

## DAFTAR PUSTAKA

- Ade, I.P., dan Agung, I.G. (2018). *Panduan Penelitian Eksperimen Beserta Analisis Statistik dengan SPSS*. Yogyakarta: Deepublish.
- Arends, R. (2007). *Learning to Teach : Belajar untuk Mengajar Edisi Ketujuh Buku Dua*. Yogyakarta : Pustaka pelajar.
- Arikunto, S. (2013). *Dasar-dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara.
- Arini, A. N. (2019). Analysis of Problem Solving Skills and Students Scientific Attitude through the Implementation of Problem Based Learning Module. *Journal of Innovative Science Education*, 7(2), 68-75.
- Amaringga, N.G., Amin, M., & Irawati, M. H. (2021). The effect of problem-based learning module containing research results to improve students' scientific literacy. *AIP Conference Proceedings*, 2330 (March).
- Alatas, F., & Fauziah, L. (2020). Model problem based learning untuk meningkatkan kemampuan literasi sains pada konsep pemanasan global. *JIPVA (Jurnal Pendidikan IPA Veteran)*, 4(2), 102.
- Brigli, B. (2015). Creative and Critical Thinking Skills in Problem Based Learning Environment. *Journal of Gifted Education and Creativity*. 2(2): 71-80.
- Djamarah, S.B., dan Zain, A. (2010). *Strategi Belajar Mengajar*. Jakarta : Rineka Cipta.
- Elina, E. D. S., Jumadi, Scnam, Wilujeng, I,. (2015). *Project-Based Learning Model To Equip Student's ICT Literacy. Proceedings Of International Seminar on Science Education at Yogyakarta State University*. 97-108
- Eric. (2003). *Teaching Problem Solving secondary School Science*, <http://www.ericfacillity.net/ericdigest/ed309049.html> (accesses februari 2018)
- Fatthurohman, M. (2015). *Model-model Pembelajaran Inovatif*. Ar-Ruzz Media: Yogyakarta.
- Fisher, L. (2010). An examination of project based learning in relationship to student self-concept (Master's thesis). Retrieved from <https://digital.library.wisc.edu/1793/47142>.
- Giancoli, D. C. (2002). *Fisika Jilid I Edisi Kelima*. Jakarta: Erlangga.

- Goran, M. B. D. (2021). Profil Kemampuan Berpikir Kreatif Siswa kelas X SMA Negeri 1 Demon Pagong Flores Timur. *Jurnal Pendidikan Fisika*, 5(2): 114-121.
- Hasrawati, Ikhsan, M., & Hajidin. (2020). Improving students' problem-solving ability and learning motivation through problem based learning model in senior high school. *Journal of Physi: Conference Series*. 1460(1). 1-6.
- Heller, K & Heller, P. (2010). *Cooperative problem solving in Physics A user's Manual*. Amerika Serikat: University of Minnesota.
- Hosnan. (2014). *Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21*. Jakarta : Ghalia Indonesia.
- Ishaq. M. (2007). *Fisika Dasar Edisi 2*. Yogyakarta: Graha Ilmu.
- Joyce, B., Weil, M., dan Calhoun, E. (2009). *Model – Model Pengajaran*. Yogyakarta : Pustaka Belajar.
- Juleha, S., Nugraha, I., & Feranie, S. (2019). The effect of Project in Problem Based Learning on Students' Scientific and Information Literacy in Learning Human Excretory System. *Journal of Science Learning*. 2(2), 33.
- Jumriana, Nursakinah, Mutmainna. (2022). Hubungan Antara kemampuan Berpikir Kreatif dengan Kemampuan Pemecahan Masalah Fisika Peserta Didik. *Jurnal Fisika dan Pembelajarannya (PHYDAGOGIC)*.5(1). 48-55.
- Levis & Goldberg. (2012). Teaching Generation TechX with the 4Cs: Using Technology to Integrate 21<sup>st</sup> Century Skills. *Journal of instructional research*. 1(2): 59-66.
- Lestari, E. P., Wasis, W., & Purnomo, T. (2022). Science Learning Materials in Integrated PBL Scientific Literacy Model to Improve Problem Solving Ability of Junior High School Students. *IJORER : International Journal of Recent Educational Research*, 3(4), 464–477.
- Kementerian Pendidikan dan Kebudayaan. (2014). *Model Pembelajaran Berbasis Proyek*. Lintas Media: Jakarta.
- Marliani, Novi. (2015). Peningkatan Kemampuan Berpikir Kreatif Matematis Siswa Melalui Model Pembelajaran Missouri Mathematics Project (MMP). *Jurnal Formatif*. 1(5): 14-25.

- Meador, K.S. 1997. *Creative Thinking and Problem Solving for Young Learners.pdf*. Colorado : Teacher Ideas Press.
- Meika, I., Sujana, A. (2017). Kemampuan Berpikir Kreatif dan Pemecahan Masalah Matematis Siswa SMA. *Jurnal Penelitian dan Pembelajaran Matematika*. 10(2): 8-13.
- Meltzer., & David. E. (2002). The Relationship Between Mathematics Preparation and Conceptual *Learning gain in physics: A possible onhidden Variables in Diagnostic pretest scores*. Ames: Department of physics and Astronomy, Iowa State University.
- Muliasitri, N. K., Nyoman, D., & Gede Rasben, D. (2019). Pengaruh Model Pembelajaran Inkuiri dengan Teknik Scaffolding Terhadap Kemampuan Literasi Sains dan Prestasi Belajar IPA. *Jurnal Ilmiah Sekolah Dasar*, 3(3).
- Musyriatul.F, Indrawati, A. A. Gani. (2015). Model pembelajaran berbasis proyek (project based learning) disertai media audio-visual dalam pembelajaran fisika di SMAN 4 Jember. *Jurnal pembelajaran Fisika*. 4(2): 181-186.
- Napitupulu, J. F., Simanjuntak, M.P., & Simurat, J. (2019). The Effect of Problem Based Learning Model on Students Learning Results and Students'problem Solving Skills. *Indonesia Science Education Research*, 1(1), 47-53.
- Ngalimun. (2014). *Strategi dan Model Pembelajaran*. Yogyakarta: Aswaja Pressindo.
- Nurfa, N. N., & Nana. (2020). Pengaruh Model Project Based Learning Terintegrasi 21st Century Skills Terhadap Kemampuan Berpikir Kreatif Siswa Fisika SMA. *Jurnal Penelitian Pendidikan Fisika*. 5(2), 109–115.
- Nurfitriyanti, M. (2016). Model Pembelajaran Project Based Learning Terhadap Kemampuan Pemecahan Masalah Matematika. *Formatif: Jurnal Ilmiah Pendidikan MIPA*. 6(2): 149–160.
- Patton, A. (2012). *Work that Matters The Teacher's Guide to Project Based Learning*. Paul Hamlin Foundation: U,K.
- Payadnya, I. P. A. A., & Jayantika, I. G. A. N. T. (2018). *Panduan Penelitian Eksperimen Beserta Analisis Statistiknya dengan SPSS*. Deepublish.
- Pituch, K. A., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences (6<sup>th</sup> ed.)*. Routledge.

- Proctor, M., Farquhar, C. (2006). Clinical Review. Diagnosis and management of Dysmenorrhea. Vol 332.
- Prastika, M. D., Wati, M., & Suyidno, S. (2019). The Effectiveness of Problem Based Learning in Improving Students Scientific Literacy Skills and Scientific Attitudes. *Berkala Ilmiah Pendidikan Fisika*, 7(3), 194.
- Rahmazatullaili, C. M. Zubainur, S.Munzir. (2017). Kemampuan berpikir kreatif dan pemecahan masalah siswa melalui penerapan model project based learning. *Jurnal tadriss matematika*. 10(2): 166-183.
- Rubini, B., Ardianto, D., Pursitasari, I. D., & Permana, I. (2016). Identify scientific Literacy from the science teachers' perspective. *Jurnal Pendidikan IPA Indonesia*. 5(2). 299-303.
- Sani, R. A. (2014). *Pembelajaran Saintifik Untuk Implementasi Kurikulum 2013*. Jakarta: Bumi Aksara.
- Santoso dan Ashari (2005). Analisis statistik dengan Microsoft Excel & SPSS. Yogyakarta: ANDI.
- Simanjuntak, M. P., (2019). Desain Pembelajaran Berbasis Proyek Terhadap 4C. *Jurnal INPAFI*. 7(3): 38-46.
- Simanjuntak, M. P., Bukit, N., Sagala, Y. D. A., Putri, R. K., Utami, Z. L., & Motlan. (2021). Desain Pembelajaran Ipa Berbasis Masalah Dan Multirepresentasi Terhadap Pemahaman Konsep dan Pemecahan Masalah. *Jurnal Inovasi Pembelajaran Fisika (INPAFI)*, 8(4), 20–25.
- Simanjuntak, M. P., Hutahaean, J., Marpaung, N., & Ramadhani, D. (2021). Effectiveness of problem-based learning combined with computer simulation on students' problem-solving and creative thinking skills. *International Journal of Instruction*, 14(3), 519–534.
- Simamora, R. E., Rotua Sidabutar, D., & Surya, E. (2017). Improving Learning Activity and Students' Problem Solving Skill through Problem Based Learning (PBL) in Junior High School. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 33(2), 321–331.
- Siregar, N., & Khairuna, K. (2022). Measuring Students' Problem-Solving Ability with Problem Based Learning (PBL) in Madrasah Aliyah Schools. *Bioedu science*, 6(2), 148–157.
- Slameto. (2010). *Belajar dan Faktor-Faktor yang Mempengaruhinya*. PT Rineka Cipta: Jakarta.

- Sosilo. (2015). *Riset Kualitatif dan Penelitian Ilmu*. Jakarta: TIM.
- Suciani, T. (2018). Pemahaman Model Pembelajaran sebagai kesiapan praktik pengalaman lapangan (PPL) Mahasiswa program Studi Pendidikan Tata Boga. *Media Pendidikan, Gizi dan Kuliner*. 7(1): 76-81.
- Sudjana. (2005). *Metoda Statistika*. Penerbit Tarsito: Bandung.
- Sugiyanto. (2012). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D*. Bandung: ALFABET.
- Sukir. (2015). *Development Of PLC and Monitoring System Trainer KIT For Project-Based Practice Learning, Student Centered Learning, and Scaffolding in Vocational High Schools. Proceedings Of International Seminar on Science Education at Yogyakarta State University*.
- Sumarni. (2013). The strengths and weaknesses of the implementation of project based learning: a review. *International Journal of Science and Research (IJSR)*. 4(3): 478-484.
- Suharsimi. (2013). *Prosedur Penelitian Suatu pendekatan Praktik*. Jakarta: Rineka Cipta.
- Siyoto, S., dan Sodik, A. (2015). *Dasar Metodologi Penelitian*. Jakarta: Literasi Media Publishing.
- Surya, E., Sari, N. (2017). Analysis Effectiveness of using Problem Posing Model in Mathematical Learning. *Basic and Applied Research (IJSBAR)*. 33(3): 13-21.
- Sihaloho, R.R., Sahyar, S., & Ginting, E. M. (2017). The Effect of Problem Based Learning (PBL) Model toward Student's Creative Thinking and Problem Solving Ability in Senior High School. *IOSR Journal of Research & Method in Education (IOSRJRME)*. 07(04). 11-18.
- Thomas, J. W. (2000). *A review of research on PBL*. <http://www.Bobpcarlman.org/BestPractices/PBLResearch.pdf>
- Tim BSNP. (2010). *Paradigma Pendidikan Nasional ABAD XXI*, TP:BSNP.
- Ulger. Kani. ( 2018). *The Effect of Problem Based Learning on The Creative Thinking and Critical Thinking Disposition of Student in Visual Arts Education Interdisciplinary Journal of Problem Based Learning*. 12(1): 1-20.

Utami.L.Z, N. Bukit, M. P. Simanjuntak, Motlan. (2019). Pengaruh model project based learning terhadap keterampilan berpikir kreatif pada materi fluida dinamis di SMA. *Jurnal pendidikan fisika*. 8(2): 97-101.

Wena. (2011). *Model Pembelajaran Terpadu*. Penerbit Bumi Aksara: Jakarta.

Zubaidah, S. (2019). Menenal 4C: Learning and Innovation Skills Untuk Menghadapi Era Revolusi Industri 4.0. *Universitas Trunojoyo Madura*. 2(4). 0-18.