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Abstracts. Proceedings of the 14th edition of Romanian International Conference for Education & Research

Innovations in Education and Research 29 - 30 OCT 2024 Cluj-Napoca

Coordonator: Alina-Cerasela Avram

București, 2024

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ABSTRACTS

Proceedings of the 14th edition of Romanian International Conference for Education and Research

Innovations in Education and Research

29th-30th October 2024, Cluj-Napoca, Romania

București, 2024





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Published by: Weik Press

Desktop Publishing: Ioana Cristea



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The Role of Education in the Future AGI. A Study on the Balance of Education, Finance, and Social Welfare

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Abstract

According to the provisions set out in Objective 4 of the Agenda for Sustainable Development set up by the United Nations in September 2015 for the implementation of a fair and quality education, boundless by borders as a result of the adhesion of the states fully assumed for these objectives, the action plans must be vitalized and contextualized by the information crisis created by the pandemic, war, and artificial intelligence. These circumstances have instituted a global tension in education. While some companies are cushioning this tension through their investments in the specialization of employees, the solution to neutralize the global educational risk is the development of the public educational process per the worldwide objective. For future generations of professionals, educational practices must establish and develop contextualization and practice to meet the competence requirements required by AGI (artificial general intelligence) within enterprises. In AGI companies people use LLM (large language model) for evaluation and analysis and specialization involves competence for the profession's deontology and appropriate technical professional training. Thus, there is an established need for an educational program that develops upskilling, a program with a double significance: the



establishment of professional skills and the foundation of personality attributes for safe, ethical, and responsible professional practice.

The UN together with the OIM calls for a unitary educational system in principles and the implementation of an educational process based on scientific thinking and developed socio-emotional skills.

The general subject of this article examines to what extent education impacts social well-being and financial performance. The research aims to study the circumstantial conditional association between education, well-being, and economics and to highlight the impact of education on social welfare and the economy. The research is based on information capitalized in Eurostat, IMF, and OECD databases and starts from the status quo of the last 20 years, the analysis of this period notes an increasing rate of completion of the higher education cycle, but UNESCO statistics on skills acquired in reading and calculation affirms a decreasing rate of these. Going forward with the research, we observe the consequence in the employment rate for people who have graduated from an institution of higher education, much higher than the employment rate of primary or secondary education graduates, the Nordic countries being at the top of this ranking. This situation, however, generated an increasing unemployment rate in the analyzed period. This study researches how extent programs combat unemployment among young people aim to increase practical and social-emotional skills, analyzes the impact of investments in education and their effect on the economy, and the incidence of integrity and quality control of the educational process. Graphical representations and data analysis are performed in Microsoft Office.

Keywords: education, sustainability, artificial general intelligence, higher education, workforce, well-being.

JEL Classification: I20, I23, I24, I25, J01, J21, J24.



The Benefits of Using Technology to Optimize Student Learning in the Classroom

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Abstract

The use of technology in teaching practice is contemplated as a necessity facing the adaptation to the current needs of society. The purpose of this research highlights the benefits of using technology in education and to optimize students' learning in the classroom. The study emphasizes the results of a recent research accomplished survey Likert-scale. The participants in the research are 150 students from the secondary education institution in Buzau. The results obtained by analyzing the responses of the subjects included in our sample have shown that a group of students have the same opinions regarding the benefits of using technology in the classroom.

Keywords: ICT, education, motivation, classroom, learning.



The Positive Effects of the Coronavirus Pandemic on Marine Higher Education

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Abstract

The study aims to analyze the positive effects, deriving from the pandemic situation, on the marine higher education in "Mircea cel Bătrân" Naval Academy, by examining the degree of satisfaction of students and teachers on the educational process carried out during the two pandemic academic years. The analysis was carried out in three main directions: the use of ICT technologies and didactic resources in the education process, the qualitative evaluation of teaching and evaluation methods in e-learning, and the communication and relationship methods between students, teachers, and institutional management. The results allow the identification of new development directions and trends in marine higher education, which respond to current and future challenges, to improve the quality of marine education.

Keywords: marine higher education, education process, e-learning, online.



The Role of Discursive Genres in the Spread of Fake News: Visual Rhetoric, Cognitive Biases, and Cross-Platform Dynamics

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Abstract

This article investigates how discursive genres shape the propagation of fake news across social media platforms, focusing on persuasive and manipulative discourse mechanisms. By examining the role of polyphonic discourse, intertextuality, cognitive biases, and visual rhetoric (including memes and deep fakes), the paper explores how genre conventions adapt to different platforms, amplifying the reach and believability of misinformation. Case studies, including the "Plandemic" meme series and the deepfake of Mark Zuckerberg, highlight the powerful influence of emotionally charged and visually persuasive content. The analysis also addresses the cross-platform dissemination of narratives, illustrating how different genres contribute to creating a networked ecosystem of misinformation. By combining insights from Critical Discourse Analysis (CDA), intertextuality theory, and media studies, the article sheds light on the sophisticated tactics used to manipulate audiences and spread misinformation.

Keywords: Discursive Genres, Fake News, Polyphony, Persuasion, Digital Media Amplification.



Methods of Developing Creative Thinking through Mathematical Problem-Solving Techniques

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Abstract

This study evaluates various problem-solving methods and their contribution to the development of creative thinking in young schoolchildren and as a specific objective the identification of the most effective methods in the development of creative thinking. Twenty-eight second-grade students participated in the study, which was divided into four groups, depending on the methods used to solve mathematical problems. Each group used different problem-solving techniques to solve mathematical problems: the method of mathematical logic, the method of visual representations, a teamwork method of decomposition and reassembly (used by computer scientists when developing new software), and a teamwork method of solving problems through games. The Torrance test (Technical and Normative Manual) was used to evaluate creative



thinking - verbal form A (for testing) and form B (for retesting). After obtaining the scores, they were entered into the SPSS program - Statistical Package for Social Sciences. Results show that the methods used to solve mathematical problems play a significant role in the development of creative thinking in young schoolchildren and that mathematical games have the greatest impact on the development of creative thinking in young schoolchildren.

Keywords: mathematical problem-solving, creative thinking, creativity, primary school teaching.

JEL Classification: I2, C02.



Digitalization in Education: Innovating Value for Stakeholders

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Abstract

Digitalization and digital transformation have significantly influenced various sectors, reshaping the way organizations function, deliver services, create value and engage with stakeholders. Public institutions, including educational ones, such as universities, are increasingly being influenced by digital transformation. As technology continues to evolve, universities are at a critical crossroad where the adoption of digital tools and platforms is no longer optional, but a fundamental aspect of their operations. Digitalization offers an unprecedented opportunity to enhance administrative efficiency, improve the quality and accessibility of education, and facilitate more dynamic interactions between universities and their stakeholders, including students, businesses, local government and the broader community. By leveraging digital technologies, educational institutions have the potential to innovate and redefine the value they offer to their stakeholders. Using the existing literature on digital transformation within public institutions, specifically universities, this article explores how digitalization can serve as a catalyst for innovation in the value offered by public educational institutions to their stakeholders.

Keywords: digital transformation, higher education, value innovation, digital innovation, digital technologies, stakeholder engagement

Romanian International Conference for Education and Research 14th edition, 29 - 30 October 2024, Cluj-Napoca, Romania



Is the Education in Standardization One of the Best Approaches in Training the Next Generation of Experts?

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Abstract

The growing complexity and globalization of industries highlight the crucial role of standardization in ensuring quality, interoperability, and innovation across sectors. Europe needs the best standardization experts to pursue its global standard-setting ambitions to safeguard a digital, green and resilient single market. As industries evolve, the demand for experts well-versed in standards and their implementation becomes increasingly urgent.

The strategic importance of standards requires more attention and promotion. Students do not often get the value of learning about standardization until a later stage of their career. At the same time, the industry, public authorities, and societal stakeholders need experts to assist them in the standardization process. Increasing the incentives for students and universities to engage in



standardization depends on market attractiveness and societal perspective on standardization This paper presents an example of best practice of collaboration between national standardization bodies of Romania, Bulgaria, Universitat Politècnica de València, Spain and University of Life Sciences "King Mihai I" from Timisoara, Romania in developing micro-credential courses. This paper investigates whether the integration of standardization into educational frameworks represents a new and necessary vision for developing the next generation of experts.

Keywords: higher education, curricula, standardization, research, quality assurance.



Micro-Credentials and Green Standards – An International Approach of Sustainability Learning

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Abstract

This paper presents the experience gained through the successful implementation of international project B-Green-ED Project (Project No 2022-1-BG01-KA220-HED-000085821) which main objective is to stimulate the European green economy and climate neutrality by developing innovative higher education practices related to the implementation of micro-credential (MC) courses developed in cooperation with European standardization bodies. The developed innovative micro-credential courses have been in line with labor market needs and facilitate the provision of flexible, accessible, and inclusive learning focused on the industry/sector-related environmental, management, and green standards that support the transition to a green and digital economy. The information structure in the micro-credentials template inside the



B-GREEN-ED project follows the EU standard for constitutive elements of micro-credentials proposed by the European Commission Consultation Group. During the B-GREEN-ED project, a set of micro-credentials courses have been developed and piloted. Inside the B-GREEN-ED project, micro-credentials have been conceived as stand-alone activities, though the university partners may consider recognizing univocally a specific set of online courses, depending on their own internal education strategy.

Different surveys have been done to test and check the student's opinion about the micro-credential development and organization. Overall, students believed that micro-credentials provided a competitive advantage in the labor market. Job prospects and career opportunities can be improved using these credentials by demonstrating continuous learning and practical skill application. According to the students, micro-credentials were crucial for fostering a more knowledgeable and skilled workforce, leading to societal advancement.

Keywords: micro-credentials, green economy, standardization, quality assurance.



The Intention to Leave: An Overview of the Factors Determining the Turnover from the Teaching Career in the Romanian Education System

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Abstract

To maintain a high level of education quality, schools must attract new and well-prepared teachers while retaining and developing existing and effective ones (Guarino, Santibanez, and Daley, 2006). In this context, the issue of teacher retention becomes an increasingly intense concern, especially since the teaching profession is extremely demanding, generating stress, burnout, and potentially leading to the intention to leave the system (Farber B., 2000). Exhausted, some teachers choose to leave their careers in the early years of activity, others in the middle of their careers, or when they have reached the final stage of professional development. Although working conditions are similar, teachers' responses to stress and its consequences are relatively different (Chang, 2009).

Thus, this study investigates the predictors of the intention to leave, considering the career development stage of Romanian teachers. The study is presented as a comparative analysis, and its main contribution is the understanding of specific factors leading to the turnover from the profession at different career points. The research method used is a sociological survey based on a questionnaire. A total of 194 teachers from the Romanian pre-university education system responded online to a questionnaire that addresses their work experience, including aspects such as working conditions, mindset towards stress, receptivity to distress, degree of emotional



exhaustion, depersonalization, and reduced personal accomplishment, as well as the intention to leave. The data is analyzed using the SPSS program, employing multiple regression analysis to test the effects of each predictor on the intention to leave, depending on the career development stage. The data is analyzed using the SPSS program, employing multiple regression analysis to test the effects of each predictor on the intention to leave, depending on the career development stage.



Transforming Higher Education: How Generative AI Might Revolutionize Learning and Teaching

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Abstract

In recent years, the rise of artificial intelligence (AI), particularly through the widespread adoption of generative AI, has significantly impacted various aspects of society, including the economic, educational, and cultural spheres, both in professional and personal contexts. This rapidly evolving technology is poised to become as ubiquitous as smartphones, transforming many aspects of daily life, including how we teach and learn.

Such rapid developments in emerging technologies are generating significant responses from educational actors. From raising concerns to adopting AI for teaching and learning activities, the challenges, limits, risks, barriers, and opportunities of using AI in higher education are becoming central topics of discussion, highlighting its potential for meaningful impact.

This paper aims to investigate how prepared the education system is to face these opportunities and challenges, from both students' and teachers' perspectives. Additionally, we seek to understand the role of other educational actors and stakeholders in enhancing the implementation and use of AI, both in educational contexts and beyond.

Keywords: generative AI, teaching, learning, (higher) education