When you write a narrative that names people and attribute to them certain achievements it is inevitable that some people will not be mentioned and their role in the achievement of noteworthy outcomes will be left out. The author recognizes that his experience and insights are just that, his experience and insights. The information and opinions shared during the forum and this narrative are the author’s and should not be taken as anything more.

Driver and Traffic Safety Education has always been a changing educational program with rich history of development starting in the public schools during the 1936-38 time period. This process of change involves a constant change of leadership and financial support throughout the USA.

The main areas addressed in this forum discussion are the process of change and development of traffic safety education and it’s leadership and a look at the changes in personal transportation options throughout the 20th and 21st Century. The forum will conclude with consideration of the development of traffic safety curriculum and instructor preparation.

The Bishop Forum has always had the intention of providing a place for exploring issues impacting ADTSEA issues. My goal is to raise questions for the members of ADTSEA and the traffic safety education community. The intention is to look to the future with great respect for those leaders in the field that have served our organization so well in the past.

**LEADERSHIP**

The two most critical early leaders in program development for the public school Driver Education had to be ‘Ame’ Neyhart and ‘Les’ Silvernale. It largely depends whether you are from Pennsylvania or Michigan in regard to who actually started the Driver Education in public schools. Their roles for program development in American Automobile Association (AAA) and developing connections to General Motors (GM) paved the way for a lifetime of support for traffic safety programs through the AAA and GM.
Both ‘Ame’ Neyhart and ‘Les’ Silvernale regretted starting the program with the 30-6 hours of instruction. Since the school terms were 36 weeks in length, the once a week program fell into the school year easiest in this format. It has been a great struggle throughout our short history to have school systems involved in any more hours of instruction than 30 and 6. They also thought about the need to have two time periods of instruction (pre-licensing and post-licensing) which is still being sought today.

“It has been a great struggle throughout our short history to have school systems involved in any more hours of instruction than 30 and 6.”

It was never hard to find ‘Ame’ Neyhart at a conference, as he was always sitting in the front row to the left or right of the aisle. Ame was always ahead of the game and was quick to provide humor even in some difficult situations. I will always remember a talk at a PASE Conference when he talked about relative importance. He talked about a somewhat heated conversation with his son about replacing the roof on his home. He explained how the roof needed repair, but at his age he did not want to spend a great deal of money. His son wanted to put a 30-year roof on the house and he wanted to install a 10-year roof. His point was at 80 years of age what value would he get from a 30-year roof when a 10-year roof would suit his needs. He says that is the basic argument concerning relative importance. The student and teacher do not share the same level of relative importance.

In regard to ‘Les’ Silvernale, I was honored to hear his history with the development of driver education when honored with the Michigan ‘Les Silvernale’ Award. I was able to see and hear how his influence developed the driver education program in the Michigan and Ohio areas.

Safety education leaders like Dr. Norman Key, Dr. Bob Marshall, Dr. Amos Neyhart, and Dr. Lester Silvernale were foresighted, as they promoted the need for the development of driver and traffic safety programs across the nation. As pioneers in the traffic safety area, they were constantly seeking support and funding for traffic safety programs.

My rural farming family’s first motor vehicle was a small pickup truck that allowed for the transport of goods and travel to and from urban areas. The trolley and bus system provided the only form of motorized travel to urban areas prior to this time period. The development of personal transportation occurred more rapidly in urban areas as the cost of vehicles came within the family budget.

Post WWII cars of the 40s through 60s were often based on size, power, and sportiness. The growth of motor racing, motor vehicle travel and federal government agencies provided a priority to reduce the yearly death toll. This development of resources provided most of the former ADTSEA leadership roles through their university research and funding for development of traffic safety programs.

Federal funding in the 60s and 70s brought leaders to the national and state associations to share their efforts in curriculum development and training. The late 20th Century began a slow process of dissolving university and educational support as state and federal funding began to dwindle in traffic safety education as a crash reduction method.

ADTSEA leadership is struggling to find a public educational role for our modern traffic safety education programs as urban areas are shifting focus to enhance mass transit and autonomous personal transportation.
Rural areas are struggling with semi-autonomous vehicle development. There will always be a dichotomy between rural and urban drivers, since their needs and interests are so different in regard to personal transportation. As we see an increase in foreign born and immigrant populations into the US, there will continue to be the need for older, used vehicles that can be developed into a personal vehicle that speaks to their talent and ingenuity. In many urban areas, we are seeing the development of older vehicles into special vehicles that are part of each generation’s culture and resources.

There is still a significant role of Driver Development Research and Federal Funding Projects that are aimed at crash reduction, but they seem to be taking different routes than the educational community.

I would like to take a few minutes to re-familiarize you with leaders that have had a tremendous effect on educational attainment and career development. My personal memories of Dr. Richard ‘Max’ Bishop may be a little different than most of this audience. As a graduate, former athlete and student athletic trainer at Millersville University, I had the unique experience of knowing Max as a Millersville alumni.

His induction into the Millersville Collegiate Hall of Fame was well known in the athletic department. It was as a senior at Millersville that I learned that ‘Dick’ Bishop was the person that I knew as ‘Max’ Bishop by his Millersville reputation. Max has always been highly regarded in the Lancaster, PA area and talked about as the hometown hero.

Of the 12 inaugural Millersville University Athletic Hall of Fame inductees, only one was voted as a unanimous choice by the Hall of Fame Committee and that inductee was Richard W. "Max" Bishop. He was known as a gentleman of unquestioned integrity who exuded sincerity and devotion in everything he did. Dr. Bishop excelled in leadership capacities as an athlete, coach, and faculty member at local high schools and Millersville University. Dr. Bishop later went on to gain excellence as a scholar at Michigan State University and Florida State University.

Dr. Bishop's roots were local. Prior to enrolling at Millersville State Teacher's College, he attended Millersville Training School and Manor Township Senior High School. As a high school athlete, he earned six varsity letters in basketball and baseball and was named captain of both squads in his senior year.

When he became a collegian at Millersville State, Dr. Bishop continued to excel on the basketball court. As a three-year starter and two-year captain, Bishop led Millersville to State Teacher's College championships in 1934-35 (11-1 record) and in 1936-37 (13-2 mark). He also played four years on the ‘M-ville' baseball team and was elected team captain as a senior. He was the only athlete to become captain of both sports at ‘M-ville’. Max also served as president of the Varsity Club as an undergraduate. When receiving his bachelor's degree in 1937, he was honored with the Guy Bard Award as the institution's outstanding student teacher.

Prior to World War II, Dr. Bishop was a mathematics teacher and coach at West Lampeter High School. As a baseball mentor, he led his 1940 team to a 10-0 league championship, and he turned the high school basketball program around from doormat to league champion in three years. Dr. Bishop competed on the Lancaster Red Roses professional basketball team and he also played baseball with several amateur and semi-pro teams in Lancaster City and County.

"There is still a significant role of Driver Development Research and Federal Funding Projects that are aimed at crash reduction, but they seem to be taking different routes than the educational community.."
project were Warren Quensel and Art Opfer from the Automotive Safety Foundation. His articles in the Journal were always direct and comprehensive. It was often the first reading for me as I studied curriculum and instruction in my graduate programs.

I have two very treasured memories of Dick Bishop, as he stopped by to talk to a driver and traffic safety preparation class in 1968, when I was doing undergraduate work at Millersville. My first thought was about how this respected ‘M-ville’ graduate became a leader in Traffic Safety Education throughout the nation. During his brief talk with our class, he expressed a curriculum issue that stuck with me to the present day. He explained, “It is important for all future teachers and instructors to remember that what students learn is much more important than what we teach.” Young drivers and instructors often have different goals that are difficult to determine as a novice teacher. Our job is made much easier when teachers understand that learning is more important than what we are teaching.” I found that to be true throughout my experiences with learners.

My second memory happened after a curriculum development meeting in Washington State. We were developing a revised curriculum for teen drivers and after the session, three different attendees told me that I reminded them of the same issues that were brought up by Dick Bishop when he helped them with the initial curriculum development project. I never felt so good when I realized that some of the Dick Bishop theory and techniques have actually been learned on both ends of the curriculum development process. Dick or Max was a humble person that was quick-witted and enjoyed playing sports throughout his lifetime.

The efforts of Dr. Norman Key (Mr. Safety—USA and the Executive Secretary of the National Commission on Safety Education within the National Education Association) sparked a movement leading to the first national meeting of state leaders of driver and traffic safety education in 1956. His guiding efforts with the leaders resulted in founding the American Driver and Traffic Safety Education Association and bringing Driver Education to national recognition.

Dr. Robert Marshall became the first president, with Dr. William Cushman as Executive Director, and Dr. Richard Kaywood developing the series of Journals, known as the JOURNAL of Traffic Safety Education which was based on the California state program at the time.

Dr. Cushman started out with an office within the National Education Association in Washington and led ADTSEA to national recognition as the federal government joined into the traffic safety education movement through the National Highway Safety Act in 1966.

Dr. Richard Kaywood provided the national journal which brought together a publication means for national driver and traffic safety research, practicum, promotional materials, and traffic safety discussion issues of the time period.

My treasured memories of Richard Kaywood, as for many, was the first article that I provided for publication. It was returned by mail with a note that this article has some merit for the time period and that it should be resubmitted for publication. My main memory was that the article had more red ink on it than the initial black ink used for typing the article. Dr. Kaywood had a high mark for accuracy and made the Journal of Traffic Safety Education into a fine representation of the organization and the traffic safety community. On the third revision, my first article was published and I did have a sense of accomplishment having met his standards.

Dr. Cushman frequently attended the Pennsylvania state conferences and I was able to see how he was able to encourage members to take the extra step to promote driver and traffic safety education. My best memory is the phone call that I received one morning in 1972. He just called to say that he was unable to tell if I was PASE president this coming year or Newsletter editor for the PASE’etter, but to keep up the good work and offer any support that I may need. It was his encouragement that pushed me to look to completing my education at a university safety education program.
One of his recommendations was Texas A&M University.

Dr. Frank Kenel and Warren Quensel excelled in providing means to help student learning as a novice driver or novice teacher. Dr. Kenel’s work with AAA, Sportsmanlike Driving, and How to Drive continues today with AAA training materials and curriculum development. He was always good for a story about student development and was very strong on his recommended teaching techniques. His vision and perception materials were always outstanding and based on research and learning techniques. Quensel’s work with Dr. Bishop’s efforts in developing the A Resource Curriculum in Driver and Traffic Safety Education was well known as his main focus became one of instructor development. Quensel developed many tools to help instructors evaluate driver performance through video research and development tools.

My treasured Dr. Kenel memories are hearing stories about his children and their development as drivers. He helped me look very carefully at the need to develop more than one steering technique for novice drivers. He helped me realize that as the vehicles change instructors must adapt vision, steering, accelerating, and braking skills to meet the modern vehicle’s technology and engineering needs.

Quensel and I had many discussions about developing instructor skills to comprehend what the students are learning. He developed many programs providing measurement skills. I was honored that he sent me his resource materials after he retired so that these resources could be in the EKU Traffic Safety Institute’s library. Our students were privileged to use and develop ideas for in-car instruction. I learned a great deal about instructional techniques and the need to keep skills current from Dr. Kenel and Mr. Quensel.

The real importance of mentorship is often brought together with learning needs at the National, Regional, and state conferences. Research in the field is brought forth and instructors are able to see a possible solution to problems they were having in their teaching. I have been extremely blessed to have a great group of mentors from my work in the traffic safety field.

I can recall some special efforts by Dr. Gary Bloomfield and Owen Crabb at state level of management. They were just great examples of how professionals at the state level can encourage your development and allow you to grow as an instructor in this profession.

The universities that I have attended have all had great mentors that were willing to help students grow and learn. Even making mistakes along the way allow students and instructors to grow. I was always impressed with Dr. Maury Dennis’s ability to promote individual success, as noted by many of his ‘Aggie students’ have been heavily involved in the national, state and local traffic safety and alcohol education organizations.

My treasured memories of Dr. Bloomfield, Washington State, is his encouragement to be involved with the teachers and administrators of the local school systems in Washington. He always encouraged me to visit frequently and get the staff interested in new instructional techniques. He had the ability to encourage your efforts and was always a phone call away.

My special memories of Owen happened in 1968-9 when ADTSEA was promoting a new driving system. I was attending a class at Millersville on a Thursday evening when ‘Ame’ Neyhart visited our class with a person promoting a new driving system called ‘The IPDE System’. His name was Owen Crabb and I was amazed how his system actually simplified the perception and decision-making process. Upon doing graduate work, I used the IPDE filmstrip to determine if perception skills had any relationship to novice driver crashes within the first two years. The study did indicate a significant difference and I was surprised by some of the questionnaire responses. It was very surprising to see the number of young driver crashes that were unreported to the state Department of
Transportation, due to the amount of damage to vehicles (under $500).

Owen and I worked on the skid control skills section of the Driver Right textbook and I was very happy to work with Owen’s young drivers in regard to traction and stability control at the EKU range facility.

To illustrate how one can learn by making mistakes, I can remember a particular travel incident regarding Dr. Dennis. We had a Texas Alcohol Education Association meeting in Corpus Christi one weekend. John Windigler and I were going to drive in the morning and we thought that Dr. Dennis was flying on Friday for the weekend meeting. We met at 5:00 am for the four-hour drive to Corpus. Dr. Dennis’s briefcase was sitting in the doorway of his office. So, we picked it up thinking that he forgot the case.

Well it turned out that we were well on our way, when at 7:00 am Dr. Dennis came to the office to pick up his briefcase prior to his 30 min flight. The flight tickets were in the briefcase that we were transporting it to Corpus. He was very understanding that we were trying to do the right thing, but we always left the briefcase in the doorway in the future, as Dr. Dennis often considered the floor as part of his desk.

I was very blessed to have great leadership at the state level in Dr. Allen Robinson and Dr. Rich Hornfeck, as I was working within the state and national associations at the time.

Dr. Robinson as a national level mentor, provided a means to spread information throughout the regional and state conferences. Helping to develop new curriculum opportunities and editing The Chronicle of ADTSEA allowed me to participate in many aspects of training and development. His retirement from the ADTSEA Chief Executive position will have an effect on future leadership of ADTSEA at all levels. He was a master at putting together the right people at the right times to accomplish tasks and goals for the Association.

Dr. Hornfeck was a great mentor at the State level as IUP became the meeting place for driver and traffic safety instructors through the PASE activities. Dr. Hornfeck encouraged me to edit and develop the PASE’etter as a means to get information out to the membership. It was a difficult cut and paste task until computers started to make the task easier for columns and picture files.

My treasured memories were traveling throughout the nation on ADTSEA missions and training programs. I remember one time period when we were in so many hotels that we were beginning to forget what room numbers that were assigned to us. I remember having to write down the number on the key envelope, except that sometimes I wrote the wrong floor but right room number. The sessions were always a great privilege to represent ADTSEA at conferences at the state and national levels.

At one of these meetings we were within one hour of having a national driver education program established at Crystal City sponsored by the Insurance companies. We even had a sound plan to develop studies of the results through the Insurance Institute for Highway Safety. At 4:00 pm of the final day, we had Brian O’Neill, IIHS President, come into the session after he had talked to the insurance providers. He had convinced the insurance leaders not to put any more highway safety research dollars into the driver education program. So the process was stopped. It was a difficult day in the history of driver and traffic safety education.

Women have played vital roles in ADTSEA leadership starting with Cissie Gieda as an ADTSEA volunteer staff member since the start of the association. Cissie Gieda, Maryland, was also the first woman ADTSEA President in 1972-73. Margaret ‘Mickey’ Johnson, Illinois, was noted as one of the original Drive Right textbook authors and was honored with the ADTSEA Richard Kaywood Award in 2008.
Barbara Brody, Vermont, served as ADTSEA President in 1994-95 and was honored with the Richard Kaywood Award in 2009. Robin Bordner, Michigan, was the initial ADTSEA ‘Teacher of the Year’ honoree in 1999 and serves as the ADTSEA co-instructor in the teacher training program, initially working with Terry Kline and now Rich Hanson. Patricia ‘Sam’ Houston, Oregon, served as ADTSEA President in 2001-02 time period and was a leader in the Oregon Traffic Safety Program. Elizabeth ‘Beth’ Weaver/Shepard served as ADTSEA President in 2004-05 as well as serving as Idaho State Coordinator. She spent many years working and promoting the Motorcycle Safety Foundation Program throughout the US. Carol Hardin, Virginia, served as ADTSEA President in 2006-07 and was honored with the Richard Kaywood Award in 2013 and served on the ADTSEA Curriculum 2.0/3.0 development committees. Cathy Broderick, Vermont, served as ADTSEA President in 2014-15 and is a skilled member of the Vermont Driver Education community. Janice Meeker, Hawaii, served as ADTSEA President in 2015-16 and was honored with the Richard Kaywood Award in 2011. She serves ADTSEA as coordinator of the NSSP Program and Program Director of the Hawaii Driver and Traffic Safety Program. Wendy Bills served as ADTSEA President in 2017-18 and Utah NSSP Coordinator. She has retired recently as volleyball coach for her Provo High School program.

Who will become the future leaders for ADTSEA and traffic safety education?

With university research professors dwindling, we may need to find small college and community college leaders. We always can look to the ADTSEA Teacher Excellence Award winners for future leaders. Seven of our past ADTSEA Teacher Excellence winners are involved in ADTSEA leadership and more need to be encouraged to participate. Regional staff is often a place we can look to encourage ADTSEA leadership roles. We may be looking to corporate agencies involved in traffic safety education to help in the leadership roles.

What are some of the new leadership roles that will be required?

ADTSEA will need to have some members research the coming semi-autonomous devices and provide research on their benefits and problems for drivers new to the devices. More leadership involvement in curriculum development and state administrative development will be required to pull together the many supporters of traffic safety education. ADTSEA will need to have constant leadership that works with federal agencies to improve driver education for the future. Above all, ADTSEA will need to have writers who can contribute to our journals in an effort to gather the relevant data that supports and introduces new technology and curriculum adoptions.

“ADTSEA will need to have some members research the coming semi-autonomous devices and provide research on their benefits and problems for drivers new to the devices. “

Where will ADTSEA and instructors look for research and development needs? The Journal of Traffic Safety Professionals has long been a great source for current research information, as have web sites that are directed toward specific problems in working with drivers of all age groups. National Highway Traffic Safety Administration (NHTSA) website information will need to be widely distributed among the driver and traffic safety education community.

WHAT IS IT THAT WE SEEK?

Those of us from Christian backgrounds may remember that Christ asked one question to each of his disciplines prior to his departure. He asked, “What is it that you seek?” I would like to borrow the same premise as we continue this forum.
WHAT IS IT THAT WE SEEK….
Who will become the future leaders for ADTSEA and traffic safety education?

What will personal transportation look like in the future?

How will metropolitan/suburban personal transportation be different from local/countywide personal transportation?

What are some of the new educational roles and needs that will be required?

Where will ADTSEA and instructors look for research and development needs?

Where will ADTSEA and instructors look for curriculum development?

Terry is a retired professor emeritus from Eastern Kentucky University and program coordinator for the EKU Traffic Safety Institute from July 1, 2007 until his retirement on July 1, 2015. He was Project Director for Kentucky Transportation Cabinet Contracts for the State Traffic School (Classroom) and Graduated Licensing Program for Novice Drivers (Classroom) providing $1.6 million in funding for TSI contracted programs. He also served as Project Director for a Kentucky Justice and Public Safety Cabinet Contract for the EKU Kentucky Motorcycle Rider Education Program that provided $1.3 million in funding for novice and experienced rider training through 20 regional site providers. He holds degrees from Millersville State University, PA (B.S. in Education), Central Missouri State University, MO (M.S. in Public Services), and Texas A&M University, TX (Ed.D. in Industrial and Vocational Education/Curriculum Specialist).

*This article is based a presentation Dr. Kline gave at the 2018 Bishop Forum as a part of the 2018 American Driver and Traffic Safety Education Association annual conference. This is Part 1 of two different articles based upon his Bishop Forum presentation.
Although the Industrial Revolution in the US brought motorized vehicles to local use in the early 1900s, it was not until the late 1920s and early 30s that vehicles were used for family and personal use. Real differences in needs are noted in urban transport versus rural transport using motorized vehicles. Urban streets were the first to see a great deal of personal use as facilities to support vehicles became more prevalent. Rural areas mainly relied on trucks to move goods and powered devices to meet agricultural needs. As roadways became more developed in rural areas, the use of personal and family vehicles became more prevalent.

**What was your first car?**

Forum participant’s answers were vehicles from the ‘60-‘80s time period with most of them being older vehicles of the time period. My first family car based on my memory was a light green ‘51 Studebaker Coupe Convertible and my first personal vehicle was a ‘53 Studebaker Starliner Coupe that I traded in on a ‘55 Studebaker Commander Coupe for $150.00. My father and I refurbished and updated the ‘55 Studebaker from 1963 through 1968.

**What were original vehicles used for teaching novice drivers?**

In 1936-38, GM vehicles (usually Pontiac) were used by ‘Ame’ Neyhart and ‘Les’ Silvernale in their early projects.

Your student’s first cars will likely not be the most updated technology vehicle on the market. Often it is a favorite older family car or one that has been a family favorite from a pasted decade. Students need to learn how to drive the modern vehicle as well as the older vehicle they will start out with. It is often a breaking of the ‘ice’ when you ask your student what car they are planning to drive when they start out. Many times, their first vehicle may be the family SUV or Van.

**What are the differences in urban and rural drivers today?**

The amount of BTW time is different for rural-urban drivers. What are some other differences? The forum participants provided some answers.

It may be more vehicle operating experiences for rural v. urban young novice drivers, or it may be very little work experience with any vehicle… It may be some combination of each. The young driver may have only been a passenger as is often the case in many urban situations.

**Rural Driver Experiences (This is my experience as a rural driver growing up in farming)**

Before age 12 in the 1960s, I was able to have some operating experiences with the following vehicles… 3 tractors, 1 combine, 2 go-karts, 3 bicycles, 3 power lawn mowers, 1 moped, 1 motorcycle, 2 pickup trucks, and a 1.5-ton grain truck. But the big problem with my experience level was that I never went into a sharp curve on a sharp curve on a roadway at speeds above 30 miles per hour.

**Urban Driver Experiences - What is typical of this experience?**

Often urban students view driving from the passenger seat. Novice drivers therefore have difficulty with vision control. Novice urban drivers are unable to recognize the space that the vehicle occupies on the roadway. Many novice urban drivers have a fear of making mistakes and getting into a crash (hesitant in all actions).

**How does this affect novice driver training?**

The instructor needs to have a pre-test/evaluation of driving skills regarding vision control, steering control,
and how the driver changes speed in the vehicle before taking them onto a roadway surface. The instructor should develop a plan to work with skills that are a problem in the evaluation and adjust the lesson to fit the skills that are present. Driving routes and lessons need to have an individual plan.

“The instructor needs to have a pre-test/evaluation of driving skills regarding vision control, steering control, and how the driver changes speed in the vehicle before taking them onto a roadway surface.”

Where do we find the race drivers today?

Many are rural young drivers that have basic fundamental skills and the space to practice skills. Most race tracks are found in rural areas and are attended by rural and suburban fans. The driver in this picture is Jeff Gordon, who was born in Indiana and moved to rural California to help develop his dirt track skills. Small racing tracks and drag strips were popular throughout rural areas but racing instructors skilled at training young drivers were often closer to population areas.

Do you find differences in drivers that have no previous experiences?

If the instructor performs a pre-evaluation in an off-road situation, it is not hard to notice the lack of practiced skills in the urban driver. In rural areas, even lawn mowers can go 150 mph as Honda has proved in the picture above. Rural drivers are known to race everything that moves.

What is the first car of tomorrow’s novice drivers?

The initial car may be futuristic complete with autonomous equipment or it can easily be a reclaimed vehicle that is often the dream of a young rural driver interested in cars and vehicles of all kinds. Your novice driver may drive an electric powered vehicle, or a vehicle with semi-autonomous controls. Your urban driver may ride in an autonomous vehicle due to traffic and parking issues. Many of your students may resemble most of us as we were drivers of reclaimed vehicles from family or used car retailers.

Some confusion exists in regard to semi-autonomous vehicles as they are often based on driver assist technology and will need a driver. Semi-autonomous vehicles can steer, accelerate, decelerate, stop and change lanes without human intervention. Some of the first semi-autonomous vehicle components were anti-lock brakes and stability control systems.

Semi-autonomous vehicles are able to keep in lane and even change lanes, and they may also be able to park themselves, but they are not driverless. In most cases, drivers must keep their hands on the wheel at all times. As of 2017, many automobiles including Tesla, GM, BMW, Mercedes, Infinity, Lexus, Volvo and Nissan have some of these functions as standard equipment or as options.

An autonomous car is a vehicle that is capable of sensing its environment and navigating without human input or correction. Autonomous cars combine a variety of ways to perceive their surroundings, including radar, laser light, GPS, odometry, and computer vision. Advanced control systems interpret sensory information to identify appropriate navigation paths, as well as obstacles and relevant signage.

Despite the various potential benefits to increased vehicle automation there are unresolved problems such as safety; technology issues; disputes concerning liability; resistance by individuals to forfeiting control of their cars; customer concern about the safety of driverless cars; implementation of a legal framework and establishment of government regulations; risk of loss of privacy and security concerns, such as hackers or terrorism; concern about the resulting loss of driving-related jobs in the road transportation industry; and risk of increased suburbanization as travel becomes less costly and time-consuming. Many of these issues arise because autonomous objects, for the first time, would allow computer-controlled ground vehicles to roam freely, with many related safety and security concerns.
This online video production can be used to indicate how drivers will and do respond to technology of the future. [https://jalopnik.com/which-car-company-makes-the-best-semi-autonomous-drivin-1825748739](https://jalopnik.com/which-car-company-makes-the-best-semi-autonomous-drivin-1825748739).

The two personalities in the video are arguing about which car has the best autonomous cruise control and steering control system. It is typical of rural and urban drivers to like or not like the same features designed on different cars. This poses a potential problem for instructors as they may have some of the same concerns and need to have some knowledge of the positive and negative features of the modern vehicles.

**WHAT IS IT THAT WE SEEK?**

**What will personal transportation look like in the future?**

There is no doubt that technology features are gaining momentum. As the population ages, there is a need for driver assist equipment on all different types of vehicles. As drivers age, the technology will help them be more aware of their surroundings. We need to keep in mind that we have significantly more drivers over 85 on the road today. In my retirement village in Texas. Many drivers are in their early 90’s, which probably was not true just two decades ago.

**How will metropolitan/suburban personal transportation be different from local/county wide personal transportation?**

Connecting cities and major parts of cities will be transport tunnels and tubes designed to have you place your vehicle on a transport hub and be swiftly carried to other cities or areas and high speeds similar to the subway system of today but for individual transport. This type of transport is being tested in California and Texas today and will be a major issue for the future as surface traffic has become more difficult.

**Do we need support research?**

Driver and traffic safety education will always need supportive research to determine what is or not working. Most of the past research about driver education was biased as a result of self-determination instead of random selection. Most past research has been comparing FORMAL education with INFORMAL education results. The DeKalb study intended to be random assignment, but parents did not want their students in the INFORMAL process for licensing in what they determined as unsafe thus biasing the study. Many of these parents wound up selecting the commercial schools so their child received formal instruction when they were not permitted to take the public-school programs developed for DeKalb County. Always keep in mind that the only way to get realistic and reliable results is to allow the students to be licensed without testing as they were in the 1930-40 time period. We need research efforts, but research efforts need to have solid design with random assignment for truly reliable results and conclusions.

**Do we need a spokesperson for training issues surrounding autonomous vehicle operation?**

ADTSEA has had spokespersons relating to new vehicle operation for many years. It started with Doc Whitworth and continued with Bob Bondurant and Skip Barber, as well as the ‘manufacturing community’ offering programs for instructors in new technology. For many years I have provided the ABS and new technology programs for vehicle control techniques provided through GM, Ford, Toyota, and BMW. But who will step up and look for the technologies of the future?

**What will be the training techniques for new vehicle technology?**

Benefits and problems with the new technologies are already resulting in deaths to drivers and pedestrians, so the need to develop sound training techniques for semi-autonomous vehicles will be critical in this decade of transition. The transition to semi-autonomous will start in urban areas and then slowly drift into the rural populations. Since the new technologies limit driver performance, we will see young and older rural drivers find ways to turn off systems or modify them in some manner.

“The need to develop sound training techniques for semi-autonomous vehicles will be critical in this decade of transition.”
CURRICULUMS NEED TO CHANGE

The ADTSEA Driver Education Curriculum Version 3.0 is a complete package containing curriculum lesson plans, enhanced learning activities and worksheets, still picture illustrations, and embedded short video clips and videos. The package includes 2 DVDs for use in a DVD player, 1 CD-ROM for use in a computer, 1 printed hard copy 3.0 curriculum and 1 copy of AAA How to Drive (14th Edition). This is a fine package for teaching and guiding the learning experience. We need to ask ourselves these questions… How do I know what the students are learning from this curriculum? How can I encourage my students to learn the different concepts and materials provided beyond the driver test needs?

The instructor must recognize that the novice driver is expecting to gain the information needed to gain a license from the local state agency. They may stop seeing a reason for learning a particular segment or concept if it doesn’t directly relate to getting their license. Many novice drivers think they know most of what they need to know, and all of this course material is not needed to get what they want.

The real problem is the novice drivers do not know what they do not know about driving. It is the instructor’s role to have them understand what they do not know about driving the car. How does the instructor know what the student does not know? This is the important reason for pretesting or pre-evaluating your student’s knowledge prior to a given concept or objective. This is the primary reason that I encouraged instructors to use the ‘Skid Monster.’ The novice driver was able to understand what they did not know about visual control, steering control, and speed control in the first lesson behind the wheel.

In a story… I had a high school student ask me if he will pass with a 70% grade in Dr. Ed. and by the rules he would need a 70%. The student figured out that scoring a 67% on his final exam would give him a 70%. He wanted to figure out how much he needed to study. His final grade was a 70.5%, so he met his needs. He probably spent more time figuring his grade than he needed for the exam study time. (Most students are just worried about passing their tests and not what they are learning at that age). It is the perfect reason why students need formal training more than once in their driving career. It would be wise to have all drivers attend a formal training session at least once in every 6-year licensing period as part of their licensing requirements. It is especially needed for those that are driving cars without the technology training.

Just as a side note… Where might you find this stop sign? … In Hawaii; as their parking lot entries and exits are not required to have red/white stop signs. Many color combinations are possible, as it is one of the few states that allow other colors on stop signs.

Over the years since 1936, educators and ADTSEA leaders have witnessed many stages of curriculum development that may produce lower crash results.

- The public-school program started with 30 classroom hours and 6 on-street hours to fit 36-week public schools time frames.
- Some state programs provided multiple stages to reduce costs and enhance learning including Classroom, Simulation, Off-Street Ranges, On-street, Observation Hours (DeKalb project).
- Doc Whitworth and several corporate driving/racing schools like Skip Barber and Bob Bondurant recommended combining basic skills and advanced skills training.
- Graduated licensing research supported phased education… informal, formal, informal, formal, informal training processes, as drivers may have more interest in learning to avoid crashes as they gain more roadway experiences.

PHASE ONE… Vehicle operational skills with limited driver experiences.

PHASE TWO… Driver decision-making skills development.

PHASE THREE… Violator training and re-training periods.

- National guidelines brought forth through NHTSA providing a more extensive educational program like 45 classroom and 10 on-street hours of instruction.
- Costs and time considerations have moved the teaching models toward online classroom learning
with variable formal instructional and parental informal driving experiences.

WHAT WILL STAGES LOOK LIKE IN THE FUTURE?

- The racing community relies on virtual reality simulation to train drivers to approach the different tracks on the racing circuit. The techniques are used by rookie and experienced racers.
- Gaming tools may develop in the virtual reality area to allow drivers to gain realistic experiences with traffic flow experiences.

What are some other ideas…

- Future state and training agencies will have virtual reality (VR) simulator stations that will train students for all on-road and testing efforts.
- Trainers would provide the preliminary information and collect the VR simulator testing tools for each driver to review.
- VR would provide for a consistent in-car training programs that would allow the student to progress at their own rate for more consistent learning.
- Future VR training could develop routes of localized areas to familiarize students with intersections without putting them in immediate danger with different weather conditions available for each lesson.

“Future VR training could develop routes of localized areas to familiarize students with intersections without putting them in immediate danger with different weather conditions available for each lesson.”

WHAT EDUCATORS KNOW…

- (Neyhart/Silvernale) Setting hours for completion does not work for the individual student. These rules were based on meeting the requirements of a public-school program of 36 hours for completion. This setting for instruction never considered the learning process involved with different drivers and experiences.
- (Public School Systems) Multi-phase driver instruction has become too expensive compared to its results. At one time, GM and most manufacturers would give funding to individual dealers to have cars in the field for safety instruction. It usually involved having a new car for a six-month time period, with a new car provided after that time period. When the process changed to vehicle rentals after the recessions and inflation of the 70-80s, it became too expensive to keep a stock of 12 to 14 cars in place for multi-phase training.
- (Waller) A phased education process has shown the greatest success for crash reduction. The novice driver’s formal education process is always in conflict with the informal education process. Parents have been training their young drivers for at least 8-10 years. Informal education comes in many forms as family, news, training, experiences, TV, movies may come in conflict with formal training practices. The informal training process takes about 6 months (based on consistent research evidence) to overcome the formal education process.
- Dr. Waller pointed out that several periods of formal training can lengthen the effect of positive learning results. She recommended a formula that would show positive crash reduction results up to age 19…. Informal…then Formal (15-16)… Informal… then Formal (17-18)… then Informal educational practices.
- (Current Program Results) Specified online classroom and on-street hours are most efficient/cost-effective methods for instruction. Rising costs and student time continue to be a thorn for public and private education programs. Online programs lower costs and provide convenient training times for the participant. As vehicles become more expensive and trainers become less prevalent, costs will continue to soar for in-car training efforts which can be as high as $700 to $750 per student in today’s market.
WHAT WILL STAGES LOOK LIKE IN THE FUTURE?

Online, Blogs, Simulation Gaming, Virtual Realty Training, Parental Training, Mentoring, Licensing levels may be the future efforts? We need to have the reader think about any other ideas that they may see for the future…

RESEARCH EVOLVES

Research on driver and traffic safety education has never had a good design using random assignment which affects analysis. We have often compared formal training with informal training. We teach English and reading skills for 12-14 years but driver education for one semester. So, to show 6 months results means driver instructors are doing a hell of a good job. If researchers really wanted to set an accurate study design, we would need to randomly assign groups to formal training, informal training and no training. States (like Georgia) and parents are reluctant to just give a license to a novice driver without training or licensing, as they did in the 1920-30’s time periods. Should it not tell us enough about education based on the threats of ‘no’ education and driving based on observation of other drivers. These are ideas that we have found based on adequately designed research studies Dr. Weaver and Smith Statements from DeKalb Project) Students are not able/willing to learn all of the curriculum processes within a limited time frame.

Mike Smith, NHTSA Research Division, pointed out that the research design was compromised after a year due to parents having their students formally trained when placed on the informal training group. The study lost most of the study population after two years due to moves out of state and name changes.

(John Bishop… A Mythical Story) Student attention and assumed needs are based on when they can pass the road test. His mythical story in the Journal of Traffic Safety Education, July 1975, pp. 29-32 explained what it would be like to visit a school setting with the best environment for student learning in a high school setting. He described meetings during a mythical session with all the main characters of an outstanding program. His focus was on how the process can enhance student involvement and learning through a public education system.

(Deaf. Patricia Waller… Michigan Study) Students need time between learning episodes… informal… formal… informal… formal… informal training processes allow for crash reduction principles to last longer than six months.

(Wayne Steele, Motorcycle Safety Foundation) Students learn in four basic styles/patterns or some combination of the four styles based on peaceful, powerful, perfect, and popular learning styles. It is important to identify the learning style of each novice driver to understand how they learn. How they learn is extremely important when working with the student in the car. There are simple assessments that can be done in the classroom to identify individual learning styles.

(Deaf. Bishop’s main Premise in Curriculum Development) What students learn is more important than what teachers teach. He explains that teachers often get so involved in teaching that they are not measuring what the students are learning in each session. Evaluation of student learning is critical for the in-car lessons and is often related to how well the classroom information is learned.

(Deaf. Terry Kline, Washington State Curriculum Development Project) Student pre-testing/post-testing is critical to measuring student learning. Visiting a site in WA State, I discovered a great method for developing the 27 principles in WA Curriculum. The classroom students took pre-test; then short teacher introductory lecture was presented; students then accomplished individual work until they were able to score at least an 80 on the topical posttest. Classroom students were able work on 1 of 5 special topic areas and/or a group project within classroom time period. If a student scored 100 on the pretest, they could move directly into a special topic or group project for assigned class time period. The instructor had a great ability to measure student learning and then provide individual help to those who were struggling with the topic area.
However, I was disappointed when observing the BTW lesson 4 at the same school setting. The instructor gave the student all passing notations and a very good review at the end of the 25-minute time period. A significant problem was noted in the evaluation, as the instructor basically told the student what to do during the whole in-car time period. When and where to stop, where to look, when to go and when to wait. He checked her speed constantly and helped the student steer on two of the turns. The evaluation did not have a section for how well the student followed directions, as the BTW instructor basically scored his own decision-making skills. We did take some time to work on methods to support student decision-making.

“What students learn is more important than what teachers teach. Evaluation of student learning is critical for the in-car lessons and is often related to how well the classroom information is learned.”

WHAT IS IT THAT WE SEEK....

Most state and national agencies support a curriculum that...

- lowers crash rate for novice drivers;
- develops a response system for traffic flow issues;
- supports different learning styles;
- supports student learning rather than teaching goals; and
- supports pre-testing and post-testing to evaluate student learning and achievement.

What are some other areas of concern in your public or private school areas? A final question is what will ADTSEA X.0 Curriculums look like in the future?

TEACHER/INSTRUCTOR PREPARATION & CERTIFICATION NEED TO CHANGE

State and federal agencies developed the primary role of university programs to certify teachers and instructors providing and liability support for individual schools and programs.

Across the nation, as research dollars dwindled, teacher preparation programs closed as student course enrollment declined dramatically during the past two decades on a national level. There are still a few states that provide the certification programs, but the numbers dwindle each year.

University research programs and state contractual programs could no longer support the certification process, as was the example of EKU. The Traffic Safety Institute was the source of 5-6 million dollars for federal and state service contracts. That dwindled down to about 3 million dollars in state contracts during the past five years but enrollment in traffic safety programs was maintained at about 300 students per semester. Retirements have made the current state contracts and student enrollment be nonexistent as of this 2018-19 school term.

Regional Service Centers in many states became certification agencies which placed the liability issues on local programs when state certification programs were revised by state agencies to take the burden of certification liability away from the state agency being now directed to the local agency that provides the certification of students and instructors. The liability issues then began to affect the regional service centers as very few are offering complete teacher-student education certification. In many states the local school district now provides the certification process for young drivers to meet state guidelines. This process is putting more pressure on local districts to drop the potentially liability of students using school district vehicles on the roadway.

So as traffic safety programs moved away from urban schools, the individual programs became their certification agency while raising agency liability issues for owners and management.
WHAT IS IT THAT WE SEEK….

Who will become the future leaders for ADTSEA and traffic safety education?

What will personal transportation look like in the future?

How will metropolitan/suburban personal transportation be different from local/countywide personal transportation?

What are some of the new educational roles and needs that will be required?

Where will ADTSEA and instructors look for research and development needs?

Where will ADTSEA and instructors look for curriculum development?


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