

DAFTAR PUSTAKA

- Abd-El-Khalick, F., Boujaoude, S., Duschl, R., Lederman, N. G., Mamlok-Naaman, R., Hofstein, A., ... & Tuan, H. L. (2004). Inquiry in science education: International perspectives. *Science education*, 88(3), 397-419.
- Abusomwan, S. B., & Osaigbovo, L. (2020). Competency Improvement Needs of Teachers of Brick/Blocklaying and Concreting Works. *Journal of Education and Learning (EduLearn)*, 14(4), 517-524.
- Akmam, A., Anshari, R., Amir, H., Jalinus, N., & Amran, A. (2018, April). Influence of learning strategy of cognitive conflict on student misconception in computational physics course. In *IOP Conference Series: Materials Science and Engineering* (Vol. 335, p. 012074). IOP Publishing.
- Apino, E., & Vieira, M. (1993). *Defining Higher Order Thinking Related papers problems and solutions in assessing critical thinking dispositions of pre-serv...* Gökhan İskifoğlu Assessing 21st century skills: *Int egrat ing research findings*. <http://www.jstor.org/stable/1476693>
- Arsal, Z. (2015). The effects of microteaching on the critical thinking dispositions of pre-service teachers. *Australian Journal of Teacher Education (Online)*, 40(3), 140-153.
- Astuti, I. P., & Untari, E. (2021). Eksperimentasi Penerapan Model Pembelajaran NHT (Numbered Heads Together) dan TGT (Team Games Tournament) Terhadap Prestasi Belajar Matematika di SMP Negeri 5 Ngawi. *JEID: Journal of Educational Integration and Development*, 1(2), 134-146.
- Barak, M., & Shakhman, L. (2008). Reform-based science teaching: Teachers' instructional practices and conceptions. *Eurasia Journal of Mathematics, Science and Technology Education*, 4(1), 11-20.
- Beck, C., Butler, A., & Burke da Silva, K. (2014). Promoting inquiry-based teaching in laboratory courses: are we meeting the grade?. *CBE—Life Sciences Education*, 13(3), 444-452.
- Bonnes, C., & Hochholdinger, S. (2020). Approaches to teaching in professional training: a qualitative study. *Vocations and Learning*, 13(3), 459-477.
- Buku Pegangan Pembelajaran HOTS 2018-2.
- Crawford, B. A. (2000). Embracing the essence of inquiry: New roles for science teachers. *Journal of Research in Science Teaching: The Official Journal of the National Association for Research in Science Teaching*, 37(9), 916-937.
- DeLuca, C., Bolden, B., & Chan, J. (2017). Systemic professional learning through collaborative inquiry: Examining teachers' perspectives. *Teaching and teacher education*, 67, 67-78.

Digest, E. (n.d.). *ED340272 1991-09-00 Active Learning: Creating Excitement in the Classroom*.
www.eric.ed.gov

Dinni, H. N. (2018, February). HOTS (High Order Thinking Skills) dan kaitannya dengan kemampuan literasi matematika. In *PRISMA, Prosiding Seminar Nasional Matematika* (Vol. 1, pp. 170-176).

Dosen, T. (2015). *Ragam Model Pembelajaran di Sekolah Dasar (Edisi ke-2)*. UPI Sumedang Press.

Eick, C. J., & Reed, C. J. (2002). What makes an inquiry-oriented science teacher? The influence of learning histories on student teacher role identity and practice. *Science Education*, 86(3), 401-416.

Fitriyah, I., Ramly, A. T., & Firdaus, M. A. (2022). The Influence of Organizational Culture on Improving the Performance of Educational Staff Case Study at Institut Bisnis dan Informatika Kesatuan.

Gao, R., & Lloyd, J. (2020). Precision and accuracy: Knowledge transformation through conceptual learning and inquiry-based practices in introductory and advanced chemistry laboratories. *Journal of Chemical Education*, 97(2), 368-373.

Gichuhi, W. K. (2019). Astrochemistry as a Gateway to Teaching and Learning Threshold Concepts in Physical Chemistry. *World*, 7(3), 209-215.

Heong, Y. M., Othman, W. B., Yunus, J. B. M., Kiong, T. T., Hassan, R. B., & Mohamad, M. M. B. (2011). The level of marzano higher order thinking skills among technical education students. *International Journal of Social Science and Humanity*, 1(2), 121.

Iriani, A. P., Abidin, S. F., & Safitri, S. R. (2019). Project-based learning in Chinese classroom: A way to stimulate students. *KnE Social Sciences*, 77-84.

Joyce, B., & Calhoun, E. (2024). *Models of teaching*. Taylor & Francis.

Juliarti, H., & Widiarti, H. R. (2019). Kajian Literatur: Kemampuan Berpikir Tingkat Tinggi dalam Pembelajaran Kimia. In *Prosiding Seminar Nasional Kimia dan Pembelajarannya (SNKP)* (pp. 313-317).

Kasih, A. P., & Nurcahyo, H. (2020). Pengembangan Model Pembelajaran Adel (Active and Delightful Learning) Pada Materi Organel Sel Kelas VII SMP. *Edusains*, 12(1), 135-144.

Khalik, M., Abdul Talib, C., & Mohd Rafi, I. B. (2018). Implementation of Inquiry-Based Science Education: Issues, Exemplars and Recommendations. *Learning Science and Mathematics Journal*, 832(13), 115-132.

Kurniati, D., Harimukti, R., & Jamil, N. A. (2016). Kemampuan berpikir tingkat tinggi siswa SMP di Kabupaten Jember dalam menyelesaikan soal berstandar PISA. *Jurnal Penelitian dan Evaluasi Pendidikan*, 20(2), 142-155.

- Lawson, A. E. (1995). *Science teaching and the development of thinking*. Belmont, CA: Wadsworth.
- Madhuri, G. V., Kantamreddi, V. S. S. N., & Prakash Goteti, L. N. S. (2012). Promoting higher order thinking skills using inquiry-based learning. *European Journal of Engineering Education*, 37(2), 117-123.
- Mika, J., Zainuddin, Z., & An'nur, S. (2014). Penerapan Model Pembelajaran Advance Organizer (AO) Untuk Meningkatkan Hasil Belajar Siswa. *Berkala Ilmiah Pendidikan Fisika*, 2(3), 222-233.
- Mulyatiningsih, E. (2016). Pengembangan model pembelajaran. Diakses dari <http://staff.uny.ac.id/sites/default/files/pengabdian/dra-endang-mulyatiningsih-mpd/7cpengembangan-model-pembelajaran.pdf> pada September. PISA-2015-Indonesia. (n.d.).
- Nainggolan, B., Hutabarat, W., Situmorang, M., & Sitorus, M. (2020). Developing Innovative Chemistry Laboratory Workbook Integrated with Project-Based Learning and Character-Based Chemistry. *International Journal of Instruction*, 13(3), 895-908.
- Nilakusmawati, D. P. E., & Asih, N. M. (2012). Kajian Teoritis Beberapa Model Pembelajaran. *Kajian Teoritis Beberapa Model Pembelajaran*, 1222.
- Ningsi, S., Gani, T., & Auliah, A. (2020). Pengembangan Teknik Cerdas Cermat Kimia Berbasis HOTS dalam Model Team Games Tournament untuk Meningkatkan Motivasi Belajar dan Keterampilan Berpikir Kritis Peserta Didik. *Chemistry*, 4(1), 1-9.
- Pratiwi, K. W., Suardika, I. W. R., & Suara, I. M. (2014). Model Pembelajaran Sains Teknologi Masyarakat (STM) Berbantuan Media Visual Terhadap Hasil Belajar IPA. *MIMBAR PGSD Undiksha*, 2(1).
- PRAYITNO, A., & Nofiana, M. (2021). Pengembangan instrumen evaluasi high order thinking skills pada materi jaringan hewan dengan bentuk two-tier multiple choice question. *Bioed: Jurnal Pendidikan Biologi*, 8(1), 1-10.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of engineering education*, 93(3), 223-231.
- Priyasmika, R., & Yuliana, I. F. (2017). Penerapan Model Inkuiri Terbimbing dan Pengaruhnya Terhadap Higher Order Thinking Skills (HOTS) Ditinjau dari Literasi Kimia. *Journal of Chemistry Education Research*, 1(1), 1-8.
- Purba, J., Situmorang, M., & Silaban, R. (2019). The development and implementation of innovative learning resource with guided projects for the teaching of carboxylic acid topic. *Indian Journal of Pharmaceutical Education and Research*, 53(4), 603-612.
- Rahmawati, Y., & Taylor, P. C. (2019). *Empowering Science and Mathematics for Global Competitiveness*. London: CRC Press.

- Ramadhan, S., & Linda, R. (2020). Pengembangan E-Module Interaktif Chemistry Magazine Berbasis Kvisoft Flipbook Maker Pada Materi Laju Reaksi. *Jurnal Zarah*, 8(1), 7-13.
- Rima, R., & Anriani, N. (2023). Implementasi Model Evaluasi Context, Input, Process, and Product (CIPP) pada Program Pengenalan Lapangan Persekolahan (PLP) bagi Calon Guru Bahasa Inggris. *Afeksi: Jurnal Penelitian dan Evaluasi Pendidikan*, 4(6), 622-631.
- Rizal, R., Rusdiana, D., Setiawan, W., & Siahaan, P. (2020, April). Creative thinking skills of prospective physics teacher. In *Journal of Physics: Conference Series* (Vol. 1521, No. 2, p. 022012). IOP Publishing.
- Roff, S. U. E., McAleer, S., Harden, R. M., Al-Qahtani, M., Ahmed, A. U., Deza, H., ... & Primparyon, P. (1997). Development and validation of the Dundee ready education environment measure (DREEM). *Medical teacher*, 19(4), 295-299.
- Rop, C. J. (2002). The meaning of student inquiry questions: A teacher's beliefs and responses. *International Journal of science education*, 24(7), 717-736.
- Rosana, D., & Dwandaru, W. S. B. (2019). Measuring Junior High School Students' Science Learning and Science Process Skills through an Integrated Science Instructional Assessment. *Journal of Turkish Science Education*, 16(4), 467-477.
- Rusilowati, A., Hartono, H., & Supriyadi, S. (2012). Pengembangan model pembelajaran better teaching and learning berkarakter untuk membekali kompetensi pedagogi mahasiswa calon guru. *Jurnal Penelitian Pendidikan*, 29(2).
- Saido, G. A. M., Siraj, S., DeWitt, D., & Al-Amedy, O. S. (2018). Development of an instructional model for higher order thinking in science among secondary school students: a fuzzy Delphi approach. *International Journal of Science Education*, 40(8), 847-866.
- Santi, T. K. (2021). Project-Based Learning to Improve Course Understanding Plant Physiology. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4), 9516-9524.
- Shilo, G., & Ragonis, N. (2019). A new approach to high-order cognitive skills in linguistics: problem-solving inference in similarity to computer science. *Journal of further and higher education*, 43(3), 333-346.
- Sinaga, M., Situmorang, M., & Hutabarat, W. (2019). Implementation of innovative learning material to improve students competence on chemistry. *Indian Journal of Pharmaceutical Education and Research*, 53(1), 28-41.
- Situmorang, M., Purba, J., & Silaban, R. (2020). Implementation of an innovative learning resource with project to facilitate active learning to improve students' performance on chemistry. *Indian Journal of Pharmaceutical Education and Research*, 54(4), 905-914.

- Situmorang, M., Sinaga, M., Purba, J., Daulay, S. I., Simorangkir, M., Sitorus, M., & Sudrajat, A. (2018). Implementation of Innovative Chemistry Learning Material with Guided Tasks to Improve Students' Competence. *Journal of Baltic Science Education*, 17(4), 535-550.
- Situmorang, M., Sitorus, M., Hutabarat, W., & Situmorang, Z. (2015). The Development of Innovative Chemistry Learning Material for Bilingual Senior High School Students in Indonesia. *International Education Studies*, 8(10), 72-85.
- Sutiani, A., Silalahi, A., & Situmorang, M. (2017, October). The development of innovative learning material with problem based approach to improve students competence in the teaching of Physical chemistry. In *2nd Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2017)* (pp. 379-383). Atlantis Press.
- Sutiani, A., Situmorang, M., & Silalahi, A. (2021). Implementation of an inquiry learning model with science literacy to improve student critical thinking skills. *International Journal of Instruction*, 14(2), 117-138.
- Szteinberg, G., Balicki, S., Banks, G., Clinchot, M., Cullipher, S., Huie, R., ... & Sevian, H. (2014). Collaborative professional development in chemistry education research: bridging the gap between research and practice. *Journal of Chemical Education*, 91(9), 1401-1408.
- Tan, O. S. (2021). *Problem-based learning innovation: Using problems to power learning in the 21st century*. Gale Cengage Learning.
- Van Uum, M. S., Verhoeff, R. P., & Peeters, M. (2016). Inquiry-based science education: towards a pedagogical framework for primary school teachers. *International journal of science education*, 38(3), 450-469.
- Vidergor, H. E. (2018). Effectiveness of the multidimensional curriculum model in developing higher-order thinking skills in elementary and secondary students. *The curriculum journal*, 29(1), 95-115.
- Westermann, K., & Rummel, N. (2012). Delaying instruction: Evidence from a study in a university relearning setting. *Instructional Science*, 40, 673-689.
- Widjaja, M. S. D. (2015). Evaluating Problem-based Learning in a Musical Drama Training Program in Cilincing Sub-district, North Jakarta. *Journal of Urban Culture Research*, 10(1), 64-81.
- Winarti, A. (2017). Strategi Belajar Mengajar Kimia.
- Wu, H. K., & Hsieh, C. E. (2006). Developing sixth graders' inquiry skills to construct explanations in inquiry-based learning environments. *International journal of science education*, 28(11), 1289-1313.

Wu, H. K., & Krajcik, J. S. (2006). Inscriptional practices in two inquiry-based classrooms: A case study of seventh graders' use of data tables and graphs. *Journal of research in science teaching*, 43(1), 63-95.

Yılmaz, Ö., & Malone, K. L. (2020). Preservice teachers perceptions about the use of blended learning in a science education methods course. *Smart Learning Environments*, 7(1), 18.

Zohar, A., & Alboher Agmon, V. (2018). Raising test scores vs. teaching higher order thinking (HOT): senior science teachers' views on how several concurrent policies affect classroom practices. *Research in Science & Technological Education*, 36(2), 243-260.



THE
Character Building
UNIVERSITY