WEB OF SYNERGY:
International Interdisciplinary Research Journal
Volume 2 Issue 2, Year 2023 ISSN: 2835-3013
https://univerpubl.com/index.php/synergy

Possibilities of Using New Pedagogical Technologies in Teaching the Subjects of Emergency Situations and Civil Protection

Mamadaliyev Adkhamjon Tukhtamirzaevich
PhD of Namangan Engineering Construction Institute, 160103, Republic of Uzbekistan, Namangan, I. Karimov st.,12

Article Information

Received: December 26, 2022
Accepted: January 27, 2023
Published: February 28, 2023

Keywords: *Educational process, educational system, pedagogical innovation, pedagogical technology, creative thinking, venn diagram, cluster, sinkvein, cubic strategy, interactive method.*

ABSTRACT

In this article, the possibilities of using new pedagogical technologies in practice are highlighted on the example of the science of emergency situations and civil protection. Using the concepts of natural disasters and tragic events related to science, the content and essence of the topic is revealed, using the interactive methods of "Venn diagram", "Cubic strategy", "Cluster" and "Sinkway".

At the current quality stage of the national personnel training program, it is important to widely introduce targeted innovation projects into educational processes for mastering advanced pedagogical technologies. Today, each of us should encourage our children to study science and trade using the conditions created by our government. Because how bright and bright our tomorrow will be depends on our children becoming scientifically and morally perfect people [1,2,3,4,5,6,7]

The purpose of introducing the teaching of pedagogical innovation into the educational system of our country is to create new forms and methods of raising a mature generation and to increase the quality of education.

Pedagogical innovations are manifested in technological approach to teaching, interactive models of teaching, test science, person-oriented education, acmeology of distance education and other forms. Pedagogical innovation forms of teaching ensure a significant increase in the quality and result of the pedagogical process compared to the previous one.

Active methods of teaching are methods that activate the learning process and ensure the student's creative participation in this process. The main content of this is the basis for the development of the student's character and ability based on individual participation. With this, it is possible to achieve not only the expansion and deepening of professional knowledge, but also the development of practical skills and qualifications based on the student's creative thinking and attention to independent study [8,9,10,11,12,13,14].

Use of pedagogical technologies created by mature pedagogic scientists in educational processes of educational institutions of our independent republic as a result, the spread of knowledge imparted to students was significantly shortened, and it gave an opportunity to achieve educational results that correspond to the requirements of the world educational standard. Wide use of teaching methods recognized in world pedagogy, such as "Brainstorming", collecting and disseminating information, creating clusters, "inserting" text and "zig-zag" interactive methods, serves to develop students' independent thinking skills.

Technological approaches to teaching can be applied to almost all subjects, including Emergency Situations and Civil Protection. In this article, educational models on the subject of "Natural emergencies and population protection from them" taught in the science of emergency situations and civil protection are created, specified goals are developed based on "Bloom's taxonomy" and using the text of lectures on the topic, using the phrase "Natural disaster" as an example, "Venn" diagrams", "Cubic strategy", "Cluster" and "Sinquain" interactive methods, the content and essence of the topic is revealed during the teaching process.

1. With the help of «Venn diagram», the signs or characteristics of 2 concepts that are unique and common to both are determined. Below is a Venn diagram for the concepts of "Natural Disaster" and "Tragic Events":

Basic concepts of the new topic	Common aspects	Comparison to previous topic
Natural disaster: 1. Types of landslides, floods, droughts and landslides. 2. The reasons are heavy rainfall, powerful tectonic forces and great energy occurring in the deep part of the earth, mining operations in mountainous areas. 3. Ways of elimination - the student fills in	1. Occurs on a very large scale and suddenly. 2. Moderate living and working conditions of people are disturbed. 3. People will die. 4. Material wealth will disappear. 5. The student finds commonalities.	Tragic incident: 1. Types - chemical damage, radioactive damage, traffic accidents and fire. 2. Reasons - road defects, improper use of machines and mechanisms, non-observance of safety equipment and traffic rules. 3. Ways of elimination – this is to be completed by the student.

Completing the Venn diagram can be used as a basis for teacher assessment of how much knowledge a student has about a new topic and how well he has mastered the topic. Because of the tragedies, only concepts related to the car are given, and the student is forced to think to fill in the rest by reading the filled-in part.

1. Use the cube strategy.

A) "Define". A natural disaster is an emergency situation that occurs suddenly in nature, as a result of which people's normal living and working conditions are disturbed, people die, agricultural animals and material wealth are destroyed. Natural disasters include earthquakes, floods, landslides, strong winds, and droughts.

B) "Compare". It is known that in addition to natural emergency situations, there are man-made and environmental emergency situations. Natural emergency situations occur under the influence of natural processes without the participation of humans, while man-made and ecological emergency situations occur directly under the influence of processes (tragedies and fires) caused by human production processes and transport, chemically hazardous objects and other activities.

V) "Association". Natural disasters are usually an unexpected and sudden process, and its occurrence is inevitable sooner or later. Therefore, it is required to prepare in advance.

G) "Analysis" The occurrence or occurrence of natural disasters differs from each other due to their specific characteristics. Therefore, there are different ways to protect people from such

disasters.

It is important to have knowledge about natural disasters and develop measures to protect against them.

D) "Application". When an earthquake occurs, a person should have mental preparation so that he does not lose himself, no matter where he is. For this, every action of a person must be planned in advance. For example, a person caught in a flood should swim downstream to a low-lying shore without losing himself; People who live in landslide-prone areas should know in advance whether their homes are at risk of falling under landslides. Generally, it is not possible to build buildings for residential or other purposes on land that is prone to landslides.

E) "Substantial arguments". Earthquakes occur on our planet almost every day. According to the data, more than a thousand earthquakes occur on average every year on our planet. More than 10 of them are extremely dangerous. Factors that cause floods and mudslides are heavy precipitation - hail, sudden (violent) melting of snow, strong winds, accumulation of ice in rivers and formation of artificial dams, erosion of rocks, displacement or damage of reservoirs due to other reasons.

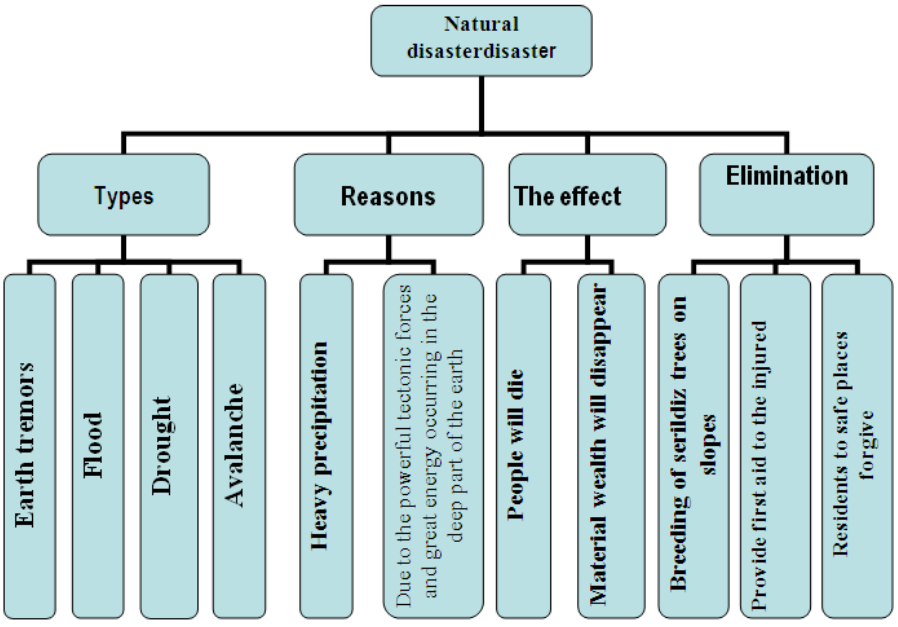
In the occurrence of landslides, the slope of the impermeable rocks lying under the loess - soils on the slopes plays an important role. If the slope of impermeable rocks is suitable for the relief, the landslide potential of the mass lying on it will be higher. The duration of flood flow can be from 0.5-2 hours to 12 hours, and its speed can reach from 5-8 m/s to 12 m/s. Such a large and high-speed flood destroys all public facilities, residential houses, hydrotechnical structures and destroys agricultural crops. Kills people and animals. In fact, prevention of natural disasters and proper action when they occur are the guarantee of people's safe life.

2. Application of the cluster-interactive method.

To use this topic phrase technique, students are brainstormed with the word "Natural Disaster" and collect every idea or piece of information they come up with. The phrase "natural disaster" is placed in the center of the circle, and any meaningful thoughts expressed by the students are written around the circle.

In this case, such words can be as follows: suddenly happens..., Earthquake..., Landslide..., People die..., Drought..., Strong wind..., Material wealth is lost... , Fire..., Heavy rainfall..., ..., Flood..., Evacuation of people to safe places..., First aid to the injured... and so on.

All opinions expressed are then categorized as follows.



4. Syncway - the interactive method helps to develop students' thinking ability based on a different approach to the problem in the process of disseminating and summarizing information.

1. ___ noun (who, what);

2. ___ ___ quality (how, what);

3. ___ ___ ___ verb (task, function);

4. ___ ___ ___ association (imagination, what came to mind)

5. Synonym (similarity) of the noun ___.

For example: "Let's make a syncretism to the phrase natural disaster:

1. "Natural disaster"
2. Scary, scary;
3. Damage to people and nature;
4. Nature, man, plant, mountain;
5. Destruction.

Boredom aspects of students should also be taken into account during the lesson. One of the main reasons for this is the uniformity of the teaching style. That's why it is necessary to choose various forms of teaching methods as mentioned above in the organization of the lesson process.

In conclusion, it can be said that the selection of methods of new pedagogical technologies encouraging independent thinking as much as possible, on the basis of ensuring students' activity in the learning process, has a good effect. Even in order to repeat the previous lesson, to strengthen the new topic, it is possible to choose the right pedagogical technology methods, and it requires the teacher to be knowledgeable. Therefore, from the time of organizing each lesson, the teacher himself should make careful preparations, even knowing in advance the questions that the students may ask based on the theory of probability, and find a thorough answer to these questions.

References:

1. Мамадалиев, А. Т., & Мамаджанов, З. Н. Фавқулодда вазиятлар ва аҳоли муҳофазаси. *Дарслик. Тошкент*.2.
2. Mamadaliyev, A. T., & Bakhriddinov, N. S. (2022). Teaching the subject of engineering geology on the basis of new pedagogical technology. *Scientific Impulse*, *1*(5).
3. Tukhtamirzaevich, M. A. (2023). Landslide occurrence in the territory of our republic and measures to prevent them. *pedagog*, *6*(2), 372-381.
4. Tukhtamirzaevich, M. A. (2023). The flood phenomenon observed in the territories of our republic and the fight against this phenomenon. *pedagog*, *6*(2), 333-342.
5. Tukhtamirzaevich, M. A. (2022). THE MOVEMENT OF THE POPULATION WHEN A FLOOD HAPPENS. *Scientific Impulse*, *1*(5), 1859-1866.
6. Tukhtamirzaevich, M. A. (2023). Interactive educational methods in teaching the subject of physicochemical properties of minerals. *Scientific Impulse*, *1*(6), 1718-1725.
7. Tukhtamirzaevich, M. A. (2022, December). DIMENSIONS AND JUSTIFICATION OF OPERATING MODES FOR PANING DEVICE OF HAIRED COTTON SEEDS WITH MACRO AND MICRO FERTILIZERS. In *International scientific-practical conference on" Modern education: problems and solutions"* (Vol. 1, No. 5).
8. Tukhtamirzaevich, M. A. (2022, December). RESULTS OF LABORATORY-FIELD

TESTING OF HAIRY SEEDS COATED WITH MINERAL FERTILIZERS. In *Proceedings of International Educators Conference* (Vol. 1, No. 3, pp. 528-536).

9. РИЗАЕВ, Б., МАМАДАЛИЕВ, А., МУХИТДИНОВ, М., & ОДИЛЖАНОВ, А. ЭКОНОМИКА И СОЦИУМ. *ЭКОНОМИКА*, 461-467.
10. РУз, П. IAP 03493. Способ покрытия поверхности семян сельскохозяйственных культур защитно-питательной оболочкой и устройства для его осущетсвления/К. Гафуров, А. Хожиев, АТ Росабоев, АТ Мамадалиев. *БИ–2007*, *11*.
11. Мамадалиев, А. Т. (2022, December). ИНЖЕНЕРЛИК ГЕОЛОГИЯСИ ФАНИ МАВЗУСИНИ ЯНГИ ПЕДАГОГИК ТЕХНОЛОГИЯ АСОСИДА ЎҚИТИШ. In *Proceedings of International Educators Conference* (Vol. 1, No. 3, pp. 494-504).
12. Mamadaliyev, A. T., & Umarov, I. (2022). Texnikaning rivojlanish tarixi. *PEDAGOGS jurnali*, *2*(1), 232-235.
13. Mamadaliyev, A. T. (2022). The movement of the population when a flood happens. *Scientific Impulse*, *1*(5).
14. Mamadaliyev, A. T. (2022). Naturally occurring carbonate minerals and their uses. *Scientific Impulse*, *1*(5).
15. Tukhtamirzaevich, M. A., Karimov, I., & Sadriddinovich, B. N. (2022). TEACHING THE SUBJECT OF ENGINEERING GEOLOGY ON THE BASIS OF NEW PEDAGOGICAL TECHNOLOGY. *Scientific Impulse*, *1*(5), 1064-1072.
16. Tukhtamirzaevich, M. A. (2022). NATURALLY OCCURRING CARBONATE MINERALS AND THEIR USES. *Scientific Impulse*, *1*(5), 1851-1858.
17. Мамадалиев, А. Т. (2022). Карбонатли минераллар ва уларнинг халқ хўжалигидаги аҳамияти. *PRINCIPAL ISSUES OF SCIENTIFIC RESEARCH AND MODERN EDUCATION*, *1*(10).
18. Tuxtamirzayevich, M. A. (2020). Study of pubescent seeds moving in a stream of water and mineral fertilizers. *International Journal on Integrated Education*, *3*(12), 489-493.
19. Мамадалиев, А. Т. (2023, January). Ўзбекистон республикаси худудларларида сел келиши ва унда аҳолининг ҳаракати. In *Proceedings of International Conference on Scientific Research in Natural and Social Sciences* (Vol. 2, No. 1, pp. 211-220).
20. Mamadaliev, A. T., & Turgunov, A. A. (2022). Causes of the occurrence of landslides and measures for its prevention. *Scientific Impulse*, *5*, 100.
21. Mamadaliev AT, T. A. (2022). Suv toshqini sodir bolganda aholining harakati. *PRINCIPAL ISSUES OF SCIENTIFIC RESEARCH AND MODERN EDUCATION*, *1*(10).
22. Tukhtamirzaevich, M. A. (2022). FLOODING IN THE TERRITORY OF THE REPUBLIC OF UZBEKISTAN AND THE MOVEMENT OF THE POPULATION THEREIN. *Scientific Impulse*, *1*(5), 2285-2291.
23. Tuxtamirzaevich, M. A. (2021). Presowing Treatment of Pubescent Cotton Seeds with a Protective and Nutritious Shell, Consisting of Mineral Fertilizers in an Aqueous Solution and a Composition of Microelements. *Design Engineering*, 7046-7052.
24. Мамадалиев, А. Т. (2021). Теоретическое обоснование параметров чашеобразного дражирующего барабана. *Universum: технические науки*, (6-1 (87)), 75-78.
25. Гафуров, К., Росабоев, А., & Мамадалиев, А. (2007). Дражирование опущенных семян хлопчатника с минеральным удобрением. *ФарПИ илмий-техник журнали.–Фарғона*, (3), 55-59

26. Росабоев, А. Т., & Мамадалиев, А. Т. (2017). Теоретическое обоснование движения опушенных семян хлопчатника после поступления из распределителяв процессе капсулирования. *Science Time*, (5), 239-245.

27. Мамадалиев, А. Т. (2013). Институт механизации и электрификации сельского хозяйства, г. Янгийул, Республика Узбекистан. *Редакционная коллегия*, 174.

28. Rosaboev, A., & Mamadaliyev, A. (2019). Theoretical substantiation of parameters of the cup-shaped coating drums. *International Journal of Advanced Research in Science, Engineering and Technology*, *6*(11), 11779-11783.

29. Mamadaliev, A. (2019). THEORETICAL SUBSTANTIATION OF PARAMETERS OF THE CUP-SHAPED COATING DRUMS. *Scienceweb academic papers collection*.

30. Росабаев, А. Т., & Мамадалиев, А. Т. (2013). старший преподаватель кафедры экологии и охраны труда Наманганского инженерно-педагогического института, г. Наманган, Республика Узбекистан. *Редакционная коллегия*, 174.

31. Umarov, I. I., Mukhtoraliyeva, M. A., & Mamadaliyev, A. T. (2022). Principles of training for specialties in the field of construction. *Jurnal. Актуальные научные исследования в современном мире. UKRAINA.–2022*.

32. Гафуров, К., Шамшидинов, И. Т., Арисланов, А., & Мамадалиев, А. Т. (1998). Способ получения экстракционной фосфорной кислоты. *SU Patent*, *5213*.

33. Sh, B. (2022). Rizaev, AT Mamadaliyev, II Umarov. Deformativity of reinforced concrete columns from heavy concrete under conditions dry hot climate. Universum. *Технические науки: электрон научн. журн*, *1*, 94.

34. Ризаев, Б. Ш., Мамадалиев, А. Т., Фозилов, О. К., & Шаропов, Б. Ў. (2022). ПРОЧНОСТНЫЕ ХАРАКТЕРИСТИКИ ЛЕГКОГО БЕТОНА НА ПОРИСТЫХ ЗАПОЛНИТЕЛЯХ. *Universum: технические науки*, (6-3 (99)), 11-15.

35. Mukhtoraliyeva, M. A., Mamadaliyev, A. T., Umarov, I. I., & Sharopov, B. X. Development of technology on the basis of scientific achievements.«. *Матрица научного познания*, *28*, 4-12.

36. Мамадалиев, А. Т., & Мухторалиева, М. А. БХ Шарапов Принципы обучения специальностям в области строительства. *Научный электронный журнал «матрица научного познания*.

37. Ризаев, Б. Ш., Мамадалиев, А. Т., & Умаров, И. И. (2022). Деформации усадки бетона в условиях сухого жаркого климата. *Экономика и социум*, *1*, 92.

38. Ризаев, Б. Ш., Мамадалиев, А. Т., Мухитдинов, М. Б., & Мухторалиева, М. А. (2022). Прочностные и деформативные свойства внецентренно-сжатых железобетонных колонн в условиях сухого жаркого климата. *Научный электронный журнал «матрица научного познания*, *27*.

39. Ризаев, Б. Ш., Мамадалиев, А. Т., Мухитдинов, М. Б., & Одилжанов, А. З. Ў. (2022). ВЛИЯНИЕ АГРЕССИВНЫХ СРЕД НА ДОЛГОВЕЧНОСТЬ ЛЕГКОГО БЕТОНА. *Universum: технические науки*, (2-2 (95)), 47-51.

40. Sh, B. R., Mamadaliyev, A. T., Mukhitdinov, M. B., & Mukhtoraliyeva, M. A. (2022). Study of changes in the strength and deformation properties of concrete in a dry hot climate. Universum. *Технические науки: электрон научн. журн*, *4*, 97.

41. Ризаев, Б. Ш., Мамадалиев, А. Т., Мухторалиева, М. А., & Назирова, М. Х. (2022). Эффективные легкие бетоны на их основе пористых заполнителей. In *Современные тенденции развития науки и мирового сообщества в эпоху цифровизации* (pp. 121

42. Мамадалиев, А. Т., & Мухитдинов, М. Б. Доцент Наманганский инженерно-строительный института Республика Узбекистан, г. Наманган. *НАУЧНЫЙ ЭЛЕКТРОННЫЙ ЖУРНАЛ «МАТРИЦА НАУЧНОГО ПОЗНАНИЯ*, *27*.
43. Мамадалиев, А. Т., Мухторалиева, М. А., & Шарапов, Б. Х. Матрица научного познания. *матрица научного познания Учредители: Общество с ограниченной ответственностью" Омега сайнс*, 137-143.
44. Ризаев, Б. Ш., Мамадалиев, А. Т., & Мухитдинов, М. Б. (2022). Қуруқ иссиқ иқлим шароитини темир-бетон элементлар ишига таъсирини тахлили. *barqarorlik va yetakchi tadqiqotlar onlayn ilmiy jurnali*, *2*(7), 75-84.
45. Sh, B. (2022). Rizaev, AT Mamadaliyev, МБ Мухитдинов. *А. Одилжанов. Анализ эффективности использования порыстых заполнителей для лёгких бетонов. Экономика и социум*, *2*, 93.