

DAFTAR PUSTAKA

- Adam, S. (2006). Introducing Bologna objectives and tools. *EUA Bologna Handbook*, 1–24.
- Aini, F. Q., Fitriza, Z., Gazali, F., Mawardi, M., & Priscylio, G. (2019). Perkembangan Model Mental Mahasiswa pada Penggunaan Bahan Ajar Kesetimbangan Kimia berbasis Inkuiiri Terbimbing. *Jurnal Eksakta Pendidikan (Jep)*, 3(1), 40. <https://doi.org/10.24036/jep/vol3-iss1/323>
- Andersen, M. S., & Makransky, G. (2021). The Validation and Further Development of the Multidimensional Cognitive Load Scale for Physical and Online Lectures (MCLS-POL). *Frontiers in Psychology*, 12(March), 1–11. <https://doi.org/10.3389/fpsyg.2021.642084>
- Best, J. W., & Khan, J. V. (2006). *Research in Education* (Tenth). Pearson Education Inc.
- Clark, R. C., Nguyen, F., & Sweller, J. (2006). Efficiency in Learning - Evidence Based Guidelines to Manage Cognitive Load. In *Pfeiffer*.
- Cranford, K. N., Tiettmeyer, J. M., Chuprinko, B. C., Jordan, S., & Grove, N. P. (2014). Measuring load on working memory: The use of heart rate as a means of measuring chemistry students cognitive load. *Journal of Chemical Education*, 91(5), 641–647. <https://doi.org/10.1021/ed400576n>
- de Jong, T. (2010). Cognitive load theory, educational research, and instructional design: Some food for thought. *Instructional Science*, 38(2), 105–134. <https://doi.org/10.1007/s11251-009-9110-0>
- DeLeeuw, K. E., & Mayer, R. E. (2008). A Comparison of Three Measures of Cognitive Load: Evidence for Separable Measures of Intrinsic, Extraneous, and Germane Load. *Journal of Educational Psychology*, 100(1), 223–234. <https://doi.org/10.1037/0022-0663.100.1.223>
- Fan, X., & Yen, J. (2007). Realistic cognitive load modeling for enhancing shared mental models in human-agent collaboration. *Proceedings of the International Conference on Autonomous Agents*, 5, 395–402. <https://doi.org/10.1145/1329125.1329197>
- Fan, X., & Yen, J. (2011). Modeling cognitive loads for evolving shared mental models in human-agent collaboration. *IEEE Transactions on Systems, Man, and Cybernetics, Part B: Cybernetics*, 41(2), 354–367. <https://doi.org/10.1109/TSMCB.2010.2053705>
- Gagne, R. M. (1974). Instruction and The Condition of Learning. In *MSS Information Corporation* (Vol. 1).
- <https://doi.org/10.1177/016146816306500209>
- Gunawan, A., & Sihombing, J. L. (2023). *Perbedaan Minat dan Hasil Belajar Siswa yang Dibelajarkan dengan Model Problem Based Learning berbantuan Lectora Inspire dan Powerpoint pada Materi Kelarutan dan Hasil Kali*

- Kelarutan di SMA.* 2(3), 10170–10177.
- Hasanuddin, M. I. (2020). Pengetahuan Awal (Prior Knowledge) : Konsep Dan Implikasi Dalam Pembelajaran. *EDISI : Jurnal Edukasi Dan Sains*, 2(2), 217–232. <https://ejournal.stitpn.ac.id/index.php/edisi>
- Ihsan, T., Saputro, S., & Hastuti, B. (2021). Diagnosis Kesulitan Belajar Materi Kelarutan dan Hasil Kali Kelarutan dengan Model Pembelajaran STAD dilengkapi handout untuk siswa kelas XI MIPA SMA N 3 Boyolali. *Jurnal Pendidikan Kimia Indoensia*, 10(2).
- Lang, A. (2000). The limited capacity model of mediated message processing. *Journal of Communication*, 50(1), 46–70. <https://doi.org/10.1111/j.1460-2466.2000.tb02833.x>
- Latifah, T. S., Hindriana, A. F., & Satianugraha, H. (2016). Implementasi Media Audio Visual Untuk Menurunkan Beban Kognitif Siswa Pada Konsep Ekosistem di Kelas VII SMP. *Quagga*, 8(2), 45–53.
- Lesmana Sari, E., Ramdhan, B., & Windyariani, S. (2020). Beban Kognitif Siswa Pada Materi Pencemaran Lingkungan Berbantuan Prezi Application. *Biodik*, 6(3), 233–241. <https://doi.org/10.22437/bio.v6i3.9840>
- Lusk, D. L., Evans, A. D., Jeffrey, T. R., Palmer, K. R., Wikstrom, C. S., & Doolittle, P. E. (2009). Multimedia learning and individual differences: Mediating the effects of working memory capacity with segmentation. *British Journal of Educational Technology*, 40(4), 636–651. <https://doi.org/10.1111/j.1467-8535.2008.00848.x>
- Milenković, D., Segedinac, M., Hrin, T., & Cvjetićanin, S. (2014). Cognitive Load at Different Levels of Chemistry Representations. *Croatian Journal of Education*, 16(3), 699–722.
- Morissan. (2012). *Metode Penelitian Survei*. Kencana. http://www.academia.edu/15619201/Buku_metode_penelitian_survei_morisan
- Nurwanda, Y., Milama, B., & Yunita, L. (2020). Beban Kognitif Siswa Pada Pembelajaran Kimia di Pondok Pesantren. *Jurnal Inovasi Pendidikan Kimia*, 14(2), 2629–2641. <https://journal.unnes.ac.id/nju/index.php/JIPK/article/view/21813>
- Paas, F., & Ayres, P. (2014). Cognitive Load Theory: A Broader View on the Role of Memory in Learning and Education. *Educational Psychology Review*, 26(2), 191–195. <https://doi.org/10.1007/s10648-014-9263-5>
- Paas, F. G., Van Merriënboer, J. J., & Adam, J. J. (1994). Measurement of cognitive load in instructional research. *Perceptual and Motor Skills*, 79(1 Pt 2), 419–430. <https://doi.org/10.2466/pms.1994.79.1.419>
- Paas, F., Tuovinen, J. E., Tabbers, H., & Van Gerven, P. W. M. (2003). Cognitive load measurement as a means to advance cognitive load theory. *Educational Psychologist*, 38(1), 63–71. https://doi.org/10.1207/S15326985EP3801_8

- Plass, J. L., Moreno, R., & Brunken, R. (2010). *Cognitive Load Theory*. Cambridge University Press.
- Prøitz, T. S. (2010). Learning outcomes: What are they? Who defines them? When and where are they defined? *Educational Assessment, Evaluation and Accountability*, 22(2), 119–137. <https://doi.org/10.1007/s11092-010-9097-8>
- Rahmat, A., & Hindriana, A. F. (2014). Beban Kognitif Mahasiswa dalam Pembelajaran Fungsi Terintegrasi Struktur Tumbuhan berbasis Dimensi Belajar. *Jurnal Ilmu Pendidikan*, 20(1), 66–74.
- Ridwan .(2015). *Dasar-Dasar Statistika*. Bandung: Alfabeta
- Sabilla, Z., Ridwan, A., & Yusmaniar, Y. (2019). Hubungan antara Pemahaman Konsep dengan Beban Kognitif Siswa pada Materi Hidrolisis Garam. *JRPK: Jurnal Riset Pendidikan Kimia*, 9(1), 46–51. <https://doi.org/10.21009/jrpk.091.06>
- Salsabila, N. H. (2017). Proses kognitif dalam pembelajaran bermakna. *Konferensi Nasional Penelitian Matematika Dan Pembelajarannya II, Knpmp Ii*, 434–443. <http://hdl.handle.net/11617/8830>
- Subandriyo, B. (2020). Buku Ajar Analisis Korelasi dan Regresi. *Diklat Statistik Tingkat Ahli BPS Angkatan XXI*, 31. https://pusdiklat.bps.go.id/diklat/bahan_diklat/BA_Analisis_Korelasi_dan_Regresi_Budi_Soebandriyo_SST_M.Stat_2123.pdf
- Sudiana, I. K. S., Suja, I. W., & Mulyani, I. (2019). Analisis Kesulitan Belajar Kimia Siswa Pada Materi Kelarutan Dan Hasil Kali Kelarutan. *Jurnal Pendidikan Kimia Indonesia*, 3(1), 7. <https://doi.org/10.23887/jpk.v3i1.20943>
- Sweller, J. (1988). Cognitive Load During Problem Solving: Effects on Learning - Sweller - 2010 - Cognitive Science - Wiley Online Library. *Cognitive Science*, 285, 257–285. [https://doi.org/10.1016/0364-0213\(88\)90023-7](https://doi.org/10.1016/0364-0213(88)90023-7)
- Sweller, J. (1994). Cognitive load theory, learning difficulty, and instructional design. *Learning and Instruction*, 4(4), 295–312. [https://doi.org/10.1016/0959-4752\(94\)90003-5](https://doi.org/10.1016/0959-4752(94)90003-5)
- Sweller, J., Ayres, P., & Kalyuga, S. (2011). Cognitive Load Theory. In *Springer* (Vol. 82). <http://www.springer.com/series/8640>
- Sweller, J., Van Merriënboer, J. J. G., & Paas, F. G. W. C. (1998). Cognitive Architecture and Instructional Design. *Educational Psychology Review*, 10(3), 251–296. <https://doi.org/10.1023/A:1022193728205>
- Van Gerven, P. W. M., Paas, F. G. W. C., Van Merriënboer, J. J. G., & Schmidt, H. G. (2002). Cognitive load theory and aging: Effects of worked examples on training efficiency. *Learning and Instruction*, 12(1), 87–105. [https://doi.org/10.1016/S0959-4752\(01\)00017-2](https://doi.org/10.1016/S0959-4752(01)00017-2)
- Van Merriënboer, J. J. G., Kirschner, P. A., & Kester, L. (2003). Taking the load off a learner's mind: Instructional design for complex learning. *Educational Psychologist*, 38(1), 5–13. https://doi.org/10.1207/S15326985EP3801_2

- Wilandari, D. N., Ridwan, A., & Rahmawati, Y. (2018). Analisis Model Mental Siswa pada Materi Larutan Elektrolit dan Nonelektrolit: Studi Kasus di Pandeglang. *JRPK: Jurnal Riset Pendidikan Kimia*, 8(2), 25–35. <https://doi.org/10.21009/jrpk.082.03>
- Xie, B., & Salvendy, G. (2000). International Journal of Cognitive Prediction of Mental Workload in Single and Multiple Tasks Environments. *International Journal of Cognitive Ergonomics*, May 2015, 37–41. <https://doi.org/10.1207/S15327566IJCE0403>
- Yuan, K., Steedle, J., Shavelson, R., Alonso, A., & Oppezzo, M. (2006). Working memory, fluid intelligence, and science learning. *Educational Research Review*, 1(2), 83–98. <https://doi.org/10.1016/j.edurev.2006.08.005>
- Yuniar, A. P., Hendrayana, A., & Setiani, Y. (2019). Analisis Beban Kognitif Siswa Pada Kemampuan Pemecahan Masalah Matematis Dalam Pokok Bahasan Perbandingan. *TIRTAMATH: Jurnal Penelitian Dan Pengajaran Matematika*, 1(1), 1. <https://doi.org/10.48181/tirtamath.v1i1.6873>
- Zulaiha, R. (2008). *Analisis Soal Secara Manual*. Departemen Pendidikan Nasional Badan Penelitian dan Pengembangan Pusat Penilaian Pendidikan.