

OPINION

How to reference this paper:

AKHMETSHIN, Elvir; ABDULLAYEV, Ilyos; SOKOLITSYNA, Natalya; GENERALOVA, Anna; ZOLOTOVA, Yana; SHICHYAKH, Rustem; KOMPANEEVA, Liudmila. Transformation of education under the influence of the digital economy: Implementing blockchain teaching for students of non-specialized fields. **Nuances: Estudos sobre Educação**, Presidente Prudente, v. 36, n. 00, e025016, 2025. e-ISSN: 2236-0441. DOI: 10.32930/nuances.v36i00.11288



- | **Submitted:** 15/05/2025
- | **Revisions required:** 02/06/2025
- | **Approved:** 18/10/2025
- | **Published:** 16/12/2025

Editor: Prof. Dr. Rosiane de Fátima Ponce

SUMMARY FOR THE EDITOR

The article addresses the importance of blockchain education in Economics and Management courses, given the growing market demand for professionals skilled in emerging technologies. The proposal to integrate blockchain into the academic curriculum is relevant, considering its impact on various economic sectors.

However, the analysis presents limitations, such as the small sample size and lack of methodological detail. The literature review is extensive but lacks a more critical analysis, and although the proposed didactic model is interesting, it requires a stronger theoretical foundation and practical validation. While the article contributes to the discussion on blockchain adoption in higher education, a revision is recommended to improve cohesion, clarity, and depth, including practical examples to validate the proposed model.

ARTICLE ANALYSIS

INTRODUCTION

The article discusses the transformation of society and the economy, along with the increasing demand for higher education, which has intensified pressure on universities, requiring them to respond to market needs. Additionally, there is a demand for managers who are not only capable of acting as entrepreneurs but also possess extensive knowledge of business processes, enabling them to efficiently manage their companies.

Among the key points, the following stand out:

- Blockchain technology: This technology is driven by its numerous advantages in economic solutions, such as finance, insurance, retail, industry, healthcare, logistics, and public administration;
- Work environment: In the world of high-tech professionals, changes happen very quickly. What was decisive yesterday and allowed for a competitive advantage is no longer relevant today. From the employer's perspective, a specialist who does not continuously learn something new becomes redundant.

CRITICAL ANALYSIS

The article discusses the introduction of blockchain education in higher education, particularly in Economics and Management courses, highlighting its growing importance in the digital landscape. It points to the need for institutions to adapt to training demands in emerging



technologies and identifies the lack of organizational structure as one of the main barriers to this adoption.

Although the proposal is relevant, the analysis is limited to online courses and a small sample size, which reduces the reach of the results. Nonetheless, the text contributes to future reflections on the integration of technology in higher education, even in fields beyond the technological domain.

STRENGTH OF ARGUMENT

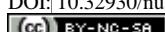
The article presents solid arguments, supported by a current and relevant literature review, in defending that blockchain education is a necessary trend, particularly in Economics and Management courses. The authors demonstrate how this technology impacts various sectors and must be integrated into university education.

They also propose a well-structured didactic model based on four pillars—human resources, students, methodology, and content—which reinforces the practical potential of the proposal.

LIMITATIONS AND OPPORTUNITIES

The article covers a current and relevant topic, discussing blockchain education in the fields of economics and management, but there are aspects that could be improved to enhance the quality and clarity of the work. The introduction needs to better define the problem and specific objectives, as well as explicitly indicate the gap the study aims to fill. Although extensive, the literature review is overly descriptive, lacking a more critical and articulated analysis among the cited authors. The methodology section lacks crucial details regarding the selection criteria for the institutions analyzed, as well as how the data was collected and interpreted.

The proposed teaching model is interesting but has a weak theoretical foundation and lacks practical validation to prove its applicability. The conclusion is also weak or absent, failing to clearly restate the study's objectives and key findings. Additionally, the text requires general revision to ensure greater cohesion between sections and eliminate repetitions or redundant passages.



DIALOGUE WITH OTHER AUTHORS

Quintana, Martínez, and Verdezoto (2022) highlight that blockchain enables the storage and transfer of information regarding internet transactions. Borovikova (2023) and Fosso Wamba et al. (2020) emphasize its growing adoption in sectors such as finance, healthcare, and logistics, due to its advantages. Smirnov *et al.* (2024) point out that, despite its young age, blockchain is rapidly evolving, driven by favorable economic and regulatory conditions. Leo et al. (2025), Bellucci et al. (2022), and other authors note that blockchain continuously evolves, overcoming technical challenges and reducing costs. Kozma-Tóth, Bába, and Fenyves (2024) warn that specialists must keep learning to avoid becoming obsolete.

Demboski *et al.* (2024) and Fedorova and Skobleva (2020) emphasize that blockchain has the potential to enhance the educational process and create new learning spaces. Desplebin, Lux, and Petit (2025) argue that successful blockchain education depends on collaboration between fields like economics and computer science. Finally, Gutowski *et al.* (2022) suggest that the integration of these fields must be adapted to the specific needs of different study areas.

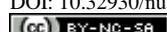
CURRENT RELEVANCE

This article's topic is extremely relevant, especially with the growing adoption of blockchain technology in sectors such as finance, healthcare, logistics, and public administration. The rapid evolution of blockchain and the increasing interest of educators and academic institutions make it essential to integrate this technology into curricula, particularly in economics and management courses. Implementing blockchain teaching models aims to prepare professionals to face technological challenges and leverage opportunities presented by this innovation.

Blockchain education is fundamental to equipping students with skills necessary for an increasingly technological and dynamic job market. Thus, the proposal to include blockchain in Economics and Management courses aligns with the demand for qualified professionals who understand the impact and opportunities of this technology, driving innovation and competitiveness.

FINAL ASSESSMENT

The article addresses the importance of blockchain education in Economics and Management courses, given the growing market demand for professionals qualified in



emerging technologies. The proposal to integrate blockchain into the academic curriculum is relevant, considering its impact on various economic sectors.

However, the analysis presents limitations, such as the small sample size and lack of methodological detail. The literature review is extensive but lacks a more critical analysis, and although the proposed didactic model is interesting, it requires a stronger theoretical foundation and practical validation.

While the article contributes to the discussion on blockchain adoption in higher education, a revision is recommended to improve cohesion, clarity, and depth, including practical examples to validate the proposed model.

REQUIRED CORRECTIONS

We request verification of citations and references—all citations must be included in the reference list, and references not cited must be removed. If the authors suggest the inclusion of bibliographies, it is not mandatory for these to be added for publication acceptance, leaving it to the authors' discretion. Additionally, we request that any modifications made be highlighted in yellow within the manuscript text.

Other required elements for submission:

- ORCID;
- Email;
- Completed Credit Authors section;
- All abstracts must be adjusted to 150 words;
- The introduction needs a clearer definition of the problem and specific objectives, as well as identifying a concrete gap in the literature;
- The literature review is overly descriptive and lacks critical articulation among the cited authors;
- The methods section lacks detailed information about the selection criteria for the institutions analyzed and the data collection and analysis procedures;
- The conclusion needs to be reformulated, as it fails to clearly restate the study's objectives and key findings.



Processamento e editoração: Editora Ibero-Americana de Educação
Revisão, formatação, normalização e tradução

