

DAFTAR RUJUKAN

- Adeoye, M. A., & Prastikawati, E. F. (2024). Simplifying the Puzzle: How Computational Thinking and Abstraction Can Help Teachers Conquer Classroom Complexity. *International Journal of Research in Education*, 4(1), 140–148. <https://doi.org/10.26877/ijre.v4i1.17487>
- Afifah, R. N., Apriyono, F., Haji, K., & Siddiq, A. (2023). Analysis of Students' Computational Thinking Skills on Social Arithmetic Material in Terms of Adversity Quotient. *Kreano, Jurnal Matematika Kreatif-Inovatif*, 14(2), 243–253.
- Aini, A. N., & Andreansyah, M. (2023). Development Male Students' Skills in Solving HOTS Problem in Terms of Self Confidence. *JDIME : Journal of Development and Innovation in Mathematics Education*, 1(1), 34–41. <https://doi.org/10.32939/jdime.v1i1.2356>
- Aisy, A. R., & Hakim, D. L. (2023). Kemampuan Berpikir Komputasi Matematis Siswa SMP Pada Materi Pola. *Jurnal Didactical Mathematics*, 5(2019), 348–360.
- Angeli, C., & Giannakos, M. (2019). Computational thinking education: Issues and challenges. *Computers in Human Behavior*, 105. <https://doi.org/10.1016/j.chb.2019.106185>
- Anggraini, N. P., Budiyo, & Pratiwi, H. (2019). Cognitive differences between male and female students in higher order thinking skills Cognitive. *Journal of Physics: Conference Series PAPER*, 1188. <https://doi.org/10.1088/1742-6596/1188/1/012006>
- Asmal, M. (2020). Pengaruh Kecerdasan Logis Matematis Terhadap Kemampuan Pemecahan Masalah Siswa Kelas VII SMPN 30 Makassar. *ELIPS: Jurnal Pendidikan Matematika*, 1(1), 30–36. <https://doi.org/10.47650/elips.v1i1.122>
- Azinar, J. A., Munzir, S., & Bahrin. (2020). Students' logical-mathematical intelligence through the problem-solving approach. *Journal of Physics: Conference Series*, 1460(1). <https://doi.org/10.1088/1742-6596/1460/1/012024>
- Baker, M. (2020). The Role of Decomposition in Problem Solving: A Study of Student Approaches. *Journal of Mathematical Behavior*, 58, 100–112.
- Baker, R., & Siemens, G. (2014). Educational data mining and learning analytics. *The Cambridge Handbook of the Learning Sciences, Second Edition, January 2014*, 253–272. <https://doi.org/10.1017/CBO9781139519526.016>
- Barcelos, T. S., Munoz, R., Villarroel, R., & Merino, E. (2018). Mathematics Learning through Computational Thinking Activities : A Systematic Literature Review. *Journal of Universal Computer Science*, 24(7), 815–845.
- Barr, V., & Stephenson, C. (2011). Bringing Computational Thinking to K-12: What is Involved and What is the Role of the Computer Science Education Community? *ACM Inroads*, 2, 48–54.

<https://doi.org/10.1145/1929887.1929905>

- Berry, M. (n.d.). *Computational thinking and problem solving*. <https://Codeweek.Eu/Training/Computational-Thinking-and-Problem-Solving>.
- Boom, K., Bower, M., Siemon, J., & Scholkmann, A. (2018). Relationship between Computational Thinking and a Measure of Intelligence as a General Problem-Solving Ability. *23rd Annual ACM Conference on Innovation and Technology in Computer Science Education (ITiCSE'18)*, 206–211.
- Cahdriyana, R. A., & Richardo, R. (2020). Berpikir Komputasi Dalam Pembelajaran Matematika. *Literasi*, *XI*(1), 33–35.
- Cansu, S. K., & Cansu, F. K. (2019). An Overview of Computational Thinking. *International Journal of Computer Science Education in Schools*, *3*(1), 1–11. <https://doi.org/10.21585/ijcses.v3i1.53>
- Clerkin, B., & Macrae, F. (2006). Men are more intelligent than women, claims new study. *Mail Online*.
- De la Hoz Serrano, A., Melo Niño, L. V., Álvarez Murillo, A., Martín Tardío, M. Á., Cañada Cañada, F., & Cubero Juárez, J. (2024). Analysis of Gender Issues in Computational Thinking Approach in Science and Mathematics Learning in Higher Education. *European Journal of Investigation in Health, Psychology and Education*, *14*(11), 2865–2882. <https://doi.org/10.3390/ejihpe14110188>
- Denner, J., Werner, L., & Campe, S. (2014). Pair Programming: Under What Conditions Is It Advantageous for Middle School Students? *Journal of Research on Technology in Education*, *46*(3), 37–41. <https://doi.org/10.1080/15391523.2014.888272>
- Dwita, R., Muchtadi, M., & Risalah, D. (2022). Kecerdasan Logis-Matematis terhadap Kemampuan Pemecahan Masalah pada Penyelesaian Soal Cerita Materi SPLDV Siswa Kelas X Multimedia SMKN Hulu Gurung. *JagoMIPA: Jurnal Pendidikan Matematika Dan IPA*, *2*(2), 1–14. <https://doi.org/10.53299/jagomipa.v2i2.176>
- Eagly, A. H., & Wood, W. (2012). Social role theory. In *In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), Handbook of theories of social psychology* (Vol. 2, pp. 458–476). Sage Publications Ltd. <https://doi.org/https://doi.org/10.4135/9781446249222.n49>
- Faizah, F., Sujadi, I., Setiawan, R. (2017). Proses Berpikir Siswa Kelas VII E Dalam Memecahkan Masalah Matematika Pada Materi Pecahan Ditinjau Dari Kecerdasan Logis-Matematis. *Jurnal Pendidikan Matematika*, *1*(4), 15–25.
- Firmansyah, M. A. (2017). Analisis Hambatan Belajar Mahasiswa Pada Mata Kuliah Statistika. *Jurnal Penelitian Dan Pembelajaran Matematika*, *10*(2). <https://doi.org/10.30870/jppm.v10i2.2036>
- Gadanidis, G., Cendros, R., & Floyd, L. (2017). Computational Thinking in Mathematics Teacher Education. *Contemporary Issues in Technology and*

Teacher Education, 17(4), 458–477.

- Geary, D. C., Saults, S. J., Liu, F., & Hoard, M. K. (2000). Sex Differences in Spatial Cognition , Computational Fluency , and Arithmetical Reasoning. *Journal of Experimental Child Psychology* 77, May 2019, 337–353. <https://doi.org/10.1006/jecp.2000.2594>
- Hadiapurwa, A., Riani, P., Yulianti, M. F., & Yuningsih, E. K. (2021). *Implementasi Merdeka Belajar untuk Membekali Kompetensi Generasi Muda dalam Menghadapi Era Society 5 . 0*. 4(1), 115–129.
- Halat, E. (2008). In-Service Middle and High School Mathematics Teachers : Geometric Reasoning Stages and Gender. *The Mathematics Educator*, 18(1), 8–14.
- Halpern, D. F. (2012). Sex differences in cognitive abilities, 4th ed. In *Psychology Press* (4th ed.). Taylor & Francis group. http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeo.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI
- Hartawan, I. G. N. Y., Putri, L. H. A., & Mahayukti, G. A. (2024). Analysis of Junior High School Student's Computational Thinking Ability in Solving Mathematical Problems. *Jurnal Pendidikan Dan Pengajaran*, 7(1).
- Isharyadi, R., & Juandi, D. (2023). A Systematics Literature Review of Computational Thinking in Mathematics Education : Benefits and Challenges. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, 13(148), 69–80. <https://doi.org/http://dx.doi.org/10.30998/formatif.v13i1.15922>
- Jockwitz, C., Wiersch, L., Stumme, J., & Caspers, S. (2021). Cognitive profiles in older males and females. *Scientific Reports*, 11(1), 1–13. <https://doi.org/10.1038/s41598-021-84134-8>
- John, E., Costa, F., Maria, L., Sampaio, R., Dario, D., & Guerrero, S. (2017). Computational Thinking in Mathematics Education : A Joint Approach to Encourage Problem-Solving Ability. *Frontiers in Education (FIE) Conference*. <https://doi.org/10.1109/FIE.2017.8190655>
- Kamil, R., Imami, A. I., & Abadi, A. P. (2021). Analisis kemampuan berpikir komputasional matematis Siswa Kelas IX SMP Negeri 1 Cikampek pada materi pola bilangan. *AKSIOMA: Jurnal Matematika Dan Pendidikan Matematika*, 12(2), 259–270.
- Karp, A. (2020). Analytical Thinking and Problem Solving: A Study of the Relationship. *Journal of Educational Psychology*, 112(3), 456–467. <https://doi.org/DOI: 10.1037/edu0000375>
- Khotijah, S. (2016). *Pengaruh Kecerdasan Logis Matematis Dan Kecerdasan Analitik Terhadap Kemampuan Peserta Didik Dalam Menggambar Grafik Fungsi Eksponensial Kelas X Sma Negeri 13 Semarang Tahun Pelajaran*

2015/2016. 10–47.

- Kim, B., Kim, T., & Kim, J. (2013). PAPER-AND-PENCIL PROGRAMMING STRATEGY TOWARD COMPUTATIONAL THINKING FOR NON-MAJORS : DESIGN YOUR SOLUTION. *Journal of Educational Computing Research*, 49(4), 437–459.
- Kowalski, R. (2011). *Computational Logic and Human Thinking How to be Artificially Intelligent*.
- Leung, H. Y.-H. (2021). Integrating Computational Thinking into Mathematics Education. *Doctoral Student Forum Proceedings of the 25th Global Chinese Conference on Computers in Education*, 7–12.
- Ling, M. K. D., & Loh, S. C. (2021). Relationships between cognitive pattern recognition and specific mathematical domains in mathematics education. *International Journal of Mathematical Education in Science and Technology*, 54(2), 159–179.
- Litia, N., Sinaga, B., & Mulyono. (2023). Profil Berpikir Komputasi Siswa dengan Menggunakan Model Pembelajaran Problem Based Learning (PBL) Ditinjau dari Gaya Belajar di SMA N 1 Langsa. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 07(March), 1508–1518. <https://doi.org/https://doi.org/10.31004/cendekia.v7i2.2270>
- Lynn, R. (2013). *Race and Sex differenceS in intelligence and PerSonality* (H. N. (Editor) (ed.)). Ulster Institute for Social Research.
- Mulyanto, A., Niwanputri, G. S., & Rusyda, Y. (2020). *Pembelajaran Computational Thinking Pada Pendidikan Dasar dan Menengah* (Issue December).
- Nuraisa, D., Saleh, H., Raharjo, S., & Tangerang, U. M. (2021). PROFILE OF STUDENTS ' COMPUTATIONAL THINKING BASED ON SELF - REGULATED LEARNING IN COMPLETING BEBRAS TASKS. *Prima: Jurnal Pendidikan Matematika*, 5(2), 40–50.
- Nuvitalia, D., Saptaningrum, E., Ristanto, S., & Putri, M. R. (2022). Profil Kemampuan Berpikir Komputasional (Computational Thinking) Siswa SMP Negeri Se-Kota Semarang Tahun 2022. *Jurnal Penelitian Pembelajaran Fisika*, 13(2), 211–218. <https://doi.org/10.26877/jp2f.v13i2.12794>
- Obara, S. (2019). Pre-service teachers exploring the role of pattern-based reasoning in the context of algebraic thinking. *Eurasia Journal of Mathematics, Science and Technology Education*, 15(11). <https://doi.org/10.29333/ejmste/109262>
- Pei, C. Y., Weintrop, D., Wilensky, U., & Pei, C. Y. (2018). Cultivating Computational Thinking Practices and Mathematical Habits of Mind in Lattice Land Cultivating Computational Thinking Practices and Mathematical Habits of Mind in Lattice Land. *Mathematical Thinking and Learning*, 20(1), 75–89. <https://doi.org/10.1080/10986065.2018.1403543>
- Rahmadhania, L. I. P., & Mariani, S. (2021). Kemampuan Komputasional Siswa

- Dalam Memecahkan Masalah Matematika SMP Melalui Digital Project Based Learning Ditinjau Dari Self Efficacy. *PRISMA, Prosiding Seminar Nasional Matematika*, 4, 289–297.
- Ramírez-Uclés, I. M., & Ramírez-Uclés, R. (2020). Gender Differences in Visuospatial Abilities and Complex Mathematical Problem Solving. *Frontiers in Psychology*, 11(March), 1–10. <https://doi.org/10.3389/fpsyg.2020.00191>
- Rejeki, W. S. (2021). *Analisis Keterampilan Metakognitif Siswa Kelas XI SMAN 2 Sukoharjo dalam Memecahkan Masalah Matematika Tipe HOTS pada Materi Turunan Fungsi Aljabar Ditinjau dari Kecerdasan Logis Matematis*. 00(00), XX–XX. <https://doi.org/10.1007/XXXXXX-XX-0000-00>
- Rifqi, A., & Suyitno, H. (2021). Critical Thinking Skills Reviewed from Logical-Mathematical and Musical Intelligence on Process Oriented Guided Inquiry Learning. *Unnes Journal of Mathematics Education Research*, 10(2), 175–183. <http://journal.unnes.ac.id/sju/index.php/ujmer>
- Rosali, D. F., & Suryadi, D. (2021). An Analysis of Students' Computational Thinking Skills on The Number Patterns Lesson during The Covid-19 Pandemic. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, 11(2), 217–232. <https://doi.org/10.30998/formatif.v11i2.9905>
- Rosyadi, A. A. P. (2021). Analisis Berpikir Kritis Mahasiswa Dalam Menyelesaikan Masalah Kontroversial Matematika. *EDU-MAT: Jurnal Pendidikan Matematika*, 9(1), 1. <https://doi.org/10.20527/edumat.v9i1.9988>
- S. A. Miller & J. McGowan. (2020). Mathematical Thinking: A Problem-Solving Approach. *Journal of Educational Psychology*, 112(4), 678–690.
- Selby, C. C., & Woollard, J. (2014). *Refining an Understanding of Computational Thinking*.
- Sezer, H. B., & Namukasa, I. K. (2023). School and Community Practices of Computational Thinking in Mathematics Education through Diverse Perspectives. *JOURNAL OF RESEARCH IN SCIENCE, MATHEMATICS AND TECHNOLOGY EDUCATION*. <https://doi.org/10.31756/jrsmte.617SI>
- Shute, V. J., Sun, C., & Asbell-Clark, J. (2017). Demystifying computational thinking. *Educational Research Review*, 22, 142–158. <https://doi.org/10.1016/j.edurev.2017.09.003>
- Suarca, K., Soetjiningsih, S., & Ardjana, I. E. (2016). Kecerdasan Majemuk pada Anak. *Sari Pediatri*, 7(2), 85. <https://doi.org/10.14238/sp7.2.2005.85-92>
- Sunendar, A., Santika, S., Supratman, & Nurkamilah, M. (2019). The Analysis of Mathematics Students' Computational Thinking Ability at Universitas Siliwangi. *Journal of Physics: Conference Series*, 1477. <https://doi.org/10.1088/1742-6596/1477/4/042022>
- Sung, W., Ahn, J., & Black, J. (2017). *Introducing Computational Thinking to Young Learners : Practicing Introducing Computational Thinking to Young Learners : Practicing Computational Perspectives Through Embodiment in*

- Mathematics Education. August.* <https://doi.org/10.1007/s10758-017-9328-x>
- Suwarno, S., Nisa, F. B., & Mukhlis, M. (2020). Does students' logical-mathematical intelligence correlate to mathematics communication skills on a linear system with three variables problems? *Journal of Physics: Conference Series*, 1663(1). <https://doi.org/10.1088/1742-6596/1663/1/012029>
- Taufik, M., In'am, A., & Susanti, R. D. (2024). Computational thinking in mathematical problem solving: Pattern recognition. *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(3), 791–797. <https://doi.org/10.11594/ijmaber.05.03.05>
- Turmuzi, M., Suharta, I. G. P., Astawa, I. W. P., & Suparta, I. N. (2024). Misconceptions Of Mathematics In Higher Education universities When Learning With Google Classroom Based On Learning Styles And Gender Differences. *Journal of Technology and Science Education*, 14(1), 200–223.
- Upadhayay, N., & Guragain, S. (2014). Comparison of Cognitive Functions Between Male and Female Medical Students : A Pilot Study. *Journal of Clinical and Diagnostic Research*, 8(6), 10–13. <https://doi.org/10.7860/JCDR/2014/7490.4449>
- Veenman, K., Tolboom, J. L. J., & Beekun, O. Van. (2022). The relation between computational thinking and logical thinking in the context of robotics education. *Frontiers in Education*, 7.
- Veronica, A. R., Siswono, T. Y. E., & Wiryanto. (2022). Hubungan Berpikir Komputasi dan Pemecahan Masalah Polya pada Pembelajaran Matematika di Sekolah Dasar. *ANARGYA: Jurnal Ilmiah Pendidikan Matematika*, 5(1). <https://doi.org/10.24176/anargya.v5i1.7977>
- Weintrop, D., Beheshti, E., Horn, M., Orton, K., Jona, K., Trouille, L., & Wilensky, U. (2016). Defining Computational Thinking for Mathematics and Science Classrooms. *Journal of Science Education and Technology*, 25(1), 127–147. <https://doi.org/10.1007/s10956-015-9581-5>
- Wing, J. M. (2006). Computational Thinking. *COMMUNICATIONS OF THE ACM*, 49(3), 33–35. <https://www.cs.cmu.edu/~15110-s13/Wing06-ct.pdf>
- Wing, J. M. (2008). Computational thinking and thinking about computing. *Philosophical Transactions Of The Royal Society*, 366, 3717–3725. <https://doi.org/10.1098/rsta.2008.0118>
- Wing, J. M. (2010). *Computational Thinking : What and Why ?* (Issue November).
- Wing, J. M. (2011). Research Notebook : Computational Thinking--What and Why ? *The Magazine of the Carnegie Mellon University School of Computer Science*.
- Wing, J. M. (2017). Computational thinking ' s influence on research and education for all. *Italian Journal of Educational Technology*, 24(2), 7–14. <https://doi.org/10.17471/2499-4324/922>

- Wuryanto, H., & Abduh, M. (2022). *Mengkaji Kembali Hasil PISA sebagai Pendekatan Inovasi Pembelajaran untuk Peningkatan Kompetensi Literasi dan Numerasi*.
- Yadav, A., Hong, H., & Stephenson, C. (2016). Computational Thinking for All : Pedagogical Approaches to Embedding 21st Century Problem Solving in K-12 Classrooms. *TechTrends*. <https://doi.org/10.1007/s11528-016-0087-7>
- Yadav, A., Mayfield, C., Zhou, N., & Hambrusch, S. (2014). Computational Thinking in Elementary and Secondary Teacher Education. *ACMTrans. Comput. Educ*, 14(1). <https://doi.org/10.1145/2576872>
- Ye, H., Liang, B., Ng, O. L., & Chai, C. S. (2023). Integration of computational thinking in K - 12 mathematics education : a systematic review on CT - based mathematics instruction and student learning. *International Journal of STEM Education*, 10(3). <https://doi.org/10.1186/s40594-023-00396-w>
- Yuliana, E. (2015). Pengembangan Soal Open-Ended pada Pembelajaran Matematika untuk Mengidentifikasi Kemampuan Berfikir Kreatif Siswa. In *Prosiding Seminar Nasional Pendidikan Matematika (SNAPTIKA)*.
- Zamzami, E. M., Tarigan, J. T., Zendrato, N., Muis, A., Yoga, A. P., & Faisal, M. (2020). Exercising the Students Computational Thinking Ability using Bebras Challenge. *Journal of Physics: Conference Series*, 1566(012113). <https://doi.org/10.1088/1742-6596/1566/1/012113>
- Zhu, Z. (2007). Gender differences in mathematical problem solving patterns : A review of literature. In *International Education Journal* (Vol. 8, Issue 2, pp. 187–203).
- Zuhair Zaid, M. (2021). Telaah kerangka kerja PISA 2021 : era integrasi computational thinking dalam bidang matematika. *PRISMA, Prosiding Seminar Nasional Matematika, March 2020*, 706–713.
- Zuod, R., & Namukasa, I. (2023). Computational Thinking Workshop : A New Way to Learn and Teach Mathematics. *JOURNAL OF RESEARCH IN SCIENCE, MATHEMATICS AND TECHNOLOGY EDUCATION*. <https://doi.org/10.31756/jrsmte.624>