

COVERING LETTER

First author*¹⁾, Second author ²⁾, etc. [Times New Roman 10]

The manuscript must list a main author along with any co-authors. Author names should be written without academic titles or ranks. Clearly identify the corresponding author, as they will be responsible for managing all stages of the process before and after publication. The list should include the full names of both the main author and co-authors. The corresponding author is the one who agrees to handle all communication throughout the review, publication, and post-publication stages.

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TITLE [English] [FONT TIMES NEW ROMAN 12 pt BOLD]**Abstract [Times New Roman 11 pt, Bold]**

A clear and concise abstract is required for each paper, consisting of approximately 150–250 words. The abstract should briefly outline the research objectives, key findings, and main conclusions. Since it may be published separately from the article, the abstract must be able to stand alone. It should be written as a single, unified paragraph covering the introduction and purpose, methods, results, conclusion, and recommendations, without using subheadings. References should not be included, and uncommon abbreviations should be avoided unless essential, in which case they must be defined at first mention. The abstract must be accompanied by relevant keywords. [Times New Roman 11pt, single].

Keywords: Physics; education; engineering; etc (separate by semicolons)

Keywords are the labels of your manuscript and critical to correct indexing and searching. Keywords should not more than 5 words or phrases in alphabetical order which has not been used in the title. Therefore the keywords should represent the content and highlight of your article. Use only those abbreviations that are firmly established in the field. [Times New Roman 11pt, single].

[NB: Full text in English]**INTRODUCTION [Times New Roman 11pt, Bold, 1.5 space]**

The Introduction section should explain: [Times New Roman 11pt, 1.5 space]

1. The background to the study
2. A summary of the existing literature
3. The reason why the study was necessary, and the novelty must be explained
4. Aims or objectives of the study
5. As you compose the introduction, think of readers who are not experts in this field.

METHODS [Times New Roman 11pt, Bold, 1.5 space]

This section should reflect the state of the art in educational physics and technology, demonstrating advanced perspectives and approaches, potential innovations, and contributions that are genuinely new to the field. The work should be comprehensive, not merely replicating previous studies or making minor modifications to existing methods and objects. [Times New Roman 11pt, 1.5 space]

The methods section should include:

1. Specify the time and place of study in the first section
2. The aim, design, and setting of the study
3. The characteristics of participants or description of material
4. A clear description of all processes and methodologies employed. Generic names should generally be used. When proprietary brands are used in research, include the brand names in parentheses
5. The type of statistical analysis used, including a power calculation if appropriate

6. Studies involving human participants, data or tissue or animals must include statement of ethics approval and consent

RESULTS AND DISCUSSION [Times New Roman 11pt, Bold, 1.5 space]

The Results and Discussion section must be presented as a single, continuous part. Findings should be organized from the main results to supporting data, accompanied by a thorough discussion. This section should demonstrate critical analysis and synthesis, including a detailed explanation of the results, their connection to existing concepts or theories, and a comparison with previous studies. The discussion should highlight whether the findings support, refine, or challenge earlier research. All measurements must follow the International System of Units (SI). Figures and tables should remain editable for the editor. Furthermore, the discussion should emphasize the significance of the study's outcomes and clearly highlight differences between the current results and those reported in prior publications. [Times New Roman 11pt, 1.5 space]

In writing this paper, every table, figure, and equation must be provided with a caption using the Insert Caption feature in Microsoft Word. Furthermore, when referring to tables, figures, or equations in any section of the text, it should be done using Cross-reference so that the numbering will automatically update if there are changes in order or additional data. For example, the data from the analysis of students' learning independence levels are presented in Table 1, which shows the distribution of students in the high, medium, and low categories. Furthermore, the comparison between the experimental and control classes is visualized in Figure 1, making it easier for readers to observe the differences in research outcome trends.

Table 1. Students' learning independence levels [Times New Roman 11pt, 1.5 space]

No.	Learning Independence	Number of Students	Percentage (%)
1	High	8	22
2	Medium	16	44
3	Low	12	33
	Total	36	100

*[Times New Roman 11pt, single]

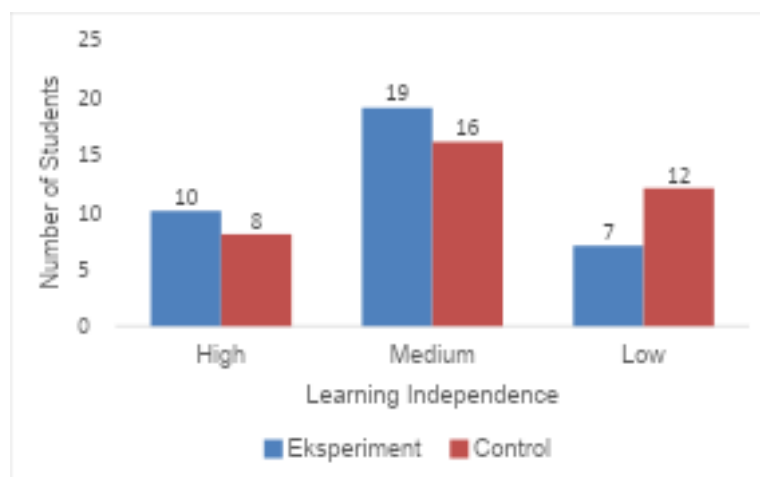


Figure 1. The comparison between the experimental and control classes

[Times New Roman 11pt, 1.5 space]

All formulas or equations must be created using an equation editor or MathType, not as screenshots or images. Equations should be aligned with the left margin and follow directly after the preceding sentence, with 1.5 line spacing separating them from the surrounding text. Each equation must be numbered consecutively using Arabic numerals in parentheses, placed on the right side of the column, and properly referenced within the text. All symbols used in the equations should be clearly defined, either before or after the equation.

Equation (1) is an example of an equation for calculating the baud rate frequency in mode two for serial communication in an 8051 microcontroller. In equation (1) f_{baud} is the baud rate frequency. SMOD is the control bit in PCON (*Power Mode Control Special Function Register*), while f_{osc} is the oscillator/crystal frequency used in the microcontroller circuit.

$$f_{baud} = \frac{2^{SMOD}}{64} \times f_{osc} \quad (1)$$

CONCLUSION [Times New Roman 11pt, 1.5 space]

The conclusion should directly address the research objectives and be presented clearly, based on accurate and in-depth new findings. Such findings may include theories, postulates, formulas, principles, methods, models, or prototypes, and must be supported by adequate research data. Suggestions, placed after the conclusion, should provide recommendations related to the study or practical input for users. Both the conclusion and suggestions must be written in a single paragraph of fewer than 100 words. [Times New Roman 11pt, 1.5 space]

ACKNOWLEDGEMENT (If any) [Times New Roman 11pt, 1.5 space]

Recognize those who helped in the research, especially funding supporter of your research. Name the person to help you work. [Times New Roman 11pt, 1.5 space]

REFERENCES [Times New Roman 11pt, 1.5 space]

The ratio of primary references to other references must be >80% in order to improve the quality of thoughts and ideas that were used as a writing framework. The primary reference is the result of direct research, including articles in scientific journals, proceedings, dissertations, theses, monographs, books and others. Reference must be up to date with the proportion >80% is the last 10 years. Classical works can be referred but not to compare the discussion or not to prove originality. Avoid reference to self-citation that is too much. [Times New Roman 11pt, single]

- References must follow the APA 7th edition style. Please refer to the citation guide available on our website and the examples provided at <https://apastyle.apa.org/style-grammar-guidelines/references/examples>
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Example:

Journal Article

Haldimann, M., Morinaj, J., & Hascher, T. (2023). The role of dyadic teacher–student relationships for primary school teachers’ well-being. *International Journal of Environmental Research and Public Health*, 20(5), 1–22. <https://doi.org/10.3390/ijerph20054053>

Book

Serway, R. A., & Jewett, J. W. (2019). *Physics for scientists and engineers* (10th ed.). Cengage Learning.

Edited Book

Halliday, D., Resnick, R., & Walker, J. (2010). *Fundamentals of Physics* (9th ed.). John Wiley & Sons.

Dissertation or Thesis

Hlatshwayo, M. Q. (2021). *Simulating strongly coupled many-body systems with quantum algorithms* (Doctoral dissertation). Kalamazoo, MI, USA: Western Michigan University. Retrieved from <https://scholarworks.wmich.edu/dissertations/3714>

Web

University of Colorado Boulder. (n.d.). *PhET interactive simulations*. Retrieved October 2, 2025, from <https://phet.colorado.edu/>

***References must use a reference management tool such as Mendeley/Zotero/Endnote.**