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THE ROLE OF DIDACTIC MATERIALS IN THE PROCESS OF TEACHING PHYSICS

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ABSTRACT

In the field of physics, using didactic materials, it is of great practical importance to demonstrate the animated actions in the image, i.e. physical phenomena that cannot be seen in nature in a unique way.

Keywords: Didactics, computer tools, models, models, exhibitions, technical tools, equipment, didactic materials, pedagogical skills.

INTRODUCTION

Didactics is an independent branch of pedagogy, which deals with the development of the theory of education, that is, its goals, content, laws, and principles.

Didactics is a part that studies the general laws of the educational process. Didactics is a Greek word derived from the words "didasko" - teaching and "didaskol" - teacher. The literal translation of "didactics" means the theory of education.

Didactics seeks answers to questions of pedagogy such as "**what to teach**", "**what to teach**" and "**how to teach".** General didactics, in turn, is very strongly connected with the methods of certain subjects. Based on the information of these methods, it reveals the general laws of teaching and at the same time serves as a general basis for the teaching methods of each subject.

Didactics sets itself the task of learning the general laws that meet the goals of comprehensive education of students. The main task of didactics is to arm the young generation with a system of scientific knowledge, skills and qualifications.

Didactic tools and handouts are equipment, computer tools, models and layouts, exhibitions and technical tools, equipment and products necessary for teaching this science. They are also handouts used by the teacher during the teaching process. They are: flashcards, questionnaires, instructions, interesting questions and tasks, technological maps on the organization of practical work, etc.

Didactic materials are prepared separately for each lesson by the pedagogue and serve to fully express the content of the lesson and for students to understand the content of the lesson well. These include various visual aids, devices that create different problem situations, games, etc. Didactic materials are also created in accordance with the principles of didactics. The teaching process is carried out only through methods and techniques and is an integral part of the lesson. Just as a lesson cannot be done without a teacher and student, without a curriculum and plan, it cannot be done without pedagogical methods and techniques.

Didactic tasks of educational tools are as follows:

— providing complete and accurate information about the studied event or object, thereby creating an opportunity to improve the quality of education;
— help to develop students' interest in understanding at a high level;
— ensure that education is demonstrable, that students understand difficult material;
— to make the work of students more productive, on this basis, to accelerate the study of educational material;
— organize more independent work of students in the lesson;
— models of machines, apparatus, technical devices in motion;
— tools for educational experiments conducted in physics and chemistry classes;
— graphic tools (photos, pictures, tables, geographical maps);
— technical educational tools (slides, slides, film, drawing and sound apps, audio and video recordings);
— photocopies of educational materials;
— textbooks and teaching aids;
— devices for monitoring students' knowledge and understanding. Experiments in the field of application of educational tools show that they free the student from technical work as a source of information.

Educational tools create an opportunity to fully and deeply describe the content of the educational material, form creative thinking in students.

Technical means of education provide an opportunity to effectively use didactic principles as a demonstrative and convenient tool

Therefore, all the necessary tools and modern pedagogical technologies that help to study and apply the laws of the educational process, i.e. physical laws and their properties, make up **the didactic materials of teaching.**

In secondary general education schools, the teacher of each subject should take into account the student's learning ability during the lesson. This requires students to know the psychological characteristics of

In the formation of knowledge and skills, the teacher's knowledge, teaching style, and pedagogical skills are very important. However of education each how conditions each time even action universal styles that do no and such of style may be it's not. Teaching style first of all harvest to be done including knowledge to be studied of the material content and character suitable coming need.

Physics teaching process organize reach with together physics of teaching to himself special taking into account the characteristics get necessary. They are from everyone first of the subject content with is determined. Under study of objects to the point come in ideal to go models build, one in appearance from abstraction to another transition and that's it like fantastic actions to perform Demand is enough Of these all physicist scientific thinking represents, everyone fantastic deeds reading in the process is formed and of age increase with developed goes.

Physics teaching of the process second to himself special feature of the following consists of: Physics in teaching more from the models and different in appearance from signs (formula, various to the topic about demonstration …) is used and from the students certain from images to real objects perception from doing ideal to compose and their certain to images to pass done increase Demand will be done.

Physics teaching of the process to himself special the third feature experiences from showing use of students their observations organize make, their practical their work independent perform with depends high emotionality.

Medium common education in the VI class of schools high level abstractness with separate standing "physic bodies", "trajectory", "movement like relativity, time, length mechanic concepts in students shaping process much easy will pass.

Harvest has been skills in the next steps is developed as a result of students to know abilities grows. That's it because of increasing size increased going scientific information to master and again to restore students prepared will be They are in physics received knowledge another to the subject copy it will receive either, or like that

Education process laws ie physical laws and him properties to learn, as well research to do intended students education activities to activate laws research to do help giver all necessary tools and modern pedagogical technologies of the teacher didactic materials organize does.

REFERENCES

1. N.N. Azizhojayeva. Pedagogical technologies and pedagogical skill Tashkent 2006.
2. VG Razumovsky Teachers creative abilities to grow Toshkent1978
3. Young physicists encyclopedia. Toshkent1996.
4. "From physics issues solve methodology" C.E. Kamensky, V.P. Orekhov Tashkent 1976
5. Khursanbayevich, Kuchkorov Mavzurjon. "SEMICONDUCTORS: THE HISTORY OF FORMATION AS A SCIENCE. DEFECTS IN THE CRYSTAL STRUCTURE. ELECTRICAL CONDUCTIVITY AND CONTACT PHENOMENA." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 12.06 (2023): 172-175.
6. Qo'chqorov, Mavzurjon Xursanboyevich, and Moxinur Voxidjon qizi Muxammadyusupova. "NISBIYLIK NAZARIYASI HAMDA EYNSHTEYN PASTULOTLARI. KVANT MEXANIKASI VA MIKROZARRALAR." Educational Research in Universal Sciences 2.4 (2023): 799-801.
7. Melibayev, M., M. Kh Kuchkarov, and M. Abdusalomov. "THE IMPORTANCE OF INFORMATION TECHNOLOGY IN TEACHING PHYSICS IN GENERAL SECONDARY SCHOOLS." Galaxy International Interdisciplinary Research Journal 10.12 (2022): 1943-1947.
8. Мухторов, Лутфулло Тохирович, Абдуали Абдуманонов, and Носирчон Бозоров. "The method of drawing graphs on physics by using Visual Basic 6.0 program." Ученые записки Худжандского государственного университета им. академика Б. Гафурова. Серия: Естественные и экономические науки 4 (2018): 194-198.
9. Sodikovich, Bozorov Nosirjon, and Umurkulov Kayumjon Parpievich. "MICROMECHANICAL APPROACH TO STRENGTH AND FRACTURE ANALYSIS OF HETEROGENEOUS MATERIALS." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 12.04 (2023): 174-176.
10. Sodikovich, Bozorov Nosirjon, and Umurkulov Kayumjon Parpievich. "MICROMECHANICAL APPROACH TO STRENGTH AND FRACTURE ANALYSIS OF

HETEROGENEOUS MATERIALS." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 12.04 (2023): 174-176.

11. Melibaev, M., and S. Y. Yuldashev. "Spatial parity nonconservation in atomic Auger decays." Sov. J. Nucl. Phys.(Engl. Transl.);(United States) 41.1 (1985).
12. Labzovskii, L. N., M. Melibaev, and J. S. Murti. "Higher approximations for transition matrices and their application to the calculation of atomic spectra." Theoretical and Experimental Chemistry 13 (1977): 107-110.
13. Gorshkov, V. G., L. N. Labzovskii, and M. Melibaev. "Parity nonconservation effects in X-ray atomic spectra." Yad. Fiz.;(USSR) 28.6 (1978).
14. Ibragimova, R. X., M. A. Raximberdiyeva, and N. A. Tojiyeva. "DIURNAL APPEARANCE MOVEMENTS OF LUMINAIRES. METHODOLOGY OF TEACHING THE SUBJECT" CONSTELLATIONS." Galaxy International Interdisciplinary Research Journal 10.12 (2022): 1948-1956.
15. Раҳимов, К. А., and Р. Х. Ибрагимова. "АСТРОНОМИК МАЗМУНДАГИ ФИЗИК МАСАЛАЛАРНИ ЕЧИШ ОРҚАЛИ ЎҚУВЧИЛАРНИНГ ҚИЗИҚИШИНИ ОРТТИРИШ." E Conference Zone. 2022.
16. ДАДАБОЕВА, ФЕРУЗА ОЛИМЖОНОВНА, РАНО ХАМДАМОВНА ИБРАГИМОВА, and КАМОЛА ЮСУПОВА. "ТЕХНОЛОГИЯ ПОСТАНОВКИ ДИАГНОСТИЧНЫХ ЦЕЛЕЙ ОБУЧЕНИЯ." БУДУЩЕЕ НАУКИ-2015. 2015.
17. Sattorova, D. "IMPORTANCE OF MODERN EDUCATIONAL TECHNOLOGIES IN TEACHING PHYSICS IN PART OF “ELECTRICITY AND MAGNETISM”." Science and innovation 2.B10 (2023): 214-218.
18. Sattorova, D., and Sh Jo'martova. "USING MODERN EDUCATIONAL METHODS, DETERMINING STUDENTS'MASTERY LEVEL." Open Access Repository 8.12 (2022): 509-511.
19. Maxammadjonovich, Madaliyev Akmaljon. "LATEST ACHIEVEMENTS OF ELEMENTARY PARTICLE PHYSICS AND THE STATE OF ITS TEACHING IN PEDAGOGICAL UNIVERSITIES."
20. Makhammadjonovich, Madaliyev Akmaljon. "Pedagogical-Psychological Aspects Of Teaching Elementary Particle Physics In Practical Classes In General Physics." Pedagogical Cluster-Journal of Pedagogical Developments 1.2 (2023): 18-27.
21. Rasulov, V. R., et al. "European Science Review, Issue 9-10-1/2018."
22. Rustamovich, R. V., Yavkachovich, R. R., Eshboltaev, I. M., & Mamadaliyeva, N. Z. (2018). Surface photoconductivity in a multivalley semiconductor. European science review, (1-2), 263-266.
23. Otaqo‘Ziyevna, Toxirova Maxfuzaxon, and Azizova Xonzodabegim. "YORUG’LIKNING TARQALISHI, QAYTISHI VA SINISHI MAVZUSINI ZAMONAVIY PEDAGOGIK TEXNALOGIYALARI ASOSIDA TASHKIL ETISH USULLARI." Ta’lim fidoyilari 22.7 (2022): 452-457.
24. Toxirova, Maxfuzaxon Otaqo‘ziyevna. "FIZIKA FANINING BOSHQA FANLAR BILAN O ‘ZARO ALOQADORLIGI VA FANLARARO BOG ‘LANISHNING O ‘ZIGA XOS XUSUSIYATLARI." Educational Research in Universal Sciences 2.16 (2023): 787-790.

25. Urinova, Kamala Komildjonovna. "INKLUZIV TA'LIM JARAYONIDA FIZIKA DARSLARINI TASHKIL ETISH, MASALALARNI MUHOKAMA QILISH BO 'YICHA USLUBIY TAVSIYALAR." Educational Research in Universal Sciences 2.5 (2023): 686-690.
26. Komildjonovna, Urinova Kamala. "TYPES AND IMPORTANCE OF MODERN EDUCATIONAL TECHNOLOGIES IN PHYSICS LESSONS ON THE PRIORITY OF INCLUSIVE EDUCATION." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 12.04 (2023): 177-178.
27. Masodiqova, D. "MAMLAKATIMIZDA INKLYUZIV TA'LIMNI RIVOJLANTIRISH TAMOYILLARI VA ISTIQBOLLARI." Экономика и социум 3-1 (94) (2022): 662-665.
28. Mamadaliyeva, N. Z., and D. R. Masodiqova. "ORGANIZATION OF PRACTICAL TRAINING ON QUANTUM MECHANICS IN PEDAGOGICAL HIGHER EDUCATION INSTITUTIONS." Экономика и социум 3-2 (2021): 718-724.