



THE ROLE OF THE VEHICLE DRIVER TRAINING SYSTEM IN ENSURING TRAFFIC SAFETY

Kalauov Saydulla Aymakhanovich

Candidate of Technical Sciences, Professor Academy of the Ministry of
Internal Affairs of the Republic of Uzbekistan,

Shukurov Nuritdin Rakhimovich

Candidate of Technical Sciences, Associate Professor Academy of the
Ministry of Internal Affairs of the Republic of Uzbekistan

Abstract: It is known that it is important to study the driver training systems of developed countries and analyze and implement the positive results achieved by them in this area.

The article presents an analysis of the driver training system in South Korea and Germany, its uniqueness, and positive experiences achieved in this regard.

Keywords: driver's training schools, driving in urban conditions, temporary driver's license, motor vehicle driver, car, highways, traffic safety.

Introduction

Nowadays, modern life is unimaginable without road transport. The number of cars is increasing every year, but, unfortunately, the number of road accidents is also increasing. Road accidents caused by the fault of drivers make up the bulk of all accidents. The ability of drivers to prevent road accidents depends on their level of training.

Globally, about 1.3 million people die in road accidents every year, that is, 3,700 people a day, or one person every 24 seconds. Up to 50 million people are also injured to varying degrees. The risk group is mainly people aged 5 to 29 years [1].

According to the United Nations, the leaders in the number of deaths per 100,000 people from road accidents in 2023 are Liberia, the Democratic Republic of the Congo, and the Central African Republic. The main reasons for this are the lack of funding for appropriate infrastructure in these countries, the lack of sufficient and high-quality roads for the growing number of vehicles, as well as the low level of legal literacy of the population.

According to the World Health Organization, to achieve zero road deaths, it is not enough to hold drivers accountable alone. It is also important that pedestrians know and follow the rules of the road, as well as that vehicles are equipped with safety systems and roads are designed to be safe.

The UN General Assembly has set a target of reducing road deaths and injuries by 50% by 2030. Experts plan to achieve this by switching to roads and road networks that focus on human safety [2].

The acceleration of the processes of urbanization and globalization of the economy, the increase in the number of megacities lead to the development of population mobility and logistics processes. The solution to these problems is provided by an increase in the population's need for cars and an increase in the number of commercial transport fleets, which, in turn, leads to an increase in the number of road accidents, aggravation of their consequences, and a decrease in the safety of the transport system as a whole.

Improving road safety around the world is a priority task, which is addressed not only at the level of general strategies, but also in operational management tools. A systematic approach is needed that would reduce the number of road accidents and the level of injuries caused by them, as well as increase the stability of the entire transport system. For these purposes, various methods and models are used, involving technical and intellectual resources, in order to improve the quality of transport system management.

To create an effective traffic management system on the roads, it is necessary to have a tool that allows using modern data to identify the most important factors, analyze various scenarios of the development of events, make timely corrective decisions, and then evaluate their effectiveness.

A management strategy based on a systematic approach is effective in terms of ensuring road safety, since it allows predicting and preventing many accidents, as well as reducing the severity of their consequences, due to a combination of technical and organizational measures [3].

Identifying and analyzing factors that significantly affect the likelihood and severity of road accidents, as well as predicting the likelihood of their occurrence and assessing their possible consequences, allows you to significantly increase the level of traffic safety.

Driving a car requires the driver to make the right decisions in a rapidly changing environment. With a constant lack of time, the driver cannot analyze all possible directions of movement in detail and assess their consequences, as well as consult with someone about the correctness of the chosen decision [4].

Improving the driver training system, that is, the methods and techniques of training, significantly contributes to improving road safety. In the process of driver training, it is carried out by forming a set of knowledge, skills, habits and qualities that reliably guarantee practical control of a vehicle.

The system of training motor transport drivers in foreign countries has its own characteristics, and the implementation of the rich experience accumulated by them plays an important role in improving road safety. In this regard, the analysis of the driver training system in South Korea and Germany is especially noteworthy.

The organization of driving license exams in South Korea is similar to that in Russia. Candidates take a theoretical exam on traffic rules, as well as demonstrate driving skills on a track and in real road conditions. Practical driving exams are taken at the track. Equipped with the latest technology, this track facility the size of a football field allows you to test 500 candidates daily [5].

The track simulates intersections, railway crossings, turns of various radii and configurations. The future driver must drive a certain route by performing the most appropriate maneuvers in real conditions: starting on a steep slope, parking the car on the road in various ways, etc. The track is equipped with road signs, road markings and traffic lights. In order to ensure maximum impartiality in assessing the actions of the future driver, the participation of the examiner is minimized. Its task is to monitor the process from a vantage point. Modern technologies help the police in this: a system of sensors installed on the road and in vehicles allows them to monitor the correct execution of control tasks, as well as time parameters.

The training leaders are provided with the necessary methodological recommendations and instructions for the accurate and effective conduct of theoretical training. To achieve high quality driver training, it is necessary to skillfully combine theoretical, laboratory-practical (hands-on) training and training to instill the necessary skills in accordance with the qualification requirements.

When conducting training, teachers and trainers must instill in students a high sense of personal responsibility for ensuring road safety and have a respectful attitude towards road users. It is important to determine specific and effective measures as a result of a reliable and substantiated analysis of the causes and consequences of accidents, using statistical data collected for the country and specific examples from the region.

In South Korea, when training drivers, the main focus is on training in vehicle equipment and maintenance, as well as on the knowledge and skills of the trainees to identify and eliminate malfunctions that affect road safety, as well as to check the technical condition of the vehicle before setting off on a journey (flight), and to perform maintenance work after returning from a flight. The main teaching method is to demonstrate and explain the components and mechanisms of the vehicle and their operation in material parts (models), and the operation of the mechanisms in cut samples. Vehicle inspection and maintenance are studied in theoretical classes.

In the practice of driving a vehicle, practical training is conducted in preparation for driving and maintenance after returning from driving [6].

The peculiarity of training drivers in Germany is that, in addition to high-quality training of instructors in practical driving, practical training is carried out in urban conditions, without racetracks. The curriculum, of course, includes a full course in the theory and practice of using rear-view and side mirrors, the ability to keep a distance - this is controlled by technical means, and in case of violation of these requirements, fines are applied. If desired, you can take a course on the technical component of a car, where you can learn how to sort out the engine, independently change summer tires to winter tires. You can learn practical knowledge, such as identifying the causes of a car not starting and eliminating some of them. In addition, driving training in Germany is carried out using the latest computer programs and modern technologies. Three-dimensional simulators of a real road help to develop a certain reaction to indicators and signs, improve the memorization of their signs. Theoretical training with simulation of traffic situations can be conducted both on a computer monitor and on special large-format projectors.

The theoretical exam is a multiple-choice test that includes questions on traffic rules, various situational questions, and questions about the car's design. There are 30 questions in total.

The practical exam is taken by special independent examiners licensed by local authorities. There are usually two or three in each region. They take exams at all driving schools in the region. They cannot be bribed or influenced in any other way. Practical exams are taken on city streets, and candidates are subject to a strict failure for even the slightest mistake.

The examiner sits in the back seat of the car and vigilantly monitors the examinee's movements. Any serious misconduct during the exam is punished with an immediate stop with a negative result. Such a penalty includes: driving at a red light, failing to yield to pedestrians at a crosswalk, failing to stop completely at a stop sign or stop line, endangering road users or reacting too late to a danger, and other similar violations. The exam is taken in the car in which the student has undergone practical training. The instructor who has undergone practical training sits in the front passenger seat of the car. If during the exam the instructor presses the brake pedal before the student, the exam is considered failed.

The practical test lasts a maximum of 45 minutes. At the end of the test, there is usually another theoretical question on understanding the structure of the car. An independent examiner makes a judgment based on the number and severity of errors made by the license applicant.

After successfully passing the test for the first time, the applicant is issued a provisional driving license valid for two years. If during these two years he does not commit any serious traffic violations, the provisional license is replaced by a permanent license [7].

Conclusion

In conclusion, it can be said that in the process of training and retraining teachers and drivers in driving schools, it is necessary to increase the theoretical knowledge of students and develop sufficient practical skills in the practical operation of motor vehicles, thereby increasing their professional competence based on innovative pedagogical technologies.

References

1. Kalauov S. A., Shukurov N. R. Japanese Experience In Training Vehicle Drivers // International journal of recently scientific researcher's theory / International scientific journal. –Volume 2, – №12, 2024. – P.32-35.
2. Kalauov S. A., Shukurov N. R. Analysis of the driver training system in some european countries // International multidisciplinary journal for research & development. –Volume: 11, – Issue: 11, 2024. – P.660-666.
3. Shukurov N.R. Ways to Reduce Harmful Emissions from Vehicles // J.: Pioneer: Journal of Advanced Research and Scientific Progress (JARSP). Volume: 02 Issue: 05| 2023. – R.25-272. Advanced Research and Scientific Progress (JARSP). –Volume: 02. – Issue: 05 | 2023 ISSN: 2751-7551, – P.25-27.
4. Yakupova, G. A. Povisheniye bezopasnosti dorojnogo dvijeniya na osnove sistemnogo podxoda s primeneniym sovremennix metodov i modeley [Tekst]: avtoref. dis. ... kand. texn. nauk: 05.22.10 / Yakupova Gulnara Anvaryovna. – Kazan, 2021. – 19 s.: il. – Bibliogr.: S.19.
5. S.N. Rakhimovich, K.S. Aymakhanovich. Country's Leader in Road Safety // American Journal of Engineering, Mechanics and Architecture. – Vol.2. – №1(2024) – P. 27-29.
6. Kak gotovyat voditeley v Yujnoy Koreye [Elektronniy resurs] // URL. <https://caridea.ru/bezopasnoe-vozhdenie/kak-gotovjat-voditelej-v-juzhnoj-koree>. (Date of access: 14.03.2025).
7. Obtaining a driver's license in Germany. – URL. <https://www.tupa-germania.ru/avtomobil/kak-poluchit-voditelskie-prava>. (Date of access: 14.03.2025).