

Increasing Independent Practice for Traffic Safety Education
Students Through School Newsletter Communications

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FACULTY APPROVAL

Increasing Independent Practice for Traffic Safety Education
Students Through School Newsletter Communications

Approved for the Faculty

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ABSTRACT

The purpose of this quantitative study was to determine whether TSE students increased independent driving practice when families received a school newsletter with practice suggestions as measured by student reporting of independent practice hours. To accomplish this purpose, a review of selected literature was conducted. Additionally, participating student surveys data was obtained and analyzed from which related inferences, conclusions, and recommendations were formulated. An analysis of data indicated that when the families of Traffic Safety Education students received school newsletters containing practice suggestions, the students reported a greater number of independent practice hours when compared with Traffic Safety Education students whose families did not receive school newsletters containing practice suggestions.

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CHAPTER 1

Introduction

Background for the Project

The Washington State Patrol, Department of Licensing and Office of the Governor established the “Target Zero” plan in 2000 to aggressively decrease the number of traffic deaths statewide. The plan established a goal of zero deaths on Washington roads by the year 2030. Following Washington Legislative approval of RCW 28A-220 in 2000, enhanced funding for public school traffic safety programs was removed and traffic safety instruction from private driving schools in Washington State emerged as the primary method for the preparation of young drivers. As a result, traffic authorities in Washington State have come to depend on private driving schools to be most effective in reaching their goal.

Statement of the Problem

The mission of Traffic Safety Education (TSE) has focused on assuring that students became safe and responsible drivers. Driving practice has been an area of the education process that TSE instructors had little control over. However, while TSE students are usually able to write correct answers on assignments, understand video presentations, and answer questions during discussions, evidence still does not exist to confirm that habits for successful driving have been instilled in driver candidates.

Phrased as a question, the problem which represented the focus of the present study may be stated as follows: Will Traffic Safety Education students increase independent driving practice when families receive school newsletters with practice suggestions as measured by student reporting of independent practice hours?

Purpose of the Project

The purpose of this quantitative descriptive study was to determine whether TSE students increased independent driving practice when families received a school newsletter with practice suggestions as measured by student reporting of independent practice hours. To accomplish this purpose, a review of selected literature was conducted. Additionally, participating student survey data was obtained and analyzed from which related inferences, conclusions, and recommendations were formulated.

Delimitations

The study was conducted during two eight week periods during fall and winter months from 2006 - 2007 when weather conditions were unpredictable. The location of the study was Benton City, a mostly rural community of Eastern Washington. Students involved in the study ranged in age from fifteen to seventeen years. The students were enrolled in a class created by a private driving school with classroom sessions that met twice weekly totaling four hours. Thirty hours of in-class instruction and four hours of behind-the-wheel instruction

were provided. Of 39 students enrolled in the TSE class, 11 received a traffic safety newsletter with practice suggestions mailed to their parents. The remaining 11 students did not receive a traffic safety newsletter with practice suggestions mailed to their parents. This project was not meant to generalize to all populations.

Assumptions

An assumption was made by the researcher (Michael Carlson) that participants had access to practice vehicles and supervision required for independent driving practice. The researcher also assumed the in-class instruction properly trained participants with knowledge essential for completing independent driving practice. For validation of the second assumption, the driving school underwent an annual State of Washington course audit and program certification review. Finally, it was assumed that Traffic Safety Education students will increase independent driving practice when families receive school newsletters with practice suggestions as measured by student reporting of independent practice hours.

Hypothesis

Traffic Safety Education students will increase independent driving practice when families receive school newsletters with practice suggestions as measured by student reporting of independent practice hours.

Significance of the Project

From 1960 to 2000, the population of Washington State doubled, while the population of Benton County, the location of this study, increased by more than double (Social Science Data Analysis Network, 2006). Those increased population pressures and uncharted technology pressures (e.g. stop lights, traffic signs and signals, new road constructions, etc.) combined to create driving environments that called for a very sophisticated and prepared driver.

In 2001, the Washington State Legislature passed RCW 46.20.075 which required new drivers under age eighteen to present certification by his or her parent, guardian, or employer to the department indicating that the applicant has had at least fifty hours of driving experience, ten of which were at night. As a result, the public needed guidance to understand the new regulations and to properly meet the needs of new teen drivers (Washington State Legislature, 2001).

In 2000, Washington State Legislative approved of RCW 28A-220 that removed enhanced funding from public school TSE programs. Without adequate funding, the majority of public school TSE education programs gradually closed down. The primary source of formal traffic safety education in Washington State, therefore, became the domain of private driving school programs. Private driving school programs accepted the responsibility to connect new teen drivers with the new requirements for licensure. For private driving schools to be successful, a

team effort was needed. Essentially, these schools needed to connect with parents and not just the teen who showed up in the classroom each day (Washington State Legislature, 2000).

Procedure

During 2006, Demographic statistics were obtained from the Washington State Office of Superintendent of Public Instruction (OSPI). The OSPI data has been used as a state standard and reported by every public school in Washington State. These data were also deemed valid for the present study because all of the participants came from Kiona Benton High School (KBHS).

All 39 participating students included in the study were selected at random. In the same manner, participants were assigned to control and treatment groups as follows:

Control Group (X): Students whose parents did not receive a TSE newsletter.

Treatment Group (Y): Students whose parents received a TSE newsletter.

The identity of the students receiving the newsletter was withheld from the classroom and behind-the-wheel instructors in order to remove any prejudice that might be caused by knowing whether a student was receiving extra treatment. Five newsletters (Appendix C) were mailed to the home address of students and addressed to the parent or guardian of the randomly selected students. The newsletters were distributed at an interval designed to match preparation periods

for each of the four behind-the-wheel drive lessons. The first newsletter was mailed the day after the first class period and the remainder were mailed every other week for the eight week tenure of the course.

Independent driving practice time was recorded twice weekly during class periods by students using a student practice tracker form (Appendix A) that was kept in individual student folders. Students reported practice hours each week throughout the eight week course. A satisfaction survey (Appendices B-1 and B-2) was completed by the parents of participating students to elicit approval levels for communication between the school staff and the families. The follow-up survey also evaluated whether the parent knew how to help the student practice. Data collection occurred at the beginning of each class period. Students used the practice tracker form to record hours of independent practice. The hours were totaled for each individual student and used to compare treatment and control groups.

Definition of Terms

Significant terms used in the context of the present study have been defined as follows:

behind-the-wheel. Behind-the-wheel was any learning a student did while in the car.

descriptive statistics. Data analysis techniques enabling the researcher to meaningfully describe many scores with a small number of numerical indices.

independent driving practice. Independent driving practice occurred when students did driving practice outside of instructor supervision.

intermediate driver license. The licensing requirements in the State of Washington required new drivers under the age of eighteen to have completed fifty hours of independent driving practice with ten of the fifty being completed at night.

practice tracker. A form used for the reporting of independent driving practice hours.

quantitative research. The collection of numerical data to explain, predict, and/or control phenomena of interest.

random sampling. The process of selecting a sample in such a way that all individuals in the defined population have an equal and independent chance of being selected for the sample.

survey research. Statistical surveys are used to collect quantitative information about items in a population with respect to one or more variables.

Acronyms

KBHS. Kiona-Benton High School

OSPI. Office of Superintendent of Public Instruction

TSE. Traffic Safety Education

CHAPTER 2

Review of the Literature

Introduction

The review of literature and research summarized in Chapter 2 has been organized to address the following topics:

Traffic Safety Education

Parent Involvement

Newsletter Communications

Summary

Current data were identified through an on-line computerized literature search using the Internet, Proquest, and a hand-search of related, supplemental materials.

Traffic Safety Education

Traffic Safety Education (TSE) provides a venue for the preparation of inexperienced drivers and an opportunity to obtain experience early in their driving careers. Friedland, Trebilcock, and Roach (1990) identify that TSE is the method by which governmental systems target the high risk driving groups and enact interventions that will limit undesirable driving behaviors. Since young drivers represent a disproportionate percentage of the accidents (U.S. Department of Transportation, 2005), they are the frequent focus of TSE programs. Friedland, Trebilcock, and Roach (1990) add that it is inconclusive whether the over-

representation of young drivers in accidents can only be explained by their inexperience with driving or through be explained by behavioral and environmental factors such as aggression, immaturity, or peer pressures that are specific to young people. To the extent that driving inexperience contributes to novice driver accidents, interventions that reduce teen driving exposure will have a positive correlation through extending driver preparation. Considering immaturity and related factors, interventions that extend the preparation of novice drivers will be more effective in reducing traffic accidents by preventing or reducing the driving of our most dangerous driving population. Today's interventions of required TSE courses for novice drivers may inherently reduce the accident rate among teen drivers by having them obtain licensure at an older age. Thus, if they are required to wait to drive while completing the TSE course, fewer accidents will occur because they are less affected by immaturity while driving unsupervised.

While Traffic Safety programs have varied from one community to the next, the consistent hallmark was the connection of Traffic Safety Education professionals with beginning teen drivers. The goal was to provide a classroom environment where "...driver education/training be a superior way to learn basic driving skills, and there is some evidence that this goal can be achieved. For example, in the landmark DeKalb study, those who received the maximum training scored higher than the minimum training and control groups on an on-

road performance test.” Improved skills meant students were better prepared for the conditions they found on the roadway (Williams, 2006).

Curriculum for traffic safety education has developed as varied as there the types of students that are enrolled in the classes, driving tasks and errors, driving difficulties, and the development of traffic technology. “In contrast, the seminal safe performance curriculum was based on an extensive conceptual task analysis with many hundreds of task components identified and rated as to criticality. A number of curricula have been revised and improved incrementally over the years, seemingly with an eclectic theoretical basis” (McKnight et al., 1991, p. 18).

Crossan, Lane, and White (1999) observe that the integration of a skill such as smoothness in steering comes from experience and therefore experience is related to safety. The broader objective in steering includes both motor and visual skills, and it is known that poor visual skills in are related to risk and inexperience. This gives confidence that increasing the experience of novice drivers will create the integration of skills and develop safer traffic systems.

Parent Involvement

Decades of research validated that a strong and consistent involvement of parents in a student’s education was an indicator of student success. With parent involvement, education has become a focused three-way team that includes the teacher and student. From this belief, studies were conducted to identify methods

for increasing parent involvement that included homework hotlines, parent/child activities, conferences, websites, and parent education (Ellender, & Wang, 2006).

Parental involvement is so powerful because the children spend the largest percentage of development at home. The majority of the children's learning is completed outside of school. Cordry & Wilson observed:

By the time Johnny X. turns one, his parents will have 8,750 hours to provide supervision and care for Johnny. When Johnny is ready to start school at the age of five, his parents will have accumulated 43,800 hours of time for his development and growth. (p.56).

According to Greenwood & Hickman (1991), Considerable research now documents the contribution of parent involvement to positive outcomes. A model of parent involvement from the Family-School Partnership Lab offered motivations based on a view of parental roles.

Hoover-Depmsey, et al. (2005) explained that the parental role includes a sense of personal or shared responsibility for the child's educational outcomes and concurrent beliefs about whether one should be engaged in supporting the child's learning and school success. Parental sense of efficacy for helping the child succeed in school includes the belief that personal actions will help the child learn.

Working relationships between students and parents was shown to influence student achievement. As illustrated in the Yakima School District,

74.8% of students qualified for the United States Department of Agriculture Free and Reduced Priced Meal Program (Wilson Middle School, 2005). Qualifying for Free and Reduced Priced Meals is a marker for low income families. One of the keys to achievement for students from low income families was in creating relationships with their families (Payne, 2003).

Student and parent relationships that work are built by the employment of emotional deposits and the avoidance of emotional withdrawals. Emotional deposits include the keeping of promises, kindness, clarifying expectations, apologies and being open to feedback (Payne).

Building working student and parent relationships develops a support system. “No significant learning will occur without a meaningful relationship” (Payne, p. 143). Having as successful support system will mean greater academic success for students in low income families.

The roles for student education have been created by group expectations. Invitations to involvement from important others, including teachers, are often key motivators of parents’ decisions to become involved. In other words, the relationship between parent and school changed when parents were asked to be involved (Hoover-Dempsey, et al., 2005). West, et al. (1998) found that during early education, mothers provided most of the educational connection with their children and that more highly educated mothers made more use of workbooks and private tutors.

A parental intervention study conducted by Somons-Morton, et al. (2003) concluded that when parents were engaged in regular discussions with 16 year old adolescents, parent-teen communication concerned with teen driving was enhanced for the entire nine month period. Therefore, it was possible to reach parents through brief interventions and measurably improve parental restrictions on teen driving with some continuation beyond the intervention.

Newsletter Communications

Connecting parents to the school led Ferrana & Ferrana (2005) to describe and organizational framework comprised of six strategies to maximize student achievement. Three of these strategies are paraphrased below:

1. Parenting: This approach helped families establish home environments to support children as students by providing parent education/trainin, such as family literacy. This strategy also supported school programs to assist families with health, nutrition, and other services.
2. Communication: This strategy provided effective forms of school-to-home, and home-to-school communications about school programs. Schools were encouraged to conference with parents and to provide language translators to assist families. Regular notices, memos, phone calls and other forms of informal communication were recommended.

3. Learning at home: This strategy provided information and ideas to families about how to help students at home with homework and other school related activities, decisions and planning. Provision was made for scheduling a regular time and place for home study.

Newsletters were commonly listed as one method of outreach for educational programs that attempted to increase achievement of students through parent involvement. Research found that while results sometimes fell below full expectations, there was still produced an improvement in connections to parents and increases in student achievement (LeCompte, 1990). “Comprehensive partnership programs should include activities for all six types of involvement, including workshops for parents, newsletters...” (Epstein, 2004).

Summary

The review of selected literature presented in Chapter 2 supported the following research themes:

1. Traffic Safety Education produced teen drivers that scored higher on performance tests than did control groups that did not receive program training, while delays in access to unsupervised driving privileges reduced the impact of dangerous driving behaviors.
2. Involvement of parents in the educational process amplified the educational impact for students when parents were given tools to support the classroom experience.

3. When newsletters were used to supplement other communications, parents were empowered with timely knowledge and resources that increased retention of student knowledge.

CHAPTER 3

Methodology and Treatment of Data

Introduction

The purpose of this quantitative descriptive study was to determine whether TSE students increased independent driving practice when families received a school newsletter with practice suggestions as measured by student reporting of independent practice hours. To accomplish this purpose, a review of selected literature was conducted. Additionally, participating student and parent survey data was obtained and analyzed from which related inferences, conclusions, and recommendations were formulated.

Chapter 3 contains a description of the methodology used in the study. Additionally, the researcher includes details concerning participants, instruments, design, procedure, treatment of data, and summary.

Methodology

The researcher utilized a quantitative descriptive research methodology to determine whether Traffic Safety Education students increased independent driving practice when families received school newsletters (Appendix C) with practice suggestions as measured by student reporting of independent practice hours. A questionnaire survey (Appendix B) was used to obtain data needed to compare treatment and control groups.

Participants

Thirty-nine students in grades 9-12 at KBHS participated in the study. Participants, who ranged in age from 15 – 17 years, were all enrolled at KBHS and in the researcher's private TSE course. Students were selected at random and assigned to control and treatment groups as follows:

Control Group (X): Students whose parents did not receive a TSE newsletter.

Treatment Group (Y): Students whose parents received a TSE newsletter.

Instruments

Baseline data central to the study emanated from two primary sources. First, a student practice tracker form (Appendix A) was used by participants to report practice driving hours logged throughout the two 8-week courses. Next, a follow up questionnaire survey was distributed to parents to elicit their generalized perceptions regarding satisfaction levels for communication between school staff and the families.

Design

This research study utilized a quantitative descriptive survey design to determine whether Traffic Safety Education students increased independent driving practice when families received school newsletters with practice suggestions as measured by student reporting of independent practice hours. This involved collecting data from two groups of participants as follows:

Control Group (X): Students whose parents did not receive a TSE newsletter.

Treatment Group (Y): Students whose parents received a TSE newsletter.

Procedure

Procedures employed in the present study evolved in several stages as detailed below:

1. During 2006, demographic statistics were obtained from the Washington State Office of Superintendent of Public Instruction (OSPI). The OSPI data have been used as a state standard and reported by every public school in Washington State. These data were also deemed valid for the present study because all of the participants came from Kiona Benton High School (KBHS).
2. All 39 participating students included in the study were selected at random. In the same manner, participants were assigned to control and treatment groups as follows:

Treatment Group (X): Students whose parents received a TSE newsletter.

Control Group (Y): Students whose parents did not receive a TSE newsletter.

3. The identity of the students receiving the newsletter was withheld from the classroom and behind-the-wheel instructors in order to remove any prejudice that might be caused by knowing whether a student was receiving extra treatment.
4. During each of the two 8-week sessions in 2006, participants enrolled in private TSE courses. Participants were given information describing the Washington State Intermediate Licensing Law which includes the requirement for license applicants under 18 years of age to record 50 hours of driving time outside of their TSE course.
5. Five newsletters were mailed to the home address of students and addressed to the parent of guardian of the randomly selected students. The newsletters were distributed at an interval designed to match preparation periods for each of the four behind-the-wheel drive lessons. The first newsletter was mailed the day after the first class period and the remainders were mailed every other week for the eight week tenure of the course.
6. Independent driving practice time was recorded twice weekly during class periods by students using a practice tracker form that was kept in individual student folders. Students reported practice hours each week throughout the eight week course. Participants were asked to round to the nearest 5 minutes when tracking time.

7. A satisfaction survey (Appendices B-1 and B-2) was completed by parents that elicited satisfaction levels for communication between the school staff and the families. The follow up survey also asked for an evaluation of personal knowledge about how to help students practice. Data collection occurred at the beginning of each class period. Students used the practice tracker form to record hours of independent practice. The hours were totaled for each individual student and used to compare treatment and control groups.
8. Comparison of the results of the practice tracker reports and the satisfaction survey were made in order to determine whether there were any distinct benefits or drawbacks to using newsletter communications with parents of TSE students.

Treatment of the Data

Data obtained from treatment and control groups including both the student practice tracker form and survey data obtained from parents provided essential information from which related conclusions and recommendations were formulated. Specifically, the student practice tracker form was used to record independent driving practice time, whereas the survey of parents reported their overall level of satisfaction with school and family communication.

Summary

Chapter 3 provided a description on the research methodology employed in the study, participants, instruments used, research design, and procedure utilized. Details concerning treatment of the data obtained and analyzed were also presented.

CHAPTER 4

Analysis of the Data

Introduction

The analysis offered in Chapter 4 will be drawn out of data collected from 39 participants included in the study, selected at random, and assigned to control and treatment groups as follows:

Treatment Group (X): Students whose parents received a TSE newsletter.

Control Group (Y): Students whose parents did not receive a TSE newsletter.

Description of the Environment

The study was conducted during two eight week periods during fall and winter months from 2006 - 2007 when weather conditions were unpredictable. The location of the study was Benton City, a mostly rural community of Eastern Washington affected by the population growth pressures also felt by Washington State (Appendices D-1 and D-2). Students involved in the study ranged in age from fifteen to seventeen years. The students were enrolled in a class created by a private driving school with classroom sessions that met twice weekly totaling four hours. Thirty hours of in-class instruction and four hours of behind-the-wheel instruction were provided. Of 39 students enrolled in the TSE class, 11 received a traffic safety newsletter with practice suggestions mailed to their parents. The remaining 11 students did not receive a traffic safety newsletter with practice

suggestions mailed to their parents. This project was not meant to generalize to all populations.

Hypothesis

Traffic Safety Education students will increase independent driving practice when families receive school newsletters with practice suggestions as measured by student reporting of independent practice hours.

Results of the Study

As shown in Table 1, all groups and sessions demonstrated variations in reported independent practice time. Differences range from as high as 35:15 hours to as low as 3:10 hours.

Session 1 had a student population of 25. Treatment Group (X) in session 1 reported an average of 12:08 hours of independent practice. The Control Group (Y) in session 1 reported an average of 13:27 hours of independent practice. The Control Group exceeded the Treatment Group by 1:19 hours on average.

Session 2 held a student population of 14. Treatment Group (X) in session 1 reported an average of 18:86 hours of independent practice. The Control Group (Y) in session 1 reported an average of 11:57 hours of independent practice. The Treatment Group exceeded the Control Group by 7:29 hours on average.

Table 2 represents the parent survey results. The parents were asked 3 quantitative survey questions along with one qualifying question that identified the Treatment Group (X) and Control Group (Y). As shown in Table 2, the

Table 1

Practice Tracker: Summary of student reported independent practice hours for Treatment (X) and Control Groups (Y), October 2006 – February 2007.

	Session 1		Session 2	
	Treatment Group (X)	Control Group (Y)	Treatment Group (X)	Control Group (Y)
	33:40	04:15	17:20	10:20
	07:05	08:45	13:35	15:00
	08:06	04:15	23:05	11:20
	11:45	09:58	18:50	5:35
	11:57	40:20	13:30	17:40
	08:00	26:10	10:25	17:50
	13:00	16:55	35:15	03:15
	07:45	6:41		
	08:40	11:10		
	12:40	11:20		
	03:30	3:10		
	09:20	15:10		
	12:20			
Total Hours Practiced	147:48	160:06	132:00	81:00
Average Hours Practiced	12:08	13:27	18:86	11:57
Average Difference	- 1:19	+ 1:19	+ 7:29	- 7:29

Treatment Group (X) reported a stronger connection to the idea that parents should be taking the student to practice. The Treatment Group (X) in session 1 reported a 100% understanding of the parent and student practice curriculum with 88% of session 2 reporting this understanding. The Treatment Group (Y) reported a 91% understanding for session 1 and a 75% understanding in session 2 of the parent and student practice curriculum.

For the second question, the Control Group (X) of both sessions showed a mean score of 2 out of a possible 5, whereas the Treatment Group (X) showed a mean score of 4 and 4.6. The difference between the groups is also demonstrated

Table 2

Parent Survey: Summary of surveys given to the parents of student participants, October 2006 – February 2007.

		Session 1		Session 2	
1.	"... I was expected to take my student driving."	Treatment Group (X)	Control Group (Y)	Treatment Group (X)	Control Group (Y)
	"1 = Very untrue"				
	"2 = Somewhat untrue"				
	"3 = Undecided"				1
	"4 = Somewhat true"		3	3	3
	"5 = Very true"	6	4	2	
	Mean Score	5	4.6	4.4	3.8
	Percentage	100%	91%	88%	75%
	Combined Mean	X = 4.7	Y = 4.3		
	Combined Percentage	X = 94%	Y = 86%		
2.	"I knew how to help my student practice."	Treatment Group (X)	Control Group (Y)	Treatment Group (X)	Control Group (Y)
	"1 = Very untrue"		2		1
	"2 = Somewhat untrue"		3		2
	"3 = Undecided"	1	2		1
	"4 = Somewhat true"	4		2	
	"5 = Very true"	1		3	
	Mean Score	4	2	4.6	2
	Percentage	80%	40%	92%	40%
	Combined Mean	X = 4.3	Y = 2		
	Combined Percentage	X = 86%	Y = 40%		
3.	"How satisfied were you with communication. . .?"	Treatment Group (X)	Control Group (Y)	Treatment Group (X)	Control Group (Y)
	"1 = Very unsatisfied"				
	"2 = Somewhat unsat."				1
	"3 = Undecided"		2		
	"4 = Somewhat satisfied"	3	4	4	3
	"5 = Very satisfied"	3	1	1	
	Mean Score	4.5	3.9	4.2	3.5
	Percentage	90%	78%	84%	70%
	Combined Mean	X = 4.4	Y = 3.7		
	Combined Percentage	X = 88%	Y = 74%		

in the percentages with the Control Group (Y) showing a competency level of 40% when asked about parental knowledge of how to provide help to a practicing student. When asked the same question, the Treatment Group (X) showed an aggregated competency level of 86%. The second question highlights the largest divergence between the Treatment Group (X) and Control Group (Y).

The Treatment Group (X) gave a higher satisfaction with communication between the driving school and the parents with a percentage of 88% while the Control Group (Y) gave scores that equaled 74%.

Findings

From the analysis of the data, a limited number of findings became apparent. The problem which was the focus of this study was answered in the affirmative. That is, when the families of Traffic Safety Education students received school newsletters containing practice suggestions, the students reported a greater number of independent practice hours when compared with Traffic Safety Education students whose families did not receive school newsletters containing practice suggestions.

Summary

Chapter 4 includes discussion of the environment, hypothesis, results of the study, and findings. Data analyzed supported the hypothesis that Traffic Safety Education students will increase independent driving practice when

families receive school newsletters with practice suggestions as measured by student reporting of independent practice hours.

CHAPTER 5

Summary, Conclusions and Recommendations

Summary

The purpose of this quantitative descriptive study was to determine whether Traffic Safety Education students will increase independent driving practice when families receive school newsletters with practice suggestions as measured by student reporting of independent practice hours. To answer this question, a review of selected literature was conducted and student independent practice data was collected and analyzed.

Conclusions

From the review of selected literature presented in Chapter 2 and the analysis in Chapter 4, the following conclusions were reached:

1. Traffic Safety Education produced teen drivers that scored higher on performance tests than did control groups that did not receive program training, while delays in access to unsupervised driving privileges reduced the impact of dangerous driving behaviors.
2. Involvement of parents in the educational process amplified the educational impact for students when parents were given tools to support the classroom experience.

3. When newsletters were used to supplement other communications, parents were empowered with timely knowledge and resources that increased retention of student knowledge.

Recommendations

Based on the conclusions above, the following recommendation has been suggested:

1. To improve performance test scores and dangerous driving behaviors of teen drivers, Traffic Safety Education and supervised driving practice should be increased.
2. To improve the educational impact for students, parents should be involved in the educational process and they should be given tools to support the classroom experience.
3. To improve the retention of student knowledge, newsletters should be used to supplement other communications so that parents are empowered with timely knowledge and resources.
4. Traffic Safety Education personnel may wish to utilize information contained in this study or, they may wish to undertake further study more suited to their unique needs.

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APPENDIX A

Student Practice Tracker Form

Name _____

For each day of the week, please indicate the number of driving and practicing minutes completed.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 st Week							
2 nd Week							
3 rd Week							
4 th Week							
5 th Week							
6 th Week							
7 th Week							
8 th Week							

This form was used by students to record their independent practice time. This data was extracted and compiled for use in comparing control and treatment groups.

APPENDIX B-1

Parent Satisfaction Survey

To be completed by a parent or guardian of the driver education student.

Please take a moment and let us know how you felt communication was between the driving school and the parents/guardians during this course.

Please circle the answer that most closely matches how you feel.

I knew that I was expected to take my student driving.

- 1 = Very untrue
- 2 = Somewhat untrue
- 3 = Undecided
- 4 = Somewhat true
- 5 = Very true

I knew how to help my student practice.

- 1 = Very untrue
- 2 = Somewhat untrue
- 3 = Undecided
- 4 = Somewhat true
- 5 = Very true

How satisfied were you with communication between the driving school and parents/guardians?

- 1 = Very unsatisfied
- 2 = Somewhat unsatisfied
- 3 = Undecided
- 4 = Somewhat satisfied
- 5 = Very satisfied

I received newsletters from the driving school

Yes No

APPENDIX B-2

Letter to Parents

PARKSIDE DRIVING SCHOOL

1912 Fruitvale Blvd.
Yakima, WA 98902
(509) 457-6862



Parkside Driving
believes in student success
www.parksidedriving.com

November 9, 2006

Dear Parent or Guardian,

We are requesting your permission to survey your student for their independent driving practice hours. This study is in connection with a master's degree project through Heritage University.

This study will allow the driving school to measure the impact of its policies and program delivery. The information gathered from your student will be used to make curriculum decisions for future classes.

Your student's information will be held in the strictest confidence and the resulting study will not allow the identification of a specific student's information. We will respect the right of the family to opt out of this study.

If you have any questions or concerns, please contact Mike Carlson at 509-430-1808.

Thank you,

Michael Carlson
Owner

APPENDIX C

Newsletter 1

1912 Fruitvale Blvd
Yakima, WA 98902
(509) 457-6862

PARKSIDE DRIVING SCHOOL
Newsletter
www.parkside-driving.com

PARKSIDE DRIVING
believes in student success.

Instructor's Corner

Class is off to a great start! We always like being with the new students in class.

We teach class with the idea that students will come with different learning styles. The class is conducted to meet these variations. Students will learn by listening to an instructor and answers given by other students. They will be personally involved with class discussion and giving verbal answers. Also, learning by watching video segments and the driving of other students will take place. Students will give written answers from text materials. And finally, students physically perform the skills during lessons in the car.

We hope that this class will reach students on different levels and through all learning styles.

On the way home from class....

Studies of memory show that without practice or review, $\frac{1}{2}$ of information learned is lost after 24 hours with only $\frac{1}{4}$ remaining after 6 days. While the class structure is designed to beat these statistics, the most powerful tool is a discussion of the material outside of class.

Open-ended questions can be a great way to start. Ask about specific driving situations you encounter while on the road. Get your students views on intermediate licensing, seat belt laws, road rage, and drinking and driving.

Allowing students to relate what they learn in class to themselves creates lasting memories.

**New Developments in Driving**

The intermediate license is still new to many and one of the best changes for Washington State in a long time.

John Hopkins School of Medicine has released the findings of a study showing that intermediate licensing programs across the country have reduced fatal teen crashes by 11%. Further, states with aggressive approaches like Washington have reduced fatal teen crashes by greater than 20%.

The results are clear about the effectiveness of the new laws. They are resulting in dramatically fewer traffic convictions. With an increase in the requirements for driving experience and the removal of driving with friends in the car, driving behaviors have changed. Washington State now joins the majority of states by adding this law.

With parental support, this law changes driving attitudes and reduces teen deaths. Washington State has made a good choice with this law.

Practicing at Home

Starting to practice can be unsettling for many parents. You should know that this will eventually go away and be replaced with smooth transitions and control.

Driving practice can begin even before a permit is issued. Having students sit in the front passenger seat and make judgments about traffic situations is one of the easiest to accomplish. This is an excellent time to discuss things they have learned in class. Without a permit, students may also practice their driving on private property such as grandpa's farm and large empty parking lots.

Driving backwards is a big hurdle students must master.

Because they are required to look backwards while they drive backwards, their brain must interpret information in a different way. Typically students will turn the opposite direction they want to travel and not understand why the car won't go where they want. Picking a target or reference point in the distance and driving straight towards it is a good method to overcome this. It is something that usually must be repeated many times.

While it is not required, students are most successful on their first drive after they have had at least 5 driving experiences.

Getting a Permit

Getting a permit is supposed to be easy. Remember that the Department of Licensing wants to be certain of your identity and that students have permission to get a license. When you go in, take a birth certificate, photo ID, and a parent or guardian. If the attending parent's last name is different than the student's, they will want proof of a relationship. Taking documents that show a marriage, adoption, guardianship, etc. can do this. If you have a question about what documents will be accepted, call their office at 734-7130.



Newsletter 2

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PARKSIDE DRIVING SCHOOL Newsletter www.parkside-driving.com

PARKSIDE DRIVING
believes in student success.

Instructor's Corner



The story is told of a farmer who interviewed 3 young men for a job. They would be required to drive his wagon of produce to the market, many miles away down a steep mountain road. He was understandably concerned about keeping the wagon from going over the cliffs.

The farmer asked one young man how close he could come to the edge of the cliff without going over.

The young man confidently replied, "I can come within two feet of the cliff with out going over."

The second young man was asked the same question and quickly replied, "I can come within one foot of the cliff without going over."

When the third young man was asked the same question, he replied, "I stay as far from the edge of the cliff as I can."

With good role models and an understanding of the importance of vehicle laws, teen drivers can have the instinct to keep themselves far from danger.

On the way home from class....

Early in their driving experience many students are very cautious about entering traffic. If they are not already driving home from class by themselves, have them sit up front with you to watch and evaluate traffic situations. This guided practice allows them to make choices about entering traffic without the dangers of heavy traffic.

Have them discuss who has the right-of-way, when it is safe to enter traffic and what other drivers might do.



New Developments in Driving

A different colored school zone sign is being tested around the country. The bright green background is made from a new fluorescent material that makes the sign more visible. If it is successful, this material may be used to replace the standard

yellow on all warning signs. An example of this experimental sign can be seen on the inside cover of the driver guide.

Signs are developed with standard shapes and colors to allow drivers to get information at a distance and with only a quick glance. There are even signs, like the stop sign, which are immediately recognizable in countries and languages all over the world.

Practicing at home

The intermediate licensing law requires that students have a minimum of fifty hours of driving, supervised by a parent or guardian with ten of those hours at night.

To help track this progress, students are given a driving log where these hours can be recorded. Using this log as a tool to improve driving skills, both students and parents will see regular improvement in driving.

When the student visits the Department of Licensing to take their test, the parent/guardian is required to sign a form confirming the completion of 50 hours of supervised driving. This information is found on the back of the driving log.



Giving Directions

It is common for new drivers to express frustration about instructions for taking a turn or completing a maneuver being given too late. Planning the practice route together before you begin can help this. It will allow the student to visualize what situations they will meet, anticipate lane positions and prepare for conditions better.

Giving instructions in a pattern of "where" and then "what", will also help them make smoother movements. These can be done by saying things like, "At the next road, take a left," or "After the mailbox, pull to the curb."

Having a plan for practice time will make the time spent together more comfortable and more productive for everyone in the training experience.



Newsletter 3

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PARKSIDE DRIVING SCHOOL
Newsletter
www.parksidedriving.com

PARKSIDE DRIVING
believes in student success.

Instructor's Corner

We often check with students about how their practicing is going. They reply that it is going fine. When asked what they have practiced, too often they say that they have just been driving around.

We try to instill in their mind that "driving around" is a passive method of learning. In this method it is **hoped** that learning will take place.

Practicing on the other hand is when they are actively improving their skills. This can be as simple as making sure they come to a complete stop in the right location at stop signs. It also means parallel parking over and over.

Using the driving log will help to focus your driving sessions and make your time together productive.

Practicing at Home

While preparing for drive lessons, students are often concerned about performing the parallel parking maneuver. This does not need to be the frightening maneuver that we imagine it to be.

Setting up the practice space is the first step. During the drive lesson and the test the parking spot is marked by cones. If you do not have cones, you may use garbage cans, chairs, or anything else that is tall enough to be seen from the driver's seat. The cones are set 25 feet apart and 8 feet away from the curb. While you can always do it in your own neighborhood, making a visit to the Department of Licensing

course on a Sunday, Monday, or holiday is also a good idea.

There are many different approaches to teaching parallel parking. The most frequent approach used by experienced drivers is "the snake." This is done by reversing into the spot while quickly turning to the right and then left. This ends up being difficult to master in the early stages of driving and is not often reliable.

During their lesson, students are taught to approach and pass the cones within 3 feet. They should stop the car when they can see the front cone in the triangular window on the rear passenger side. They will need to signal as they begin their turn and continue backwards until the car is at a 45° angle from the curb. They should then straighten the wheels and continue backwards until they are 2 ½ feet from the curb. Turning the wheels all the way to the left, they need to be careful not to hit the curb and not go past the cone behind them. They will probably still be at an angle when they end this movement. Shifting to drive, they



should turn the wheels to the right so that the car becomes parallel to the curb. The final movement is to get the car ½ way between the cones.

To exit the parking space, students should back up about 1 foot so that they can clear the cone as they re-enter traffic. With the turn signal on, a left turn hand signal, and a good head check, they are ready to pull back into traffic.

New Developments in Driving

Using a wireless phone while driving increases your chance of an accident by 400%. There's a whole new generation of in-car electronic gadgets designed to make life in a car more convenient & comfortable.

As communication and navigation technology become more common in vehicles, governments and car companies are taking steps to increase safety. Some systems cannot be used while the vehicle is in motion, voice-activated systems are being developed and new laws are being considered to limit what devices may be used while driving.

The creation of new laws will eventually occur if we do not take personal responsibility for the way we use this new technology. Creating habits early about how wireless phones and technologies are used will give students a good perspective for driving defensively.

Focus on the Driver's Ed Car

One of the reasons for our choice of cars for student instruction is that they have front-wheel drive. This offers better traction than rear-wheel drive because the wheels that are powered are directly under the drivetrain. It's sort of like pulling the car instead of pushing it. The added weight of the engine also helps those front wheels grip the road while they are providing the power.



Newsletter 4

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PARKSIDE DRIVING SCHOOL
Newsletter
www.parksidedriving.com

PARKSIDE DRIVING
believes in student success.

Instructor's Corner



It is common for people to suggest that being a driver education teacher must be a dangerous job. While there are occasionally thrilling moments, let me assure you that it really is not a bad job. We don't take students places that they are not ready to go. Each drive begins from a parking lot and each driver is assessed brand new on each drive before leaving the parking lot.

We enjoy working with our students and are grateful for your trust and support.

On the way home from class....

Understanding the effects of sleep deprivation can help students recognize its symptoms. This can be a great discussion as you drive home.

According to the National Highway Traffic Safety Administration, no research shows that opening windows, talking to a friend, or cranking up the radio will help keep drivers alert. The only proven course of action is taking a 15 – 20 minute nap. Coffee is no substitute for alertness. While it increases breathing and heart rates, it does not give the brain the alertness it needs.

The best solution is prevention. Get a good night's rest the day before trips and share driving responsibilities where you stop every two hours for a break.

New Developments in Driving

What is ABS? ABS is an acronym for anti-lock braking system, one of the most significant safety advances in automotive engineering in recent decades. First developed and patented in 1936, anti-

lock brakes are designed to prevent skidding and help drivers maintain steering control during an emergency stopping situation. In cars equipped with conventional brakes, the driver pumps the brakes, whereas in cars equipped with four-wheel ABS, the driver keeps a firm foot on the brake, allowing the system to rapidly and automatically pump the brakes. Because the wheels don't lock, drivers have the ability to steer around hazards if they are unable to stop in time.

What does ABS do for me? ABS can improve vehicle stability, steerability and stopping capability.

When the braking force created by the driver is greater than the tire can handle, the wheel can lock up. Locked wheels can create vehicle instability problems and prevent steering around obstacles in the road. Stopping distance on many slippery surfaces will also increase with locked wheels. Four-wheel ABS prevents wheel lock-up in situations in which the wheels might normally lock, such as on slippery roads.

ABS can also prevent tire damage. Locked wheels on dry asphalt or concrete can quickly create flat spots on tires, which can cause an annoying vibration while driving. The big advantage, however, is the maintenance of the tire -- a significant factor in effective stopping.

Practicing at home

The intermediate licensing law requires that students have a minimum of fifty hours of driving, supervised by a parent or guardian with ten of those hours at night.

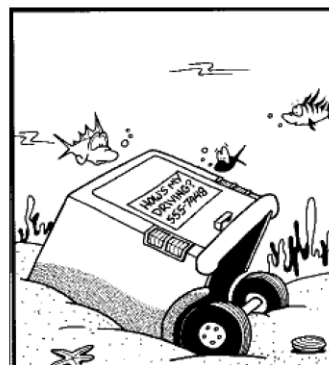
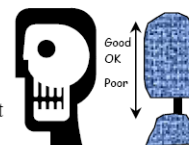
To help track this progress, students are given a driving log where these hours can be recorded.

When the student visits the Department of Licensing to take their test, the parent/guardian is required to sign a form confirming the completion of 50 hours of supervised driving. This information is found on the back of the driving log.

While the log is valuable as a tool to create good habits, it is keeping track of the hours that is important. The same thing can be done by recording student hours in a notebook.

Head Restraints

At minimum, an adjustable head restraint on the top of your seat should reach ear level in order to be fully effective. Your head's center of gravity is about 3.5 inches from the top. That is the ideal position for your head. Car manufacturers have dramatically improved head restraints in recent years. Whiplash and brain injury has dropped dramatically since the days when seats only went up to the shoulders. Those classic cars can still look great, but you would ever want us to go back to those days for their safety technology.



Newsletter 5

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PARKSIDE DRIVING SCHOOL Newsletter www.parkside-driving.com

PARKSIDE DRIVING
believes in student success.

Instructor's Corner



I am very pleased with the successes we have had during this session. I want to recognize the support of family members who have supported this class. It requires countless hours of practice and discussion for the best possible outcome. Thank you for joining us for the training of your students.

On the way home from class....

Clear expectations about the use of the car should be clearly laid out. Use this time to create a dialog about

- What restrictions there will be on use of the car
- Curfew times
- How insurance will be paid
- How a ticket would be paid
- How the costs of gas and vehicle maintenance will be covered
- What limits might there be for driving in snow and icy weather
- What responsibilities might there be for running errands and picking up siblings

A reasonable discussion about these issues before getting their license will create proper expectations and more trust.



Taking the Knowledge Test

The DOL written test consists of 25 computerized questions. Students must get 20 correct answers to pass.

To help in taking the test, the computers have phones connected where the student can hear the questions read. This is an excellent option for students who struggle with test taking or concentration.

While the primary source of independent study should be the Washington State Driver Guide, there are several websites that can quiz students getting ready for their license.

- www.driverstest.net (try the road sign test and the automobile test)
- www.wa.gov/dol (this also has excellent information about getting your license)

You will not need to make an appointment for knowledge tests, but you will need to arrive with plenty of time to complete the test before the DOL closing time. If there are questions about the test, call the DOL office at 734-7130.

Preparing for the Test

Practice. Practice. Practice. Controlling the car and putting it where they want it will mean students must repeat maneuvers like backing around a corner, parking on a hill, changing lanes, and parallel parking many times over. These movements should become very comfortable to them. If they are not completing these consistently in practice, they may end up repeating the driving test. During the pressure of a driving test it will be hard to keep bad habits from showing through. One way to improve scores on the test is to become familiar with the roads, speeds, and signs in the

neighborhood around the Department of Licensing where a test is taken.

Remember that the examiner is there to check if students have mastered basic driving skills. The whole test will probably last around 15 minutes.

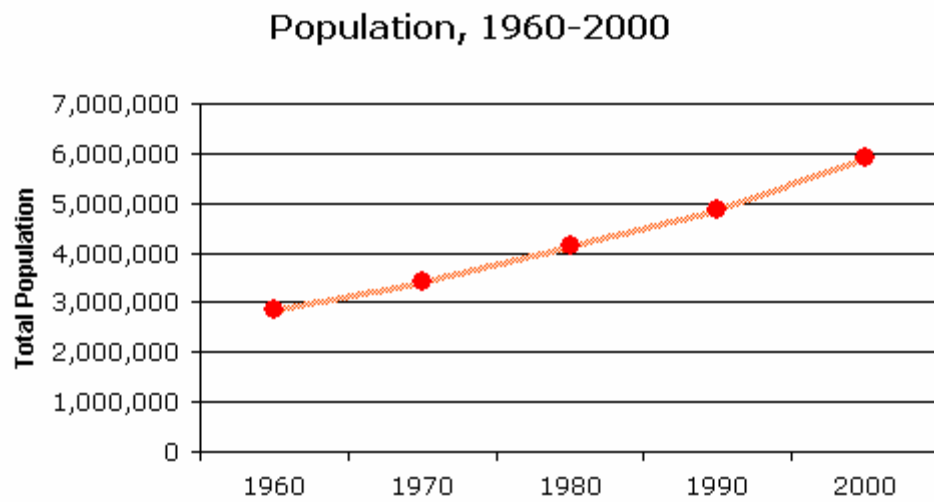
Taking the Driving Test

Make sure students are familiar with the vehicle they'll be using for the test. (It needs to be one that passes all safety inspection standards.) Clean the windshield. If a smoker uses the car, empty any ashtrays and air the car out for a bit. Don't rely on perfumes or air fresheners to mask that odor; nowadays, as many people are sensitive to fragrances as they are to cigarette smoke. Dress sensibly. The goal on this is to show the person conducting the test that students are dependable and ready to accept the responsibilities that go with a driver's license.

Driving tests are usually done by appointment. This can be scheduled after passing the knowledge test, or by calling the DOL if they have already passed the knowledge test. The DOL office can be reached by calling 734-7130.

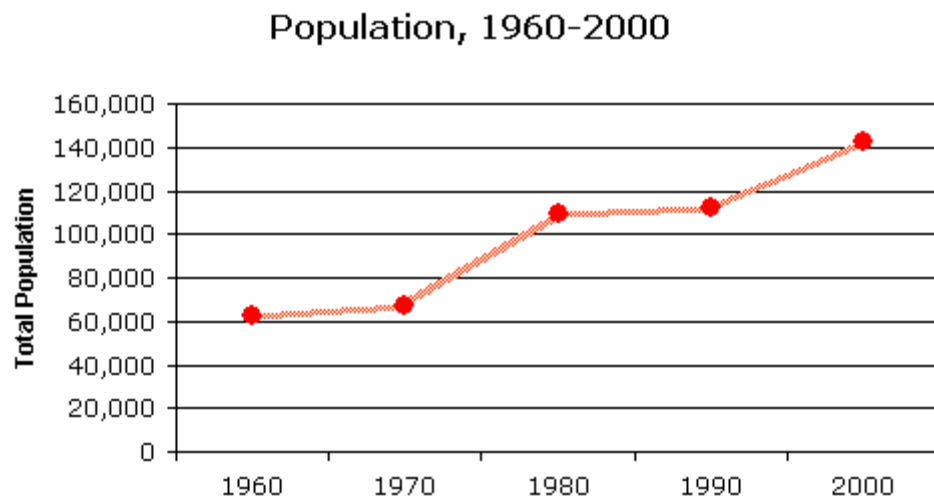


APPENDIX D-1



Population Growth in Washington State. From "Census 2000" analyzed by the *Social Science Data Analysis Network (SSDAN)*.

APPENDIX D-2



Population Growth in Benton County Washington. From "Census 2000" analyzed by the *Social Science Data Analysis Network (SSDAN)*.

APPENDIX E
School Demographics

Demographics of KBHS	
White	74.2%
Hispanic	23.3%
African American	0.6%
Asian	1.1%
Native American	0.8%
Male	51.8%
Female	48.2%

The skills and abilities of the participants were equal due to the sorting that had taken place prior to group placements. There were no significant differences between the students statistically to determine that the group was not similar.