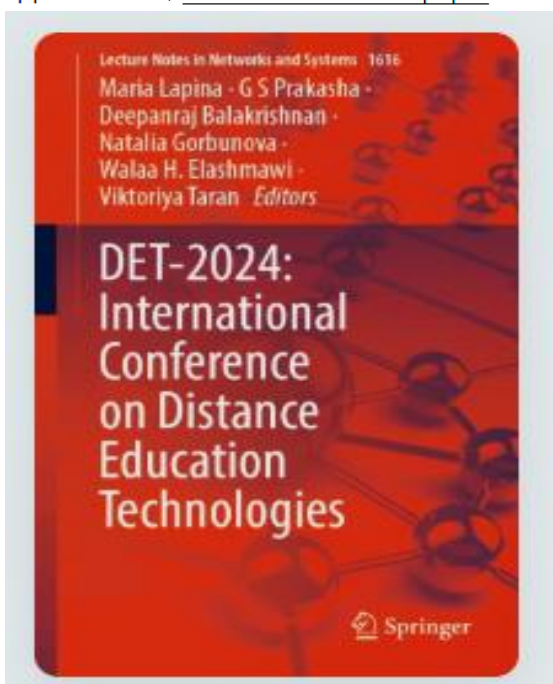


The Impact of Neural Networks on the Educational Outcomes of Students of Pedagogical Specialties

Conference paper | First Online: 01 October 2025

pp 334–341 | [Cite this conference paper](#)



The Impact of Neural Networks on the Educational Outcomes of Students of Pedagogical Specialties (2025-10-01)
doi: https://doi.org/10.1007/978-3-032-04365-8_33

Влияние нейронных сетей на образовательные результаты студентов педагогических специальностей

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- pp 334–341

Novik, N., Gabdulhakov, V., Lapina, M., Deepanraj, B. (2025). The Impact of Neural Networks on the Educational Outcomes of Students of Pedagogical Specialties. In: Lapina, M., Prakasha, G.S., Balakrishnan, D., Gorbunova, N., Elashmawi, W.H., Taran, V. (eds) DET-2024: International Conference on Distance Education Technologies. DET 2024. Lecture Notes in Networks and Systems, vol 1616. Springer, Cham. Pp. 334-341. https://doi.org/10.1007/978-3-032-04365-8_33

Abstract

The relevance of the research is associated with the lack of objective analysis of the positive and negative aspects of the influence of neural networks on the educational outcomes of university students. Educational results are recorded through quantitative data (scores) which indicate how well students have assimilated knowledge and developed necessary skills, competencies, and personal qualities during their study of both cultural and professional blocks. The study of the influence of neural networks on educational outcomes in several universities in the Republic of Tatarstan showed that the use of neural network resources significantly affects cognitive activity and the ability to independently acquire new knowledge. The reliability of the results was assessed

using Pearson's χ^2 (chi-square). It was found that in higher education institutions, the negative effects of neural networks manifest as a decrease in student activity in scientific and technological events, as well as a decline in interest in creativity. This occurs despite the existence of numerous government programs aimed at developing students' creative potential. The conclusion was made that the effectiveness of using neural networks to enhance students' educational outcomes depends on the presence of methodological and technological approaches, which are currently being developed by many programmers and pedagogical researchers.

Keywords

- [neural network](#)
- [artificial intelligence](#)
- [educational outcomes](#)
- [students](#)
- [digital environment](#)

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