ORGANIZATION OF THE PRACTICAL ASPECT OF THE MODERN EDUCATIONAL PROCESS

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Professional development is necessary to bridge the gap between educational research and practice [1]. Research-practice programs are highly beneficial for both teachers and students. These programs aim to provide real scientific research experiences, based on the idea that they will enhance the scientific-theoretical training of teachers [2]. An inquiry-based approach allows students to engage as researchers in chemistry lessons, facilitating their learning of scientific concepts and the nature of chemistry through experimental investigations [3].

Experimentation is an indispensable activity for observing the outcomes of any work. As an idea, all proposed theoretical concepts find their visual confirmation through the results of practical activities. This principle holds special significance in the educational process. Our modern era is built upon a highly competitive and rapidly developing system that demands advanced results. To adapt to these criteria, it is essential to constantly follow the course of time and be ready for innovations. The foundation of this development is laid correctly at the secondary school level, acting as an accelerating factor for subsequent processes. From this perspective, theoretical knowledge in secondary school education is currently highly accessible. Teachers' directed information, various electronic resources, videos, textbooks, etc., are widely available. The integration of artificial intelligence has further facilitated access to theoretical knowledge.

Our proposal is to ensure that a significant portion of secondary school education is conducted through experimental lessons, practical experiences, general discussions, and assessments based on practical results. The limitations of these processes, particularly in the natural sciences, lead to the perception of these subjects as purely theoretical in secondary schools. Consequently, students fail to fully grasp the essence of these subjects, resulting in a decline in interest and disengagement. The education system should be structured in a way that allows students to observe and evaluate the practical application of theoretical concepts. This approach encourages creativity, enhances critical thinking, and motivates students to present their findings. Even university entrance exam questions should be designed within this framework to ensure logical comprehension of acquired knowledge.

Obviously, restructuring a long-established education system in this direction is a complex and resource-intensive task. However, it is inevitable. Only through this approach can talents be discovered and nurtured. This necessity arises from the demands of our time. Developing a curriculum that outlines experimental practices for students at every stage of the educational process and implementing activities based on this curriculum would make education more engaging. The application of such a system would also be highly effective in universities. Each university graduate would enter the workforce as a professional who has already undergone practical training. In today's evolving world, multiple requirements are imposed on individuals to become efficient professionals. These requirements cannot be developed suddenly within a short period. Instead, they must be acquired gradually through knowledge, skills, and experience.

References

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