Dear EJMSTE Editor

Here are our comments (feedback) on the results of the final review of the article:

- Could you please check for full compliance with the author submission guidelines, including the stylistic and bibliographic requirements of the journal?

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We've checked citations and in-text references in journal style references. Reference list attached

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We have checked and ensured that all references have appropriate in-text citations, and all in-text citations have appropriate references

- Could you please check name(s) and affiliation(s) of the author(s)?

The name(s) and affiliation(s) of the author(s) are correct

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Erpin Evendi (<u>https://orcid.org/0000-0002-8040-4130</u>) Al Kusaeri (<u>https://orcid.org/0000-0002-4064-6506</u>) M. Habib Husnial Pardi (<u>https://orcid.org/0000-0002-1522-9102</u>) Lalu Sucipto (<u>https://orcid.org/0000-0002-4628-0621</u>) Faizul bayani (<u>https://orcid.org/0000-0003-4017-952X</u>) Saiful Prayogi (<u>https://orcid.org/0000-0001-7265-1193</u>)

- I highlighted some in-text citations which have no corresponding references, or require corrections. Could you please check them?

We've fixed it and made sure the in-text citations have proper references.

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We've fixed this and made sure the in-text citations have proper references. See the attachment

- Could you please provide missing funding information?

Attachment 1: Missing References

Along with the digitalization system that continues to grow rapidly, interest in the internet and virtual learning has brought changes to the learning system, where face-to-face learning is replaced by an online learning system (e-learning) (Palvia et al., xxxx). This is also the impact of COVID-19 that has hit people in all parts of the world, which forces learning to be carried out using an e-learning system (Muliadi et al., 2021). We see this as a very good opportunity to conduct the PBL model towards virtual learning. In the context of this	 learning system (e-learning) (Palvia et al., 2018). Palvia, S., Aeron, P., Gupta, P., Mahapatra, D., Parida, R., Rosner, R., & Sindhi, S. (2018). Online Education: Worldwide Status, Challenges, Trends, and Implications. <i>Journal of Global Information Technology Management</i>, 21(4), 233–241. <u>https://doi.org/10.1080/1097198X.2018.1542262</u>

with the distance learning policy implemented during the COVID-19 pandemic. However, the cross-cultural implications of being a challenge in the implementation of PBL, this is recognized by previous studies (Gwee, 2008) that the inclusiveness of PBL is active learning with an open communication style, while the cultural character of Asians is reticence. Actually, there are many sides of the strength of Indonesian culture that not many	by previous studies (Choon-Eng Gwee, 2008). A study by Choon-Eng Gwee (2008) reports that
people know about. This culture includes; love to work together, collaborate, and open to diversity. On this basis, cooperative learning is widely used by teachers in Indonesia (Karmina et al., 2021).	Choon-Eng Gwee, M. (2008). Globalization of Problem- based Learning (PBL): Cross-cultural Implications. <i>The</i> <i>Kaohsiung Journal of Medical Sciences</i> , 24(3), S14–S22.
To avoid interactivity barriers, researchers use the mother tongue in implementing e-PBL. It is used so that the content can be understood by students and learning can run well. This ensures that lecturers and preservice teachers view PBL in the same way. A study by Gwee (2008) reports that learners' lack of proficiency in English has the potential to have a serious impact on PBL tutorials in Asia, including Indonesia, which makes English a second language.	https://doi.org/10.1016/S1607-551X(08)70089-5

Attachment 2: References List

Aini, N. R., Syafril, S., Netriwati, N., Pahrudin, A., Rahayu, T., & Puspasari, V. (2019). Problem-Based Learning for Critical Thinking Skills in Mathematics. *Journal of Physics: Conference Series*, *1155*, 012026. https://doi.org/10.1088/1742-6596/1155/1/012026

Akker, J. V. D., Bannan, B., Kelly, A. E., Nieveen, N., & Plomp, T. (2013). *Educational Design Research: An Introduction*. Netherlands Institute for Curriculum Development (SLO).

Altun, A., & Cakan, M. (2006). Undergraduate Students' Academic Achievement, Field Dependent/Independent Cognitive Styles and Attitude toward Computers. *Educational Technology & Society*, 9(1), 289–297.

Animasaun, I. L., & Abegunrin, O. A. (2017). Gender difference, self-efficacy, active learning strategies and academic achievement of undergraduate students in the Department of Mathematical Sciences, Federal University of Technology, Akure, Nigeria. *International Journal of Teaching and Case Studies*, 8(4), 255. https://doi.org/10.1504/IJTCS.2017.088929

Arends, R. (2012). Learning to teach (9th ed). McGraw-Hill.

Arifin, S., Setyosari, P., Sa'dijah, C., & Kuswandi, D. (2020). The effect of problem based learning by cognitive style on critical thinking skills and student retention. *Journal of Technology and Science Education*, *10*(2), 271. https://doi.org/10.3926/jotse.790

Armstrong, S. J., Cools, E., & Sadler-Smith, E. (2012). Role of Cognitive Styles in Business and Management: Reviewing 40 Years of Research. *International Journal of Management Reviews*, *14*(3), 238–262. https://doi.org/10.1111/j.1468-2370.2011.00315.x

Ayalon, M., & Hershkowitz, R. (2018). Mathematics teachers' attention to potential classroom situations of argumentation. *The Journal of Mathematical Behavior*, *49*, 163–173. https://doi.org/10.1016/j.jmathb.2017.11.010

Bezanilla, M. J., Fernández-Nogueira, D., Poblete, M., & Galindo-Domínguez, H. (2019). Methodologies for teaching-learning critical thinking in higher education: The teacher's view. *Thinking Skills and Creativity*, *33*, 100584. https://doi.org/10.1016/j.tsc.2019.100584 Calkins, S., Grannan, S., & Siefken, J. (2020). Using Peer-Assisted Reflection in Math to Foster Critical Thinking and Communication Skills. *PRIMUS*, *30*(4), 475–499. https://doi.org/10.1080/10511970.2019.1608608

Cassano, R., Costa, V., & Fornasari, T. (2019). An Effective National Evaluation System of Schools for Sustainable Development: A Comparative European Analysis. *Sustainability*, *11*(1), 195. https://doi.org/10.3390/su11010195

Choon-Eng Gwee, M. (2008). Globalization of Problem-based Learning (PBL): Cross-cultural Implications. *The Kaohsiung Journal of Medical Sciences*, 24(3), S14–S22. https://doi.org/10.1016/S1607-551X(08)70089-5

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, *52*(4), 281–302. https://doi.org/10.1037/h0040957

D'Alessio, F. A., Avolio, B. E., & Charles, V. (2019). Studying the impact of critical thinking on the academic performance of executive MBA students. *Thinking Skills and Creativity*, *31*, 275–283. https://doi.org/10.1016/j.tsc.2019.02.002

de Jong, N., Krumeich, J. S. M., & Verstegen, D. M. L. (2017). To what extent can PBL principles be applied in blended learning: Lessons learned from health master programs. *Medical Teacher*, *39*(2), 203–211. https://doi.org/10.1080/0142159X.2016.1248915

Dekker, T. J. (2020). Teaching critical thinking through engagement with multiplicity. *Thinking Skills and Creativity*, *37*, 100701. https://doi.org/10.1016/j.tsc.2020.100701

Dennis, J., & O'Hair, M. J. (2010). Overcoming Obstacles in Using Authentic Instruction: A Comparative Case Study of High School Math & Science Teachers. *American Secondary Education*, 38(2), 4–22.

Dewey, J. (1933). *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process.* D.C. Heath & Co Publishers.

Dogruer, S. S., & Akyuz, D. (2020). Mathematical Practices of Eighth Graders about 3D Shapes in an Argumentation, Technology, and Design-Based Classroom Environment. *International Journal of Science and Mathematics Education*, *18*(8), 1485–1505. https://doi.org/10.1007/s10763-019-10028-x

Dolapcioglu, S., & Doğanay, A. (2020). Development of critical thinking in mathematics classes via authentic learning: An action research. *International Journal of Mathematical Education in Science and Technology*, 0(0), 1–24. https://doi.org/10.1080/0020739X.2020.1819573

Dwyer, C. P., Hogan, M. J., & Stewart, I. (2014). An integrated critical thinking framework for the 21st century. *Thinking Skills and Creativity*, *12*, 43–52. https://doi.org/10.1016/j.tsc.2013.12.004

Elder, L., & Paul, R. (2012). *The thinker's guide to intellectual standards: The words that name them and the criteria that define them.* Foundation for Critical Thinking Press.

Emmer, E. T., & Millett, G. B. (1970). *Improving teaching through experimentation: A laboratory approach*. Prentice-Hall.

Ennis, R. (2018). Critical Thinking Across the Curriculum: A Vision. Topoi, 37(1), 165–184.

Ennis, R. H. (2011). The nature of critical thinking: An outline of critical thinking dispositions and abilities. *Inquiry: Critical Thinking Across the Disciplines*, *26*(2), 1–8. https://doi.org/10.5840/inquiryctnews201126214 Erikson, M. G., & Erikson, M. (2019). Learning outcomes and critical thinking – good intentions in conflict. *Studies in Higher Education*, *44*(12), 2293–2303. https://doi.org/10.1080/03075079.2018.1486813

Evendi, E., & Verawati, N. N. S. P. (2021). Evaluation of Student Learning Outcomes in Problem-Based Learning: Study of Its Implementation and Reflection of Successful Factors. *Jurnal Penelitian Pendidikan IPA*, 7(SpecialIssue), 69–76. https://doi.org/10.29303/jppipa.v7iSpecialIssue.1099

Festiawan, R. (2021). The Problem-Based Learning: How the effect on student critical thinking ability and learning motivation in COVID-19 pandemic? *Journal of Sport Area*, 6(2), 231–243.

Firdaus, F., Kailani, I., Bakar, M. N. B., & Bakry, B. (2015). Developing Critical Thinking Skills of Students in Mathematics Learning. *Journal of Education and Learning*, *9*(3), 226–236.

Frye, A. W., & Hemmer, P. A. (2012). Program evaluation models and related theories: AMEE Guide No. 67. *Medical Teacher*, *34*(5), e288–e299. https://doi.org/10.3109/0142159X.2012.668637

Fukuzawa, S., Boyd, C., & Cahn, J. (2017). Student Motivation in Response to Problem-Based Learning. *Collected Essays on Learning and Teaching*, *10*, 175–187.

George, B., Desmidt, S., Cools, E., & Prinzie, A. (2018). Cognitive styles, user acceptance and commitment to strategic plans in public organizations: An empirical analysis. *Public Management Review*, *20*(3), 340–359. https://doi.org/10.1080/14719037.2017.1285112

Ghanizadeh, A. (2017). The interplay between reflective thinking, critical thinking, self-monitoring, and academic achievement in higher education. *Higher Education*, 74(1), 101–114. https://doi.org/10.1007/s10734-016-0031-y

Gilmanshina, S., Smirnov, S., Ibatova, A., & Berechikidze, I. (2021). The assessment of critical thinking skills of gifted children before and after taking a critical thinking development course. *Thinking Skills and Creativity*, *39*, 100780. https://doi.org/10.1016/j.tsc.2020.100780

Güner, P., & Gökçe, S. (2021). Linking critical thinking disposition, cognitive flexibility and achievement: Math anxiety's mediating role. *The Journal of Educational Research*, *114*(5), 458–473. https://doi.org/10.1080/00220671.2021.1975618

Hake, R., R. (1999). Analyzing change/gain scores. Indiana University: Woodland Hills, CA - USA.

Harun, N. F., Yusof, K. M., Jamaludin, M. Z., & Hassan, S. A. H. S. (2012). Motivation in Problembased Learning Implementation. *Procedia - Social and Behavioral Sciences*, *56*, 233–242. https://doi.org/10.1016/j.sbspro.2012.09.650

Hung, W. (2011). Theory to reality: A few issues in implementing problem-based learning. *Educational Technology Research and Development*, *59*(4), 529–552. https://doi.org/10.1007/s11423-011-9198-1

Karmina, S., Dyson, B., Watson, P., & Philpot, R. (2021). Teacher Implementation of Cooperative Learning in Indonesia: A Multiple Case Study. *Education Sciences*, *11*(5), 218. https://doi.org/10.3390/educsci11050218

Katz, B. P. (2021). Curated Collection: Assessment. *PRIMUS*, *0*(0), 1–14. https://doi.org/10.1080/10511970.2021.1879333

Kirkpatrick, D. (1996). Great Ideas Revisited: Revisiting Kirkpatrick's Four-Level Model. *Training & Development*, 50, 54–57.

Krishnan, S., Gabb, R., & Vale, C. (2011). Learning Cultures of Problem-Based Learning Teams. *Australasian Journal of Engineering Education*, *17*(2), 67–78. https://doi.org/10.1080/22054952.2011.11464057

Kroll, A. (2014). Why Performance Information Use Varies Among Public Managers: Testing Manager-Related Explanations. *International Public Management Journal*, *17*(2), 174–201. https://doi.org/10.1080/10967494.2014.905409

Kumar, M., & Natarajan, U. (2007). A problem-based learning model: Showcasing an educational paradigm shift. *The Curriculum Journal*, *18*(1), 89–102. https://doi.org/10.1080/09585170701292216

LaForce, M., Noble, E., & Blackwell, C. (2017). Problem-Based Learning (PBL) and Student Interest in STEM Careers: The Roles of Motivation and Ability Beliefs. *Education Sciences*, 7(4), 92. https://doi.org/10.3390/educsci7040092

Lee, C., & de Vries, W. T. (2019). Sustaining a Culture of Excellence: Massive Open Online Course (MOOC) on Land Management. *Sustainability*, *11*(12), 3280. https://doi.org/10.3390/su11123280

Li, H.-C., & Tsai, T.-L. (2017). The implementation of problem-based learning in a Taiwanese primary mathematics classroom: Lessons learned from the students' side of the story. *Educational Studies*, *43*(3), 354–369. https://doi.org/10.1080/03055698.2016.1277138

Luo, Y.-J. (2019). The influence of problem-based learning on learning effectiveness in students' of varying learning abilities within physical education. *Innovations in Education and Teaching International*, *56*(1), 3–13. https://doi.org/10.1080/14703297.2017.1389288

MacDonald, A. (2020). Mathematics education beliefs and practices of Under 3s educators in Australia. *European Early Childhood Education Research Journal*, 28(5), 758–769. https://doi.org/10.1080/1350293X.2020.1817246

Maulyda, M. A. (2020). Mathematics Learning Paradigm based on NCTM. CV IRDH.

Monrat, N., Phaksunchai, M., & Chonchaiya, R. (2022). Developing Students' Mathematical Critical Thinking Skills Using Open-Ended Questions and Activities Based on Student Learning Preferences. *Education Research International*, 2022, 1–11. https://doi.org/10.1155/2022/3300363

Moreno-Guerrero, A.-J., Aznar-Díaz, I., Cáceres-Reche, P., & Alonso-García, S. (2020). E-Learning in the Teaching of Mathematics: An Educational Experience in Adult High School. *Mathematics*, 8(5), 840. https://doi.org/10.3390/math8050840

Morgado, M., Mendes, J. J., & Proença, L. (2021). Online Problem-Based Learning in Clinical Dental Education: Students' Self-Perception and Motivation. *Healthcare*, *9*(4), 420. https://doi.org/10.3390/healthcare9040420

Muliadi, A., Prayogi, S., Bahalwan, F., Nirmala, W., & Verawati, N. N. S. P. (2021). Online Learning During the Covid-19 Pandemic: Preservice Teacher's Perception. *Jurnal Penelitian Pendidikan IPA*, 7(3), 464–467. https://doi.org/10.29303/jppipa.v7i3.787

National Council of Teachers of Mathematics. (2000). *Principles, Standards, and Expectations— National Council of Teachers of Mathematics*. https://www.nctm.org/Standards-and-Positions/Principles-and-Standards/Principles,-Standards,-and-Expectations/

Nutt, P. C. (2006). Comparing Public and Private Sector Decision-Making Practices. *Journal of Public Administration Research and Theory*, *16*(2), 289–318. https://doi.org/10.1093/jopart/mui041

Onyekuru, B. U. (2015). Field Dependence-Field Independence Cognitive Style, Gender, Career Choice and Academic Achievement of Secondary School Students in Emohua Local Government Area of Rivers State. *Journal of Education and Practice*, 6(10), 76–85.

Palvia, S., Aeron, P., Gupta, P., Mahapatra, D., Parida, R., Rosner, R., & Sindhi, S. (2018). Online Education: Worldwide Status, Challenges, Trends, and Implications. *Journal of Global Information Technology Management*, *21*(4), 233–241. https://doi.org/10.1080/1097198X.2018.1542262

Panek, P. E., Funk, L. G., & Nelson, P. K. (1980). Reliability and Validity of the Group Embedded Figures Test across the Life Span. *Perceptual and Motor Skills*, *50*(3_suppl), 1171–1174. https://doi.org/10.2466/pms.1980.50.3c.1171

Pendlington, S. (2005). Mathematics Is Not Easy: The Importance of Teaching Children to Struggle. *Research in Mathematics Education*, 7(1), 3–17. https://doi.org/10.1080/14794800008520142

Peter, E. E. (2012). Critical thinking: Essence for teaching mathematics and mathematics problem solving skills. *African Journal of Mathematics and Computer Science Research*, *5*(3), 39–43. https://doi.org/10.5897/AJMCSR11.161

Pintrich, P. R., Marx, R. W., & Boyle, R. A. (1993). Beyond Cold Conceptual Change: The Role of Motivational Beliefs and Classroom Contextual Factors in the Process of Conceptual Change. *Review of Educational Research*, *63*(2), 167–199. https://doi.org/10.3102/00346543063002167

Pithers, R. T. (2002). Cognitive learning style: A review of the field dependent-field independent approach. *Journal of Vocational Education & Training*, *54*(1), 117–132. https://doi.org/10.1080/13636820200200191

Portuguez-Castro, M., & Gómez-Zermeño, M. G. (2020). Challenge Based Learning: Innovative Pedagogy for Sustainability through e-Learning in Higher Education. *Sustainability*, *12*(10), 4063. https://doi.org/10.3390/su12104063

Pozzi, F., Asensio-Perez, J. I., Ceregini, A., Dagnino, F. M., Dimitriadis, Y., & Earp, J. (2020). Supporting and representing Learning Design with digital tools: In between guidance and flexibility. *Technology, Pedagogy and Education*, 29(1), 109–128. https://doi.org/10.1080/1475939X.2020.1714708

Prameswari, N. S., Saud, M., Amboro, J. L., & Wahyuningsih, N. (2020). The motivation of learning art & culture among students in Indonesia. *Cogent Education*, 7(1), 1809770. https://doi.org/10.1080/2331186X.2020.1809770

Prayogi, S., Yuanita, L., & Wasis. (2018). Critical Inquiry Based Learning: A Model of Learning to Promote Critical Thinking Among Prospective Teachers of Physic. *Journal of Turkish Science Education*, *15*(1), 43–56.

Preus, B. (2012). Authentic Instruction for 21st Century Learning: Higher Order Thinking in an Inclusive School. *American Secondary Education*, 40(3), 59–79.

Procter, L. (2020). Fostering critically reflective thinking with first-year university students: Early thoughts on implementing a reflective assessment task. *Reflective Practice*, *21*(4), 444–457. https://doi.org/10.1080/14623943.2020.1773421

Rayner, S., & Cools, E. (2011). *Style Differences in Cognition, Learning, and Management: Theory, Research and Practice.* Routledge.

Rivera Pérez, J. F., Hart, R., & Lund, E. (2021). Vocabulary-learning cues used on children's bilingual programming. *Journal of Children and Media*, *15*(3), 301–319. https://doi.org/10.1080/17482798.2020.1802315

Romero Ariza, M., Quesada Armenteros, A., & Estepa Castro, A. (2021). Promoting critical thinking through mathematics and science teacher education: The case of argumentation and graphs interpretation about climate change. *European Journal of Teacher Education*, *0*(0), 1–19. https://doi.org/10.1080/02619768.2021.1961736

Ryan, M. (2013). The pedagogical balancing act: Teaching reflection in higher education. *Teaching in Higher Education*, 18(2), 144–155. https://doi.org/10.1080/13562517.2012.694104

Salamah, D. P. (2020). Analisis Kesalahan berdasarkan Newman Error Analysis terhadap Materi Peluang Kejadian Majemuk Ditinjau dari Gender dan Self Confidence pada Siswa Kelas XII SMK di Bandung Barat. *JPMI (Jurnal Pembelajaran Matematika Inovatif)*, *3*(4), 273–284. https://doi.org/10.22460/jpmi.v3i4.p%p

Sattarova, U., Groot, W., & Arsenijevic, J. (2021). Student and Tutor Satisfaction with Problem-Based Learning in Azerbaijan. *Education Sciences*, *11*(6), 288. https://doi.org/10.3390/educsci11060288

Savery, J. R. (2006). Overview of Problem-based Learning: Definitions and Distinctions. *Interdisciplinary Journal of Problem-Based Learning*, 1(1), Article 1. https://doi.org/10.7771/1541-5015.1002

Siburian, O., Corebima, A. D., Ibrohim, I., & Saptasari, M. (2019). The Correlation Between Critical and Creative Thinking Skills on Cognitive Learning Results. *Eurasian Journal of Educational Research*, *19*(81), 1–16. https://doi.org/10.14689/ejer.2019.81.6

Sireci, S., & Faulkner-Bond, M. (2014). Validity evidence based on test content. *Psicothema*, 26(1), 100–107. https://doi.org/10.7334/psicothema2013.256

Souza, A. C. de, Alexandre, N. M. C., Guirardello, E. de B., Souza, A. C. de, Alexandre, N. M. C., & Guirardello, E. de B. (2017). Psychometric properties in instruments evaluation of reliability and validity. *Epidemiologia e Serviços de Saúde*, *26*(3), 649–659. https://doi.org/10.5123/S1679-49742017000300022

Suhirman, S., Prayogi, S., & Asy'ari, M. (2021). Problem-Based Learning with Character-Emphasis and Naturalist Intelligence: Examining Students Critical Thinking and Curiosity. *International Journal of Instruction*, *14*(2), 217–232. https://doi.org/10.29333/iji.2021.14213a

Susandi, A. D., Sa'dijah, C., As'ari, A. R., & Susiswo. (2019). Students' critical ability of mathematics based on cognitive styles. *Journal of Physics: Conference Series*, *1315*(1), 012018. https://doi.org/10.1088/1742-6596/1315/1/012018

Syafril, S., Aini, N. R., Netriwati, Pahrudin, A., Yaumas, N. E., & Engkizar. (2020). Spirit of Mathematics Critical Thinking Skills (CTS). *Journal of Physics: Conference Series*, *1467*(1), 012069. https://doi.org/10.1088/1742-6596/1467/1/012069

Szenes, E., Tilakaratna, N., & Maton, K. (2015). The Knowledge Practices of Critical Thinking. In M. Davies & R. Barnett (Eds.), *The Palgrave Handbook of Critical Thinking in Higher Education* (pp. 573–591). Palgrave Macmillan US. https://doi.org/10.1057/9781137378057_34

Trostek, J. R. (2020). Between the modelling and the engineering of learning: Preservice teachers' performance in course essays. *Journal of Further and Higher Education*, 44(6), 781–794. https://doi.org/10.1080/0309877X.2019.1600665

Verawati, N. N. S. P., Hikmawati, H., & Prayogi, S. (2020). The Effectiveness of Inquiry Learning Models Intervened by Reflective Processes to Promote Critical Thinking Ability in Terms of Cognitive Style. *International Journal of Emerging Technologies in Learning (IJET)*, *15*(16), 212. https://doi.org/10.3991/ijet.v15i16.14687

Verawati, N. N. S. P., Hikmawati, H., Prayogi, S., & Bilad, M. R. (2021). Reflective Practices in Inquiry Learning: Its Effectiveness in Training Pre-Service Teachers' Critical Thinking Viewed from Cognitive Styles. *Jurnal Pendidikan IPA Indonesia*, *10*(4), 505–514. https://doi.org/10.15294/jpii.v10i4.31814

Viator, R. E., Harp, N. L., Rinaldo, S. B., & Marquardt, B. B. (2020). The mediating effect of reflective-analytic cognitive style on rational thought. *Thinking & Reasoning*, *26*(3), 381–413. https://doi.org/10.1080/13546783.2019.1634151

Wang, C.-C. (2021). The process of implementing problem-based learning in a teacher education programme: An exploratory case study. *Cogent Education*, 8(1), 1996870. https://doi.org/10.1080/2331186X.2021.1996870

Wirkala, C., & Kuhn, D. (2011). Problem-Based Learning in K-12 Education: Is it Effective and How Does it Achieve its Effects? *American Educational Research Journal*, 48(5), 1157–1186.

Witkin, H. A., & Goodenough, D. R. (1981). Cognitive styles: Essence and origins. Field dependence and field independence. *Psychological Issues*, *51*, 1–141.

Witkin, H. A., Moore, C. A., Goodenough, D., & Cox, P. W. (1977). Field-Dependent and Field-Independent Cognitive Styles and Their Educational Implications. *Review of Educational Research*, 47(1), 1–64. https://doi.org/10.3102/00346543047001001

Wood, T., Williams, G., & McNeal, B. (2006). Children's Mathematical Thinking in Different Classroom Cultures. *Journal for Research in Mathematics Education*, *37*(3), 222–255. https://doi.org/10.2307/30035059

Yuliati, L., Fauziah, R., & Hidayat, A. (2018). Student's critical thinking skills in authentic problem based learning. *Journal of Physics: Conference Series*, *1013*, 012025. https://doi.org/10.1088/1742-6596/1013/1/012025

Zaqiah, Q. Y., Suhendar, D., & Maryani, N. (2018). Evaluation of Teacher Performance to Quality Learning in Madrasah Aliyah (A Comparative Study between Madrasah Aliyah Model and Non-Model Madrasah Aliyah in West Java). *Proceedings of the International Conference on Islamic Education (ICIE 2018)*. International Conference on Islamic Education (ICIE 2018), Bandung, Indonesia. https://doi.org/10.2991/icie-18.2018.32