Machinery & Energetics. Journal of Rural Production Research. Kyiv. Ukraine. 2021, Vol. 12, No 2, 61-66
ISSN 2663-1334 (print), ISSN 2663-1342 (online), www.journals.nubip.edu.ua/index.php/Tekhnica

http://dx.doi.org/10.31548/machenergy2021.02.061

УДК 378.147.88–057.87

QUALITY IMPROVEMENT OF PRACTICAL TRAINING ON THE SUBJECT "THE ROAD TRAFFIC REGULATIONS"

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Speciality of article: 275 – transport technologies (by road).

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Article history: Received – January 2021, Accepted – June 2021, Published – 30 July 2021.
Bibl. 10, fig. 2, tabl. 0.

Abstract. In recent decades, the world has seen a rapid increase in the number of vehicles and an increase in traffic, which leads to an increase in the number of road accidents and their negative consequences. For example, according to the World Health Organization (WHO), road traffic injuries are one of the biggest health problems today. Road accidents are projected to be one of the top five causes of death in the world in 2030. In Ukraine, the level of deaths and injuries due to road accidents is one of the highest in Europe, and the level of road safety remains extremely low, as repeatedly pointed out in their reports by experts from the WHO, the World Bank and other international institutions. More than 26 % of those killed and 15 % injured in road accidents in 2019 are pedestrians (1,414 people died and 8,455 people were injured). In 2019 alone, 329 children under the age of 18 died on the roads of Ukraine and 7,906 children were injured. Accidents in Ukraine are the first most common cause of death for young people aged 15 to 24 and the second most common cause of death for children aged 5 to 14. Thus, in 2019, compared to 2018, the number of road accidents increased by 7 %, as well as the number of dead and injured persons by 4.2 % and 6.3 %, respectively. Ukraine is also one of the leaders among EU countries in terms of specific indicators of accidents and consequences of road accidents. Thus on average in the EU member states (according to 2017 data) there are 5 fatalities in road accidents per 100 thousand populations, while in Ukraine this figure is (according to 2017 data) 12.5 people, respectively, which is more than the European average. 150 %. It is also important to note that in the absence of quality data collection on injuries and deaths due to road accidents, these indicators may not reflect the present figures. A significant number of road accidents that occurred in Ukraine during 2017-2019, as well as people injured in them, affect the economy and health care of Ukraine.

Studies conducted by many countries establish a general rule that every death costs about 70 gross domestic products per person, and every serious injury to a person amounts to about 17 gross domestic products per person. If we apply this rule to the indicators given above, it becomes clear that the cost estimate of socio-economic losses of Ukraine (excluding material costs associated with property damage and reduced productivity) from these accidents and their consequences in 2019 alone is about 4.79 billion US dollars (3.18 % of Ukraine's gross domestic product).

The main reasons for this situation are the insufficient level of road safety; improper maintenance of vehicles; low level of discipline of road users; inconsistency of the state of the road network with the level of traffic intensity; insufficient introduction of the latest technologies and technical means of traffic organization; low level of training of future drivers. The article considers the problems of the educational process related to improving the quality of practical training of students in the discipline "Traffic Rules" and suggests effective ways to solve them by differentiating approaches to managing the cognitive activity of students.

Key words: cognitive activity, exercises, emotional sphere of thinking, figurative sphere of thinking, motive, perception, practical tasks, the conceptual and logical sphere of thinking.

Introduction

Teaching the subject "The Road Traffic Regulations" at the engineering faculties of agricultural universities requires a special attitude from the teacher to the student audience.

This feature is to take into account the unequal readiness of students to perceive the material to be mastered. Some students know the rules of the road well, as they have received training in driver training courses and have experience in their use both while driving and as a pedestrian.

Formulation of problem

This is one of the most important factors that help the student during his studies. Some students have a fairly rough idea of the rules and use the knowledge gained before entering the university on traffic rules, which apply only to pedestrians.

The experience of teaching the discipline "The Road Traffic Regulations", gained in the process of theoretical and practical training, taking into account the listed

objective circumstances, gives grounds to apply an individual approach to students during their studies.

Analysis of recent research results

Solving the problem of improving the quality of professional training of highly qualified specialists in connection with the scientific developments of such well-known scientists as S. Arkhangelsky, S. Batisheva, A Djomyna , B. Yesipova, S. Zinovieva, O. Kondratiuka, G. Kostyuk, Y. Myleriana, S.Rubinstein, N. Talizina, D.Thorzhevsky, S. Shaporinsky and others. Solving topical issues of practical training of students in universities were engaged in I.Y. Blozva, A. Bugerko, D. Voitiuk, V. Gaponenko, A. Gumeniuk, A. Djomyn, G. Zhyvolup, V. Krasylnykov, P. Laush, P. Luzan, I.Palamar, V. Ryabets, D. Smetanin, P. Yaroshenko, L. Yaroshenko and others.

Purpose of research

Determining the characteristics of the method of practical training of students during their study of the subject "The Road Traffic Regulations" and its improvement, considering the special of students' perception of the starting material.

Research results

In order to get a clearer idea of the peculiarity of students' perception of the subject " The Road Traffic Regulations " according to the level of previously acquired knowledge of the rules, we divided the second-year students in field of study "Transport Technologies" in National University of Life and Environmental Sciences of Ukraine, where observations were conducted, into three subgroups:

1) students who are partially known with certain provisions of road traffic regulations and have to experience in their use as a pedestrian;

2) students who before studying at the university had the opportunity to study road traffic regulations in driver courses, but they have no experience of their use as a driver of a vehicle, only as a pedestrian.

3) students who before studying at the university had the opportunity to study road traffic regulations in driver training courses, have the appropriate driver's license and have experience in applying the rules as road user.

Students of the third subgroup who studied at driver training courses and received the appropriate certificate have an advantage when studying according to the level of previously acquired knowledge. Students of the third subgroup who studied at driver training courses and received the appropriate certificate have an advantage when studying according to the level of previously acquired knowledge. It is so much easier to work with such students, because they have basic knowledge, are fluent in answering the terms of traffic rules and, of course, have no difficulty in passing a test or exam in the discipline.

Difficulties in studying the discipline arise in students of the first two subgroups. These difficulties in each subgroup differ like the manifestation.

Students in the first subgroup, who are partially familiar with certain provisions of the traffic rules and have experience in their application only as a pedestrian, make up about 60%, in some cases up to 70% of the total number on the course. These students are familiar with traffic rules in preparation for school or because of their curiosity. Difficulties used in the early stages of learning by students in this subgroup are related to the lack or absence of experience in perceiving information about the rules. To avoid difficulties in cognitive activity, this is due to the student's insufficient level of prior training.

The level of preliminary preparation of students for the conscious study of the material is determined mainly by personal experience. The level of preliminary preparation of students for the conscious study of the material is determined mainly by personal experience. And experience in cognitive activity is characterized by certain knowledge, skills and abilities that are needed for the formation of new knowledge and skills [3].

According to scientists, the level of preparation of students for the conscious acquisition of knowledge is determined by the presence of such necessary basic concepts, cognitive changes and navigation and memory readiness during their implementation. It should be noted the scientific developments of S. Arkhangelsky, V. Vergasov, A. Demin, I. Lerner, M. Skatkin, V. Slastyonin, T. Shamova, G. Schukina in which scientists considered certain cognitive skills that contribute to the acquisition of new educational information. The objection of special scientific research to identify the necessary cognitive values and skills that students have to master the knowledge of traffic rules in the process of practical training were almost not conducted. Thus, the task of our study is to identify the necessary cognitive values and skills that must be formed in students for their conscious mastery of educational information.

In our opinion, the use of cognitive names is a necessary condition for successful mastering by students of knowledge of the rules [1-10]:

1. The presence of skills to perceive flat educational drawings in the form of spatial images of sections of roads and intersections.

To develop students' ability to perceive flat educational drawings in the form of spatial images of road sections and intersections, it is advisable to use the techniques of comparing drawings on educational posters, textbooks and test tasks in tickets with specific sections of roads and intersections on street roads at the initial period of studying traffic rules. settlement network (fig. 1).

To this end, we offer students exercises through conversation:

- the poster shows a drawing of a section of road that has two lanes for traffic in one direction; give an example of such a section of road that is located in our neighbourhood;

- draw on the board a section of the road that you named and show in the picture its main elements;

- arrange the vehicles in the picture as shown on the poster.

2. The presence of skills to imagine the trajectories of vehicles on posters and drawings in test tasks in exam tickets.

Fig. 1. Skills formation.

We offer students to develop the ability to imagine the trajectories of vehicles in the pictures in the test tasks in tickets and fees by performing practical exercises in business during use using models. The models in the practical classes are special boards, which depict parts of roads and cars are fixed with the help of magnets.

For example, when students study the content of traffic rules in the section "Start of traffic and change its direction", students perform the following tasks:

- place vehicles moving in adjacent lanes in one direction on the carriageway of a four-lane road as shown on the poster;
- demonstrate the trajectory of vehicles in the case of adjustment one of them to an adjacent lane, which moves another vehicle as shown on the poster;
- demonstrate, without using a poster, the trajectories of vehicles in the case of their simultaneous adjustment.

During the interview, we correct the students' answers and, if necessary, give additional explanations using the training manuals (fig. 2).

Fig. 2. Conversation with a student.

Completely different difficulties are found in students of the second subgroup who have knowledge gained in driver training courses. In the process of perceiving the knowledge, they differ significantly from the representatives of the first subgroup, because they have already studied the rules of the road and are relatively easy to navigate in the training material.

However, the behaviour of students of the second subgroup differs significantly from the rest in practical classes, they inattentively listen to the teacher, are distracted, sometimes interfere with others to perceive educational information. There are difficulties in the defence of reports on practical work when the student's answer to the questions posed by the teacher contains many blunders. Thus, learning difficulties that arise in students of the second subgroup are based on their own misconceptions about the level of their knowledge and skills, unwillingness to work with the group in class, use textbooks and reference books. To direct the cognitive activity of such students to the active assimilation of the necessary educational information, the teacher must timely restore the driving force of the learning process. To do this, we create a situation that will allow the student to discover the true level of their knowledge. It is implemented during the teacher's conversation with students or during the performance of a set of practical tasks, which will allow without the intervention of the teacher to assess the level of their knowledge. Practical tasks, for example, when studying the topic “Traffic regulation. Forbidden signs” are given as follows:

- give the exact name of the road sign on which the sign points;
- name the conditions of use of this road sign;
- provide a list of vehicles that do not enhance the effect of this road sign;

give an example of the use of this sign in real road conditions;

- give the correct answer to the test questions.

Consider some aspects that affect the cognitive activity of students of these subgroups in practical classes. It is known that any human activity is not only characterized by the presence of meaningful goals but also motivated. The purpose of the activity is what it is aimed at and what should be its direct result. The reason is what determines a person's desire to do so, and not any other goal. This term refers to the motivating reasons that determine the purposeful activities of people. For students of these subgroups, the motivating reasons or motives for learning is the need to learn something new. But the question arises: why this need for students of the first and third subgroups causes motivation to acquire knowledge and for students of the second subgroup this motivation is lost?

As a result of satisfaction or dissatisfaction of human needs, certain emotions arise. Psychologists claim that in cognitive terms a person has three main areas of mental activity:

- conceptual and logical;
- figurative;
- emotional [9].

The conceptual and logical sphere of thinking allows the student to perceive and understand patterns, laws, concrete and abstract concepts that reflect existing processes, phenomena, objects and other objects being studied.

Due to this positive property of the conceptual and logical sphere of thinking, it is based on the main

subjective loads in learning. In order for a student to be able to perfectly understand the educational material and master the knowledge well, the appropriate time of mental work of his conceptual and logical sphere is required. There are three interrelated stages in the work of this field of thinking in the process of acquiring knowledge. The first stage is the formation of the foundations of concepts, their initial understanding and memorization, which requires repeated repetition of educational information. The second stage - a comprehensive reproduction and understanding of the basics of concepts, their addition to new information and the formation of skills to relate these concepts with knowledge of new information. The third stage is the emergence of new problems, hypotheses and the search for solutions. This is the stage of the creative application of knowledge. Figurative thinking is based on direct and indirect sensory perception of information about phenomena, processes, objects. The emotional area of thinking alone does not do the job of understanding information. However, it can significantly affect the activities of both areas of thinking. The emotional area of thinking alone does not do the job of understanding information. However, it can significantly affect the activities of both areas of thinking. Therefore, the emotional sphere in the learning process is not used as an independent cognitive force.

Consider students from another subgroup to determine the motives for learning. But the impression of the new has passed. The student has already studied the content of the rules and applied some provisions on practice. That is why the needed to learn something new does not cause motives for learning, this need is met. The experience of dissatisfaction with the need at the level of the emotional sphere of thinking has already passed and therefore the motivation, the desire for action aimed at the subject of study does not arise. In addition, the emotional sphere of thinking does not tolerate repetition. During the teaching of partly material, which is partially familiar to students of the second subgroup, the emotional sphere comes into play and causes inhibitory processes in the cognitive activity of students, emotions are disconnected from the work of conceptual-logical and figurative sphere of thinking. To offset the negative effects of the emotional sphere and connect students to cognitive activities, we have proposed practical tasks that destroy students' attitude about the level of their knowledge. Practical tasks open those aspects of the object of knowledge that are still unknown to the student and thus restore the motivation to learn something new.

For students of the first subgroup, the need to learn something new remained. The experience of dissatisfaction with the need includes motivation, the desire to act to master the object of knowledge. The emotional sphere of thinking of students of this subgroup connects to cognitive activity the conceptual-logical and figurative sphere of thinking. For a student to be able to perfectly understand the educational material and master the knowledge well, the appropriate time of mental work of his conceptual and logical sphere of thinking is required. At the first stage of the conceptual and logical sphere, students passively perceive the educational material - they listen to a lecture or explanation of the teacher in practical classes, work with a textbook, manual. But passive repetition doesn`t allow to give knowledge active properties. Passive repetition is necessarily replaced by active repetition when the student reproduces his knowledge during oral answers. Exercises in the form of practical tasks are an active repetition, which allows the student to reproduce and systematize knowledge, to fix them in memory, to show the ability to apply theoretical knowledge to practical actions.

Students of the third subgroup, the best prepared for the perception of educational information in the discipline " The Road Traffic Regulations ", knowledge formed at the first stage of the conceptual and logical sphere of thinking. The advantage in the level of knowledge formation over the representatives of the first and second subgroups is manifested in a fairly rapid transition of the conceptual and logical sphere of thinking from the first to the second stage, the stage of productive reproduction and application of knowledge in different conditions. The quantities and content of educational information in practical classes arouse interest associated with the restoration of motivation for cognition, there is an experience of need, or rather the experience of its dissatisfaction. The experience of dissatisfaction with the need connects the emotional sphere of thinking, which in turn has a positive effect on the conceptual-logical and figurative spheres, encouraging them to active cognitive work. The experience of dissatisfaction with the need connects the emotional sphere of thinking, which in turn has a positive effect on the conceptual-logical and figurative spheres, encouraging them to active cognitive work.

Conclusions

1. The rules and practical tasks that we propose to apply during the practical classes are intended to stimulate the cognitive activity of students during the study of the discipline " The Road Traffic Regulations ".

2. Rules and practical tasks are a means of activating students' cognitive activity and compiling an integral part of the main methodological complex, which directs students in mastering educational technical information, which determines the attention of certain parts of students at low levels of previously acquired knowledge, which stimulates their active learning.

References

1. *Monios J., Lambert B.* (2013). The heartland intermodal corridor: public private partnerships and the transformation of institutional settings. Journal of Transport Geography. 27. 36-45.

2. *Neirotti P., De Marco A., Cagliano A., Mangano G., Scorrano F.* (2014). Current trends in Smart City initiatives: some stylised facts. Cities. 38. 25-36.

3. *Raimbault N.* (2019). From regional planning to port regionalization and urban logistics. The inland port and the governance of logistics development in the Paris region. Journal of Transport Geography. 78. 205-213.

4. *Rauch E., Dallasega P., Matt D.* (2016). Sustainable production in emerging markets through Distributed Manufacturing Systems (DMS). Journal of Cleaner Production. 135. 127-138.

5. *Schliwa G., Armitage R., Aziz S., Evans J., Rhoades J.* (2015). Sustainable city logistics – making cargo cycles viable for urban freight transport. Research in Transportation Business & Management. 15. 50-57.

6. *Sumets O. M.* (2014). Factors of logistics development at the present stage of market transformations. Bulletin of the National University "Lviv Polytechnic". 779. 106-112.

7. *Tijan E., Aksentijevic S., Ivanić K., Jardas M.* (2019). Blockchain technology implementation in logistics. Sustainability. 11. 1-13.

8. *Ye F., Zhao X., Prahinski C., Li Y.* (2013). The impact of institutional pressures, top managers' posture and reverse logistics on performance – evidence from China. International Journal of Production Economics. 143(1). 132-143.

9. *Zagurskiy O., Ohiienko M., Pokusa T., Zagurska S., Pokusa F., Titova L., Rogovskii I.* (2020). Study of efficiency of transport processes of supply chains management under uncertainty. Monograph. Opole: The Academy of Management and Administration in Opole. 162.

10. *Zagurskiy O., Rogach S., Titova L., Rogovskii I., Pokusa T.* (2019). «Green» supply chain as a path to sustainable development. Mechanisms of stimulation of socio-economic development of regions in conditions of transformation. Monograph. Opole: The Academy of Management and Administration in Opole. 199-213.

Список літератури

1. *Monios J., Lambert B.* The heartland intermodal corridor: public private partnerships and the transformation of institutional settings. Journal of Transport Geography. 2013. Vol. 27. P. 36-45.

2. *Neirotti P., De Marco A., Cagliano A., Mangano G., Scorrano F.* Current trends in Smart City initiatives: some stylised facts. Cities. 2014. Vol. 38. P. 25-36.

3. *Raimbault N.* From regional planning to port regionalization and urban logistics. The inland port and the governance of logistics development in the Paris region. Journal of Transport Geography. 2019. Vol. 78. P. 205-213.

4. *Rauch E., Dallasega P., Matt D.* Sustainable production in emerging markets through Distributed Manufacturing Systems (DMS). Journal of Cleaner Production. 2016. Vol. 135. P. 127-138.

5. *Schliwa G., Armitage R., Aziz S., Evans J., Rhoades J.* Sustainable city logistics – making cargo cycles viable for urban freight transport. Research in Transportation Business & Management. 2015. Vol. 15. P. 50-57.

6. *Sumets O. M.* Factors of logistics development at the present stage of market transformations. Bulletin of the National University "Lviv Polytechnic". 2014. Vol. 779. P. 106-112.

7. *Tijan E., Aksentijevic S., Ivanić K., Jardas M.* Blockchain technology implementation in logistics. Sustainability. 2019. Vol. 11. P. 1-13.

8. *Ye F., Zhao X., Prahinski C., Li Y.* The impact of institutional pressures, top managers' posture and reverse logistics on performance – evidence from China. International Journal of Production Economics. 2013. Vol. 143. Issue 1. P. 132-143.

9. *Zagurskiy O., Ohiienko M., Pokusa T., Zagurska S., Pokusa F., Titova L., Rogovskii I.* Study of efficiency of transport processes of supply chains management under uncertainty. Monograph. Opole: The Academy of Management and Administration in Opole. 2020. 162 p.

10. *Zagurskiy O., Rogach S., Titova L., Rogovskii I., Pokusa T.* «Green» supply chain as a path to sustainable development. Mechanisms of stimulation of socio-economic development of regions in conditions of transformation. Monograph. Opole: The Academy of Management and Administration in Opole. 2019. P. 199-213.

ПОВИШЕНИЕ КАЧЕСТВА ПРАКТИЧЕСКОЙ ПОДГОТОВКИ ПО ДИСЦИПЛИНЕ “ПРАВИЛА ДОРОЖНОГО ДВИЖЕНИЯ”

И. А. Колосок

Аннотация. В течение последних десятилетий в мире наблюдается стремительное увеличение количества транспортных средств и повышения интенсивности дорожного движения, что приводит к увеличению количества дорожно-транспортных происшествий и их негативных последствий. Так, по данным Всемирной организации здравоохранения (ВОЗ), дорожно-транспортный травматизм на сегодня является одной из самых больших проблем здравоохранения. По прогнозам, в 2030 году дорожно-транспортные происшествия могут стать одной из основных пяти причин смертности людей в мире. В Украине уровень смертности и травматизма в результате дорожно-транспортных происшествий является одним из самых высоких в Европе, а уровень организации безопасности дорожного движения остается крайне низким, о чем в своих отчетах неоднократно подчеркивали эксперты ВОЗ, Всемирного банка и других международных институтов. Более 26 % процентов погибших и 15 % травмированных в ДТП в 2019 году - это пешеходы (1414 человек погибли и 8455 травмированы). Только за 2019 на дорогах Украины погибло 329 детей в возрасте до 18 лет и 7906 детей травмированы. ДТП в Украине является первой по распространенности причиной смерти молодежи в возрасте от 15 до 24 лет и второй по распространенности причиной смерти детей в возрасте от 5 до 14 лет. Итак, в 2019 году по сравнению с 2018 годом зафиксировано увеличение количества ДТП на 7 %, а также погибших и травмированных в них лиц на 4,2 % и 6,3 % соответственно. По удельным показателям аварийности и последствий ДТП Украина также является одним из лидеров среди стран ЕС. Так, в среднем в странах - членах ЕС (по данным 2017 года) на 100 тыс.населения приходится 5 погибших в ДТП, тогда как в Украине такой показатель составляет (по данным 2017 года) соответственно 12,5 человек, что больше среднеевропейского показателя на 150 %. Важно также учесть, что при отсутствии качественного сбора данных о травмированных и погибших в результате ДТП указанные показатели могут не отражать реальные цифры. Значительное

количество ДТП, которые произошли в Украине на протяжении 2017-2019 годов, а также пострадавших в них людей, влияют на экономику и сферу здравоохранения Украины.

Исследования, проведенные многими странами, определяют общее правило, согласно которому каждая смерть одного человека стоит около 70 валовых внутренних продуктов на одного человека, а каждое серьезное травмирование человека составляет примерно 17 валовых внутренних продуктов на одного человека. Если применять это правило к показателям, приведенным выше, становится понятно, что стоимостная оценка социально-экономических потерь Украины (без учета материальных расходов, связанных с повреждением имущества и снижением производительности труда) от этих ДТП и их последствий только за 2019 составляет около 4,79 млрд. долларов США (3,18% валового внутреннего продукта Украины).

Основными причинами такого положения является недостаточный уровень обеспечения безопасности дорожного движения; ненадлежащее обеспечение технического обслуживания транспортных средств; низкий уровень дисциплины участников дорожного движения; несоответствие состояния улично-дорожной сети уровню интенсивности транспортного движения; недостаточность внедрения новейших технологий и технических средств организации дорожного движения; невысокий уровень подготовки будущих водителей. В статье рассматриваются проблемы учебного процесса, связанные с повышением качества практической подготовки студентов по дициплине "Правила дорожного движения" и предложены действующие пути их решения за счет дифференциации подходов в управлении познавательной деятельностью студентов.

Ключевые слова: восприятие, мотив, понятийно-логическая сфера мышления, практические занятия, образная сфера мышления, познавательная деятельность, упражнения, эмоциональная сфера мышления.

ПІДВИЩЕННЯ ЯКОСТІ ПРАКТИЧНОЇ ПІДГОТОВКИ З ДИСЦИПЛІНИ “ПРАВИЛА ДОРОЖНЬОГО РУХУ”

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Анотація. Протягом останніх десятиліть у світі спостерігається стрімке збільшення кількості транспортних засобів та підвищення інтенсивності дорожнього руху, що призводить до збільшення кількості дорожньо-транспортних пригод та їх негативних наслідків. Так, за даними Всесвітньої організації охорони здоров’я (ВООЗ), дорожньо-транспортний травматизм на сьогодні є однією з найбільших проблем охорони здоров’я. За прогнозами, у 2030 році дорожньо-транспортні пригоди можуть стати однією з основних п’яти причин смертності людей у світі. В Україні рівень смертності та травматизму внаслідок дорожньо-транспортних пригод є одним з найвищих в Європі, а рівень організації безпеки дорожнього руху залишається вкрай низьким, про що у своїх звітах неодноразово наголошували експерти ВООЗ, Світового банку та інших міжнародних інституцій. Понад 26% відсотків загиблих та 15% травмованих у ДТП у 2019 році - це пішоходи (1 414 осіб загинуло та 8 455 осіб травмовано). Тільки за 2019 рік на дорогах України загинуло 329 дітей віком до 18 років та 7 906 дітей травмовано. ДТП в Україні є першою за поширеністю причиною смерті молоді віком від 15 до 24 років та другою за поширеністю причиною смерті дітей віком від 5 до 14 років. Отже, у 2019 році порівняно з 2018 роком зафіксовано збільшення кількості ДТП на 7%, а також загиблих і травмованих у них осіб на 4,2% та 6,3% відповідно. За питомими показниками аварійності та наслідків ДТП Україна також є одним з лідерів серед країн ЄС. Так, у середньому в країнах - членах ЄС (за даними 2017 року) на 100 тис. населення припадає 5 загиблих у ДТП, тоді як в Україні такий показник становить (за даними 2017 року) відповідно 12,5 осіб, що більше середньоєвропейського показника на 150%. Важливо також врахувати, що за відсутності якісного збору даних щодо травмованих і загиблих унаслідок ДТП зазначені показники можуть не відображати реальні цифри. Значна кількість ДТП, які сталися в Україні протягом 2017 - 2019 років, а також постраждалих у них людей, впливають на економіку та сферу охорони здоров’я України.

Дослідження, проведені багатьма країнами, визначають загальне правило, згідно з яким кожна смерть однієї особи коштує близько 70 валових внутрішніх продуктів на одну особу, а кожне серйозне травмування людини становить приблизно 17 валових внутрішніх продуктів на одну особу. Якщо застосовувати це правило до показників, наведених вище, стає зрозуміло, що вартісна оцінка соціально-економічних втрат України (без урахування матеріальних витрат, пов’язаних з пошкодженням майна та зниженням продуктивності праці) від цих ДТП та їх наслідків тільки за 2019 рік становить близько 4,79 млрд. доларів США (3,18 % валового внутрішнього продукту України).

Основними причинами такого стану є недостатній рівень забезпечення безпеки дорожнього руху; неналежне забезпечення технічного обслуговування транспортних засобів; низький рівень дисципліни учасників дорожнього руху; невідповідність стану вулично-дорожньої мережі рівню інтенсивності транспортного руху; недостатність впровадження новітніх технологій і технічних засобів організації дорожнього руху; невисокий рівень підготовки майбутніх водіїв. В статті розглядаються проблеми навчального процесу, що пов’язані з підвищенням якості практичної підготовки студентів з дициплiни “Правила дорожнього руху” та запропоновані дійові шляхи їх вирішення за рахунок диференціації підходів у керуванні пізнавальною діяльністю студентів.

Ключові слова: вправи, емоційна сфера мислення, мотив, образна сфера мислення, понятійно-логічна сфера мислення, пізнавальна діяльність, практичні завдання, сприймання.

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