

DAFTAR PUSTAKA

- Ekayana, A. A. G., Muku, I. D. M. K., & Hartawan, I. N. B. (2021). Implementasi model pembelajaran flipped classroom pada mata kuliah sensor transduser dalam pembelajaran daring. *Jurnal Teknologi Pembelajaran Indonesia*, 11(2), 106-119.
- Abeysekera, L., & Dawson, P. (2015). Motivation and Cognitive Load in the Flipped Classroom: Definition, Rationale and a Call for Research. *Higher Education Research & Development*, 34, 1-14. <https://doi.org/10.1080/07294360.2014.934336>
- Adhitiya, E. N., Prabowo, A., & Arifudin, R. (2015). Studi komparasi model pembelajaran traditional flipped dengan peer instruction flipped terhadap kemampuan pemecahan masalah. *Unnes Journal of Mathematics Education*, 4(2)
- Ahmed, H. O. K. (2016). Flipped learning as a new educational paradigm: An analytical critical study. *European Scientific Journal*, 12(10).
- Akker, J. van den, Gravemeijer, K., McKenney, S. & Nieveen, N. (Eds). (2006). Educational design research. London: Routledge.
- Aldoobie, N. (2015). *Technology integration and learning theory*. *American International Journal of Contemporary Research*, 5(6), 114-118
- Anderson, L.W. & Krathwohl, D. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of Educational Objectives*. New York: Addison Wesley Longman
- Anonymous. (2000). *The Stability and Shelf Life of Food*. Woodhead Publishing Limited. England.
- Apino, E. (2016). Mengembangkan kreativitas siswa dalam pembelajaran matematika melalui pembelajaran creative problem solving. Prosiding Seminar Nasional Matematika dan Pendidikan Matematika, pp. 335–340. <http://seminar.uny.ac.id/semnasmatematika/sites/seminar.uny.ac.id/semnasmatematika/files/PM-49.pdf>

- Arikan, E. E. (2017). Is there a relationship between creativity and mathematical creativity? *Journal of Education and Learning*, 6(4), 239-253.
- Asrial, Syahrial, Maison, M., Kurniawan, D. A., & Piyana, S. O. (2020). Ethnoconstructivism E-Module to Improve Perception, Interest, and Motivation of Students in Class V Elementary School. *Jurnal Pendidikan Indonesia*, 9(1), 30–41. <https://doi.org/10.23887/jpi-undiksha.v9i1.19222>.
- Asrizal., A., Mardian, V., Novitra, F., & Festiyed, F. (2022). Physics Electronic Teaching Material-Integrated STEM Education to Promote 21st-Century Skills. *Cypriot Journal of Educational Sciences*, 17(8), 2899-2914.
- Astuti, A., Waluya, S. B., & Asikin, M. (2020). The Importance of Creative Thinking Ability in Elementary School Students for 4.0 Era. *International Journal of Educational Management and Innovation*, 1(1), 91 <https://doi.org/10.12928/ijemi.v1i1.1512>
- Asyafah, A. (2019). *Menimbang model pembelajaran (Kajian teoretis-kritis atas model pembelajaran dalam Pendidikan Islam)*. Tarbawy: *Indonesian Journal of Islamic Education*, 6(1), 1–22
- Awidi, I. T., & Paynter, M. (2019). The impact of a flipped classroom approach on student learning experience. *Computers & Education*, 128, 269- 283. <https://doi.org/10.1016/j.compedu.2018.09.013>
- Bashirova, M., & Sattarova, A. (2018). The Use of New Teaching and Learning Technologies for Professional Qualification Development in the System of the Initial and Secondary Vocational Education. In *Technical and Vocational Education and Training* (Vol. 28). https://doi.org/10.1007/978-3-319-73093-6_12
- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 83(2), 39–43. <https://doi.org/10.1080/00098650903505415>

- Bergmann, J., & Sams, A. (2012). *Flip Your Classroom: Reach Every Student in Every Class Every Day*. Oregon: International Society for Technology in Education. <https://doi.org/10.1111/teth.12165>
- Berrett, D. (2012). *How 'Flipping' the Classroom Can Improve the Traditional Lecture*. The Chronicle of Higher Education. Retrieved from <https://www.chronicle.com/article/how-flipping-the-classroom-can-improve-the-traditional-lecture>
- Bhattacharjee, J. (2015). Constructivist approach to learning—an effective approach of teaching learning. *International Research Journal of Interdisciplinary & Multidisciplinary Studies*, 1(4), 23-28.
- Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university* (4th ed.). McGraw-Hill Education.
- Birgili, B. (2015). Creative and Critical Thinking Skills in Problem-based Learning Environments. *Journal of Gifted Education and Creativity*, 2(2), 71–71. <https://doi.org/10.18200/jgedc.2015214253>
- Bock, A., Modabber, A., Kniha, K., Lemos, M., Rafai, N., & Hölzle, F. (2018). Blended learning modules for lectures on oral and maxillofacial surgery. *British Journal of Oral and Maxillofacial Surgery*, 56(10), 956–961.
- Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom*. ASHE-ERIC Higher Education Report No. 1. The George Washington University.
- Borg, W.R & Gall, M.D (1983). *Education research: an introduction*. 4th Edition. New. York: Longman Inc
- Krauss, J., & Boss, S. (2013). *Thinking through project-based learning: Guiding deeper inquiry*. Corwin Press.
- Boss, S., Larmer, J., & Mergendoller, J. R. (2013). *PBL for 21st century success: Teaching critical thinking, collaboration, communication, and creativity*. Buck Institute for Education. (print)

- Brunner, H., & Sievi, R. (2017). Asymmetric catalyses. XXXIII. New optically active phospholanes derived from tartaric acid. *Journal of Organometallic Chemistry*, 328(1–2), 7180
- Chambers, P. (2008). *Teaching mathematics developing as a reflective secondary teacher*. London, UK: Sage Publications.
- Chang, T. S., Wang, H. C., Haynes, A. M., Song, M. M., Lai, S. Y., & Hsieh, S. H. (2022). Enhancing student creativity through an interdisciplinary, project-oriented problem-based learning undergraduate curriculum. *Thinking Skills and Creativity*, 46, 101173.
- Christopher, I. O., Julie, O. I., & Janehilda, A. O. (2020). Assessment of Students' Creative Thinking Ability in Mathematical Tasks at Senior Secondary School Level. 12(2), 494–506.
- Christopher, M., Bowd, C., Belghith, A., Goldbaum, M. H., Weinreb, R. N., Fazio, M. A., Girkin, C. A., Liebmann, J. M., & Zangwill, L. M. (2020). Deep Learning Approaches Predict Glaucomatous Visual Field Damage from OCT Optic Nerve Head En Face Images and Retinal Nerve Fiber Layer Thickness Maps. *Ophthalmology*, 127(3), 346–356.
<https://doi.org/10.1016/j.ophtha.2019.09.036>
- Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning* (4th ed.). Wiley.
- Cooperstein, S. E., & Kocavar-Weidinger, E. (2004). Beyond active learning: A constructivist approach to learning. *Reference services review*, 32(2), 141–148.
- Cropley, A. J. (2001). *Creativity in education and learning: A guide for teachers and educators*. Routledge.
- Damanik, J., & Widodo, W. (2024). Unlocking Teacher Professional Performance: Exploring Teaching Creativity in Transmitting Digital Literacy, Grit, and

Instructional Quality. *Education Sciences*, 14(4), 384.
<https://doi.org/10.3390/educsci14040384>

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140.
<https://doi.org/10.1080/10888691.2018.1537791>

Davies, R. S., Dean, D. L., & Ball, N. (2013). Flipping the classroom and instructional technology integration in a college-level information systems spreadsheet course. *Educational Technology Research and Development*, 61(4), 563–580. <https://doi.org/10.1007/s11423-013-9305-6>

Davis, B. G. (1993). *Tools for Teaching*. San Francisco: Jossey-Bass

Dehdashti, Semira Mehralizadeh, Masoud Motalebi Kashani. (2013). Incorporation of Project-based Learning into an Occupational Health Course, *Journal of Occupational Health*, Volume 55, Pages 125–131, <https://doi.org/10.1539/joh.12-0162-OA>

Derek Rowntree, *Preparing Materials for Open, Distance and Fleksible Learning*, (London: Kogan Page Limited, 1994), h.86

Dick, W., Carey, L., & Carey, J. O. (2015). *The systematic design of instruction* (8th ed.). Upper Saddle River, New Jersey: Pearson.

Dini V, Sevia H, Caushi K, Orduña Picón R. (2020). Characterizing the formative assessment enactment of experienced science teachers. *Science Education*. 104: 290–325. <https://doi.org/10.1002/sce.21559>

Dyah Triwahyuningtyas, & I Ketut Suastika. (2023). Influence Inquiry-Based Geometry E-Module for Primary School Teacher Education Students. *Elementary Education Online*, 19(3), 160–166. Retrieved from <https://ilkogretim-online.org/index.php/pub/article/view/7447>

- Edi Prayitno, & Masduki, L. R. (2017). Pengembangan Media Blended Learning Dengan Model Flipped Classroom Pada Mata Kuliah Pendidikan Matematika Ii. *JIPMat*, 1(2), 121–126. <https://doi.org/10.26877/jipmat.v1i2.1238>
- Efstratia, D. (2014). Experiential Education through Project Based Learning. *Procedia - Social and Behavioral Sciences*, 152, 1256–1260
- Eggen, Paul D & Kauchak (1996). Strategies for Teacher Teaching Content and Thinking Skills, New Jersey, Prentice Hall.
- Ekayana, A. A. G., Muku, I. D. M., & Hartawan, I. N. (2021). Implementasi Model Pembelajaran Flipped Classroom Pada Mata Kuliah Sensor Transduser Dalam Pembelajaran Daring. *Jurnal Teknologi Pembelajaran Indonesia*, 11(2), 106–119. https://doi.org/10.23887/jurnal_tp.v11i2.636
- El-Banna, M. M. (2015). The role of elaboration in creative thinking. *Journal of Creativity and Innovation*, 3(2), 45-52.
- Enfield, J. (2013). Looking at the impact of the flipped classroom model of instruction on undergraduate multimedia students at CSUN. *TechTrends*, 57(6), 14-27. <https://doi.org/10.1007/s11528-013-0698-1>
- Erdogan, N., & Bozeman, T. D. (2015). 3. *MODELS OF Project-BASED Learning FOR The 21 ST Century*. 5(12), 31–42.
- 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>
- Findlay-Thompson, S., & Mombourquette, P. (2014). Evaluation of a flipped classroom in an undergraduate business course. *Business Education & Accreditation*, 6(1), 63-71. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2331035
- Fleming, N. D., & Mills, C. (1992). Not another inventory, rather a catalyst for reflection. *To Improve the Academy*, 11(1), 137–155. <https://doi.org/10.1002/j.2334-4822.1992.tb00213.x>

- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410–8415. <https://doi.org/10.1073/pnas.1319030111>
- Gagné, R.M., Wager, W.W., Golas, K.C., & Keller, J.M. (2005). *Principles of Instructional Design* (5th ed.). Belmont, CA: Wadsworth/Thomson Learning.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction*. Boston: Pearson/Allyn & Bacon
- Gariou-Papalexiou, A., Papadakis, S., Manousou, E. (Gelly), & Georgiadu, I. (2017). Implementing a flipped classroom: A case study of biology teaching in a greek high school. *Turkish Online Journal of Distance Education*, 18(3), 47–65. <https://doi.org/10.17718/tojde.328932>
- Gatot, Muhsetyo, dkk. (2007). *Pembelajaran Matematika SD*. Jakarta: Universitas Terbuka.
- Glaser, R. (Ed.). (1962). *Training research and education*. Pittsburgh, PA: University of Pittsburgh Press.
- Gravemeijer, K.P.E. (1994). *Developing Realistic Mathematics*. Utrecht: Freudenthal institute.
- Greenhow, C., Lewin, C., & Staudt Willet, K. B. (2020). Education and social media: Toward a digital future. *Learning, Media and Technology*, 45(1), 1–7. <https://doi.org/10.1080/17439884.2020.1713655>
- Gunter, M. A., Estes, T. H., & Schwab, J. H. 1990. *Instruction: A models approach*. Boston: Allyn and Bacon.
- Hadiyanti, N. F. D., Hobri, Prihandoko, A. C., Susanto, Murtikusuma, R. P., Khasanah, N., & Maharani, P. (2021). Development of mathematics e-module with STEM collaborative project based learning to improve mathematical literacy ability of vocational high school students. *Journal of*

Physics: Conference Series, 1839(1), 012031. <https://doi.org/10.1088/1742-6596/1839/1/012031>

Hamiyah, N. Dan M. *Jauhar*. 2014. Strategi Belajar-Mengajar di Kelas. Jakarta: Prestasi Pustaka

Harta, Idris. (2006). *Matematika Bermakna*. Surakarta: Mediatama

Hastuti, W. D. (2020). Membangun Motivasi dan Kemandirian Peserta Didik Berkebutuhan Khusus Melalui Flipped Classroom di Masa New Normal Covid-19. *Prosiding Webinar Magister Pendidikan Nonformal UNG* | 181, September, 181–192.

Havwini, T., & Wu, Y.-T. (2019). the Implementation of Flipped Classroom in Efl Class: a Taiwan Case Study. *Journal of Digital Education, Communication, and Arts (Deca)*, 2(02), 79–88. <https://doi.org/10.30871/deca.v2i02.1536>

Hendra Sofyan, Evita Anggereini (2019). Developing the Reference Books of Center, Area and Group Learning Models Based on Environment and Thematic in Early Childhood Education. *Universal Journal of Educational Research*, 7(10), 2208 - 2213.

Hidayat, A. S., & Widjajanti, D. B. (2018). Kemampuan berpikir kreatif siswa dalam pemecahan masalah matematika ditinjau dari gaya kognitif. *PYTHAGORAS: Jurnal Pendidikan Matematika*, 13(2), 146–158. <https://doi.org/10.21831/pg.v13i2.21882>

Hidayat, S., Lydia, R. B., & Resmadi, I. (2022). *Mobile application for donation and adoption of stranded dogs and cats during the COVID-19 pandemic. In Embracing the Future: Creative Industries for Environment and Advanced Society 5.0 in a Post-Pandemic Era* (pp. 22-25). Routledge.

Horn, M. B., & Staker, H. (2014). *Blended: Using disruptive innovation to improve schools*. Jossey-Bass.

- Hotaman, D. (2008). the Examination of the Basic Skill Levels of the Students' in Accordance With the Perceptions of Teachers, Parents and Students. *International Journal of Instruction*, 1(2), 1694–609. www.e-iji.net
- Hruby, G. G., & Roegiers, A. B. (2012). Cognitive constructivism. *The encyclopedia of applied linguistics*.
- Hubackova, S., & Semradova, I. (2016). Evaluation of Blended learning. *Procedia-Social and Behavioral Sciences*, 217(551)
- Hudoyo, Herman. 2000. *Pengembangan Kurikulum dan Pembelajaran Matematika*. Malang: Universitas Malang.
- Hugerat, M. (2016). How teaching science using project-based learning strategies affects the classroom learning environment. *Learning Environments Research*, 19(3), 383-395.
- Indrawati, B. (2020). Tantangan dan peluang pendidikan tinggi dalam masa dan pasca pandemi COVID-19. *Jurnal Kajian Ilmiah (JKI), Edisi Khusus*(1), 39–48
- Isabekov, A., & Sadyrova, G. (2018). Project-based learning to develop creative abilities in students. In J. Drummer, G. Hakimov, M. Joldoshev, T. Köhler, & S. Udartseva (Eds.), *Vocational teacher education in central asia: developing skills and facilitating success*. Cham: Springer International Publishing, 43–49, doi: 10.1007/978-3-319-73093-6_4.
- Islamiati, N., & Kreatif, B. (2022). *Pengaruh Model Pembelajaran Project Based Learning (PJBL) Berbasis Etnomatematika Terhadap Kemampuan*. 5, 1–7.
- James & James. (1976). *Mathematics Dictionary 4th edition*. New York, Van Nostrand Reinhold.
- Januszewski, A., & Molenda, M. (Eds.). (2008). *Educational technology: A definition with commentary*. New York, NY: Lawrence Erlbaum Associates

- Johnson, G. B. (2013). *Student perceptions of the flipped classroom* (Doctoral dissertation, University of British Columbia).
- Jonassen, D. H. (1999). *Computers as mindtools for schools: Engaging critical thinking* (2nd ed.). Prentice Hall.
- Joyce, B., Weil, M., & Calhoun, E. (2004). *Models of Teaching* (7th ed.). Boston: Allyn and Bacon.
- Joyce, B., Weil, M., & Calhoun, E. (2009). Models of teaching: Model-model pengajaran. Yogyakarta: Pustaka Pelajar, 39–50.
- Joyce, B., Weil, M., & Showers, B. (1992). *Models of teaching* (4th ed., Moral Development). Massachusetts 02194: Allyn and Bacon.
- Kabassi, K., Dragonas, I., Ntouzevits, A., & Pomonis, Tz. Papastathopoulos, G. Vozaitis, Y. (2016). Evaluating a learning management system for blended learning in higher education. *Springer Plus Journal*, 5(101). <https://doi.org/10.1186/s40064-016-1705-8>
- Kacetl, J., & Semradova, I. (2020). Reflection on blended learning and e-learning—case study. *Procedia Computer Science*, 176, 1322–1327. <https://doi.org/10.1016/j.procs.2020.09.141>
- Kadribayeva, R., Pardala, A., Alimkulova, B., Adylbekova, E., Zhetpisbayeva, G., & Jamankarayeva, M. (2022). Methodology of application of blended learning technology in mathematics education. *Cypriot Journal of Educational Science*, 17(4), 1117–1129. <https://doi.org/10.18844/cjes.v17i4.7159>
- Kamulovna, R. X. (2025). Mechanisms For Teaching Students Creative Thinking Through Media Education Methods. *Educator Insights: Journal of Teaching Theory and Practice*, 1(6), 311-318.
- Kementerian Pendidikan dan Kebudayaan RI, (2016). Konsep Dan Pedoman Penguatan Pendidikan Karakter Tingkat Sekolah Dasar dan Sekolah Menengah Pertama. Jakarta : TIM PPK Kemendikbud.

Keser dan Karagoca. (2010). Langkah langkah strategi dalam pembelajaran. cetakan I Bandung: YRAMA.

Khodeir, L. M. (2018). Blended learning methods as an approach to teaching project management to architecture students. *Alexandria Engineering Journal*, 57(4), 3899–3905.

Kholid, M. N., Mahmudah, M. H., Ishartono, N., Putra, F. G., & Forthmann, B. (2024). Classification of students' creative thinking for non-routine mathematical problems. *Cogent Education*, 11(1), 2394738.

Kholid, Tamalane, Yusuf, & Rasyid. (2024). Kajian Etnobotani Pemanfaatan Dan Teknik Budidaya Tanaman Kopi Berbasis Kearifan Lokal Masyarakat Jailolo Selatan. *Jurnal Bioedukasi*. E-ISSN: 2829-0844.

Kim, M. K., Kim, S. M., Khera, O., & Getman, J. (2014). The experience of three flipped classrooms in an urban university: an exploration of design principles. *The Internet and Higher Education*, 22, 37-50. <https://doi.org/10.1016/j.iheduc.2014.04.003>

Knoblauch, C. (2022). Combining and Balancing Project-Based and Blended Learning in Education. *International Journal of Advanced Corporate Learning (IJAC)*, 15(1), 35–44. <https://doi.org/10.3991/ijac.v15i1.27135>

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Kurniawan, E., Badruzzaman, D. Z., & Marlina, E. T. (2023). Dinamika Populasi dan Identifikasi Bakteri pada Proses Dekomposisi Awal Campuran Lumpur Susu dan Jerami Padi dengan Perbedaan Nisbah C/N. *Jurnal Teknologi Hasil Peternakan*, 4(2), 141–156. <https://doi.org/10.24198/jthp.v4i2.47920>

Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher education research & development*, 34(1), 1-14.

- Lalima, D., & Lata Dangwal, K. (2017). Blended Learning: An Innovative Approach. *Universal Journal of Educational Research*, 5(1), 129–136. <https://doi.org/10.13189/ujer.2017.050116>
- Lasmiyati, L., & Harta, I. (2014). Pengembangan Modul Pembelajaran untuk Meningkatkan Pemahaman Konsep dan Minat SMP. *PYTHAGORAS Jurnal Pendidikan Matematika*, 9(2), 161–174. <https://doi.org/10.21831/pg.v9i2.9077>
- Leidl, D. M., Ritchie, L., & Moslemi, N. (2020). Blended learning in undergraduate nursing education—A scoping review. *Nurse Education Today*, 86, 104318.
- Litster, K., Macdonald, B. L., & Shumway, J. F. (2020). Experiencing active mathematics learning: Meeting the expectations for teaching and learning in mathematics classrooms. *Mathematics Enthusiast*, 17(2–3), 615–640. <https://doi.org/10.54870/1551-3440.1499>
- Littlejohn, A., & Chambers, L. (2007). Preparing for Blended learning. Routledge.
- Love, B., Hodge, A., Grandgenett, N., & Swift, A. W. (2014). Student learning and perceptions in a flipped linear algebra course. *International Journal of Mathematical Education in Science and Technology*, 45(3), 317–324. <https://doi.org/10.1080/0020739X.2013.822582>
- Love, M. I., Huber, W., & Anders, S. (2014). Moderated estimation of fold change and dispersion for RNA-seq data with DESeq2. *Genome biology*, 15(12), 550. <https://doi.org/10.1186/s13059-014-0550-8>
- Lu, X., & Kaiser, G. (2022). Can mathematical modelling work as a creativity-demanding activity? An empirical study in China. *ZDM – Mathematics Education*, 54(1), 67–81. <https://doi.org/10.1007/s11858-021-01316-4>
- Lu, X., & Kaiser, G. (2022). Creativity in students' modelling competencies: Conceptualisation and measurement. *Educational Studies in Mathematics*, 109(2), 287–311.

- Mahanal, Susriyati. (2008). *Pengembangan Perangkat Pembelajaran Deteksi Kualitas Sungai dengan Indikator Biologi berbasis Konstruktivistik untuk Memberdayakan Berpikir Kritis dan Sikap Siswa SMA terhadap Ekosistem Sungai di Malang*. Malang: Program Pascasarjana UM. Disertasi Tidak diterbitkan.
- Maker, C. J. (1982). *Curriculum development: Planning and writing*. Dubuque, IA: Kendall/Hunt.
- Maksum, H., & Purwanto, W. (2022). The Development of Electronic Teaching Module for Implementation of Project-Based Learning during the Pandemic. *International Journal of Education in Mathematics, Science and Technology*, 10(2), 293–307. <https://doi.org/10.46328/ijemst.2247>
- Margolis, A. A. (2020). Zone of Proximal Development, Scaffolding and Teaching Practice. *Cultural-Historical Psychology*, 16(3).
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed.). Cambridge University Press.
- Melyana, N., Supriatna, A., & Sulastri, E. (2022). Analisis kemampuan berpikir kreatif mahasiswa calon guru dalam pembelajaran matematika. *Jurnal Pendidikan Matematika*, 16(1), 45–52. <https://doi.org/10.22342/jpm.v16i1.22274>
- Moraros, J., Islam, A., Yu, S., Banow, R., & Schindelka, B. (2015). Flipping for success: evaluating the effectiveness of a novel teaching approach in a graduate level setting. *BMC Medical Education*, 15(1):27
- Munandar, U. (1985). *Mengembangkan Bakat dan Kreativitas Anak Sekolah*. Jakarta: Gramedia.
- N.F.D. Hadiyanti dkk. (2021) berjudul “Development of Mathematics E-Module with STEM-Collaborative Project Based Learning to Improve Mathematical Literacy Ability of Vocational High School Students”
- Nadjafikhah, M., Yafian, N., & Bakhshalizadeh, S. 2012. “Mathematical creativity: Some definitions and characteristics”. *Procedia - Social and*

- Behavioral Sciences, 31(2012), 285–291. Retrieved from <https://bit.ly/2K9KEVg>.
- Nagarajan, S., & Overton, T. (2019). Promoting systems thinking using project-and problem-based learning. *Journal of Chemical Education*, 96(12), 2901-2909
- Nayak, A., Satpathy, I., & Jain, V. (2024). The project-based learning approach (PBL): Enthralling students through Project-Based Learning approach (PBL) in Education 5.0. In *Preconceptions of Policies, Strategies, and Challenges in Education 5.0* (pp. 158-174). IGI Global.
- Nieveen, N., McKenney, S., & van den Akker, J. (2006). Educational design research: The value of variety. In J. van den Akker, K. Gravemeijer, S. McKenney, & N. Nieveen (Eds.), *Educational design research* (pp. 151–158). London, UK: Routledge.
- Nilimaa, J. (2023). New examination approach for real-world creativity and problem-solving skills in mathematics. *Trends in Higher Education*, 2(3), 477-495
- Nilimaa, J. and Zhaka, V. (2023) Material and Environmental Aspects of Concrete Flooring in Cold Climate. *Construction Materials*, 3, 180-201. <https://doi.org/10.3390/constrmater3020012>
- Nisa, A. H., Mujib, M., & Putra, R. W. Y. (2020). Efektivitas E-Modul dengan Flip Pdf Professional Berbasis Gamifikasi Terhadap Siswa SMP. *Jurnal Pendidikan Matematika Raflesia*, 05(02), 14–25. <https://ejournal.unib.ac.id/index.php/jpmr>
- Nurohman, S. (2015). Pendekatan Project Based Learning. *Pendidikan Matematika*, 1(1), 1–20.
- P. S. A. O. E. Palmer. "The Flipped Classroom: A Meta-Analysis Of Effects On Student Performance Across Disciplines And Education Levels," *Educational Research Review*, vol. 30, pp. 5-22, 2020.

- Peimani, N., & Kamalipour, H. (2021). Online education in the post covid-19 era: Students' perception and learning experience. *Education Sciences*, 11(10). <https://doi.org/10.3390/educsci11100633>
- Perdana, Sarwanto, Sukarmin, S., & Sujadi, I. (2017). Development of E-Module Combining Science Process Skills and Dynamics Motion Material to Increasing Critical Thinking Skills and Improve Student Learning Motivation Senior High School. *International Journal of Science and Applied Science*, 1(1), 45–54. <https://doi.org/10.20961/ijsascs.v1i1.5112>.
- Pinontoan, K. F., & Walean, M. (2020). Pengaruh Flipped Classroom Menggunakan Google Classroom Berbahan Ajar Video Tutorial Pada Mata Kuliah Kalkulus. *Edcomtech*, 5(2), 51–60.
- Pinontoan, K. F., Walean, M., & Lengkong, A. V. (2021). Pembelajaran Daring E-Modul pada Flipped Classroom Statistika untuk meningkatkan Kemampuan bernalar dan Intensi Berwirausaha. *JINOTEP (Jurnal Inovasi Teknologi Pendidikan)*, 8(1), 1 -10
- Pratiwi, N., Haryanto, H., & Hastuti, W. T. (2021). The effect of the PjBL learning model on PGSD student ability in researching natural science. *Jurnal Prima Edukasia*, 9(1), 168–178.
- Prianto, A., & Made Sulandra, I. (2016). Berpikir Kreatif dalam pembelajaran matematika. *Jurnal Pendidikan*, 1(1), 1442–1448.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223–231. <https://doi.org/10.1002/j.2168-9830.2004.tb00809.x>
- Purwoto. (2003). *Strategi Pembelajaran Matematika*. Surakarta: Universitas Sebelas Maret Press.
- Rachmantika, A. R., Waluya, S. B., & Isnarto, I. (2022). Kemampuan Berpikir Kreatif Matematis pada Pembelajaran Project Based Learning dengan Setting Daring. *Edukatif: Jurnal Ilmu Pendidikan*, 4(2), 2609–2615. <https://doi.org/10.31004/edukatif.v4i2.1100>

- Ramadhani, R., & Fitri, Y. (2021). EPUB3 Based Mathematical E-Modules Using the Sigil Application as A Solution in Teaching and Learning Process Through Covid-19 Pandemic. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, 11(1), 35–48. <https://doi.org/10.30998/formatif.v11i1.6826>
- Ramirez, D., Hinojosa, C., & Rodriguez, F. (2014). Advantages and Disadvantages of Flipped Classroom: Stem Students' Perceptions. *IcERI 2014: 7Th International Conference of Education, Research and Innovation*. <https://doi.org/10.13140/RG.2.1.2430.8965>
- Raths, D. (2014). Nine video tips for a better flipped classroom. *The Education Digest*, 79(6), 15.
- Raths, D. (2014). Nine video tips for a better flipped classroom. *The Education Digest*, 79(6), 15. <https://search.proquest.com/openview/87c02524433eba786c1d1b2096c47f96/1.pdf?pq-origsite=gscholar&cbl=25066>
- Rindaningsih, I. (2018, Maret 17). Efektivitas Model Flipped Classroom dalam mata Kuliah Perencanaan Pembelajaran Prodi S2 PGMI UMSIDA. *Seminar nasional FKIP UMSIDA*. 1, hal. 51-60. Sidoarjo: FKIP UMSIDA.
- Rivera, Ruth & Guiza, Milagros & Aguilar Salinas, Wendolyn & Martínez Molina, Ana & Fuentes, Maximiliano. (2017). FLIPPED CLASSROOM TO SUPPORT BLENDED LEARNING TEACHING. 9672-9678. 10.21125/inted.2017.2282.
- Rohmaniyah, N., & Asih, S. W. (2024). Project-Based Learning Design in Secondary Schools: Enhancing Students' Collaborative and Creative Skills. *International Journal of Post Axial: Futuristic Teaching and Learning*, 274-287.
- Runco, M. A., & Acar, S. (2012). Divergent thinking as an indicator of creative potential. *Creativity Research Journal*, 24(1), 66–75. <https://doi.org/10.1080/10400419.2012.652929>

- Safaruddin, Degeng, I. N. S., Setyosari, P., & Murtadho, N. (2020). The effect of PJBL with WBL media and cognitive style on students' understanding and scienceintegrated concept application. *Jurnal Pendidikan IPA Indonesia*, 9(3), 384–395. <https://doi.org/10.15294/jpii.v9i3.24628>
- Saleh, S. E. (2019). Critical Thinking As A 21st Century Skill: Conceptions, Implementation And Challenges In The EFL Classroom. *European Journal of Foreign Language Teaching*, 4(1), 1–16. <https://doi.org/10.5281/zenodo.2542838>.
- Saputra, M.E.A, & Mujib. (2018). Efektifitas Model Flipped Classroom Menggunakan Video Pembelajaran Matematoka terhadap Pemahaman Konsep. *Desimal: Jurnal Matematika*, 173-179.
- Sari, E. D. P., Trisnawati, R. K., Agustina, M. F., Adiarti, D., & Noorashid, N. (2023). Assessment of Students' Creative Thinking Skill on the Implementation of Project-Based Learning. *International Journal of Language Education*, 7(3), 414-428
- Seels, B. B., & Richey, R. C. (1994). *Instructional technology: The definition and domains of the field*. Washington, DC: Association for Educational Communications and Technology.
- Septiati, E., Misdalina, M., & Rohana, R. (2022). Pengembangan Modul Elektronik Konsep Dasar Bilangan Berbasis Flipped Classroom Bagi Mahasiswa Pgsd. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 11(2), 1173. <https://doi.org/10.24127/ajpm.v11i2.4976>
- Shyr, W. J., & Chen, C. H. (2018). Designing a technology-enhanced flipped learning system to facilitate students' self-regulation and performance. *Journal of Computer assisted learning*, 34(1), 53-62. <https://doi.org/10.1111/jcal.12213>
- Silver, E. A. (1997). Fostering creativity through instruction rich in mathematical problem solving and problem posing. *Zdm*, 29(3), 75–80. <https://doi.org/10.1007/s11858-9970003-x>

- Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2008). *Instructional technology and media for learning* (9th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Soedjadi. (2000). *Kiat Pendidikan Matematika di Indonesia*. Jakarta: Direktorat Jendral Pendidikan Tinggi Departemen Pendidikan Nasional
- Spector, J. M., Merrill, M. D., Elen, J., & Bishop, M. J. (Eds.). (2014). *Handbook of research on educational communications and technology* (4th ed.). New York, NY: Springer
- Sriwindari, W., Asih, T., & Noor, R. (2022). *Pengembangan E- Modul Berbasis Pjbl (Project Based Learning) Materi Daur Ulang Limbah*. 12–20.
- Staker, H., & Horn, M. B. (2012). *Classifying K-12 Blended Learning*. Mountain View, CA: Innosight Institute.
<http://www.christenseninstitute.org/wp-content/uploads/2013/04/Classifying-K-12-blended-learning.pdf>
- Sudjimat, D. A., Nyoto, A., & Romlie, M. (2020). Implementation of Project-Based Learning Model and Workforce Character Development for the 21st Century in Vocational High School. *International Journal of Instruction*, 14(1), 181–198. <https://doi.org/10.29333/IJI.2021.14111A>
- Suharnan, S. (2005). *Psikologi kognitif*. Srikandi.
- Suherman Erman. (2003). *Strategi pembelajaran Matematika Kontemporer*. Bandung: UPI
- Suherman, Erman. (2003). *Model Pembelajaran Inovatif Berorientasi Konstruktivistik*. Prestasi Pustaka. Surabaya.
- Sundaram, S., & Ramesh, R. (2022). Effectiveness of joyful game-based blended learning method in learning chemistry during COVID-19. *International journal of Evaluation and Research in Education*, 11(4), 2140–2146. <https://doi.org/10.11591/ijere.v11i4.22427>
- Suyitno, Amin. (2004). *Dasar-dasar dan Proses Pembelajaran Matematika I*. Semarang: FMIPA UNNES.
- Suzan, Z., Nana Kohn, Pao.K., Friedman. (2013). Critical Thinking of Registered Nurses, in a Fellowship Program. *The Journal of Continuing Education in Nursing* Vol 44, No. 8.

- Syofyan, E., Septiari, D., Dwita, S., & Rahmi, M. (2021). The characteristics of the audit committee affecting timeliness of the audit report in Indonesia. *Cogent Business and Management*, 8(1).
<https://doi.org/10.1080/23311975.2021.1935183>
- Talbert, R. (2017). *Flipped learning: A guide for higher education faculty*. Stylus Publishing.
- Taotao Long, Joanne Logan, & Michael Waugh. (2016). Students' Perceptions of the Value of Using Videos as a Pre-Class Learning Experience in the Flipped Classroom. *TechTrends: Linking Research and Practice to Improve Learning*, v60 n3 p245-252.
- Thomas, J.W. (2000). *Review of Research on Project-Based Learning* (Online)
http://www.bie.org/index.php/site/RE/pbl/_research/29
- Tomas, L., Evans, N. S., Doyle, T., & Skamp, K. (2019). Are first year students ready for a flipped classroom? A case for a flipped learning continuum. *International Journal of Educational Technology in Higher Education*, 16(1), 1-22.
- Torrance, E. P. (1987). Teaching for creativity. *Frontiers of creativity research: Beyond the basics*, 189, 215.
- Trianto. (2009). *Mendesain model pembelajaran inovatif-progresif*. Jakarta: Kencana Prenada Media Group.
- Trilling, B., & Fadel, C. (2009). *21st century skills: Learning for life in our times*. Jossey-Bass.
- Tsai, C. W., Shen, P. D., & Lin, R. A. (2015). A quasi-experimental study of digital storytelling explores the effects of student-centered project-based learning with initiation on students' computing skills. *International Journal of Information and Communication Technology Education*, 11(1), 27-43.
<https://doi.org/10.4018/ijicte.2015010102>

- Tune, J. D., Sturek, M., & Basile, D. P. (2013). Flipped classroom model improves graduate student performance in cardiovascular, respiratory, and renal physiology. *Advances in Physiology Education*, 37(4), 316–320. <https://doi.org/10.1152/advan.00091.201>
- Umek, L., Keržič, D., Aristovnik, A., & Tomaževič, N. (2015). Analysis of Selected Aspects of Students' Performance and Satisfaction in a Moodle-Based E-Learning System Environment. *Eurasia Journal of Mathematics, Science and Technology Education*, 11(6), 1495-1505. <https://doi.org/10.12973/eurasia.2015.1408a>
- Urios, M. I., Rangel, E. R., Corcoles, J. H., Tomas, R. B., & Salvador, J. T. (2017). Implementing The Flipped Classroom Methodology to The Subject "Applied Computing" of Two Engineering Degrees at The University of Barcelona. *Journal of Technology and Science Education*, 7(2), 119-135.
- Van de Walle, J. A. (2008). *Matematika sekolah dasar dan menengah*. (Terjemahan Suyono). Jakarta: Penerbit Erlangga.
- Vine, M. M., Chiappetta-Swanson, C., Maclachlan, J., Brodeur, J. J., & Bagg, J. (2016). Exploring Local Level Factors Shaping the Implementation of a Blended Learning Module for Information and Geospatial Literacy in Ontario. *The Canadian Journal for the Scholarship of Teaching and Learning*, 7(2). <https://doi.org/10.5206/cjsotl-rcacea.2016.2.9>
- Vygotsky, L., & Cole, M. (2018). Lev Vygotsky: Learning and social constructivism. *Learning Theories for Early Years Practice*. UK: SAGE Publications Inc, 68-73.
- Wahyudi, W., Anugraheni, I., & Winanto, A. (2018). Pengembangan model blended learning berbasis proyek untuk menunjang kreatifitas mahasiswa merancang pembelajaran matematika sekolah dasar. *JIPM (Jurnal Ilmiah Pendidikan Matematika)*, 6(2), 68-81.
- Wahyuni, L., & Rahayu, Y. S. (2021). Pengembangan E-Book Berbasis Project Based Learning (PjBL) untuk Melatihkan Kemampuan Berpikir Kreatif pada

- Materi Pertumbuhan dan Perkembangan Tumbuhan Kelas XII SMA. Berkala Ilmiah Pendidikan Biologi (BioEdu), 10(2), 314–325. <https://doi.org/10.26740/bioedu.v10n2.p314-325>
- Wang, T.-H., Kao, C.-H., & Wang, T. J. (2021). Implementation of mobile learning in mathematics instruction for elementary second graders. *Mathematics*, 9, 1603. <https://doi.org/10.3390/math91416>.
- Wibowo, E., & Pratiwi, D. D. (2018). Pengembangan Bahan Ajar Menggunakan Aplikasi Kvisoft Flipbook Maker Materi Himpunan. *Desimal: Jurnal Matematika*, 1(2), 147. <https://doi.org/10.24042/djm.v1i2.2279>
- Wijaya, I. G. H., Santyasa, I. W., & Sudatha, I. G. W. (2022). Pengembangan E-Modul Dengan Model Problem-Based Flipped Classroom Pada Mata Pelajaran Simulasi Dan Komunikasi Digital. *Jurnal Teknologi Pembelajaran Indonesia*, 12(2). Retrieved from <http://repo.undiksha.ac.id/id/eprint/12722>
- Wijayati, N., Sumarni, W., & Supanti, S. (2019). Improving student creative thinking skills through project based learning. *KnE Social Sciences*, 408-421
- Wilhelm, J., Sherrod, S., & Walters, K. (2008). Project-based learning environments: Challenging preservice teachers to act in the moment. *The Journal of Educational Research*, 101(4), 220-233.
- Wirawan, Ik. Y. A. P., Sudarman, I. K., & Mahadewi, L. P. P. (2017). Pengembangan E-Modul Berbasis Problem Based Learning Untuk Mata Pelajaran IPA Siswa Kelas VII Semester Ganjil. *Jurnal Edutech Undiksha*, 8(2).
- Yildirim, İ., & Vural, O. F. (2016). Student views on the blended learning process integrated into mathematics teaching. *Journal of Ahi Evran University Kirsehir Education Faculty*, 17(2), 1-15. <https://dergipark.org.tr/en/pub/kefad/issue/59426/853554>
- Yilmaz, E., & Korur, F. (2021). The Effects of an Online Teaching Material Integrated Methods on Students' Science Achievement, Attitude and

Retention. *International Journal of Technology in Education*, 4(1).
<https://doi.org/https://doi.org/10.46328/ijte.79>.

Yurniwati, Y., & Utomo, E. (2020). Problem-based learning flipped classroom design for developing higher-order thinking skills during the COVID-19 pandemic in geometry domain. *Journal of Physics: Conference Series*, 1663, 012057. <https://doi.org/10.1088/1742-6596/1663/1/012057>

Yusnaeni, Y., Corebima, A. D., Susilo, H., & Zubaidah, S. (2017). Creative Thinking of Low Academic Student Undergoing Search Solve Create and Share Learning Integrated With Metacognitive Strategy. *International Journal of Instruction*, 10(2), 245–262. <https://doi.org/10.12973/iji.2017.10216a>

Zahroh, F. (2020). Pengaruh Model Pembelajaran Project Based Learning Terhadap Kemampuan Berpikir Kritis Siswa Pada Materi Elektrokimia. *Phenomenon : Jurnal Pendidikan MIPA*, 10(2), 191–203. <https://doi.org/10.21580/phen.2020.10.2.4283>

Zainuddin, Z., & Keumala, C. . (2018). Blended learning method within Indonesian higher education institutions. *Jurnal Pendidikan Humaniora*, 6(2), 69–77.

Zhou, G. Q., & Jiang, X. F. (2014). Theoretical research and instructional design of the flipped classroom. In *Applied Mechanics and Materials* (Vol. 543, pp. 4312–4315). Trans Tech Publications Ltd.
<https://www.scientific.net/AMM.543-547.4312>