

DAFTAR PUSTAKA

- Afif, G. A., Supeno, S., & Ridlo, Z. R. (2022). Profil Literasi Bioteknologi Siswa SMP dalam Pembelajaran IPA. *Paedagogia: Jurnal Kajian, Penelitian dan Pengembangan Kependidikan*, 13(1), 8-14. <http://journal.ummat.ac.id/index.php/paedagogia>
- Akanbi, A. A. & Kolawole, C. B. (2014), Effects of Guided-Discovery and Self-Learning Strategies on Senior Secondary School Students' Achievement in Biology. *Journal of Education and Leadership Development*, 6(1), 19-42. <https://www.cenresinjournals.com/wp-content/uploads/2020/02/Page-19-42-0097.pdf>
- Anas, S. (2013). Pengantar Evaluasi Pendidikan. Bandung: Alfa Beta.
- Anderson, L. W., & Krathwohl, D. R. (2001). *A Taxonomy for Learning, Teaching and Assesing: a Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman Publishing.
- Anderson, L. W., & Krathwohl, D. R. (2010). *Kerangka landasan untuk pembelajaran, pengajaran dan asesmen - Revisi taksonomi pendidikan Bloom*. Yogyakarta: Pustaka Pelajar.
- Arikunto S. (2013). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta
- Association of American Colleges and Universities (=AACU). (2010). *Scientific Reasoning Rubric*. <https://www.aacu.org>
- Aunurrahman. (2011). *Belajar dan Pembelajaran*. Bandung: Alfabeta.
- Azhar, L.O.M, Roini, S. & Hasan S. (2021). Pengaruh Model Pembelajaran *Reading Questioning And Answering* (RQA) Melalui *Virtual Class* Terhadap Keterampilan Metakognitif Dan Hasil Belajar Kognitif Mahasiswa Program Studi Pendidikan Biologi Pada Mata Kuliah Kemampuan Dasar Mengajar. *Edukasi* 19(2): 151-160. <https://doi.org/10.33387/j.edu.v19i2.3818>
- Bahri, A., & Corebima, A. D. (2015). The Contribution of Learning Motivation and Metacognitive Skill on Cognitive Learning Outcomes of Students within Different Learning Strategies. *Journal of Baltic Science Education*, 14(4), 487–500. <https://doi.org/10.33225/jbse/15.14.487>
- Bahri, A., & Idris, I. S. (2017). Teaching thinking: memberdayakan keterampilan metakognitif mahasiswa melalui PBLRQA (Integrasi problem-based learning dan reading, questioning, & answering). In *Seminar Nasional LP2M UNM*, 59–69. <http://eprints.unm.ac.id/id/eprint/11573>
- Bahri, A., Corebima, A. D., Amin, M., & Zubaidah, S. (2016). Potensi strategi problem-based learning (PBL) terintegrasi reading questioning and

answering (RQA) untuk meningkatkan hasil belajar kognitif mahasiswa berkemampuan akademik berbeda. *Jurnal Pendidikan Sains*, 4(2), 49-59. <http://dx.doi.org/10.17977/jps.v4i2.8182>

Bahri, S., Aji, A., & Yani, F. (2018). Pembuatan Bioetanol dari Kulit Pisang Kepok dengan Cara Fermentasi Menggunakan Ragi Roti. *Jurnal Teknologi Kimia Unimal*, 7(2), 85-100. <https://doi.org/10.29103/jtku.v7i2.1252>

Bao, L. C. (2009). *Physics Learning and Scientific Reasoning*. New York: Science New York.

Bloom, B. S. (1975). *Taxonomy of Educational Objectives, Book 1 Cognitive Domain*. New York: Longman Publishing.

Brown, N. J. S., Furtak, E. M., Timms, M., Nagashima, S. O., & Wilson, M. (2010). The evidence Based Reasoning Framework: Assessing Scientific Reasoning. *Educational Assessment*, 15, 123-141. <https://doi.org/10.1080/10627197.2010.530551>

Bruner, J. S. (1961). The act of discovery. *Harvard Educational Review*, 31, 21-32. <https://digitalauthorship.org/wp-content/uploads/2015/01/the-act-of-discovery-bruner.pdf>

Campbell, N. A. & Reece, J. B. (2008). *Biologi (Ed ke-8) Jilid 2*. Jakarta: Erlangga.

Corebima, A. D., & Bahri, A. (2011). *Reading, Questioning, and Answering (RQA): A New Learning Strategy to Enhance Student Metacognitive Skill and Concept Gaining*. Paper presented at International Symposium at Nanyang Technology University, Singapura.

Dadang, I., Mulyasa, & Wiwik, D., A. (2017). *Revolusi dan Inovasi Pembelajaran*. Bandung: Remaja Rosdakarya.

Dahar, R. W. (2011). *Teori-Teori Belajar dan Pembelajaran*. Jakarta: Erlangga.

Dahar, R.W. (1996). *Teori-Teori Belajar*. Jakarta: Erlangga

Darmadi. (2017). *Pengembangan Model Metode Pembelajaran dalam Dinamika Belajar Peserta didik*. Yogyakarta: Budi Utama.

Daryanti, E. P., Rinanto, Y., & Dwiastuti, S. (2015). Peningkatan Kemampuan Penalaran Ilmiah melalui Model Pembelajaran Inkuiri Terbimbing pada Materi Sistem Pernapasan Manusia. *Jurnal Pendidikan Matematika dan Sains Tahun III*, 2, 163-168. <https://doi.org/10.21831/jpms.v6i2.10948>

De Jong, T., & Lazonder, A. W. 2014. The guided discovery learning principle in multimedia learning. In R. E. Mayer (Ed.), *The Cambridge handbook of multimedia learning*. United Kingdom: Cambridge University Press.

- Dinsmore, D. L., & Fryer, L. K. (2023). Critical thinking and its relation to strategic processing. *In Educational Psychology Review* 35(36): 1-15. <https://doi.org/10.1007/s10648-023-09755-z>
- Eggen, P., & Kauchak, D. (2012). *Strategies and Models for Teachers: Teaching Content and Thinking Skills (6th ed.)*. Boston: Pearson.
- Erlina, N. (2016). Penalaran Ilmiah Dalam Pembelajaran Fisika. *Prosiding Seminar Nasional Tahun 2016*, 473-480. https://www.researchgate.net/profile/Nia-Erlina/publication/313401257_PENALARAN_ILMIAH_DALAM_PEMBELAJARAN_FISIKA/links/589988454585158bf6f8441c/PENALARAN_ILMIAH-DALAM-PEMBELAJARAN-FISIKA.pdf
- Fatirani, H. (2022). Meningkatkan Hasil Belajar Konsep Sistem Ekskresi Manusia Melalui Penggunaan Model Pembelajaran Kooperatif Tipe Jigsaw. *Secondary: Jurnal Inovasi Pendidikan Menengah*, 2(2), 223-231. <https://doi.org/10.51878/secondary.v2i2.1143>
- Febriyanti, A. E., Sari, C. N., & Adisyahputra. (2017). Effectiveness of Growth Media Commercial Yeast (*Saccharomyces cerevisiae*) For Bioethanol Fermentation From Water Hyacinth (*Eicchornia crassipes*). *Bioma*, 12(2), 112-117. [https://doi.org/10.21009/Bioma12\(2\).6](https://doi.org/10.21009/Bioma12(2).6)
- Febriyanti, A. E., Sari, C. N., & Adisyahputra. (2017). Effectiveness of Growth Media Commercial Yeast (*Saccharomyces cerevisiae*) For Bioethanol Fermentation From Water Hyacinth (*Eicchornia crassipes*). *Bioma*, 12(2), 112-117. [https://doi.org/10.21009/Bioma12\(2\).6](https://doi.org/10.21009/Bioma12(2).6)
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How To Design and Evaluate Research in Education* (8th Ed). New York: McGraw Hill.
- Ga, P. R., Adoe, T. Y., Bulu, V. R. & Nurhabibah, S. (2021). Pengaruh Model Pembelajaran RQA dalam Pembelajaran Daring Terhadap Hasil Belajar Mahasiswa. *Jurnal Jendela Pendidikan* 1(3), 156-162 <https://www.ejournal.jendelaedukasi.id/index.php/JJP>
- Guyton A.C & J.E. Hall. (2006). *Textbook of Medical Physiology* (11th Ed). Philadelphia: Elsevier Saunders.
- Haavold, P. Ø., & Sriraman, B. (2022). Creativity in problem solving: Integrating two different views of insight. *ZDM - Mathematics Education* 54(1), 83-96. <https://doi.org/10.1007/s11858-021-01304-8>
- Hairida, & Hadi, L. (2017). Improving Student'S Critical Thinking Skills Through Sets Vision Learning. *USEJ Unnes Science Education Journal*, 6(2), 1561-1566. <https://doi.org/10.15294/usej.v6i2.15824>
- Hake, R. (1999). *Analizing Change/Gain Scores*. Indiana University.

- Hammer, D. (1997). Discovery Learning and Discovery Teaching. *Cognition and Instruction*, 15(4), 485-529. <http://www.jstor.org/stable/3233776>
- Hariyadi, S., & Corebima, A. D. (2019). The distribution of patterns and types of questions in genetic learning implementing reading-questioning-answering learning model. *International Journal of Environmental and Science Education*, 14(8), 469-477. http://www.ijese.net/makale_indir/IJESE_2137_article_5d91ffa285120.pdf
- Hariyadi, S., Corebima, A. D., Zubaidah, S., & Ibrohim, I. (2017). The comparison of the question types in the RQA (reading, questioning, and answering) learning model and conventional learning model. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, 4(7), 10-18. <http://dx.doi.org/10.20431/2349-0381.0407002>
- Hariyanto, Hikamah, S. R., Maghfiroh, N. H., & Priawasana, E. (2023). The potential of the discovery learning model integrated the reading, questioning, and answering model on cross-cultural high school students' problem-solving skills. *Journal of Education and Learning (EduLearn)*, 17(1), 58-66. <https://doi.org/10.11591/edulearn.v17i1.20599>
- Hatchi, I., Ulinniam, Salawati, & Sudirman, D. (2024). *Dasar-dasar Pendidikan Biologi*. Medan: Media Penerbit Indonesia.
- Herlianti, Sefaniyah, & Indri, A. (2018). Pemanfaatan limbah kulit pisang sebagai Bahan Baku pembuatan Bioetanol. *Jurnal Teknologi*, 6(1), 1-10. <https://doi.org/10.31479/jtek.v6i1.1>
- Hikamah, S. R., Hariyanto, Maghfiroh, N. H., & Isriyah, M. (2024). Discovery Learning Model Integrated RQA to Improve Critical Thinking Skills, Metacognitive Skills and Problem-Solving Through Science Material for Junior High School Students. *Pegem Journal of Education and Instruction*, 14(4), 287-294. <https://doi.org/10.47750/pegegog.14.04.25>
- Hill, M., M.D.S., & Johnston, H. (2015). How Online Learning Can Improve The Representational Fluency and Conceptual Understanding of University Physics Students. *European Journal of Physics*, 36, 1-20. <https://doi.org/10.12973/eurasia.2015.1427a>
- Hosnan, M. (2014). *Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21*. Bogor: Ghalia Indonesia.
- Ijeoma, E. C., & Rita, A. L. Effects Of Discovery Learning And Problem-Based Instructional Approaches On Secondary School Students' Achievement In Biology, *International Journal of Research and Scientific Innovation (IJRSI)*, 8(5), 1-7. <https://rsisinternational.org/journals/ijrsi/digital-library/volume-8-issue-5/01-07.pdf>

- Inah, E. N. (2015). Peran Komunikasi Dalam Interaksi Guru Dan Peserta didik. *Al-TA'DIB: Jurnal Kajian Ilmu Kependidikan*, 8(2), 150-167. <http://dx.doi.org/10.31332/atdb.v8i2.416>
- Jensen, J.L., McDaniel, M.A., Woodard, S. M., & Kummer, T. A. (2014). Teaching to the test... or testing to teach: Exams requiring higher order thinking skills encourage greater conceptual understanding. *Educational Psychology Review*, 26(2), 307–329. <https://doi.org/10.1007/s10648-013-9248-9>
- Jin, E., & Sutherland, J.W. (2016). A Proposed Integrated Sustainability Model for a Bioenergy System. *Procedia CIRP*, 48, 358–363. <https://doi.org/10.1016/j.procir.2016.03.159>
- Karplus, R., Fuller, R., & Lawson, A. E. (1977). Can physics develop reasoning?. (1977). *Research Papers in Physics and Astronomy*, 2(1), 23-28. <https://digitalcommons.unl.edu/physicsfuller/31>
- Koenig, K., Schen, M., & Bao, L. (2012). Explicitly Targeting Pre-Service Teacher Scientific Reasoning Ability and Understanding of Nature of Science Through an Introductory Science Course. *Science Educator*, 21(2), 1-9. <https://static.nsta.org/connections/college/201307koenig.pdf>
- Kristiani, N., Susilo, H., Rohman, F., & Aloysius, D. C. (2015). The contribution of students' metacognitive skills and scientific attitude towards their academic achievements in biology learning implementing Thinking Empowerment by Questioning (TEQ) learning integrated with inquiry learning (TEQI). *International Journal of Educational Policy Research and Review*, 2(9), 113–120. <https://doi.org/10.15739/IJEPRR.020>
- Kundariati, M., Maghfiroh, L., Indriwati, S. E., Rohman, F., Priambodo, B., & Atan, N. A. (2021). Scientific reasoning skills (SRS): Predictor to the student's problem-solving in the biology classroom?. *Biosfer: Jurnal Pendidikan Biologi*, 14(2), 189-200. <https://doi.org/10.21009/biosferjpb.20238>
- Kusuma, A. S. & Baskara, Z. W. (2023). Pengaruh strategi pembelajaran reading questioning and answering (RQA) terintegrasi mind mapping terhadap keterampilan metakognitif dan retensi mahasiswa. *Jurnal Ilmiah Profesi Pendidikan*, 8(1), 929–938. <https://doi.org/10.29303/jipp.v8i1b.1312>
- Lashari, D. A., Lisa, Y. & Julung, H. (2017). Pengaruh model *reading, questioning, answering* (RQA) terhadap pengetahuan metakognitif siswa pada materi sistem pernapasan manusia. *JPBIO (Jurnal Pendidikan Biologi)*, 2(2), 27-33. <https://doi.org/10.31932/jpbio.v2i2.222>
- Lawson, A. E., Alkhoury, S., Benford, R., Clark, B. R., & Falconer, K. A. (2000). What kinds of scientific concepts exist? Concept construction and intellectual development in college biology. *Journal of Research in Science*

Teaching, 37(9), 996-1018. [https://doi.org/10.1002/1098-2736\(200011\)37:9<996::AID-TEA8>3.0.CO;2-J](https://doi.org/10.1002/1098-2736(200011)37:9<996::AID-TEA8>3.0.CO;2-J)

Levinson, Ralph. (2015). Towards a Theoretical Framework for Teaching Controversial Socioscientific Issues. *International Journal of Science Education*, 28(10), 1204. <https://doi.org/10.1080/09500690600560753>

Liu, Y. & Pásztor, A. (2022). Effects of problem-based learning instructional intervention on critical thinking in higher education: A meta-analysis. *Thinking Skills and Creativity*, 45, 101069. <https://doi.org/10.1016/j.tsc.2022.101069>

Loeneto, B. A., Er-nalida, E., Eryansyah, E., Alwi, Z., & Oktarina, S. (2020). In-Service Teacher Training and Education in Indonesia. *Creative Education* 11, 328-342. <https://doi.org/10.4236/ce.2020.113026>

Maemonah & Suhandi. (2022). Analisis Instrument Tes Multiple Choice Sebagai Alat Evaluasi Mata Pelajaran Ski Kelas IX Di MTS Pringgabaya. *Jurnal PRIMED: Primary Education Journal*, 2(2), 91-101. <https://doi.org/10.33379/primed.v2i2.1363>

Mayer, D., Sodian, B., Koerber, S., & Schwippert, K. (2014). Scientific reasoning in elementary school children: Assessment and relations with cognitive abilities. *Learning and Instruction*, 29(1), 43–55. Retrieved from <https://www.learntechlib.org/p/199386>

Mazfufah, N. F., Herlanti, Y. & Mardiaty, Y. (2017). Increasing Scientific Reasoning within Discussion of Scientific and Socioscientific Issues on Virus Topics. 3rd International Conferences on Education in Muslim Society (ICEMS 2017). *Advances in Social Science, Education and Humanities Research*, 115. <http://dx.doi.org/10.2991/icems-17.2018.39>

Mehta, S. R., & Al-Mahrooqi, R. (2015). Can thinking be taught? Linking critical thinking and writing in an EFL context. *RELC Journal*, 46(1), 23–36. <https://doi.org/10.1177/0033688214555356>

Miller, M.D., Linn, R.L., & Gronlund, N.E. (2009). *Measurement and Assessment in Teaching*. New Jersey: Pearson.

Mufidah, S., & Wijaya, A. (2017). Pengembangan perangkat realistik pada materi aritmatika soal untuk meningkatkan kemampuan berpikir tingkat tinggi peserta didik SMP Kelas VII. *Jurnal Pendidikan Matematika*, 6(4), 11-8. <https://doi.org/10.21831/jpm.v6i4.6970>

Mujahidin, A., Sulasmi, E. S., & Kunci, K. (2018). Pengaruh Penerapan RQA (*Reading, Questioning, and Answering*) terhadap Hasil Belajar Kognitif Mahasiswa. *Prosiding Seminar Nasional Hayati* 6(1), 375-378. <https://doi.org/10.29407/hayati.v6i1.622>

- Mukhlis, Yacob, F., & Rafdi, M. (2023). Pemanfaatan Limbah Ampas Tebu melalui Fermentasi Menjadi Bioetanol Sebagai Energi Alternatif Rumah Tangga. *Jurnal Ilmiah Mahapeserta didik*, 1(1), 26-38. <https://jim.ar-raniry.ac.id/index.php/ej/article/view/336>
- Mulyadi, Adlim, & Djufri. (2014). Memberdayakan Kemampuan Berpikir Mahasiswa Melalui Model Pembelajaran *Reading Questioning And Answering* (Rqa). *Biotik: Jurnal Ilmiah Biologi Teknologi dan Kependidikan*, 2(1): 33-37. <https://doi.org/10.22373/biotik.v2i1.2511>
- Nasrudin, H. & Azizah, U. (2019). Reading, questioning, and answering (RQA) strategies': An alternative to empowering undergraduate student thinking abilities. *Atlantis Highlights in Chemistry and Pharmaceutical Sciences*, 1(0), 135-139. <http://doi.org/10.2991/snk-19.2019.32>
- Neka, I. K., Marhaeni, M. P. A. N., & Suastra, M. P. P. I. W. (2015). Pengaruh Model Pembelajaran Inkuiri Terbimbing Berbasis Lingkungan Terhadap Keterampilan Berpikir Kreatif Dan Penguasaan Konsep Ipa Kelas V SD Gugus VIII Kecamatan Abang. *E-Journal Pasca Sarjana*, 5(1), 1-11. <https://www.neliti.com/publications/124383/pengaruh-model-pembelajaran-inkuiri-terbimbing-berbasis-lingkungan-terhadap-kete>
- Nitko, A. J., & Brookhart, S. M. (2011). *Educational Assessment of Students* (6th Ed). Boston: Pearson.
- Nnorom, N.R. (2013). The Effect of Reasoning Skills on Students Achievement in Biology in Anambra State, *International Journal of Scientific & Engineering Research*, 4(12), 2102-2120. <https://www.ijser.org/researchpaper/The-Effect-of-Reasoning-Skills-on-Students-Achievement.pdf>
- Nugrahini, Y. (2020). Multi-literacy Learning Model. *Journal of English Language Teaching Learning and Literature*, 3(1), 66-88. <https://journal.stkipppgtritenggalek.ac.id/index.php/kid/article/view/167>
- Pramudiyanto, A. S. & Suedy, S. W. A. (2019), Energi Bersih dan Ramah Lingkungan dari Biomassa untuk Mengurangi Efek Gas Rumah Kaca dan Perubahan Iklim yang Ekstrim. *JEBT: Jurnal Energi Baru & Terbarukan*, 1(3), 86-99. <https://doi.org/10.14710/jebt.2020.9990>
- Purwianingsih, W., Rustaman, N. Y., & Redjeki, S. (2009). Identifikasi Kesulitan Pembelajaran Bioteknologi pada Guru SLTA se Jawa Barat. In *Seminar Nasional: Inovasi Biologi dan Pendidikan Biologi dalam Pengembangan Sumber Daya Manusia*, Bandung.

- Putri, E., Rinanto, Y. & Widiastuti, S. (2015). Peningkatan Kemampuan Penalaran Ilmiah melalui Model Pembelajaran Inkuiri Terbimbing Pada Materi Sistem Pernapasan Manusia. *Jurnal Pendidikan Matematika dan Sains UNS Tahun III*, 3(2), 163-168. <https://doi.org/10.21831/jpms.v6i2.10948>
- Ramadani, S., Alfian & Gusriani, N. (2022). Model pembelajaran reading questioning and answering berpengaruh terhadap hasil belajar biologi siswa di madrasah aliyah. *EDU-BIO: Jurnal Pendidikan Biologi*, 6(1), 36–43. <https://doi.org/10.30631/edubio.v6i2.20>
- Riduwan. (2010). *Skala Pengukuran Variabel-variabel Penelitian*. Bandung: Alfabeta.
- Ristante, R. H., Rusdi, Aulia, M. I. (2023). Reading, Mind Mapping, Sharing (RMS) And Reading, Questioning, Answering (RQA): Their Effect on the Higher-Order Thinking Skills (HOTS). *Indonesian Journal of Biology Education* 6(2), 78-87. <https://doi.org/10.31002/ijobe.v6i2.903>
- Rohayati, I., Aminah, N., & Ekawati, E. (2013). Penyusunan instrumen tes formatif fisika SMP. *Jurnal Pendidikan Fisika*, 1(1), 46-54. <https://jurnal.fkip.uns.ac.id/index.php/pfisika/article/view/1777>
- Rompegading, A. B., Syam, L. & Nasir, M. (2022). Effect of using the reading, questioning, and answering (RQA) assistance of the quizizz media learning model on the science literature ability of students. *Jurnal Penelitian Pendidikan IPA*, 8(6), 3165-3169. <https://doi.org/10.29303/jppipa.v8i6.2412>
- Rustaman, N. (2007). “Kemampuan Dasar Bekerja Ilmiah dalam Pendidikan Sains dan Assesmennya” on The 1st International Seminar on Science Education. UPI Bandung.
- Saadah, A. F., Fauzi, A., & Juanda, B. (2017). Peramalan Penyediaan dan Konsumsi Bahan Bakar Minyak Indonesia. *Jurnal Ekonomi dan Pembangunan Indonesia*, 17(2), 118-137. <https://doi.org/10.21002/jepi.v17i2.661>
- Sadler, T. D. (2011). *Socio-scientific Issues in the Classroom*. New York: Springer Science+Bussiness Media.
- Schunk, D. H. (2012). *Learning Theories*. Jakarta: Pustaka belajar.
- Setiawan, M. A. (2017). *Belajar dan Pembelajaran*. Ponorogo: Uwais Inspirasi Indonesia.
- Setiawati H. & Corebima, A. D. (2017). Empowering Critical Thinking Skills Of The Students Having Different Academic Ability in Biology Learning of Senior High School through PQ4R - TPS Strategy. (2017). *International Journal of Social Sciences and Humanities Invention* 4(5), 3521-3526. <https://doi.org/10.18535/ijsshi/v4i5.09>

- Shieh, C. J., & Yu, L. A. (2016). Study on Information Technology Integrated Guided Discovery Instruction toward Students Learning Achievement and Learning Retention. *Eurasia Journal of Mathematics, Science & Technology Education*, 12(4), 833-842. <https://doi.org/10.12973/eurasia.2015.1554a>
- Stiggins, R. J. (1994). *Student Centered Classroom Assessment*. New York: Macmillan College Publishing Company.
- Sudin, Duda, H. J. & Supiandi, M. I. (2018). Pengaruh model reading questioning answering terhadap pernapasan manusia. *JPBIO (Jurnal Pendidikan Biologi)*, 3(1), 1-8. <https://doi.org/10.31932/jpbio.v3i1.260>
- Sugiyono. (2013). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Bandung: Alfabeta.
- Suranti, N. M. Y., Gunawan & Sahidu, H. (2016). Pengaruh Model Project Based Learning Berbantuan Media Virtual Terhadap Penguasaan Konsep peserta didik Materi Alat-alat Optik. *Jurnal Pendidikan Fisika Dan Teknologi*, 2(2), 73-79. <https://doi.org/10.29303/jpft.v2i2.292>
- Susongko, P. Perbandingan Keefektifan Bentuk Tes Uraian dan Testlet dengan Penerapan Graded Response Model (Grm). *Jurnal Penelitian dan Evaluasi Pendidikan*, 14(2), 269-288. <https://journal.uny.ac.id/index.php/jpep/article/view/1082>
- Suyidno, Nur, M., Yuanita, L., Prahani, B. K., & Jatmiko, B. (2018). Effectiveness of Creative Responsibility Based Teaching (CRBT) Model on Basic Physics learning to Increase Student's Scientific Creativity and Responsibility. *Journal of Baltic Science Education*, 17(1), 136-151. <https://doi.org/10.33225/jbse/18.17.136>
- Tanti, Y. A., Yuki R. J., Anastasia P. K. & Buana G. (2011). Fermentasi hidrolisat eceng gondok menjadi bioetanol menggunakan *Pichia stipitis*. *Prosiding Seminar Nasional Teknik Kimia Kejuangan. Pengembangan Teknologi Kimia untuk Pengolahan Sumber Daya Alam Indonesia*, Yogyakarta. [link fermentasi hidrolisat eceng gondok menjadi bioetanol menggunakan pichia stipitis .pdf](#)
- Thieman, W.J. & M.A. Palladino. (2006). *Introduction to Biotechnology* (2nd Ed). USA: Pearson International.
- Tushar H. & Sooraksa, N. (2023). Global employability skills in the 21st century workplace: A semi-systematic literature review. *Heliyon* 9, 1-14. <https://doi.org/10.1016/j.heliyon.2023.e21023>
- Wardiah, R. (2020). Penerapan Model Discovery Learning Untuk Meningkatkan Hasil Belajar Peserta didik Kelas Viii Pada Materi Sistem Ekskresi Di SMP Negeri 1 Hutaraja Tinggi. *Jurnal Kajian Filosofis, Teoritis di Bidang Pendidikan*, 5(2), 145-151.

Yuberti. (2013). *Teori Pembelajaran dan Pengembangan Bahan Ajar dalam Pendidikan*. Bandar Lampung: Anugrah Utama Raharja.

Zimmerman, C. (2005). *The Development of Scientific Reasoning Skills: What Psychologists Contribute to an Understanding of Elementary Science Learning*. Normal: Learning Illinois State University.

Zubaidah, S., Corebima, A. D., Mahanal, S., & Mistianah. (2018). Revealing the relationship between reading interest and critical thinking skills through remap GI and remap jigsaw. *International Journal of Instruction*, 11(2), 41–56. <https://doi.org/10.12973/iji.2018.1124a>

Zulkifliani, Z., Handayani, S., Adisyahputra, A., & Sakarani, D. (2017). Seleksi Senyawa Penghidrolisis Untuk Menghasilkan Gula Reduksi Dari Limbah Kulit Ari Kedelai Sebagai Bahan Fermentasi Bioetanol. *Bioma*, 13(1), 1-8. [https://doi.org/10.21009/Bioma13\(1\).1](https://doi.org/10.21009/Bioma13(1).1)

