

## DAFTAR PUSTAKA

- Adadan, E., & Savasci, F. (2012). An Analysis of 16–17-Year-Old Students' Understanding of Solution Chemistry Concepts Using a Two-Tier Diagnostic Instrument. *International Journal of Science Education*, 34(4), 513–544.
- Afandi, Ahmad. (2018). Difference of Learning Mathematics Between Open Question Model and Conventional Model. *Malikussaleh Journal of Mathematics Learning*, 1(1). 13-18.
- Arif, W., Suhandi, A., Kaniawati, I., & Setiawan, A. (2017). Development Scaffolding for Construction of Evaluation Instrument Training Program on the Cognitive Domain for Senior High School Physics Teachers and the Same Level, *Journal of Physics: Conference Series* (812 012053). IOP Publishing
- Ayre, C., & Scally, A. J. (2014). Critical Values for Lawshe's Content Validity Ratio: Revisiting the Original Methods of Calculation. *Measurement and Evaluation in Counseling and Development*, 47(1), 79-86.
- Basha, S., Drane, D., & Light, G. (2016). Adapting the Critical Thinking Assessment Test for Palestinian Universities. *Journal of Education and Learning*, 5(2), 60.
- Borg, W. R., & Gall, M. D. (1974). *Education Research: An Introduction (Second Edition)*. New York: David McKay Company Inc.
- Chen, C., & Wu, C. (2015). Computers & Education Effects of Different Video Lecture Types on Sustained Attention, Emotion, Cognitive Load, and Learning Performance. *Computer & Education*, 80, 108-121.
- Dancy, M. H., & Beichner, R. (2006). Impact of Animation on Assessment of Conceptual Understanding in Physics. *Physical Review Special Topics-Physics Education Research*, 2(1), 010104.
- Djamarah, S. B. & Zain, A. (2010). *Strategi Belajar Mengajar*. Jakarta: Rineka Cipta.
- Donkor, F. (2011). Assessment of Learner Acceptance and Satisfaction with Video-Based Instructional Materials for Teaching Practical Skills at A Distance. *International Review of Research in Open and Distance Learning*, 12(5), 71-88.
- Emerson, R. W. (2015). Causation and Pearson's Correlation Coefficient. *Journal of Visual Impairment & Blindness*, 109(3), 242–244.
- Ennis, R. H. (1993). Critical Thinking Assessment. *Theory into Practice*, 32(3), 179-186.

- Ennis, R. H. (1996). Critical Thinking Dispositions: Their Nature and Assesability. *Informal Logic*, 165-182.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
- Facione, P. A. (1990). Critical thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction (The Delphi Report).
- Facione, P. A. (1991). *Using the California Critical Thinking Skills Test in Research, Evaluation, and Assessment*. California Academic Press, Millbrae, CA.
- Facione, P. A. (2018). Critical Thinking: What It Is and Why It Counts. Measured Reasons and the California Academic Press, Millbrae, CA.
- Fisher, A. (2001). Teaching Comprehension and Critical Literacy: Investigating Guided Reading in Three Primary Classrooms. *Literacy*, 42(1), 19-28.
- Franco, A. R., Costa, P. S., Butler, H. A., & Almeida, L. S. (2017). Assessment of Undergraduates' Real-World Outcomes of Critical Thinking in Everyday Situations. *Psychological Reports*, 120(4), 707-720.
- Fu, J. S. (2013). ICT in Education: A Critical Literature Review and Its Implications. *International Journal of Education & Development using Information & Communication Technology*, 9(1), 112-125.
- Guilford, J. (1978). *Fundamental Statistics in Psychology and Education*. New York: Mc. Graww-Hill Book Co. Ind.
- Griffin, P., McGaw, B., & Care, E. (Eds.). (2014). *Assessment and Teaching of 21st Century Skills: Methods and Approach*. Springer.
- Halpern, D. F. (2013). *Critical Thinking Across the Curriculum: A Brief Edition of Thought & Knowledge*. New York: Routledge.
- Halpern, D. F. (2014). *Thought and Knowledge: An Introduction to Critical Thinking*. New York: Psychology Press.
- Ibrahim, M., & Nur, M. (2004). *Pembelajaran Berdasarkan Masalah*. Surabaya: UNESA University Press.
- Ku, K. Y. (2009). Assessing Students' Critical Thinking Performance: Urging for Measurements Using Multi-Response Format. *Thinking Skills and Creativity*, 4(1), 70-76.
- Lawshe, C. H. (1975). A quantitative Approach to Content Validity. *Personnel Psychology*, 28(4), 563-575.

- Liliasari. (2007). Pengembangan Keterampilan Berpikir Tingkat Tinggi Siswa SMP sebagai Dampak *Lesson Study*. [Online]. Diakses dari [file.upi.edu/...PENDIDIKAN.../makalah\\_LS\\_2007\\_Liliasari.pdf](http://file.upi.edu/...PENDIDIKAN.../makalah_LS_2007_Liliasari.pdf).
- Mabruroh, F. (2017). *Konstruksi Instrumen Tes Keterampilan Berpikir Kritis terkait Materi Gelombang Bunyi. Jurusan Pendidikan Fisika Sekolah Pascasarjana*. (Tesis). Universitas Pendidikan Indonesia, Bandung.
- Mabruroh, F. & Suhandi, A. (2017). Construction of Critical Thinking Skills Test Instrument Related the Concept on Sound Wave. *Journal of Physics: Conference Series*. Volume 812, Number 1.
- Mahbubah, K. (2017). *Pengembangan Computer Supported Critical Thinking Test (CSCiT Test) untuk SMA/MA Terkait Materi Suhu dan Kalor*. (Tesis). Jurusan Pendidikan Fisika Sekolah Pascasarjana. Universitas Pendidikan Indonesia, Bandung.
- Mapela, R. & Siew, N.M. (2015). The Development and Validation of a Test of Science Critical Thinking for Fifth Graders. *Springer Plus*. 4: 741.
- Ng, W., & Nguyen, V. T. (2006). Investigating the Integration of Everyday Phenomena and Practical Work in Physics Teaching in Vietnamese High Schools. *International Education Journal*, 7(1), 36-50.
- Ningsi, Sulastriya. (2018). *Penerapan Model Levels of Inquiry Based Instruction (LoIBI) Berbantuan Multimedia Visual pada Pembelajaran Fisika SMA untuk Meningkatkan Scientific Explanation Skills dan Inquiry Skills Siswa*. (Tesis). Jurusan Pendidikan Fisika Sekolah Pascasarjana. Universitas Pendidikan Indonesia, Bandung.
- Noor, N.M., Yon, H., Arip, M.A.S.M. (2016). Measuring the Content Validity of MEPI Using Content Validity Ratio. *Journal of ICT in Education*, 3 (4), 81-88
- Norton, P., & Hathaway, D. (2010). Video Production as An Instructional Strategy: Content Learning and Teacher Practice, *Contemporary Issues in Technology and Teacher Education*, 10(1), 145-166.
- Nurudin, M., Kaniawati, I., & Chandra, D. T. (2017). Integrating Argument-Based Science Inquiry with Argument Mapping in Physics Learning: A Literature Study. *4th ICRIEMS* (hal. 59-63). Yogyakarta: Faculty of Mathematics and Natural Sciences.
- Partnership for 21st Century Skills. (2008). *21st Century Skills, Education and Competitiveness*. [Online]. Diakses dari <https://files.eric.ed.gov/fulltext/ED519337.pdf>.

Partnership for 21st Century Skills. (2011). [Online]. *Partnership for 21st Century Skills (P21)*. Diakses dari <https://www.ims.gov/assets/1/AssetManager/Bishop%20Pre-Con%20202.pdf>.

Permendikbud Nomor 81A Tahun 2013 tentang Implementasi Kurikulum

Permendikbud Nomor 21 Tahun 2016 tentang Standar Isi Pendidikan Dasar dan Menengah

Permendikbud Nomor 20 Tahun 2016 tentang Standar Kompetensi Lulusan Pendidikan Dasar dan Menengah

Putrawan, I. M. (2017). *Pengujian Hipotesis dalam Penelitian-penelitian*. Bandung: CV Alfabeta.

Sagala, S. (2010). *Konsep dan Makna Pembelajaran*. Bandung: Alfabeta.

Stiggins, R. J. (1994). *Student-Centered Classroom Assessment*. New York: Macmillan College Publishing Company.

Stobaugh, R. (2013). *Assessing Critical Thinking in Middle and High Schools*. New York: Routledge.

Su, K.-D. & Yeh, S.-C. (2015). Effective Assessments of Integrated Animations to Explore College Students' Physics Learning Performances. *Social and Behavioral Sciences*. 176: 588-595.

Rundgren, C. J., & Tibell, L. A. (2009). Critical Features of Visualizations of Transport Through the Cell Membrane—An Empirical Study of Upper Secondary and Tertiary Students' Meaning-Making of A Still Image and an Animation. *International Journal of Science and Mathematics Education*, 8(2), 223-246.

Tiruneh, D. T., Weldeslassie, A. G., Kassa, A., Tefera, Z., De Cock, M., & Elen, J. (2016). Systematic Design of a Learning Environment for Domain-Specific and Domain-General Critical Thinking Skills. *Educational Technology Research and Development*, 64(3), 481-505.

Tiruneh, D. T., De Cock, M., Weldeslassie, A. G., Elen, J., & Janssen, R. (2017). Measuring Critical Thinking in Physics: Development and Validation of a Critical Thinking Test in Electricity and Magnetism. *International Journal of Science and Mathematics Education*, 15(4), 663-682.

Undang-undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional

Wagner, T. A., & Harvey, R. J. (2006). Development of A New Critical Thinking Test Using Item Response Theory. *Psychological Assessment*, 18(1), 100-105.

- Wallace, E. D., & Jefferson, R. N. (2015). Developing Critical Thinking Skills: Assessing the Effectiveness of Workbook Exercises. *Journal of College Teaching & Learning*, 12(2), 101-108.
- Wang, W. F., Chen, C. M., & Wu, C. H. (2015). Effects of Different Video Lecture Types on Sustained Attention, Emotion, Cognitive Load, and Learning Performance. In *Advanced Applied Informatics (IIAI-AAI), 2015 IIAI 4th International Congress on* (pp. 385-390). IEEE.
- Wenning, C.J (2005). Levels of Inquiry: Hierarchies of Pedagogical Practices and Inquiry Processes. *Journal Physics Teacher Education Online*, 2(3).
- Wenning, C.J. (2010). Levels of Inquiry: Using Inquiry Spectrum Learning Sequences to Teach Science. *Journal Physics Teacher Education Online*, 5(3).
- Wenning, C.J. (2011). The Levels of Inquiry Model of Science Teaching. *Journal Physics Teacher Education Online*, 6(2).
- White, B., Stains, M., Escriu-Sune, M., Medaglia, E., Rostamjad, L., Chinn, C., & Sevian, H. (2011). A Novel Instrument for Assessing Students' Critical Thinking Abilities. *Journal of College Science Teaching*, 40(5), 102-107.
- Williamson, V. M., & Abraham, M. R. (1995). The Effects of Computer Animation of The Particulate Mental Models of College Chemistry Students. *Journal of Research in Science Teaching*, 57, 247–262.
- Wilson, R., Pan, W., & Schumsky, D. A. (2012). Recalculation of the Critical values for Lawshe's Content Validity Ratio. *Measurement and Education in Counseling and Development*, 45(3), 197-210.
- Yu, K., Lin, K.-Y., & Chang, S.-F, (2017) The Development and Validation of a Mechanical Critical Thinking Scale for High School Students. *Eurasia Journal of Mathematics, Science and Technology Education* 13(5):1361-1376.