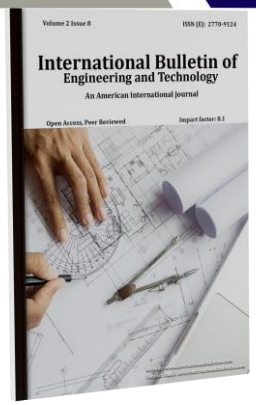

DIDACTIC OPPORTUNITIES FOR THE DEVELOPMENT OF PROFESSIONAL COMPETENCE OF FUTURE ENGINEERS BASED ON THE SCIENCE OF VEHICLE DIAGNOSTICS

Xudaykulov Rustam Zakirovich
Teacher of Termez Institute of Engineering and Technology
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Annotation: The article examines the development of professional competence in support of new pedagogical methods in lectures, practical and laboratory classes based on the science of diagnostics of motor vehicles of students of higher educational institutions.

Keywords: Computer, lecture, practical and laboratory activities, education, stage, idea, student, learning process,

The role of potential personnel in solving the problems that arise in the world today is increasing, and special attention is paid to the quality of training highly qualified, independent, capable and competitive specialists in the field of production.

The science of diagnostics of motor vehicles is a subject in the block of specialization subjects in the curriculum of undergraduate courses in the engineering field of education. The total weekly load is 6 hours and 4 credits. 2 hours of lectures, 2 hours of practical training and 2 hours of laboratory training are organized in the 2nd year. The science program of diagnostics of motor vehicles is a state educational standard, mechanics of surface transport systems and their operation (motor transport), motor transport, operation of road construction machines and equipment (on motor transport), service sector (motor transport) or It is created in accordance with the mandatory requirements of the content of bachelor's training. It is known that on the basis of the topics given in the curriculum for mastering the science of vehicle diagnostics

— reliability indicators in the operation of motor vehicles
and create an idea about the diagnostic system;
— reliability and performance of motor vehicles
learning to provide, evaluate their reliability and practice diagnostic methods and tools;
— the main operating characteristics of motor vehicles
experimental determination, data collection and processing in operational conditions
and developing analytical skills. goals lie. This situation can be seen in Table 1.2 below.
5310600-Hours allocated to "Vehicle Diagnostics" for "Vehicle Engineering" specialty

1.2 - table

Name of study subject	Total hours	Lecture	Practical training	Laboratory training	Independent education	Loan amount
Vehicle diagnostics	240	45	30	30	135	4
IV - V – semester						

Study time for science is divided in such a way that one practical and laboratory session corresponds to each lecture session. The laboratory training is conducted in small groups. In order to master the subject, lectures, practical and laboratory classes are held alternately for 2

hours a week. Such a sequence of classes provides an opportunity to work with students, to monitor the process of mastering the given material on a weekly basis, to coordinate and manage the audience and the student's independent work.

One of the important tasks of any subject, regardless of what stage of education it is taught in, is to ensure the process of forming the system of knowledge in the subject. Based on the logical-genetic analysis of the knowledge structure, the following main elements are distinguished in the knowledge system: scientific evidence, concepts, laws, theories, practical application of theoretical knowledge, scientific view of the world. The mentioned structural units of knowledge are common to all natural and social sciences [1].

More than 20 forms of education are used to form and transfer knowledge. Among them, lecture classes, which are still considered traditional education, are an important didactic tool. The essence of science, the basis of the subject, theorems, definitions, proofs, and concepts will be revealed during the lecture session.

There are disagreements about the place and role of lectures in modern higher educational institutions. Opponents of lecturing present a number of arguments against lecturing. Some believe that the lecture teaches students to passively accept other people's opinions without criticism, suppressing the desire to work and think independently. At the same time, a more critical reception of people's opinions, and less intellectual development of the student, takes its place. Attending lectures is expected to take a lot of time. It is also noted that the students do not receive the lecture materials uniformly, as a result, some of the students (sometimes the majority) cannot understand the presented material, they only mechanically record the speaker's words [2].

A properly organized lecture can raise the mental activity of students to a higher level. In addition, the lecture is the most effective method of teaching, generalization and independent thought processes to develop the skills of quick perception of new ideas. [3].

The advantages of the lecture are many. The lecture allows you to master the main core of the topics. It is also conducted in a collective manner. This training requires great responsibility from the teacher. In addition to preparing and delivering educational materials on the subject, it is necessary to have pedagogical skills that allow the listeners to accept and understand the subject. Along with explaining the new topic, he has to connect the previous topic and bring it to the students' memory. In the vehicle diagnostics course, lecture materials are collected from various sources and summarized.

Even when there are conflicting and controversial opinions on the main problems of the course presented in different understandings in various scientific manuals and articles, lectures are very necessary. In this case, the speaker sets the task of objectively evaluating different approaches and interpretations and, clarifying his theoretical position, offers the students to choose one version of the interpretation, and in some cases gives them some reason to express their arguments and opinions. gives the opportunity to choose a position. In addition, the course "Diagnostics of motor vehicles" contains topics that are too difficult for independent analysis and study according to textbooks and educational methodological literature. In such cases, the speaker should properly process the material and present it in a form that is convenient for understanding and mastering, paying attention to the explanation of very difficult aspects.

Lectures are a very economical way to get the basics of knowledge, orientation to the educational material in a generalized way. In an oral presentation, many students understand

the material more easily and get the main idea, the logic of the argumentation, the structure of the educational material becomes clearer. Thus, in all of the above-mentioned cases, the lecture is really a necessary form of acquiring and transferring knowledge of the academic subject.

In the literature, the lecture is considered as a traditional form of education and some disadvantages are mentioned: low level of student acquisition, student activity, low feedback, lack of student interest.

First of all, the student should understand the new educational material presented by the teacher, he should listen to the speaker not only by hearing, but actively and with interest. If the student can understand the speaker's point of view, the learning material will be mastered. If he carefully follows the information given by the teacher, the development of the speaker's thoughts, if he can connect the new information with the previously known information, if he can understand what he heard, a certain mental activity will be awakened in the student. The comprehension stage is very important for the acquisition process: only what is understood and comprehended remains in the memory. The material understood and understood can be partially stored in memory.

Analyzing all this, we can come to the conclusion that a properly organized lecture course should ensure perception, understanding and memorization of the material. The main purpose of the lecture is to increase the intellectual power of students, to create a movement of thinking that follows the teacher's opinion, to achieve cooperative thinking and reaction.

Many years of observations show that the main elements of the lecture set of educational tools supplementing the speaker's speech should include: teaching-methodical set, notes on the board, slides and handouts (issued via video projector). This set of tools is used by the teacher to create schemes of the approximate basis of actions (skills) formed during the lecture. In turn, they are also a powerful teaching tool.

We effectively use chalk and whiteboards along with state-of-the-art educational technology, which we believe significantly impacts the learning process when teaching a vehicle diagnostics course. When such lessons are presented on the screen in the subject planner, the classroom is shown with visual material and information that illustrates some theoretical rules, and the flow of execution is indicated on the board with chalk. Slides prepared on the basis of the Power Point program open up additional opportunities for the presentation of lecture materials.

As a strengthening factor of the educational process, problem situations are used in the lessons of "Vehicle Diagnostics" to give students a complete knowledge of the subject. The process of completing the problem exercises puts the student in a new "inventor" position.

In practical and laboratory classes, the form of education that ensures the student's mastery and strengthening of the subject is counted. Strengthens and expands the knowledge gained during the lecture. The student independently completes the assigned tasks based on the acquired knowledge.

Practical and laboratory training in vehicle diagnostics is conducted in groups and small groups. During the organization of practical and laboratory training, pre-prepared handouts and methodological instructions are distributed to each student, while touching on the theoretical part, problem solving is shown on the blackboard, and the algorithm of these tasks is compiled and shown.

The main methods used in practical training are presented in Figure 1.

The thesis is characterized by references in the form of formulas, diagrams, figures and codes, as well as literature, as well as a complete analysis and solution of the resulting tasks. Individual worksheets show what to do with this material.

This is done with the help of handouts: continuous review of the presentation material necessary for the completion of individual assignments, strengthening of knowledge; Completing the solution of tasks prepared on the computer, answers to control questions and topics in the colloquium [4].

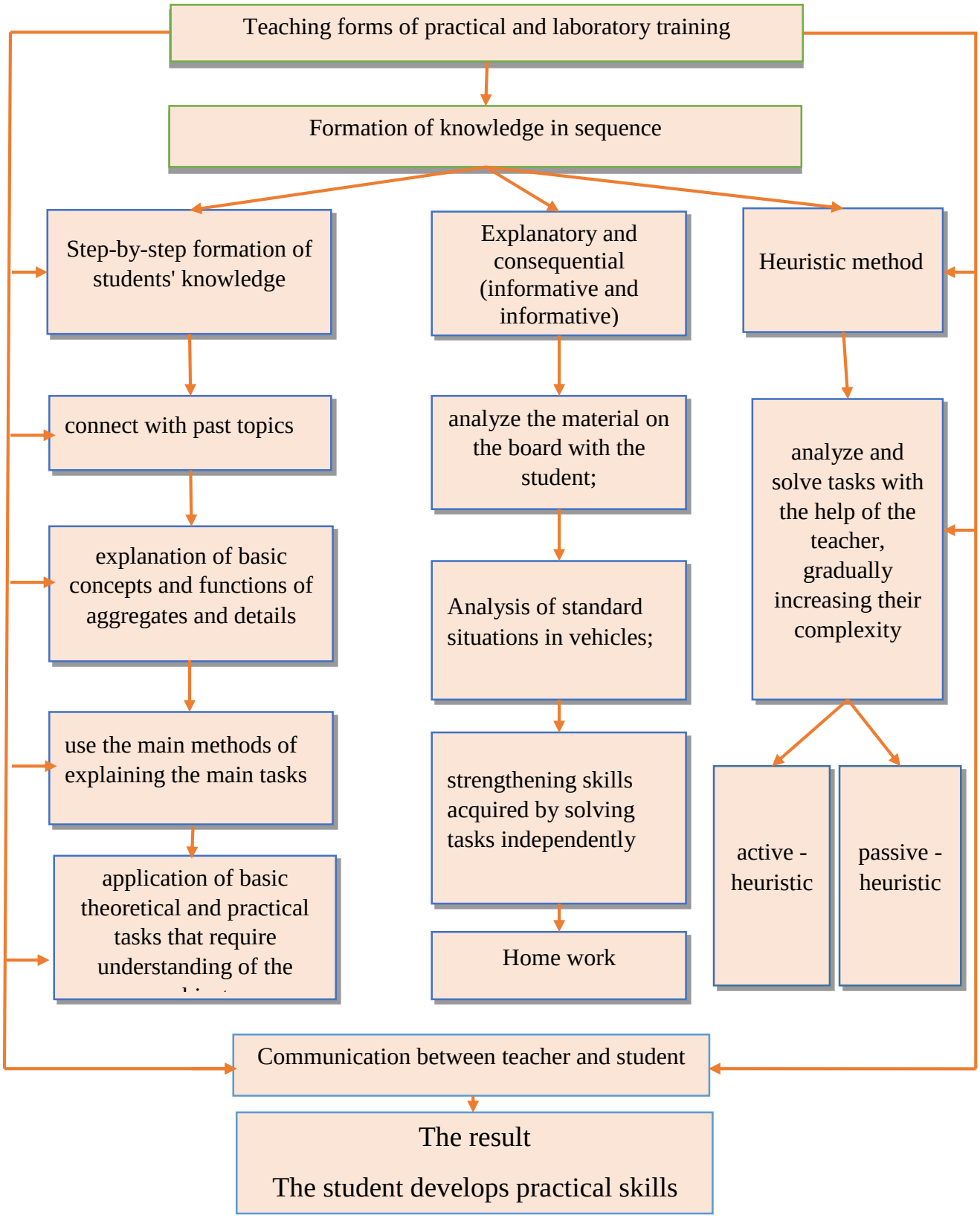

Figure1.

Methods of organizing practical and laboratory training

In the first lessons, the easiest and most convenient methods of active reading of students during the period of initial adaptation were used - crosswords by structure. After the adaptation period, active learning methods became more complex and students were offered to solve tasks during "time". Personal supervision was also used. At the same time, all students receive one task that requires maximum knowledge, skills and abilities. After personal control, it is suggested to analyze the task on the board, identifying the difficulties and showing the most common mistakes. Based on the results of personal control, in the next lesson, students solve tasks of different levels of complexity [5].

Educational information in the science of vehicle diagnostics is arranged in a logical sequence of increasing complexity of tasks and exercises. The student must first solve the problem or exercise, then compare the result with the suggested answers. If the task is solved correctly, the student receives instructions based on this answer to complete the next more difficult task. If the answer is among the wrong ones, then the student elements receive instructions on how to perform simple tasks, which consist of a component of unsolved tasks. The student, in his opinion, has the ability to "jump" over tasks that are too easy. If a student fails to solve a more complex task if his knowledge is overestimated, the map directs him to complete the missed tasks, while a highly trained student has unique opportunities to improve his abilities by working on increasingly complex heuristic tasks. ladi

The most effective means of developing and strengthening creative activity is the independent work of the student, which is the basis for improving the quality of training of specialists. Independent work of students (TMI) is considered in the psychological and pedagogical literature as a means of acquiring knowledge and reflects the specific activity of educational and scientific knowledge. The internal content of such activity should be the independent creation of the goal set by the student. TMI consists of four levels defined by specific skills as a means of organizing knowledge. Content analysis of students' independent works allows to determine the goals set in the following independent works:

- educational - development of the amount and level of knowledge, skills, qualifications of students necessary for solving educational and professional tasks, the ability to manage scientific information flows in solving tasks;

-developer - independent formation of knowledge according to students' own wishes, realizing their professional activity;

- educational - self-formation and development.

It is important to develop educational materials that provide independent learning and are focused on conducting practices. It should be noted that educational materials include a system of questions and assignments of various types, sizes and complexity so that students have sufficient knowledge and skills along with theoretical information on the method of activity related to the subject.

The following rules were taken into account when developing problem-based and creative educational tasks:

- tasks should be focused on problems related to real situations;

- development of students' mental activity using different methods in solving the problem in the educational task;

- the possibility of determining the solution of tasks and strengthening the connection between events or processes in the minds of students;
- in the process of completing the tasks, the student should be able to create a more complex concept that he has not yet mastered from simple concepts;
- formation of new knowledge based on creative thinking.

Taking into account the presentation of a large amount of theoretical material to students in a limited time (shortening the lecture period), it is important to prepare and use information cards in the form of a systematic textual and graphic list on specific topics of "vehicle diagnostics" .

Confidence in the importance of the subjects studied at the higher educational institution and future professional activity, as well as interest in the future profession, is the most important factor in the process of forming a specialist with high technical qualifications.

References:

1. W.G. Smith. Practical Descriptive Geometry. London 2013. - 257 pages.
2. https://elibrary.ru
3. Grigorevkaya L.P., Poisk kriteriev optimalo soderjaniya obucheniya na lectsionnom i prakticheskom zanyatiyax.//Sibirskiy pedagogicheskiy zurnal ... UDK (744.4 + 514): 378.2007.
4. https://dlib.rsl.ru
5. Grigorevsky L. B. Development of thematic classifiers for the improvement of the quality of education of students of printed geometry and engineering graphics: Diss. ... candy. ped. Nauk : 13.00.02 : M., 2005 214 c
6. Shomirzayev M. K. et al. National handicrafts of Uzbekistan and its social–economic significance //European Journal of Research and Reflection in Educational Sciences. – 2020. – Т. 8. – №. 8. – С. 129-138.
7. Shomirzayev M. K. Education is personally focused technology //European Journal of Research and Reflection in Educational Sciences Vol. – 2020. – Т. 8. – №. 8.
8. Shomirzayev M. K. Technology of Educational Process in School Technology Education //The American Journal of Social Science and Education Innovations. – 2020. – Т. 2. – №. 07. – С. 212-223.
9. Shomirzayev M. K. The Ethical Characteristics of Traditional Embroidery of Fergana Valley People //European Journal of Research and Reflection in Educational Sciences. – 2019. – Т. 2019.
10. Shomirzayev M. K. Local features of the traditional embroidery of the Ferghana valley //European Journal of Research and Reflection in Educational Sciences. – 2019. – Т. 2019.
11. Shomirzayev M. K. The Concept Of Pedagogical Technology And Basic Principles. Academicia: An International Multidisciplinary Research Journal.(Affiliated to Kurukshetra University, Kurukshetra, India), Vol. 10, Issue 11, November 2020 Scientific Journal Impact Factor (Sjif 2020-7.13).-Part 1554-1563.
12. Shomirzayev M. K. The concept of pedagogical technology and basic principles //ACADEMICIA: An International Multidisciplinary Research Journal. – 2020. – Т. 10. – №. 11. – С. 1551-1560.

13.Shomirzayev M. K. Ethnic characteristics of national traditional crafts //European Journal of Research and Reflection in Educational Sciences Vol. – 2020. – Т. 8. – №. 12. – С. 216-225.
14. Shomirzayev M. K. Practical lessons in technology: Characteristics of organization and conduct //Asian Journal of Multidimensional Research. – 2021. – Т. 10. – №. 4. – С. 991-1001.
15. Shomirzayev M. K., Yuldashov K. K. The Educational Importance of Teaching Knowledge to Secondary School Students //CURRENT RESEARCH JOURNAL OF PEDAGOGICS. – 2021. – Т. 2. – №. 08. – С. 132-142.
16. Shomirzayev M. K. Ethnic peculiarities of artistic embroidery of the peoples of the Ferghana valley //European Journal of Research and Reflection in Educational Sciences.-7 (12).-P. – 2019. – Т. 967.
17. Shomirzayev M. K. Combined In Technology Courses Use Of Technologies //The American Journal of Social Science and Education Innovations. – 2021. – Т. 3. – №. 05. – С. 389-396.
18. Shomirzayev M. X., Karimov I. I. Innovative pedagogical technologies in teaching technology //T.:“Universitet. – 2020. – Т. 125.
19. Shomirzayev M. X. Innovative processes in Uzbek national handicrafts //T.:“New edition. – 2019.
20. Шомирзаев М. Х. Мактаб технология таълимида миллий ҳунармандчиликнинг спектрал-вариатив компонентларини фанлараро такомиллаштириш. Педагогика фанлари бўйича докторлик (ДSc) дисс //Т.: Tafakkur. – 2020. – Т. 164.
21. Shomirzayev S. National followers in the students use of educational technologies instruction of interests //International Journal of Linguistics, Literature and Culture. – 2021. – Т. 7. – №. 3. – С. 152-157.
22. Shomirzayev M. X. Ways to increase the effectiveness of teaching technology //Methodological manual. – 2019.
23. Shomirzaev M. X. Innovative pedagogical technologies in teaching technology. Textbook //T: Tafakkur. – 2021.
24. Texnologiya fanini o’qitishda, Shomirzayev MX. "innovatsion pedagogik texnologiyalar. Darslik." T.:“TerDU nashr-matbaa markazi 226 (2020).
25. Shomirzayev M. K., Yuldashov K. K. Use of Some Historical Materials in Technology Education Classes //International Journal of Multicultural and Multireligious Understanding. – 2021. – Т. 8. – №. 11. – С. 184-195.
26. Shomirzayev M. K., Yuldashov K. K. Student-Folk Craft for Young People Teaching History as a Factor of National Education //International Journal of Multicultural and Multireligious Understanding. – 2021. – Т. 8. – №. 8. – С. 475-486.
27. Texnologiya fanini o‘qitishning S. M. X. samaradorligini oshirish yo ‘llari //T.:“Gold print nashr. – 2019. – Т. 42.
28. Shomirzayev M. K. Pedagogical technologies-as a factor to increase student knowledge in school technology classes //current research journal of pedagogics. – 2021. – Т. 2. – №. 05. – С. 84-96.

29.Shomirzayev M. K., Pakhratdinova R. O. Characteristics of Organization and Conduct of Practical Courses on National Crafts in Technology //Asian Journal of Research in Social Sciences and Humanities. – 2021. – Т. 11. – №. 9. – С. 182-192.
30. Shomirzaev M. X. The use of modern teaching methods in teaching school students folk crafts //The teacher is also constantly informed.-Nukus. – 2020. – С. 42-46.
31. Shomirzaev M. X. Problem-based education in the lessons of" Technology" //Modern education. Tashkent. – 2020. – №. 6. – С. 91.
32. Шомирзаев М., Авазов Ж. OLIY TA'LIM TIZIMIDA BO 'LAJAK MUHANDISLARNING TAYYORLASHNING BA'ZI JIHATLARI //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2021. – Т. 4. – №. 4.
33. Шомирзаев М. Х. ТЕХНОЛОГИЯ ФАНИНИ ЎҚИТИШДА ИННОВАЦИОН ПЕДАГОГИК ТЕХНОЛОГИЯЛАРИДАН ФОЙДАЛАНИШ МЕТОДИКАСИ: DOI: https://doi. org/10.53885/edinres. 2021.44. 86.020 Шомирзаев Махматмурод Хурамович Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 321-330.
34. Shomirzaev M. X. Theory and practice of interdisciplinary improvement of spectral-variable components of national crafts in school technology education. Monograph //T.: Tafakkur. – 2020.
35. Шомирзаев М. Х. Ўқувчиларда халқ ҳунармандчилиги касбларига қизиқишни фанлараро шакллантириш омиллари //Мактаб ва ҳаёт. – 2019. – С. 23-24.
36. Kh S. M. Young People from" Technology" to Profession Training as a Factor of Competitive Personnel Training //International Journal of Multicultural and Multireligious Understanding. – 2021. – Т. 8. – №. 4. – С. 580-591.
37. Shomirzaev M. X. Improving the orientation of students to the professions of folk crafts in technology education //Science and society (Science is also society).-Nukus. – 2020. – С. 98-100.
38. Shomirzaev M. X. Psychological and pedagogical potential of folk crafts in school technology education //Tafakkur ziyosi.-Jizzax. – 2020. – №. 4. – С. 154-155.
39. Шомирзаев М. Х. Таълим технологияларидан фойдаланиш муаммолари //Замонавий таълим. – 2019. – Т. 9. – №. 82. – С. 25-31.
40. Шомирзаев М. Х. Ўқувчиларда халқ миллий ҳунармандчилиги касбларига қизиқишни шакллантиришда таълим технологияларидан фойдаланиш //Қорақалпоқ давлат университетининг хабарномаси.–Нукус. – 2019. – Т. 4. – №. 45. – С. 98-102.
41. Shomirzaev M. X. The use of educational technologies in the formation of students' interest in the professions of national crafts //Karakalpak State University Bulletin.-Nukus. – 2019. – Т. 4. – №. 45. – С. 98-102.
42. Shomirzaev M. X. Factors of interdisciplinary formation of students' interest in folk crafts //School and life. – С. 23-24.
43. Shomirzayev M. K., Yuldashov K. K. Carpenter, jewelery, knifecourse development of application methods //Asian Journal of Multidimensional Research. – 2021. – Т. 10. – №. 8. – С. 302-308.
44. Shomirzaev M. X. Interethnic peculiarities of embroidery //Sources of knowledge. Urgench. – 2020. – №. 4. – С. 189-192.

45.Шомирзаев М. Х. Ўзбекистонда миллий ҳунармандчилик ривожла-нишининг тарихий–ижтимоий асослари/Таълим-тарбия контекстида фанлараро синхрон ва асинхрон боғланишлар. Илмий-услубий мақолалар тўплами //Т.: Noshirlik yog'dusi. – 2019. – С. 52-57.

46. Шомирзаев М. Х. Технология обучения народному-прикладному исскусству, трудовое и эстетическое воспитание учащихся V-VII классов общеобразовательных школ. Монография //Т.: Yangi nashr. – 2019.

47. Шомирзаев М. Х. Технология фанини ўқитиш жараёнида интерфаол методлардан халк ҳунармандчилигида фойдаланиш имкониятлари/Таълим-тарбия контекстида фанлараро синхрон ва асинхрон боғланишлар. Илмий-услубий мақолалар тўплами //Т.: Noshirlik yog'dusi. – 2019. – С. 130-136.

48. Shomirzaev M. X. Vocational education: national embroidery //Pedagogy. – Т. 2019. – С. 122-129.

49. Shomirzaev M. X. Problems of using educational technologies //Modern education. – С. 25-3.

50. Шомирзаев М. Х. Технология таълимида ўқувчиларни халқ ҳунар-мандчилиги касбларига йўналтиришни такомиллаштириш //Fan va jamiyet (Ilim ham jamiyet).– Нукус. – 2020. – С. 98-100.

51. Shomirzaev M. X. Interdisciplinary improvement of spectral-variable components of national crafts in school technology education. Monograph //Т."Tafakkur. – 2020.

52. Shomirzayev M. X. Ways to increase the effectiveness of teaching technology //Methodological manual. – 2019.

53. Shomirzayev M. X. Genesis of formation and development technology of Uzbek national handicrafts //Т.:"Yangi Nashr. – 2019.

54. Shomirzayev M. X. Spectral-variable components of Uzbek national handicrafts //Т.:"Yangi Nashr. – 2019.

55. Шомирзаев М. Х. Ўзбек миллий ҳунармандчилигида мато тайёрлаш-нинг ўзига хос жиҳатлари //Тафаккур зиёси.–Жиззах. – 2019. – С. 69-71.

56. Шомирзаев М. Х. Бойсун қуроқчилик санътини ўргатишда тарихий анъаналарнинг ўрни //Бойсун-моддий ва номоддий маданияти бешиги" мавзусидаги Халқаро илмий-амалий конференцияси.–Т.: Yangi nashr. – 2018. – С. 62-67.

57. Shomirzaev M. X. Genesis of formation and development technology of Uzbek national handicrafts. Educational-methodical manual //Т.: New edition. – 2016.

58. Rakhmatillayev A. et al. Dynamics of the effectiveness of interactive methods //Т.:"Avu press-consultant. – 2015. – С. 60.

59. Abdiev K. M. et al. COMPARATIVE EVALUATION OF NEW TREATMENTS FOR IMMUNE THROMBOCYTOPENIA //NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO. – 2021. – С. 10160-10166.

60. Шомирзаев М. Х., Хайруллаев И. Н. МАКТАБ ЎҚУВЧИЛАРИНИ ХАЛҚ ҲУНАРМАНДЧИЛИГИГА ЎРГАТИШДА ИННОВАЦИОН ТАЪЛИМ МЕТОДЛАРИДАН ФОЙДАЛАНИШ: DOI: https://doi. org/10.53885/edinres. 2021.50. 31.014 Шомирзаев Махматмурод Хурамович Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc). Хайруллаев Исматулло Нуруллаевич

Термиз давлат университети доценти //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 367-371.
61. Шомирзаев М. Х. “ТЕХНОЛОГИЯ” ФАНИ ДАРСЛАРИДА МУАММОЛИ ТАЪЛИМ //Современное образование (Узбекистан). – 2020. – №. 6 (91). – С. 28-36.
62. Шомирзаев М. Х. Зардўзлик ҳунарини ўқувчиларга ўргатишда миллий анъаналарнинг аҳамияти. – 2019.
63. Shomirzaev M. X. Opportunities for the integration of sciences in the formation of students' interest in the professions of national crafts //Science and society (Science and society).-Nukus. – 2019. – №. 3. – С. 106-108.
64. Шомирзаев М. Х. Ўзбек каштадўзлигининг шаклланиш генезиси ва ривожланиш технологияси //Муғаллим ҳем узлуксиз билимлендириў.–Нукус. – 2019. – С. 73-82.
65. Шомирзаев М. Х. Анъанавий каштадўзликда маҳаллий жиҳатлар //Илм сарчашмалари.–Урганч. – 2019. – С. 140-144.
66. Шомирзаев М. Х. Технология фани жараёнида ўқувчиларни тадбиркорлик ва кичик бизнес фаолиятига тайёрлаш/Таълим-тарбия контекстида фанлараро синхрон ва асинхрон боғланишлар. Илмий-услубий мақолалар тўплами //Т.: Noshirlik yog’dusi. – 2019. – С. 176-178.
67. Шомирзаев М. Х. Касбий таълим: миллий каштадўзлик //Педагогика. – 2019. – С. 122-129.
68. Шомирзаев М. Х. Ўзбек миллий ҳунармандчилигида инновацион жараёнлар. Ўқув-услубий қўлланма //Т.: Yangi nashr. – 2017. – Т. 48.
69. Исмаилов Х. Х. и др. Матер. конф." Фотоэлектрические явления в полупроводниках-2004. – 2004.
70. Шомирзаев М. Х. Ўзбек миллий ҳунармандчилигининг спектирал-вариатив компонентлари. Услубий қўлланма //Т.:“Янги нашр. – 2019. – Т. 48.
71. Шомирзаев М. Х. Технология фанини ўқитишнинг самарадорлигини ошириш йўллари. Ўқув-методик қўлланма //Т.: Gold print nashr. – 2019. – Т. 56.
72. Шомирзаев М. Х. Миллий ҳунармандчилик одоби. – 2018.
73. Кадыров Б. Э. ЎҚУВЧИЛАРНИНГ ҲУНАРМАНДЧИЛИККА ОИД ТАЯНЧ КОМПЕТЕНЦИЯЛАРИНИ ЭЛЕКТРОН АХБОРОТ ТАЪЛИМ МУҲИТИДА РИВОЖЛАНТИРИШНИНГ ДИДАКТИК МОДЕЛИ: DOI: https://doi. org/10.53885/edinres. 2021.37. 29.058 Қодиров Бахтиёр Эшмурзаевич Термиз давлат университети, педагогика фанлари бўйича фалсафа доктори (PhD) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 128-132.
74. Shomirzaev M. K., Astanakulov K. D., Babaev K. M. Research into the perforated surface of the double staged grinder-crusher //IOP Conference Series: Earth and Environmental Science. – IOP Publishing, 2022. – Т. 1076. – №. 1. – С. 012035.
75. Astanakulov K. D., Kurbonov F. K., Shomirzaev M. K. Development of fish feed distributor device //IOP Conference Series: Earth and Environmental Science. – IOP Publishing, 2022. – Т. 1076. – №. 1. – С. 012032.
76. Шомирзаев М. Х. ТЕХНОЛОГИЯ ТАЪЛИМИДА ЎҚИТИШ ШАКЛЛАРИ ВА МЕТОДЛАРИ: DOI: https://doi. org/10.53885/edinres. 2021.11. 39.016 Шомирзаев

Махматмурод Хурамович Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 353-358.

77. Shomirzayev M. ЎҚУВЧИЛАР ТАЪЛИМ ВА ТАРБИЯСИДА КАШТАЧИЛИКНИНГ ЎРНИ //Физико-технологического образование. – 2022. – №. 3.

78. Shomirzayev M. ЎҚИТИШДА ИННОВАЦИОН ПЕДАГОГИК ТЕХНОЛОГИЯЛАРИДАН ФОЙДАЛАНИШ //Физико-технологического образование. – 2022. – №. 3.

79. Xuramovich S. M. Individually Directed some Features of Technology //Eurasian Journal of Engineering and Technology. – 2022. – Т. 4. – С. 59-65.

80. Xuramovich S. M. IN TEACHING TECHNOLOGY TEACHER'S CREATIVE APPROACH //World Bulletin of Social Sciences. – 2022. – Т. 8. – С. 32-37.

81. Kh S. M. National Crafts And Socio-Economic Activity //The American Journal of Applied sciences. – 2021. – Т. 3. – №. 04. – С. 32-46.

82. Шомирзаев М. Х. ТЕХНОЛОГИЯ ТАЪЛИМДА ЎҚУВЧИЛАРНИ ХАЛҚ ҲУНАРМАНДЧИЛИГИ КАСБЛАРИГА ЙЎНАЛТИРИШ: DOI: https://doi. org/10.53885/edinres. 2021.81. 45.017 Шомирзаев Махматмурод Хурамович, Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 346-352.

83. Шомирзаев М. Х. МАКТАБ ТЕХНОЛОГИЯ ТАЪЛИМИДА ЎҚУВЧИЛАРНИ МИЛЛИЙ ҲУНАРМАНДЧИЛИКНИНГ СПЕКТРАЛ-ВАРИАТИВ КОМПОНЕНТЛАРИ БИЛАН ФАНЛАРАРО ТАНИШТИРИШДА ТАРИХИЙЛИК ПРИНЦИПИ: DOI: https://doi. org/10.53885/edinres. 2021.88. 48.019 Шомирзаев Махматмурод Хурамович, Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 331-341.

84. Шомирзаев М. Х., Мухамадиева Н. К. МИЛЛИЙ ТАРБИЯДА КАШТАЧИЛИКНИНГ ЎРНИ: DOI: https://doi. org/10.53885/edinres. 2021.78. 80.018 Шомирзаев Махматмурод Хурамович, Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc). Муҳамадиева Наргиза Қудратовна, Термиз давлат университети Таълим ва тарбия назарияси ва назарияси (Технологик таълим) мутахассислиги магистранти //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 342-345.

85. Шомирзаев М. Х. ТЕХНОЛОГИЯ ФАНИДАН АМАЛИЙ ДАРСЛАРНИ ТАШКИЛ ЭТИШ ВА ЎТКАЗИШ МЕТОДИКАСИ: DOI: https://doi. org/10.53885/edinres. 2021.26. 95.021 Шомирзаев Махматмурод Хурамович, Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 312-320.

86. Шомирзаев М. Х. TEXNOLOGIYA TA'LIMIDA TARBIYA JARAYONINI TEXNOLOGIYALASHTIRISH: DOI: https://doi. org/10.53885/edinres. 2021.67. 13.031 Shomirzaev Maxmatmurod Xuramovich, Termiz davlat universiteti texnologik ta'lim kafedrasi

dotsenti,
pedagogika fanlari doktori (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 263-268.
87. Шомирзаев М. Х. ТЕХНОЛОГИЯ ФАНИ ДАРСЛАРИНИ ТАШКИЛ ЭТИШНИ ТАКОМИЛЛАШТИРИШ: DOI: https://doi. org/10.53885/edinres. 2021.16. 53.015 Шомирзаев Махматмурод Хурамович, Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 359-366.
88. Шомирзаев М. Х. TEXNOLOGIYA TA'LIMIDA TA'LIMNING SHAXSGA YO 'NALTIRILGAN TEXNOLOGIYASI: DOI: https://doi. org/10.53885/edinres. 2021.49. 15.032 Shomirzaev Maxmatmurod Xuramovich, Termiz davlat universiteti texnologik ta'lim kafedrasi dotsenti, pedagogika fanlari doktori (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 255-262.
89. Шомирзаев М. Х. ТЕХНОЛОГИЯ ТАЪЛИМИДА ЎҚИТИШ ШАКЛЛАРИ ВА МЕТОДЛАРИ: DOI: https://doi. org/10.53885/edinres. 2021.11. 39.016 Шомирзаев Махматмурод Хурамович Термиз давлат университети технологик таълим кафедраси доценти, педагогика фанлари доктори (DSc) //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1-Махсус сон. – С. 353-358.
90. Shomirzayev M. K. Developing Educational Technologies In School Technology Education //Next Scientists Conferences. – 2022. – С. 14-23.
91. Шомирзаев М. PEDAGOGIK MAHORAT: ЎЗБЕКИСТОН РЕСПУБЛИКАСИ ИЖТИМОИЙ-ИҚТИСОДИЙ СОҲАСИ РИВОЖЛАНИШИДА МИЛЛИЙ ҲУНАРМАНДЧИЛИКНИНГ АҲАМИЯТИ //ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz). – 2020. – Т. 2. – №. 2.
92. Shomirzaev M. K. Factors in the development of national art. – 2020.
93. Шомирзаев М. Х. Таълим технологияларини қўллаш муаммолари //Современное образование (Узбекистан). – 2019. – №. 9 (82). – С. 25-31.
94. Якубов С. Х., Шомирзаев М. Х. Инновационные подходы к совершенствованию уроков технологии в средних общеобразовательных школах Республики Узбекистан //МИР ОБРАЗОВАНИЯ—ОБРАЗОВАНИЕ В МИРЕ. – 2019. – С. 110.
95. Sidikov I. K., Shomirzaev B. U. Two-level fuzzy adaptive regulation of dynamic objects //Management. – 2018. – Т. 2018. – №. 4. – С. 7.
96. Kh S. M. Innovation Pedagogical Technologies Used in School Technology Education.