

DAFTAR PUSTAKA

- Amin, S., Sari, D. I., & Liesdiani, M. (2022). Pengembangan Media Pembelajaran Berbasis Website Menggunakan Pendekatan Problem-Solving pada Materi SPLTV Kelas X. *Jurnal Cendekia: Jurnal Pendidikan* <https://j-cup.org/index.php/cendekia/article/view/1432>
- Ananda, R., Rani, A. R., & Fadhilaturrahmi, F. (2022). Pengembangan Model TPACK untuk Menunjang Kompetensi Profesional pada Guru Sekolah Dasar. *Jurnal Basicedu*. <https://jbasic.org/index.php/basicedu/article/view/4031>
- Arifin, Z. (2012). *Penelitian Pendidikan Metode dan Paradigma Baru* (A. Kamsyach (ed.); kedua). Remaja Rosdakarya.
- Aulia, D. M., Parno, P., & Kusairi, S. (2021). Pengaruh e-modul berbasis TPACK-STEM terhadap literasi sains alat optik dengan model PBL-STEM disertai asesmen formatif. *Jurnal Riset Pendidikan Fisika*. <http://journal2.um.ac.id/index.php/jrpf/article/view/16404>
- Azzahra, R. H., & Pujiastuti, H. (2020). Analisis kemampuan pemecahan masalah siswa pada materi sistem persamaan linear tiga variabel. *Transformasi: Jurnal Pendidikan* <http://ejournal.unibabwi.ac.id/index.php/transformasi/article/view/876>
- Batiibwe, M. S. K. (2018). How Do the Constructs of the TPACK Framework Relate with Use of ICT in Pedagogy among Teachers of Mathematical Disciplines in Universities in In *African Journal of Education, Science and Technology*. ajest.info. <http://ajest.info/index.php/ajest/article/view/593>
- Branch, R. M. (2019). Robert Maribe Branch-Instructional Design (The ADDIE Approach). In *Journal of Chemical Information and Modeling*.
- Cahyono, B., Kartono, K., Waluya, B., Mulyono, M., & ... (2021). Problem-based learning supported by arguments scaffolding that affect critical thinking teacher candidates. *Cypriot Journal of* <https://www.ceeol.com/content-files/document-1046831.pdf>
- Christina, E. N. (2021). Analisis Kemampuan Pemecahan Masalah Tahapan Polya Dalam Menyelesaikan Persamaan Dan Pertidaksamaan Linear Satu Variabel. ... *Jurnal Pembelajaran Matematika Inovatif* <https://journal.ikipsiliwangi.ac.id/index.php/jpmi/article/view/6745>
- Cooney, T.J, Davis, E.J, Henderson, K. B. (1975). *Dynamics of Teaching Secondary School Mathematics*. Houghton Mifflin Company.
- Damayanthi, L. P. E. N. P. ayu W. (2016). PENGEMBANGAN E-MODUL BERBASIS PROJECT BASED LEARNING PADA MATA PELAJARAN SIMULASI DIGITAL UNTUK SISWA KELAS X STUDI KASUS DI SMK NEGERI 2 SINGARAJA. *Jurnal Pendidikan Teknologi dan Kejuruan*.
- Darmaji, D., Kurniawan, D. A., Astalini, A., & ... (2019). Students' perceptions of electronic's module in physics practicum. In *Journal of Education* academia.edu.

- https://www.academia.edu/download/68874530/18_13005_Last_Revision_edit_arf.pdf
- Derudinansyah, S. (2021). Analisis Kebutuhan E-Modul Berbasis Pendidikan Matematika Realistik Untuk Merangsang Literasi Matematika. *Jurnal Inovasi Pendidikan Matematika* <http://jurnal.umpwr.ac.id/index.php/jipm/article/view/1038>
- Goradia, T. (2018). Role of Educational Technologies Utilizing the TPACK Framework and 21st Century Pedagogies: Academics' Perspectives. *IAFOR Journal of Education*. <https://eric.ed.gov/?id=EJ1198663>
- Hartono, H., Khaeriyah, D. Z., & ... (2021). DEVELOPMENT OF LEARNING TRAJECTORY ON THE SET TOPIC FOR 7TH GRADE IN THE CONTEXT OF SEDEKAH LAUT TRADITION. : *Jurnal* <http://kalamatika.matematika-uhamka.com/index.php/kmk/article/view/505>
- Haspen, C. D. T., Syafriani, S., & Ramli, R. (2021). Validitas E-Modul Fisika SMA Berbasis Inkuiiri Terbimbing Terintegrasi Etnosains untuk Meningkatkan Kemampuan Berpikir Kreatif Peserta Didik. *Jurnal Eksakta Pendidikan* <https://jep.ppj.unp.ac.id/index.php/jep/article/view/548>
- Hayani, S. N., & Sutama, S. (2022). Pengembangan Perangkat dan Model Pembelajaran Berbasis TPACK Terhadap Kualitas Pembelajaran Daring. *Jurnal Basicedu*. <https://jbasic.org/index.php/basicedu/article/view/2512>
- Hutauruk, A. J. B., Darmayasa, J. B., & ... (2019). Achievement of students mathematical resilience through problem based learning model with metacognitive approach. *Journal of Physics* <https://doi.org/10.1088/1742-6596/1315/1/012051>
- Irmawati, I., Syamsuri, S., Nindiasari, H., & ... (2021). Analisis Kebutuhan E-modul Matematika SMP Berbasis Teori Polya Pada Materi Segiempat. *TIRTAMATH: Jurnal* <https://eprints.untirta.ac.id/7026/>
- Istiqomah, S., Lubis, P. H. M., & Lefudin, L. (2023). Development of Problem Solving-Based Modules Assisted by Tracker Software to Improve Students' Problem-Solving Skills in High School. *Jurnal Pendidikan Fisika*. <https://journal.unismuh.ac.id/index.php/jpf/article/view/9592>
- Kasmina-toali. (2019). *Matematika untuk SMK/MAK kelas XI*. Penerbit Erlangga.
- Khaulah Putri, A. (2017). PENGEMBANGAN APLIKASI BULAKER ADVENTURE GAME SEBAGAI MEDIA BELAJAR BERBASIS ANDROID PADA MATERI BANGUN RUANG SISI LENGKUNG. *Jurusan Matematika Unesa*.
- Kurniawan, P. W., & Sumargono, S. (2021). Development of History Learning Media Based on TPACK Assisted by Ms. PowerPoint Integrated with Ispring Suite. *International Journal of Multicultural and Multireligious Understanding*, 8(4). <https://doi.org/10.18415/ijmmu.v8i4.2456>
- Mailizar, M., Hidayat, M., & Al-Manthari, A. (2021). Examining the impact of mathematics teachers' TPACK on their acceptance of online professional development. *Journal of Digital learning in*

<https://doi.org/10.1080/21532974.2021.1934613>

- Mariyati, Y., & Hastuti, I. D. (2022). PENGEMBANGAN E-MODUL GEOMETRI BERBASIS BUDAYA SASAK SEBAGAI SUMBER BELAJAR DARING SISWA SEKOLAH DASAR. ... : *Jurnal Kajian, Penelitian dan* <http://journal.ummat.ac.id/index.php/paedagoria/article/view/9707>
- Maulida, U. (2022). Pengembangan Modul Ajar Berbasis Kurikulum Merdeka. *Tarbawi*, 5. <https://stai-binamadani.e-journal.id/Tarbawi%0D>
- Maulidia, F., Johar, R., & Andariah, A. (2019). A CASE STUDY OF STUDENTS' CREATIVITY IN SOLVING MATHEMATICAL PROBLEMS THROUGH PROBLEM BASED LEARNING. *Infinity Journal*. <http://ejournal.stkipsliliwangi.ac.id/index.php/infinity/article/view/779>
- Moneva, J. C., Miralles, R. G., & ... (2020). Problem Solving Attitude and Critical Thinking Ability of Students. In *Journal of Research pdfs.semanticscholar.org*. <https://pdfs.semanticscholar.org/a98e/040acc6592c4cc8ecb839d3c89e0deccfcb1.pdf>
- Najibah, N. K., & Salsabila, E. (2022). Tpack dalam Pembelajaran Matematika Online di Masa Pandemi. ... : *Jurnal Penelitian Matematika dan* <https://ejournal.my.id/proximal/article/view/1292>
- Nurhayati, D. I., Yulianti, D., & ... (2019). Bahan ajar berbasis problem based learning pada materi gerak lurus untuk meningkatkan kemampuan komunikasi dan kolaborasi siswa. ... : *Physics Education Journal*. <https://journal.unnes.ac.id/sju/index.php/upej/article/view/3333>
- Permana, M. A., Muchlis, E. E., & ... (2020). Pengembangan Lembar Kerja Peserta Didik dengan Metode Problem Solving pada Materi Persamaan Lingkaran Kelas XI MIPA SMAN 5 Kota Bengkulu. *Jurnal Penelitian* <https://ejournal.unib.ac.id/index.php/JPPMS/article/view/8053>
- Pradnyana, I. K. A., Agustini, K., & ... (2021). Pengembangan E-Modul Interaktif Kolaboratif Pada Mata Pelajaran Komputer Dan Jaringan Dasar. *Jurnal Jendela* <https://www.ejournal.jendelaedukasi.id/index.php/JJP/article/view/24>
- Ramadhan, F. (2017). Pengembangan Media Pembelajaran Interaktif Matematika Dengan Bot Api Media Sosial Telegram Di Akademi Farmasi Surabaya. ... : *Jurnal Information Technology and* <https://jurnalmahasiswa.unesa.ac.id/index.php/10/article/view/22508>
- Rani, L., & Maarif, S. (2021). Development E-Module Three Variables Linear Equations System Based On Mathematic Communication. *Journal of Medives: Journal of Mathematics* <https://www.e-journal.iwt.ac.id/index.php/matematika/article/view/1707>
- Rizki, N.A., Medika, A. D. (2023). *Geometri Analitis*. Deepublish publisher.
- Ryan, T. G. (2021). Problem-based learning opportunities within Ontario (Canada) elementary health and physical education. *Journal of Pedagogical Sociology and Psychology*. <https://www.j-psp.com/article/problem-based-learning-opportunities>

within-ontario-canada-elementary-health-and-physical-education-11018

- Sa'diyah, K. (2021). Pengembangan E-Modul Berbasis Digital Flipbook Untuk Mempermudah Pembelajaran Jarak Jauh Di SMA. *Edukatif: Jurnal Ilmu Pendidikan*. <https://edukatif.org/index.php/edukatif/article/view/561>
- Shadiq, F. (2008). *Bagaimana Cara Mencapai Tujuan Pembelajaran Matematika di SMK?* (C. Listyani (ed.)). Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga Kependidikan Matematika Departemen Pendidikan Nasional.
- Shin, J., Lee, S. J., & Steffe, L. P. (2020). Problem solving activities of two middle school students with distinct levels of units coordination. *The Journal of Mathematical Behavior*. <https://www.sciencedirect.com/science/article/pii/S0732312320300572>
- Sholihah, T. M., & Lastariwati, B. (2020). Problem Based Learning to Increase Competence of Critical Thinking and Problem Solving. *Journal of Education and Learning (EduLearn)*. <https://eric.ed.gov/?id=EJ1270853>
- Sirait, A. R. (2018). Analysis Difficulty of Mathematical Creative Thinking Ability Reviewed From Learning Styles Through Problem Based Learning. In *Advances in Social Sciences Research Journal*. researchgate.net. https://www.researchgate.net/profile/Asril-Sirait/publication/328879608_Analysis_Difficulty_of_Mathematical_Creative_ThinkingAbility_Reviewed_From_Learning_Styles_Through_Problem_Based_Learning/links/5be94f11a6fdcc3a8dd03734/Analysis-Difficulty-of-Mathem
- Situmorang, M., Yustina, Y., & ... (2020). E-Module Development using Kvisoft Flipbook Maker through the Problem Based Learning Model to Increase Learning Motivation. *Journal of Educational* <https://jes.ejournal.unri.ac.id/index.php/JES/article/view/8017>
- Sudarmin, S., Mursiti, S., & Asih, A. G. (2018). The use of scientific direct instruction model with video learning of ethnoscience to improve students' critical thinking skills. *Journal of Physics: Conference* <https://doi.org/10.1088/1742-6596/1006/1/012011>
- Sulistiyanti, I., Haryani, S., & Cahyono, E. (2021). Developing problem based learning module containing multiple levels of representation of ksp material to improve students' problem solving ability. ... *Journal of Active Learning*. <https://www.learntechlib.org/p/218915/>
- Suryani, T., Rahayu, W., & Saptono, A. (2021). Development and Validation Technological Pedagogical Content Knowledge (TPACK) Instrument for Teacher Mathematics in Elementary School. *International Journal of Multicultural and Multireligious Understanding*, 8(8). <https://doi.org/10.18415/ijmmu.v8i8.2951>
- Tambunan, L. R., & Sundari, E. (2020). Pengembangan buku digital pada materi persamaan garis singgung lingkaran. In *Jurnal Program Studi Pendidikan* scholar.archive.org. <https://scholar.archive.org/work/krd6ov7rbfhonkhgcrafva7cy4/access/wayback/http://ojs.fkip.ummetro.ac.id/index.php/matematika/article/download/3084/pdf>
- Widyastuti, E. (2019). Using the ADDIE model to develop learning material for actuarial

- mathematics. *Journal of Physics: Conference Series*. <https://doi.org/10.1088/1742-6596/1188/1/012052>
- Wood. (2003). Problem based Learning. *PMC1125189*.
- Yanuarto, W. N., Maat, S. M., & Husnin, H. (2020). A measurement model of technological pedagogical content knowledge (TPACK) in Indonesian senior mathematics teachers' scenario. *Journal of Physics* <https://doi.org/10.1088/1742-6596/1663/1/012018>
- Yulianti, Y., & Wulandari, D. (2021). Pembelajaran untuk Mencapai Kecakapan Abad 21 Sesuai Kurikulum 2013. In ... *di Bidang Pendidikan, Pengajaran dan Pembelajaran*.
- Yusuf, S. (2020). Pengembangan E-Modul Berbasis Problem Based Learning pada Mata Pelajaran Ekonomi Kelas X untuk Meningkatkan Prestasi Belajar Siswa Tahun In *Jurnal Pendidikan: Riset & Konseptual*.