### E.S.S.E



# **Egyptian Journal of Science Education**

A Specialized Journal in Science Curricula and Methods of Teaching

https://mktm.journals.ekb.eg

Issued By (EASE)
The Egyptian Association for Science
Education
www.ease-edu.com

Vol (25) No (1) (January) 2022

ISSN: 2536-9184

E.ISSN: 2735-4245

The Journal is disclosed on Egyptian Knowledge Bank and the Edu-search of Dar Almandumah



#### **Egyptian Journal of Science Education**

A Specialized Journal in Science Curricula and Methods of Teaching

Chairman of the Journal's Board **Mona Abd-Elhady Hussin Seoudy** 

Vice-Chairman of the Journal's Board **Prof. Aly Mohy-Eldin Rashed** 

Editor in Chief **Abd-Elmesseh Samaan Abd-Elmesseh** 

Managing Editor **Tafida Sayed Ahmed Ghanem** 

**Editorial Secretariat** 

Osama Gebril Ahmed Abd-Ellatif

"The opinions expressed in the journal do not necessarily express the opinion of the association But it expresses the opinions of the authors"

All rights reserved to the Egyptian Association for Scientific Education

ISSN: 2536-9184 E.ISSN: 2735-4245

The Journal is disclosed on Egyptian Knowledge Bank and the Edu-search of Dar Almandumah

## **Editorial Board**

Prof. Naima Hasaan Ahmed Abd- Elwahed	National Center for	
	Examination and Educational	
	Evaluation	
Prof. Nahed Abd-Elrady Nouby	Faculty of Education - Minea	
Mohamed	University	
Prof. Nadia Samaan Lotfa Allah	Faculty of Education- Suis	
	Canal University	
Prof. Amal Rabia Kamel	Faculty of Education -	
	Fayoum University	
Prof. Fatma Mohamed Abd-	Faculty of Education- Benha	
Elwahab	University	
Prof. Gamal Eldin Mohamed	Faculty of Education for	
Hassan Elhamdy	Boys- Azhar University	
Prof. Sahar Mohmed Abd-	Faculty of Girls - Ain Shams	
Elkarim	University	
Prof. Amany Mohamed Saad	Faculty of Graduate Studies	
Eldin Elmogy	Cairo University	
Prof. Mohamed Abd-Elrazek	Faculty of Education-Ain	
Abd Elfatah Abd-Elrazek Heba	Shams University	
Prof. Rehab Ahmed Abd-Elaziz	Faculty of Education -	
Naser	PortSaiid University	
14001		

Web Site: https://mktm.journals.ekb.eg

E.mail: info@ease-edu.com

#### **Journal Publishing Rules**

- 1. The "Egyptian Journal of Science Education" (EJSE) publishes original theoretical and applied research and studies in the field of scientific education, of an outstanding academic level, that constitutes a new and unique contribution to the field of scientific education, and is written in one of the Arabic or English languages.
- 2. The journal accepts the presentation of university theses, as well as reviews of new books in the field of scientific education, whether in Arabic or English.
- 3. All files are sent and then received by the editor-in-chief through the electronic system of the "Egyptian Journal of Scientific Education" page on the EKB's Egyptian periodical resource website; Where the author must register on the journal system at the following link: <a href="https://mktm.journals.ekb.eg">https://mktm.journals.ekb.eg</a>, and create a personal page for him as an author on the journal's electronic page, and research sent via e-mail to the editor-in-chief or members of the Editing.
- 4. Research and studies submitted to the journal are subject to examination and review according to scientific rules, and peer review specified in the journal by the editorial board and two members of the arbitration board for each research.
- 5. The researcher adheres to the scientific method in writing the research in all its steps, so that it is characterized by good organization, accuracy, and the text is free from linguistic errors.
- **6.** The researcher must abide by the rules of the ethics of scientific publishing, and that the research has not been previously published or presented in any conference or other local, Arab, regional or international journal

- before the date of submission to the journal, and the researcher submits an acknowledgment thereof
- 7. All copyrights and their implications belong to the publisher, the "Egyptian Society for Scientific Education".
- **8.** The researcher gets one hard copy of the journal, and five print-outs of his research papers.
- 9. The researcher, whether Egyptian or non-Egyptian, shall bear the costs of arbitration, the value of which is (600) Egyptian pounds. As for the costs of publishing and printing, its value is for Egyptians (1200) Egyptian pounds, and non-Egyptians (150\$) dollars or its equivalent, for a number of (30) pages according to the settings determined by the journal, and more than that and up to (50) pages only. (40) Egyptian pounds, and non-Egyptians (10\$) dollars or its equivalent; And that is through a bank deposit in the account of the publisher "The Egyptian Society for Scientific Education: at the Bank of Alexandria, Roxy branch: the Egyptian account number (120000769001).
- **10.** The research is written with the following specifications:
  - The researcher is obligated to use the numbering pattern (2, 3, 4,....) in writing any numbers included in the research body, or tables, or figures, or appendices.
  - The research is written in a "Word" file, the dimensions of the page are 17.5 x 25.
  - Leave one space between the lines in the body of the research, a space and a half between the main or subheading and the beginning of the next paragraph of the title, and a space and a half between paragraphs..
  - The top margins are 2.1 cm, the bottom is 3.16 cm, the right is 3.1 cm, and the left is 2.75 cm.
  - The vertical is 1.16 cm and the footer is 1.27 cm.

- The researcher is obligated to write the research using Times New Roman font style, (whether for Arabic or English) size: 14 Bold for the main headings, Bold 13 for the sub-headings, 13 for the body, 12 for the table headings, 11 for the figures headings, 12 for the abstract content in both languages, and 11 for the content of the tables, and 12 for a list of references.
- The researcher is obligated to write the research according to the research template published on the journal website.
- A separate file is attached to the research file that includes the author's personal data, including: the title of the research, the author's name, academic degree, work destination, e-mail address, and website address, if any, and it is uploaded as a separate file in the "Word" file format with the search file.
- 11. An abstract of the research is submitted in Arabic, and another in English, provided that it does not exceed (150) words, and it must include the objective of the research, the research methodology, the sample, the tools, the results, and the most important recommendations, and it is written in the form of connected sentences without including numbered points, A number of no more than (6) keywords shall be attached.
- 12. In the case of publishing a research derived from a research project funded by a research organization, university, scientific association or academic body; The researcher must commit to publishing the name of the funding body and the year of funding; A space is allocated for this before the list of references under the title "النمويل" in the research published in Arabic, and under the title "Funding" in the research published in English.
- **13.** In documenting the references in the body of the research, and the final list of Arab and foreign references, the researcher is committed to following the

#### المجلة المصرية للتربية العلمية

system of the American Psychological Association (APA), the latest version.

\_\_\_\_\_

## Content

No. Subject	page
A Suggested Program in Environmental	
Nanotechnology to Develop Skills of Environment	al
Problem-solving and Strategic Thinking of Studer	nt-
teachers of Biology, Geology and environmental	
Sciences	
	1
Dr. Eman Fathy Galal Gad	1
The effectiveness of a course based on ESTEM fo	or
developing sustainable energy concepts, the abilit	t <b>y</b>
to environmental decisions making, and profession	nal
2 competencies among science students-basic educati	ion
Dr. Seham Fouad Mahmoud EL-Shennawi	45
The effectiveness of suggested program based or	
lesson Study and web Quest for Developing futur	
thinking and teacher self-efficacy of Biology Divisi	on
	77
Dr. Reham Mohamed Ahmed Abdel-Halim	
Developing the Level of Students Health at Publi	
Schools in Light of Contemporary Global Trends:	A
Suggested Proposal	
Dr. Mohammad Khawaji	
Dr. Mohammad Ghazwani	