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1. **INTRODUCTION (10 PT)**

The main text format consists of a flat left-right columns on A4 paper (quarto). The margin text from the left and top are 2.5 cm, right and bottom are 2 cm. The manuscript is written in Microsoft Word, single space, Time New Roman 10 pt, and maximum 12 pages for original research article, or maximum 16 pages for review/survey paper, which can be downloaded at the website: http://ijere.iaescore.com.

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4. Results and Discussion, and 5. Conclusion.** The structure is well-known as **IMRaD** style.

Literature review that has been done author used in the section "INTRODUCTION" to explain   
the difference of the manuscript with other papers, that it is innovative, it are used in the section "METHOD" to describe the step of research and used in the section "RESULTS AND DISCUSSION" to support the analysis of the results [2]. If the manuscript was written really have high originality, which proposed a new method or algorithm, the additional section after the "INTRODUCTION" section and before the "METHOD" section can be added to explain briefly the theory and/or the proposed method/algorithm [4].

1. **METHOD (10 PT)**

Explaining research chronological, including research design, research procedure (in the form of algorithms, Pseudocode or other), how to test and data acquisition [5]–[7]. The description of the course of research should be supported references, so the explanation can be accepted scientifically [3], [4] Figures 1-2 and Table 1 are presented center, as shown below and cited in the manuscript [5], [8]–[13]. Figure 2(a) shown math representation ability students and Figure 2(b) reasoning ability students.

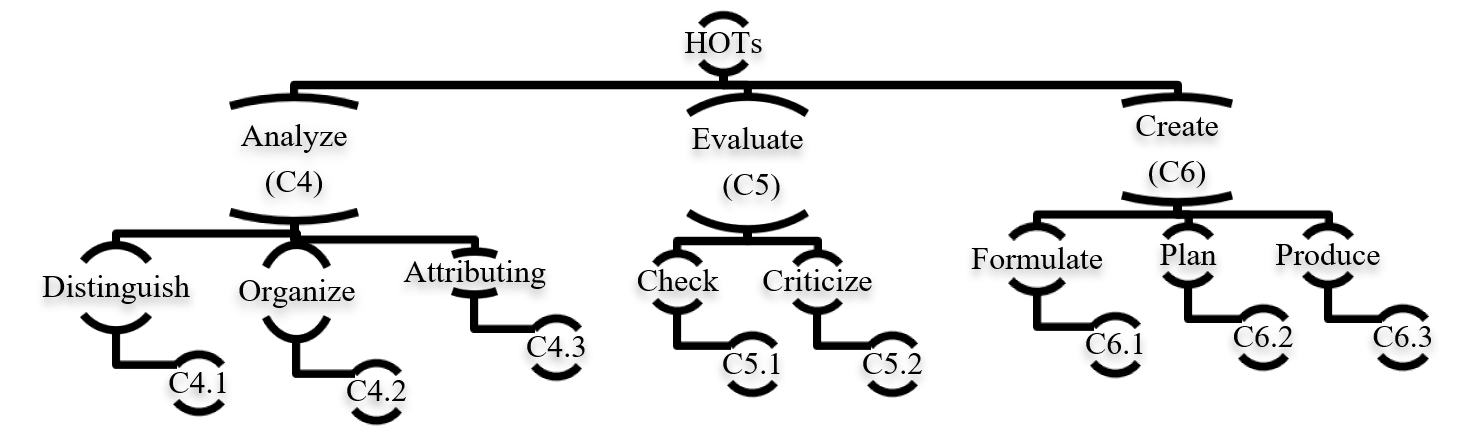
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Figure 1. Cognitive process dimension

|  |  |
| --- | --- |
|  |  |
| (a) | (b) |
| Figure 2. Pretest, posttest, and N-gain for (a) math representation ability students and (b) reasoning ability students | |

Table 1. Internal consistency reliability of biology test

|  |  |  |
| --- | --- | --- |
| SN | Indicator | Value |
| 1 | Number of Item | 60 |
| 2 | Kuder Richardson (KR-20) | 0.620 |
| 3 | Cronbach's Alpha Based on Standardized Items | 0.617 |
| 4 | Mean Item Difficulty | 0.56 |
| 5 | Mean Item Difficulty | 0.4 |

1. **RESULTS AND DISCUSSION (10 PT)**

In this section, it is explained the results of research and at the same time is given   
the comprehensive discussion. Results can be presented in figures, graphs, tables and others that make   
the reader understand easily [14], [15]. The discussion can be made in several sub-sections.

**3.1. Sub section 1**

Equations should be placed at the center of the line and provided consecutively with equation numbers in parentheses flushed to the right margin, as in (1). The use of Microsoft Equation Editor or MathType is preferred.

) (1)

All symbols that have been used in the equations should be defined in the following text.

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Proper citation of other works should be made to avoid plagiarism. When referring to a reference item, please use the reference number as in [16] or [17] for multiple references. The use of ”Ref [18]...” should be employed for any reference citation at the beginning of sentence. For any reference with more than 3 or more authors, only the first author is to be written followed by *et al*. (e.g. in [19]). Examples of reference items of different categories shown in the References section. Each item in the references section should be typed using 8 pt font size [20]–[25].

3.2.1. Subsub section 1

yy

3.2.2. Subsub section 2

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1. **CONCLUSION (10 PT)**

Provide a statement that what is expected, as stated in the "INTRODUCTION" section can ultimately result in "RESULTS AND DISCUSSION" section, so there is compatibility. Moreover, it can also be added the prospect of the development of research results and application prospects of further studies into the next (based on result and discussion).

**ACKNOWLEDGEMENTS (10 PT)**

Author thanks ... . In most cases, sponsor and financial support acknowledgments.

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* M. M. Chiampi and L. L. Zilberti, “Induction of electric field in human bodies moving near MRI: An efficient BEM computational procedure,” *IEEE Trans. Biomed. Eng.*, vol. 58, pp. 2787–2793, Oct. 2011, doi: 10.1109/TBME.2011.2158315.
* R. Fardel, M. Nagel, F. Nuesch, T. Lippert, and A. Wokaun, “Fabrication of organic light emitting diode pixels by laser-assisted forward transfer,” *Appl. Phys. Lett.*, vol. 91, no. 6, Aug. 2007, Art. no. 061103, doi: 10.1063/1.2759475.

1. **Conference Proceedings**

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* G. Veruggio, “The EURON roboethics roadmap,” in *Proc. Humanoids ’06: 6th IEEE-RAS Int. Conf. Humanoid Robots*, 2006, pp. 612–617, doi: 10.1109/ICHR.2006.321337.
* J. Zhao, G. Sun, G. H. Loh, and Y. Xie, “Energy-efficient GPU design with reconfigurable in-package graphics memory,” in *Proc. ACM/IEEE Int. Symp. Low Power Electron. Design (ISLPED)*, Jul. 2012, pp. 403–408, doi: 10.1145/2333660.2333752.

1. **Book**

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* A. Taflove, *Computational Electrodynamics: The Finite-Difference Time-Domain Method* in Computational Electrodynamics II, vol. 3, 2nd ed. Norwood, MA, USA: Artech House, 1996.
* R. L. Myer, “Parametric oscillators and nonlinear materials,” in *Nonlinear Optics*, vol. 4, P. G. Harper and B. S. Wherret, Eds., San Francisco, CA, USA: Academic, 1977, pp. 47–160.

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* N. Kawasaki, “Parametric study of thermal and chemical nonequilibrium nozzle flow,” M.S. thesis, Dept. Electron. Eng., Osaka Univ., Osaka, Japan, 1993.

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*See the examples:*

**REFERENCES**

[1] P. Delgadoa, C. Vargasb, R. Ackermanc, and L. Salmerón, “Don’t throw away your printed books: A meta-analysis on the effects of reading media on reading comprehension,” *Educ. Res. Rev.*, vol. 25, pp. 23–38, 2018, doi: 10.1016/j.edurev.2018.09.003.

[2] F. Reichert, D. Lange, and L. Chow, “Educational beliefs matter for classroom instruction: A comparative analysis of teachers’ beliefs about the aims of civic education,” *Teach. Teach. Educ.*, vol. 98, pp. 1–13, 2020, doi: 10.1016/j.tate.2020.103248.

[3] J. Roick and T. Ringeisen, “Students’ math performance in higher education: examining the role of self-regulated learning and self-efficacy,” *Learn. Individ. Differ.*, vol. 65, pp. 148–158, 2018.

[4] G. Ocak and A. Yamaç, “Examination of the relationships between fifth graders’ self-regulated learning strategies, motivational beliefs, attitudes, and achievement,” *Educ. Sci. Theory Pract.*, vol. 13, no. 1, pp. 380–387, 2013.

[5] S. Li and J. Zheng, “The relationship between self-efficacy and self-regulated learning in one-to-one computing environment: The mediated role of task values,” *Asia-Pacific Educ. Res.*, vol. 27, no. 6, pp. 455–463, 2018, doi: 10.1007/s40299-018-0405-2.

[6] B. J. Zimmerman and A. R. Moylan, “Self-regulation: where metacognition and motivation intersect,” in D. J. Hacker, J. Dunlosky, and A. C. Graesser, Eds., *Handbook of Metacognition in Education*, 2009, pp. 299–315.

[7] P. R. Pintrich, D. A. F. Smith, T. Duncan, and W. Mckeachie, *A manual for the use of the motivated strategies for learning questionnaire (MSLQ)*. Ann Arbor, Michigan, 1991.

[8] M. Pressley and C. B. McCormick, *Advanced educational psychology for educators, researchers, and policymakers*. New York, USA: HarperCollins College Publishers, 1995.

[9] A. Bandura, *Prentice-Hall series in social learning theory. Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc., 1985.

[10] A. L. Dent and A. C. Koenka, “The relation between self-regulated learning and academic achievement across childhood and adolescence: a meta-analysis,” *Educ. Psychol. Rev.*, vol. 28, no. 3, pp. 425–474, 2015, doi: 10.1007/s10648-015-9320-8.

[11] T. J. Cleary and A. Kitsantas, “Motivation and self-regulated learning influences on middle school mathematics achievement,” *School Psych. Rev.*, vol. 46, no. 1, pp. 88–107, 2017.

[12] P. R. Pintrich, “Chapter 14 - The Role of Goal Orientation in Self-Regulated Learning,” in in M. Boekaerts, P. Pintrich, M. Zeidner, Eds., *Handbook of Self-Regulation*, San Diego, California: Academic Press, 2000, pp. 451–502.

[13] H. Vonkova and J. Hrabak, “The (in) comparability of ICT knowledge and skill self-assessments among upper secondary school students: The use of the anchoring vignette method,” *Comput. Educ.*, vol. 85, pp. 191–202, 2015, doi: 10.1016/j.compedu.2015.03.003.

[14] F. Baier, A.-T. Decker, T. Voss, T. Kleickmann, U. Klusmann, and M. Kunter, “What makes a good teacher? The relative importance of mathematics teachers’ cognitive ability, personality, knowledge, beliefs, and motivation for instructional quality,” *Br. J. Educ. Psychol.*, vol. 89, no. 4, pp. 767–786, 2019, doi: 10.1111/bjep.12256.

[15] A. M. Flanagan, D. C. Cormier, and O. Bulut, “Achievement may be rooted in teacher expectations: examining the differential influences of ethnicity, years of teaching, and classroom behaviour,” *Soc. Psychol. Educ.*, vol. 23, pp. 1429–1448, 2020, doi: 10.1007/s11218-020-09590-y.

[16] F. M. van der Kleij, “Comparison of teacher and student perceptions of formative assessment feedback practices and association with individual student characteristics,” *Teach. Teach. Educ.*, vol. 85, no. 1, pp. 175–189, 2019.

[17] R. G. Brockett and R. Hiemstra, *Self-direction in adult learning: Perspectives on theory, research, and practice*. London and New York: Routledge, 2020.

[18] R. Hiemstra and R. G. Brockett, “Reframing the Meaning of Self-Directed Learning: An Updated Modeltt,” in *Adult Education Research Conference Proceedings*, 2012, pp. 155–161.

[19] S. Geng, K. M. Y. Law, and B. Niu, “Investigating self-directed learning and technology readiness in blending learning environment,” *Int. J. Educ. Technol. High. Educ.*, vol. 16, no. 17, pp. 1–22, 2019, doi: 10.1186/s41239-019-0147-0.

[20] J. R. Fraenkel, N. E. Wallen, and H. H. Hyun, *How to design and evaluate research in education*. New York, USA: McGraw-Hill, 2012.

[21] M. Honey and D. Marshall, “The impact of on-line muti-choice questions on undergraduate student nurses’ learning,” in *Proceedings of the 20th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education (ASCILITE)*, 2003, pp. 236–243.

[22] R. A. Krueger and M. A. Casey, *Focus groups: A practical guide for applied research*. London: Sage Publications, Inc., 2015.

[23] J. W. Creswell and V. L. P. Clark, “Choosing a mixed methods design,” in *Designing and Conducting Mixed Methods Research*, California: Sage Publications, Inc., 2011, pp. 53–106.

[24] E. H. Mahvelati, “Learners’ perceptions and performance under peer versus teacher corrective feedback conditions,” *Stud. Educ. Eval.*, vol. 70, 2021, doi: 10.1016/j.stueduc.2021.100995.

[25] K. Ismayilova and R. M.Klassen, “Research and teaching self-efficacy of university faculty: Relations with job satisfaction,” *Int. J. Educ. Res.*, vol. 98, pp. 55–66, 2019, doi: 10.1016/j.ijer.2019.08.012.

**BIOGRAPHIES OF AUTHORS (10 PT)**

**The recommended number of authors is at least 2. One of them as a corresponding author.**

*Please attach clear photo (3x4 cm) and vita. Example of biographies of authors:*

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| C:\Users\LENOVO\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Pak Hanif.jpg | **Hanif Cahyo Adi Kistoro**     is a Ph.D. Candidate, Department of Educational Research and Evaluation, Graduate School, Universitas Negeri Yogyakarta, Colombo Street No.1 Yogyakarta, Yogyakarta 55281, Indonesia & Lecturer, Department of Islamic Education, Universitas Ahmad Dahlan, Indonesia. His research focuses on physics education, Scaffolding in education, Scientific literacy, project-based learning, Supersymmetry in Quantum, STEM education and literacy. He can be contacted at email: hanifcahyo.2018@student.uny.ac.id; hanif.kistoro@pai.uad.ac.id. |
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