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Determination of the appropriate structure for the student performance

assessment corpus when organizing unsupervised work

Abstract. A special place in the Federal State Educational Standard of Basic General Education is occupied by the system for assessing the achievements of the planned learning outcomes, which requires the so-called evaluation tools and methods of assessment making it possible to establish the level of accomplishment of the planned results of the basic educational program of basic general education. Determination of the specific degree of knowledge, abilities and skills among students enables the teacher to make adjustments to the further learning process, make the necessary comments and recommendations, and also show his attitude to their educational efforts [1]. Since it is the students unsupervised work that significantly affects the development of their cognitive, regulatory, personal and communicative universal educational actions, a well-formed corpus of assessment tools used to organize their unsupervised work is of particular importance. The problem is that currently there are no methodological recommendations or approaches to the formation of such a corpus. Producing it, the teacher must be able to correctly and objectively assess many factors affecting the effectiveness of the evaluation tools. The main component of a student's unsupervised work is homework; it is performed without the direct teacher's assistance. Homework organization has always been an urgent problem requiring the teacher's serious attention to the possible educational and personal results. Thus, the task to construct the appropriate structure of a student performance assessment corpus when organizing homework becomes urgent. The paper proposes an approach to the construction of the appropriate structure of the evaluation tools corpus when organizing homework based on the construction of an optimization model. Using the method of expert assessments, a matrix of communication between assessment tools and complexity criteria was built; an appropriate corpus of assessment tools for the «Informatics and ICT» discipline was formed for the 7th grade students. The developed approach to the formation of the optimal fund of assessment tools can be used by teachers with ICT competence within any disciplines taught in general education schools. The constructed model of the appropriate structure for the student performance assessment corpus can be implemented not only for organizing students' unsupervised work. This method is universal for building any corpus of assessment tools within any discipline.

Keywords: optimization model, educational results, evaluation tools, method of expert assessments, unsupervised work, homework, corpus of evaluation tools.

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References

1. Amonashvili Sh. A. Educational and educational function of assessing the teaching of schoolchildren: experimental and pedagogical research. Moscow, Pedagogika Publ., 1984, 296 p. (In Russian).

2. Osipova L. G. The system for assessing the educational results of students [Electronic resource]. Available at: http://eduportal44.ru/sites/RSMO-test/SiteAssets/SitePages/Sredstva_ocenki_inform/Educational achievement assessment system.pdf (accessed 10.01.2021) (In Russian).

3. Ministry of Education and Science of the Russian Federation. Standards. Federal state educational standard of basic general education: approved. by order of the Ministry of Education and Science of December 17, 2010 N 1897 [Electronic resource]. Available at: http://window.edu.ru/resource/768/72768/files/FGOS_OO.pdf (accessed 01/10/2021) (In Russian).

5. Ivanova A. V. Types of independent work in teaching mathematics in the context of the implementation of the Federal State Educational Standard of OOO / ed. A. V. Ivanova, L. I. Shayakhmetova. Cheboksary, Central nervous system Interactive plus Publ., 2016, pp. 17–20 (In Russian).

6. Pidkasisty P. I., Korotyaev VI Independent activity of students in teaching: Unity and peculiarities of students mastering knowledge and methods of independent cognitive activity: textbook. allowance. Moscow: Publishing house MGPI, 1978, 456 p. (In Russian).

7. Demidova S. I., Denischeva L. O. Independent activity of students in teaching mathematics. Moscow, Education Publ., 1985, 191 p. (In Russian).

8. Shabalina Z. P. Home educational work of schoolchildren. Moscow, Knowledge Publ., 1982, 96 p. (In Russian).

9. Russian Federation. The laws. On education in the Russian Federation: dated December 29, 2012 N 273-FZ [Electronic resource]. Available at: http://base.garant.ru/70291362/ (accessed 10.01.2021). (In Russian).

10. Myasnikova O. V. Means of optimization of the learning process [Electronic resource] // Concept: scientific method. electron. magazine, 2016, vol. 15, pp. 1091–1095. Available at: https://e-koncept.ru/2016/96135.htm (accessed 10.01.2021). (In Russian).

11. Chief state physician of the Russian Federation. Resolutions. On the approval of SanPiN 2.4.2.2821-10 Sanitary and epidemiological requirements for the conditions and organization of training in educational institutions: dated December 29, 2010 N 189 [Electronic resource]. Available at: http://docs.cntd.ru/document/902256369 (accessed 10.01.2021) (In Russian).

12. Merkys, Gediminas Bubelienė D. (2017) Lessons Efficiency Paradox: The Unexpected Empirical Findings about the Amount of Homework and the Teacher's Strictness. Pedagogika, 2017, vol. 127, no. 3, pp. 104–118. (In English).

13. Zimnyaya I. A. Pedagogical psychology: textbook. Moscow, Logos Publ., 2007, 2nd ed, 384 p. (In Russian).

14. The National Assessment Program [Electronic resource] : official website. Available at: http://www.nap.edu. au/ (accessed 10.01.2021) (In English).

15. National Center for Education Statistics [Electronic resource] : official website. Available at: http://nces.ed.gov (accessed 10.01.2021) (In English).

16. Agencia de Calidad de la Educación [Electronic resource] : official website. Available at: http://www.simce.cl/ (accessed 10.01.2021) (In Spanish).

17. My School [Electronic resource]: official website. Available at: http://www.myschool.edu.au/ (accessed 10.01.2021) (In English).

18. Tavokin E. P. Fundamentals of methods of sociological research: textbook. allowance. Moscow, Infra-M Publ., 2009, 239 p. (In Russian).

19. Novgorodtseva T. Yu., Rodionov A. V., Dyadkin Yu. A., Pegasova N. A., Ivanova E. N., Lesnikov I. N., Nikiforova I. A. Tasks of independent work in the classroom based on the methods of expert assessments. Modern pedagogical education, 2018, no. 6, pp. 62–66. (In Russian).

20. Kleiner G. B. Modeling. Maths. Selected Works. Moscow, TsEMI RAN Publ., 2016, 856 p. (In Russian).

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