car lengths behind B.
  - B. Four car lengths behind B.
  - C. Five car lengths behind B.
5. Driver A, while traveling on a hardtop surface road, discovers that he has a flat tire. What should he do?
  - A. Pull partially off the roadway.
  - B. Stay on the roadway so as not to ruin his tire.
  - C. Pull completely off the roadway.

6. Pedestrians must know and understand driving problems so they will:
  - A. Understand the driver's problems.
  - B. Be better drivers.
  - C. Have a better understanding of traffic laws.
7. Driver A approaches an intersection. The light is in his favor. However, a pedestrian steps from the curb and starts across the street. What should A do?
  - A. Blow horn and continue on slowly.
  - B. Stop and yield to the pedestrian.
  - C. Continue through the intersection but at a reduced speed.
8. The most important part of driver education programs should be:
  - A. The development of driving skills.
  - B. The development of a sense of responsibility and courtesy.
  - C. Development of a complete knowledge of traffic laws.
9. Which of the following aspects of athletics is unwanted in driving?
  - A. Fair play.
  - B. Competition.
  - C. Sportsmanlike conduct.
10. After one has passed a vehicle in heavy traffic he should:
  - A. Honk his horn.
  - B. Check his mirror and look over his right shoulder.
  - C. Blink his lights before returning to his proper lane at night.
11. Which of the following will most likely help to improve the driving records of teen-agers and young adults?
  - A. Stricter traffic law enforcement?
  - B. An understanding of their responsibility to other drivers.
  - C. Increased knowledge of traffic laws.
12. Which of the following has precedence in controlling traffic?
  - A. Traffic signal light.
  - B. Stop sign.
  - C. Traffic officer.

## PERSONAL ATTITUDE SURVEY

Name \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_

Month's Driving Experience \_\_\_\_\_

The following statements reflect your attitude and feelings about yourself and your relations to others. There are no right or wrong answers. Fill in on the answer sheet the answer that reflects your feelings best.

Do not mark on the test booklet:

A. Always B. Usually C. Sometimes D. Rarely E. Never

1. I like (liked) to take part in organized extra-curricular activities in school.
2. Young people are much better drivers than middle-aged people.
3. Policemen are sincere in enforcing the laws.
4. My parents are reasonable in their relations with me.
5. My community is a happy place to live.
6. I put off until tomorrow things I should do today.
7. I like to daydream while I am driving.
8. I feel full of pep when I get behind the wheel.
9. I live in a home that is happy.
10. If I see a police officer when I am driving I am more careful.
11. Over-careful drivers cause more accidents than the so-called reckless ones.
12. I enjoy being out late at night and sleeping mornings.
13. I get a feeling of real power when driving a car.
14. Courses in school are set up to meet the needs and interest of the student.
15. I am concerned about the way my clothes look.

16. Slow drivers should be kept off the highways.
17. All young people should be required to take a course in driver education.
18. Unsafe drivers should be deprived of the right to drive.
19. Accidents don't just happen; they are caused.
20. I like to get everything out of a car that it has in it.
21. The chief work of most policemen should be traffic control.
22. My parents exert too much control over me.
23. The people in my community want the traffic laws enforced.
24. I have been tempted to cheat on a test at school.
25. I get impatient when driving in heavy traffic.
26. There are times when it seems as if everyone is against me.
27. Old, defective cars should be kept off the road.
28. Drivers should be given more freedom in obeying traffic signs.
29. People should drive when they are angry.
30. Passing on hills and curves is exceedingly dangerous.
31. It is necessary to stop at "stop" signs if no other cars are in sight.
32. I like to put extras on my car to attract attention.
33. I am good at talking police out of giving me a traffic ticket.
34. Strong discipline in practice makes a better team.
35. I am (was) popular with most of the kids in my class.
36. Cops are rougher on teenagers than on adults.
37. Teachers want to help students with their problems.
38. My father gets traffic tickets for moving violations.

39. I have as good table manners at home as when I eat out.
40. I have been wrong in an argument but wouldn't admit it to my opponent.
41. The school should have the right to question the way I drive.
42. I like to razz the team when it is losing.
43. I am proud of my reputation in the community.
44. I am considered a friendly person.
45. I like most of my school work.
46. Our family spends a great deal of time together.
47. Attitudes toward driving are more important than ability to handle the car.
48. I like to take chances when I'm driving.
49. Traffic laws are set up to promote safety.
50. Courtesy toward other drivers is important.
51. I like a great deal of freedom.
52. I don't mind being told what to do.
53. I find that older people tend to be bossy.
54. My grades in school are (were) a good indication of my ability.
55. I sometimes become concerned about what other people think of me.
56. I feel somewhat nervous when I drive a car.
57. I think courtesy towards others is a good reflection of a person's character.
58. I get more fun out of driving a car than in any other activity.
59. The police are only trying to do the job for which they were hired.

- 60. My folks insist that I spend most week-day evenings at home.
- 61. I am considered a reliable person.
- 62. I like to help a person who is in trouble.
- 63. I am more courteous than the average.

How do you feel about answering these questions?  
(Write on back of the answer sheet).