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NEW SCHOOL MODEL APPROACHES IN PREPARING FUTURE TEACHER - IN PEDAGOGICAL PRACTICE PROCESS

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НОВЫЕ МОДЕЛИ ШКОЛЬНЫХ ПОДХОДОВ В ПОДГОТОВКЕ БУДУЩЕГО УЧИТЕЛЯ В ПРОЦЕССЕ ПЕДАГОГИЧЕСКОЙ ПРАКТИКИ

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Abstract. The process of preparing a future teacher is one of the most important directions in Samtskhe-Javakheti State University. Particular importance is attached to the training of teachers in the field of accuracy and natural sciences — STEM, which is a priority in Georgia today. In this process, it is very important to harmonize the approaches of teaching methodology in the teaching / learning process of students with the paradigm of the new school model, since the current process of education reform in the country is based on the introduction of a new school model project. Future teacher training programs (60 credits) must be in line with the country's current reform processes, ensuring that future teacher training is up to date. Successful pedagogical practice will show the future teacher in practice and will allow him to understand the child's personality, his profile and, as a result, introduce the most important aspects of development assessment to each student, according to the developing five-level system. Assessment-Single Taxonomy — In this process, it is important to have a good understanding of the target concept / perceptions of the indigenous peoples. A special task in the learning process is a challenging task, because with a well-chosen complex task, well thought out key questions and deeply analyzed accents, effectively planned learning stages, it is possible to develop deep and fundamental knowledge in the student who prepares the student for school.

Аннотация. Процесс подготовки будущего учителя — одно из важнейших направлений в Самцхе-Джавахетском государственном университете. Особое значение придается подготовке учителей в области точных и естественных наук, что сегодня является приоритетом в Грузии. В этом процессе очень важно согласовать подходы методики преподавания в процессе преподавания / обучения учащихся с парадигмой новой школьной модели, поскольку текущий процесс реформирования образования в стране основан на внедрении новой школьный модельный проект. Будущие программы подготовки учителей должны соответствовать текущим процессам реформ в стране, обеспечивая соответствие будущей подготовки учителей современным стандартам. Успешная педагогическая практика покажет будущему учителю на практике и позволит ему понять индивидуальность ребенка, его профиль и, как следствие, познакомить с наиболее важными аспектами оценки развития с каждым учеником, согласно развивающей пятиуровневой системе. Особая задача в процессе обучения — задача, требующая умственного усилия с хорошо продуманными ключевыми вопросами и глубоко проанализированными акцентами, эффективно спланированными этапами способствует развитию глубоких и фундаментальных знаний у учеников, обучающихся в школе.

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Keywords: student-centered learning, component of pedagogical practice, target concept, key question, developmental assessment.

Ключевые слова: студентоцентрированное обучение, компонент педагогической практики, целевая концепция, ключевой вопрос, оценка развития.

The process of preparing the future teacher is one of the most important direction in Samtskhe-Javakheti State University.

Particular importance is given to the training of teachers in the field of precision and natural science – in direction of STEM, which is a priority in Georgia.

In this process it is very important to accordance the teaching methodology of approaches of the students in the teaching/learning process with the paradigm of the new model, because the ongoing education reform process in the country is based on the introduction of a new school model project, this is an opportunity to ensure the introduction of a new national curriculum [1–4].

Future teacher training programs (60 credits) must be relevant to the ongoing reform processes in the country; Which ensures the preparation of the future teacher by modern standards.

Consequently, the pedagogical practice component should be well planned and analyzed in the process of preparing the future teacher, where along with the theoretical aspects it is important to successfully implement the practical component.

Successful pedagogical practice will show the future teacher in practice and will enable him / her to understand the individuality of the child, his/her profile and consequently, to introduce the most important aspects of developmental assessment for each student, according to the developmental five-level assessment-solo taxonomy.

In this process, it is important to have a good understanding of the target concept / indigenous notions.

Complex task has a special load in the learning process, because with a well-selected complex task, well-thought-out key questions and in-depth analyzed accents, effectively planned learning stages, it is possible to develop deep and thorough knowledge of student, which will practically prepare the student for entering at the school.

It is also important to equip students with transfer skills, which will enable them to develop the skills to apply knowledge in life.

It is especially important to introduce innovations in the teaching of natural sciences / physics, when the student can create a complex task as a creative product and use various opportunities for this, such as creating a model and others.

The most important role in this process is played by a complex task, in the implementation of which the teacher has the opportunity to evaluate each student individually according to the solo taxonomy, Developmental assessment / solo taxonomy is important in shaping student-centered approaches, Which is very important to ensure a student-centered learning process. This gives the student the opportunity to evaluate thoroughly pupilOutline its individual profile and understand the most important connections in this area.

While planning the priorities of the teaching methodology, should be taken into account, that student will:

–Understand the logical connections between ideas;

–Find out, build and evaluate arguments;

–Verify typical mistakes and inconsistencies in discussions;

–Be able to achieve a long-term learning goal in a thoughtful way / by creating key questions

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based on concepts, indigenous ideas and creating a complex task/which is expressed in various creative products;

–Systematically solve problems;

–Understand the importance of a specific complex task and its practical purpose / transfer;

–Make a reflection on his/her own done product;

–Be able to understand the essence and importance of developmental assessment (New School Model, RTI-Basic Education Program)

During the teaching process, students are provided with information - target concept, subconscious, issue, sub-question, complex assignment, key questions.

We are offering a complex task completed by one of the student in the process of implementing a 60-credit program, direction of pedagogical practice in the field of science teaching (Ude #1 Public School, Teacher - Tinatin Gigolashvili, Student — Elza Khitarishvili).

The target concept-matter, research, topic: structure of the substance and its physical properties. Instruction to perform the task: Provide useful arguments for diffusion by finding information about the structure and aggregate state of a substance; Also discuss the harmful arguments of diffusion.

–What can be said about the change in the aggregate state of a substance - according to temperature?

–Find information about diffusion electronically. Use an electrical resource: https://ka.khanacademy.org/science/biology/chemistry--of-life/elements-and-atoms/a/matter-elements-atoms-article

–Read the article:

–http://mastsavlebeli.ge/?p=21465

–Submit a video on the topic "Diffusion"

–Conduct a test that confirms diffusion in liquids and gases in bodies;

–By studying the diffusion event, by observing examples from everyday life, make a causal analysis of the events / conclusions

Use key questions:

–What determines the aggregate state of a substance?

–How can we change the structure of a substance?

–How can we change the aggregate state of a substance?

–In what condition can the substance be the same?

–How does the smell spread? (Describe in examples)

–How does diffusion take place in liquids?

–What is the relationship between the rate of diffusion and the state of matter?

How does a change in temperature affect the rate of diffusion?

Using the Diffusion Event — By looking at examples from everyday life, what conclusions can be drawn about the usefulness of diffusion?

As a result of completing the given steps, the student's work: The diffusion process can be characterized by:

1. Smell - A specific sensation of the presence of aromatic substances flying in the air, which is detected by chemical receptors for the sense of smell, which are located in the nasal cavity of the animal.

2. During pollination (spring and summer) insects and wind carry both the seeds of the plant and its aroma.

In case of diffusion into liquid substances:

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–Diffusion of liquids occurs because of their molecules and the space between them.

–One liquid substance will not mix with another if the distances between the molecules are less than the size of the molecules of the other substance.

–To accelerate the diffusion of liquids, it is necessary to increase its temperature (boiling).

Oxygen and carbon dioxide

Cities where many people live emit a lot of carbon dioxide. This is because there is not enough greenery and the amount of carbon is almost equal to the amount of oxygen.

There are viruses that spread by airborne means. For example: Influenza virus. If you come in contact with an infected person, you are more likely to get sick as well, because the carbon dioxide you breathe in is also contaminated with the bacteria in the virus.

Diffusion has beneficial and harmful properties:

Diffusion in gases:

–Useful — air, oxygen, fragrances, etc.

–Harmful are-cigarette emissions, car emissions, gas odor, etc.

Diffusion in liquids:

–Useful for chemical experiments, juice making, etc.

–Harmful is-ocean and toxic substances and so on.

Diffusion in solids: Useful for colors, scientific research, etc. Harmful are-chemical powders (without instructions), waste, etc.

Student/trainee developing assessment of this student assignment:

Mariam, you have a good knowledge about matter, the structure of matter, and the state of matter. You relate the arrangement of atoms and molecules to a specific state of matter, distinguishing between simple and complex substances. You know that the distances between molecules in different aggregate states are different and they move at different speeds. Perfectly shapes the properties of solid, liquid and gaseous bodies. You know what diffusion is, its beneficial and harmful properties. However, the Power-Point slide says nothing about how diffusion in gases and solids depends and you have not tried it.

Consequently, you do not fully understand the reasons for the increase in diffusion velocity at high temperatures.

It is also important to give advice / guidance to improve the student's knowledge:

–Mariam, you have done well the task. You have a good idea of what a substance is made of, able to relate the aggregate state of a substance to its atomic molecular structure.

–Provide a description of all three aggregate states. However, in your task, the relationship between the diffusion velocity and the aggregate state of the substance is less visible, as is the dependence of the diffusion velocity on the temperature).

–You have not conducted an experiment that would confirm diffusion in liquids and gaseous bodies, which would make clear the essence of diffusion as a physical phenomenon.

–It is desirable to bring you examples of diffusion — from life. For example: using perfume/perfume, deodorant, discussing this phenomenon in cooking, as well as the role of diffusion in the metallization process.

–Would it be good to answer the questions, for what purpose do you use metallization? Decorative, corrosion protection, increase strength, fire resistance, etc.

The following conclusion can be made on the analysis of the student's work:

An analysis of the student's work revealed that he is at a relative level, has not conducted an experiment that shows diffusion in liquids and gaseous bodies, and will make clear the essence of diffusion as a physical phenomenon.

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It is desirable to give examples from everyday life in connection with diffusion . For example: when using perfumes, be aware of this phenomenon in cooking, the role of diffusion in the metallization process, and more. It is important to understand the role of diffusion as a physical phenomenon — through causal analysis, which gives the student the opportunity to logically conclude that a substance really It consists of the smallest particles (molecules and atoms) and these particles are constantly moving.

As we can see, the pedagogical practice component is crucial in the process of future teacher teaching, which helps the future teacher to plan and implement a student-centered process.

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