# PROSPECTS FOR USING ARTIFICIAL INTELLIGENCE ELEMENTS IN MANAGING THE EDUCATIONAL AND UPBRINGING PROCESS OF ACADEMIC LYCEUMS

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**Abstract.** *This article examines the scientific and pedagogical foundations for the use of artificial intelligence elements in managing the educational and upbringing process of academic lyceums. It analyzes the possibilities of predicting learners' academic performance, behaviour, participation, and moral development. An intelligent management model is proposed to improve the effectiveness, responsiveness, and evidence-based character of managerial decision-making.*

**Keywords:** *artificial intelligence, academic lyceum, pedagogical management, forecasting, quality of education, upbringing, innovative technology, intelligent system*

| Management Object | Key Indicators | Technological Tool | Expected Outcome |
|---|---|---|---|
| Educational and upbringing process | Quality, attendance, discipline, engagement | Digital platform and analytical module | Timely and evidence-based decisions |

**Introduction.** In the context of digital transformation, working with large volumes of data, identifying individual developmental trajectories, and detecting students at risk at an early stage are becoming increasingly important tasks in the management of educational institutions. For academic lyceums, this issue is especially relevant, since students' educational and upbringing development is shaped simultaneously by multiple interrelated factors. Therefore, management tools enriched with elements of artificial intelligence can elevate the traditional reporting system to a fundamentally new level.

**Theoretical Background.** Artificial intelligence elements perform three main functions in educational management: diagnosis, forecasting, and recommendation-based management. They analyse, in an integrated manner, data on students' academic indicators, attendance dynamics, extracurricular engagement, behavioural changes, and teachers' records. As a result, early signs of declining achievement, reduced motivation, or emerging upbringing-related risk factors can be identified automatically. This approach is grounded in the principles of learner-centred education, adaptive management, and data-driven management. From a theoretical perspective, it enhances both the sensitivity and the effectiveness of management.

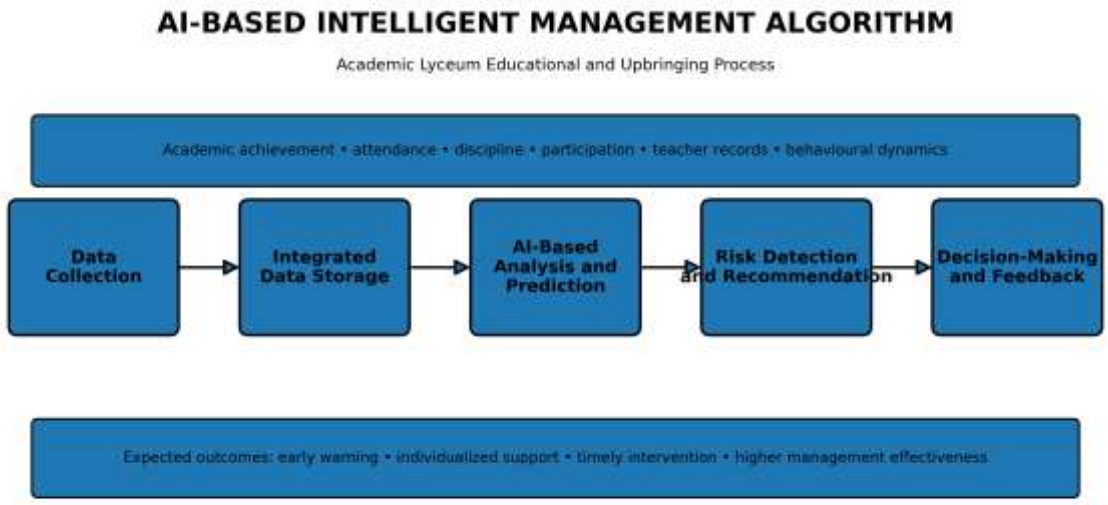


**Figure 1. AI-Based Intelligent Management Algorithm**

**Research Methodology.** The research methodology was based on systems analysis, pedagogical forecasting, model design, content analysis, and expert evaluation. The object of the study was the management system of academic lyceums, while the subject was defined as the mechanisms for using artificial intelligence elements within this system. The evaluation indicators included forecasting accuracy, the relevance of management decisions, the level of early detection of pedagogical risks, and the quality of individualized approaches.

**Analysis and Results.** The findings show that, within traditional management, certain problems are often recognized only after they have become acute. By contrast, artificial intelligence elements can evaluate minor changes in indicators in an integrated way and generate early warning signals in advance. For example, a decline in attendance together with a consistent drop in grades may indicate academic risk, whereas low participation in collective activities combined with behavioural changes may signal upbringing-related risk. AI tools rapidly identify such interconnections and provide the administration with clear recommendations. As a result, management shifts from a delayed-response model to a preventive and anticipatory one.

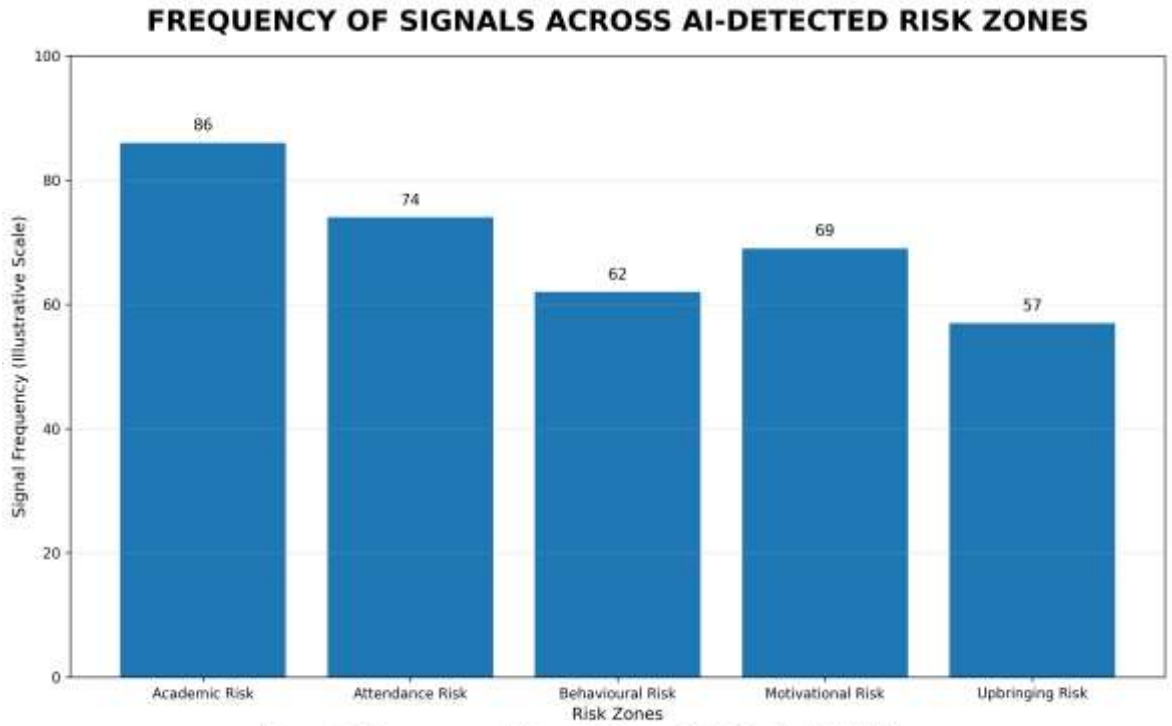


**Figure 2. Frequency of Signals Across AI-Detected Risk Zones**

**Conclusion and Recommendations.** Artificial intelligence elements are capable of ensuring a new qualitative stage in the management of academic lyceums. They support the rapid analysis of complex pedagogical situations, the early identification of risk factors, and the selection of individualized interventions. Therefore, it is necessary to develop an analytical dashboard enriched with AI elements for academic lyceums, to build student profiles on the basis of multi-criteria indicators, to foster a culture of data use, and to establish ethical and pedagogical standards for the application of these tools.

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