

Some aspects of training students of Bauman Moscow State Technical University for research activities

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The paper justifies the importance of training students for research activities. It notes the significance of the “Russian method” and its present forms in the preparation for research activities. We highlight the specific character and significance of research approaches in various disciplines, and analyze the peculiar features and potential for research activities of the junior and senior undergraduates. The work justifies the significance of the differentiation process when working with students as well as the influence of industrial R&D internship on the students’ research skills development. We emphasize the need for common specifics of the base enterprise and the faculty. The special novelty of this work is an application of foreign activation methods in research activities. The article highlights the value of motivation. It provides comparative analysis of domestic and foreign methods. In the end, we give conclusions and recommendations.

Keywords: “Russian method” of training, creative orientation of learning, peculiar features of skills development, students’ research skills, motivation, activation methods, industrial R&D internship

REFERENCES

- [1] Fedorov I.B., Kolesnikov K.S., ed. *Nauchnye shkoly Moskovskogo gosudarstvennogo tekhnicheskogo universiteta imeni N.E. Baumana. Istoriya razvitiya* [Scientific schools of Bauman Moscow State Technical University. History of development]. Moscow, BMSTU Publ., 2005, 464 p.
- [2] *Vserossiyskaya studencheskaya konferentsiya “Studencheskaya nauchnaya vesna», posvyashchennaya 165-letiyu so dnya rozhdeniya V.G. Shukhova”*: sbornik tezisov dokladov [Proceedings of All-Russian student conference “Student scientific spring”, dedicated to the 165th anniversary of the birth of V.G. Shukhov]. Moscow, Nauchnaya biblioteka Publ., 2018, 506 p.
- [3] Potaptsev I.S., Bushueva V.V., Bushuev N.N. *Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroenie — Proceedings of Higher Educational Institutions. Machine Building*, 2014, no. 8, pp. 80–88.
- [4] Bushueva V.V., Bushuev N.N. *Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroenie — Proceedings of Higher Educational Institutions. Machine Building*, 2015, no. 3, pp. 68–76.
- [5] Colette M.-B. *Invitation a la creative*. Paris, 1983, 132 p.
- [6] Potaptsev I.S., Pavlikhin G.P., Bushuev N.N., Bushueva V.V. *Ispolzovanie zarubezhnogo opyta resheniya tekhnicheskikh zadach v inzhenernoy podgotovke studentov* [Using the international experience of solving technical problems in students engineering training]. Gorodnichev V.A., ed. Moscow, Etnosotsium Publ., 2015, 156 p.
- [7] Aznar Cr. *La creativite dans l’entreprise* [Creativity in business]. Paris, 1971, 185 p.

- [8] Altshuller G.S. *Standartnye resheniya izobretatelskikh zadach (76 standartov)* [Standard inventive problem solving (76 standards)]. Available at: www.altshuller.ru/triz/standards.asp (accessed December 20, 2018).
- [9] Bushueva V.V., Samsonov K.S., Sevryukova A.V. *Gumanitarnyy vestnik — Humanities bulletin of BMSTU*, 2015, no. 9 (35).
DOI: 10.18698/2306-8477-2015-9-286

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