☐ JJASSE International Journal of Academic Studies in

SCIENCE AND EDUCATION

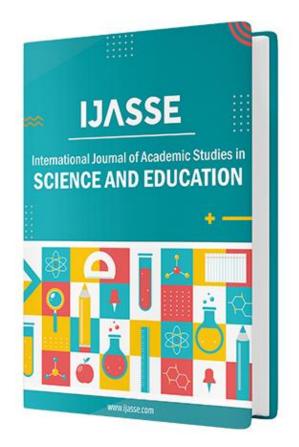
Vol 2, No 1 - Year 2024



www.ijasse.com

IJASSE

International Journal of Academic Studies in Science and Education (IJASSE)



e-ISSN: 3023-5510

IJASSE is double blind peer review international academic journal

Volume 2, No 1 Year 2024

IJASSE

Editor

- Dr. Samantha M. Curle, University of Bath, United Kingdom
- Dr. Mustafa Tevfik Hebebci, Necmettin Erbakan University, Turkiye

Language Editor

Dr. Oya Tunaboylu, Kırklareli University, Turkiye

Editorial Board

- Dr. Ali Derakhshan, Golestan University, Iran
- Dr. Ana Kazaishvili, Georgian National University SEU, Georgia
- Dr. Artur Rada, University of Tirana, Albania
- Dr. Brian Hibbs, Dalton State College, United States
- Dr. Danielle Gonçalves de Oliveira Prado, Federal Technological University of Paraná, Brazil
- Dr. Davide Carneiro, Polytechnic Institute of Porto, Portugal
- Dr. Enio Deneko, Polytechnic University of Tirana, Albania
- Dr. Gibson Muridzi, University of Johannesburg, South Africa
- Dr. Gulzhaina K. Kassymova, Abai Kazakh National Pedagogical University, Kazakhstan
- Dr. Haruni Machumu, Mzumbe University, Tanzania
- Dr. Helmut Takahiro Uchida, Tokai University, Japan
- Dr. Irida Nasufi, University of Tirana, Albania
- Dr. Irwanto Irwanto, Jakarta State University, Indonesia
- Dr. Jelena Maksimović, University of Niš, Serbia
- Dr. Justus Nyamweya Nyagwencha, United States International University Africa, Kenya
- Dr. Koen DePryck, Montclair State University, United States
- Dr. Manuel Florindo Alves Meirinhos, Polytechnic Institute of Bragança, Portugal
- Dr. Mehmet Özaslan, Gaziantep University, Turkiye



Dr. Selahattin Alan, *Selçuk University*, Turkiye Dr. Stamatios Papadakis, *The University of Crete*, Greece Dr. Takuya Matsuura, *Hiroshima University*, Japan Dr. Vera Arezina, *University of Belgrade*, Serbia Dr. Victoria I. Marín Juarros, *University of Lleida*, Spain

Desing and Layout

Ahmet Kurnaz, Adana Science and Technology University, Turkiye Hasan Gökhan Can, Ministry of National Education, Turkiye

Technical Support

Naci Küçükgençay, Ministry of National Education, Turkiye

About the Journal

The International Journal of Academic Studies in Science and Education (IJASSE) is a peerreviewed scholarly online journal. The IJASSE is published quarterly in Winter and Summer. The IJASSE is published biannual as an international scholarly, peer-reviewed online journal. There is no publication fee in the IJASSE. The IJASSE is an international journal and welcomes any research papers on science and education using techniques from and applications in any technical knowledge domain: original theoretical works, literature reviews, research reports, social issues, psychological issues, curricula, learning environments, book reviews, and review articles.

The articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to the IJASSE. Authors are solely responsible for ensuring that their articles comply with scientific and ethical standards and for the content of the article. The journal holds the copyright for all published articles. The publisher disclaims any liability for loss, actions, claims, proceedings, demands, or costs or damages whatsoever arising directly or indirectly in connection with or arising out of the use of the research material. Authors, applicable copyright laws and treaties should be observed. Copyrighted material (e.g. tables, figures or large quotations) should be used with appropriate permission and acknowledgment. All authors are required to disclose any actual or potential conflicts of interest, including financial, personal, or other relationships with individuals or organizations related to the submitted work. The work of other authors, contributors or sources cited should be used appropriately and acknowledged in the references.

Submissions

All submissions should be in electronic (.Doc or .Docx) format. Submissions in PDF and other non-editable formats are not acceptable. Papers are accepted only in English. Manuscripts can be submitted through the journal website (https://www.ijaste.com). All manuscripts should use the latest APA 7 style. The manuscript template for formatting is available on the journal website.

Contact Info

International Journal of Academic Studies in Science and Education (IJASSE)

Email: ijasseoffice@gmail.com

Web: http://www.ijasse.com

IJASSE

Table of Contents

Optimising Educational Outcomes: Data and Process Analysis Approaches with A	Attention to
Self-Directed Learning	
Bernadett Sarró-Oláh, Szabina Fodor	1
Paints of the Artist's Palette in STEAM Teaching	
Christopher Dignam	20
Impacts of ICT as Tools in Teaching Biology in Senior Secondary Schools	
Simeon Oluwatoba Ogunlowo, Gokben Ozbey, Dorcas Titilope Ogunlowo	42
A Qualitative Study on Digital Citizenship Education in Primary Schools	
Stefana Opria, Mariana Momanu	53
Social Media and the Reshaping of Religious Identity in Youth	
Saemah Shamim	66