

DAFTAR PUSTAKA

- Abdulkhak, I., & Darmawan, D. (2013). *Teknologi Pendidikan*. Bandung: PT. Remaja Rosdakarya.
- Abdullah, S. S. (2015). Mahasiswa (calon) guru matematika yang profesional. In *Seminar Nasional Matematika Dan Pendidikan Matematika UNY* (Vol. 1, pp. 721-726).
- Abdussakir. (2010). Pembelajaran Geometri Sesuai Teori Van Hiele. *Jurnal Kependidikan dan Keagamaan*, 7(2). UIN Maliki Malang.
- Abdusysykir. (2007). *Ketika Kyai Mengajar Matematika*. UIN-Malang Press.
- Adjie, N., Nahrowi, & Maulana. (2006). *Pemecahan Masalah Matematika*. Bandung: UPI Press.
- AECT. (1977). *Definisi Teknologi Pendidikan* (terjemahan Yusufhadi Miarso). Jakarta: CV. Rajawali.
- AECT. (1994). *Definisi Teknologi Pendidikan*. Jakarta: CV. Rajawali.
- Afriansyah, E. A. (2017). Desain Lintasan Pembelajaran Pecahan melalui Pendekatan Realistic Mathematics Education. *Mosharafa: Jurnal Pendidikan Matematika*, 6(3), 463-474.
- Afrianto, A. (2018). Being a professional teacher in the era of industrial revolution 4.0: opportunities, challenges and strategies for innovative classroom practices. *English Language Teaching and Research*, 2(1).
- Agrawal, M. (2011). Reimagining Mathematics: A Cultural and Historical Perspective. *Educational Studies in Mathematics*.
- Ahmad Susanto. (2014). *Perkembangan Anak Usia Dini*. Jakarta: Kencana.
- Aikenhead, G. S. (2008). *Indigenous Knowledge and Science Education*. Springer.
- Aisyah, N. (2007). *Pengembangan Pembelajaran Matematika SD*. Jakarta: Dikjen Dikti Depdiknas.
- AITSL. (2015). Australian Professional Standards for Teachers. Retrieved from AITSL (accessed 5 June 2022).
- Aizikovitsh-Udi, E. (2014). The extent of mathematical creativity and aesthetics in solving problems among students attending the mathematically talented youth program. *Creative Education*.
- Alfiatin, A. L., & Oktiningrum, W. (2019). Pengembangan Soal Higher Order Thinking Skills Berbasis Budaya Jawa Timur Untuk Mengukur Penalaran Siswa SD. *Indiktika: Jurnal Inovasi Pendidikan Matematika*, 2(1), 30-43.
- Ali Hamzah, & Muhlisrarini. (2014). *Perencanaan dan Strategi Pembelajaran Matematika*. Jakarta: Raja Grafindo Persada.
- Ali, Muh. (1978). *Guru Dalam Proses Belajar Mengajar*. Bandung: Sinar Baru.
- Alkin, M. C., et al. (2013). *Handbook of Educational Psychology*. Routledge.
- Amalia, D., & Hadi, W. (2020). Analisis kesalahan siswa dalam menyelesaikan soal HOTS berdasarkan kemampuan penalaran matematis. *Transformasi: Jurnal Pendidikan Matematika Dan Matematika*, 4(1), 219-236.
- Amirulloh, I. (2019). Pemetaan Kelompok Kerja Siswa dengan Metode Clustering K-Means dan Algoritma Greedy. *Jurnal Informatika dan Rekayasa Perangkat Lunak*, 1(2).
- Anderson, K., & Krathwohl, D. R. (2017). *Pembelajaran, Pengajaran, Dan Asesmen Revisi Taksonomi Pendidikan Bloom*. Terjemahan oleh Agung Prihantoro. Yogyakarta: Pustaka Belajar.

- Anderson, L. W., & Krathwohl, D. R. (2001). "A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives."
- Anderson, T., & Kanuka, H. (2003). E-Learning in Higher Education: A Review of Research. *Journal of Distance Education*. Artikel ini membahas implementasi teknologi dalam pembelajaran dan tantangannya terkait.
- Andriani, N. (2017). Keefektifan Model Pembelajaran Cooperative Integrated Reading And Composition Pendekatan Joyful Learning terhadap Kemampuan Penalaran Matematis Pada Materi Teorema Pythagoras Kelas VIII (Doctoral dissertation, Universitas Muhammadiyah Semarang).
- Andriyani, R., & Yenni, Y. (2019, June). Analisis High Order Thinking Skills (HOTS) Mahasiswa Pada Mata Kuliah Trigonometri. In *Seminar & Conference Proceedings of UMT*.
- Anggraini, N. P., & Pratiwi, H. (2019). Analysis of higher order thinking skills students at junior high school in Surakarta. In *Journal of Physics: Conference Series* (Vol. 1211, No. 1, p. 012077). IOP Publishing.
- Annuuru, T. A., Johan, R. C., & Ali, M. (2017). Peningkatan kemampuan berpikir tingkat tinggi dalam pelajaran ilmu pengetahuan alam peserta didik sekolah dasar melalui model pembelajaran Treffinger. *Educational Technologia*, 1(2).
- Anwar, N. T. (2018, February). Peran kemampuan literasi matematis pada pembelajaran matematika abad-21. In *Prisma, Prosiding Seminar Nasional Matematika* (Vol. 1, pp. 364-370).
- Apino, E., & Retnawati, H. (2017). Developing instructional design to improve mathematical higher order thinking skills of students. *International Journal of Education and Research*, 5(3), 45-62.
- Apino, E., & Retnawati, H. (2017, February). Developing instructional design to improve mathematical higher order thinking skills of students. In *Journal of Physics: Conference Series* (Vol. 812, No. 1, p. 012100). IOP Publishing.
- Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2006). *Student Engagement with School: Critical Conceptual and Methodological Issues of the Construct*. *Psychology in the Schools*, 43(5), 425-441.
- Arends, R. I. (2008). *Learning to Teach Buku Satu*. Edisi Ketujuh. Yogyakarta: Pustaka Pelajar.
- Arends, R. I. (2012). *Learning to Teach*. McGraw-Hill.
- Arifin, Z., & Retnawati, H. (2017). Pengembangan instrumen pengukur higher order thinking skills matematika siswa SMA kelas X. *Pythagoras: Jurnal Pendidikan Matematika*, 12(1).
- Asikin, M. (2001). Realistic Mathematics Education (RME): Paradigma baru pembelajaran Matematika. *Makalah* (Online).
- Asmin. (2006). Implementasi Pembelajaran Matematika Realistik (PMR) dan Kendala yang Muncul di Lapangan. *Makalah* yang disajikan pada Konferensi Matematika Nasional. Bandung: ITB.
- Asnawati, S. (2017). Peningkatan kemampuan komunikasi matematis siswa SMP dengan pembelajaran kooperatif tipe teams-games-tournaments. *Euclid*, 3(2).
- Astin, A. W. (1984). Student Involvement: A Developmental Theory for Higher Education. *Journal of College Student Development*, 25, 297-308.

- Astin, A. W. (1999). Student Engagement in Higher Education. *Journal of College Student Development*, 40(5), 518-529.
- Astuti, A., & Leonard, L. (2015). Peran kemampuan komunikasi matematika terhadap prestasi belajar matematika siswa. *Formatif: Jurnal Ilmiah Pendidikan MIPA*, 2(2).
- Asyafah, A. (2019). Menimbang model pembelajaran (kajian teoretis-kritis atas model pembelajaran dalam pendidikan Islam). *TARBAWY: Indonesian Journal of Islamic Education*, 6(1), 19-32.
- Atmini. (2010). Pembelajaran Matematika dengan Pendekatan Matematika Realistik (PMR). [Online]. Tersedia: <http://staff.uny.ac.id/sites/default/files/tmp/makalah%20pmri%202010.pdf>. [12 Oktober 2012].
- Ausubel, D. (1963). *The Psychology of Meaningful Verbal Learning*. New York: Grune & Stratton.
- Ausubel, D. (1978). *Educational Psychology: A Cognitive View*. New York: Holt, Rinehart and Winston.
- Ausubel, David P. (1968). *Educational Psychology: A Cognitive View*. Holt, Rinehart & Winston. Buku ini menjelaskan prinsip-prinsip belajar bermakna yang sangat relevan dalam pengajaran matematika yang mengedepankan keterkaitan konsep dengan pengetahuan sebelumnya.
- Ayu Mustika Sari. (2019). Peningkatan Kemampuan Kognitif Anak Melalui Permainan Tabung Menggunakan Balok Angka Dan Huruf. *Jurnal STKIP Muhammadiyah Kuningan*.
- Bahrack, H. P., Bahrack, P. E., & Bahrack, A. S. (1993). *Maintenance of Knowledge: Questions about Retention and the Course of Forgetting*. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19(5), 1161-1170.
- Baker, R. K., & Robinson, S. P. (2016). *Inclusive Teaching: Strategies for Promoting Community in the Classroom*. *Journal of Educational Psychology*, 108(6), 897-908.
- Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1977). *Social Learning Theory*. Prentice-Hall.
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. W.H. Freeman and Company.
- Banks, J. A. (2001). *Cultural Diversity and Education: Foundations, Curriculum, and Teaching*. Allyn & Bacon.
- Banks, J. A. (2004). Multicultural Education: Characteristics and Goals. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of Research on Multicultural Education*. Jossey-Bass.
- Banks, J. A. (2008). *Diversity and Citizenship Education: Global Perspectives*. Jossey-Bass.
- Barnett, S. M., & Ceci, S. J. (2002). *When and Where Do We Apply What We Learn? A Taxonomy for Transfer*. *Psychological Bulletin*, 128(4), 612-637.
- Barrows, H. S. (1986). Problem-Based Learning in Medicine and Beyond: A Brief Overview. In L. Wilkerson & W. G. DeWitt (Eds.), *New Directions for Teaching and Learning* (pp. 3-12). Jossey-Bass.
- Barrows, H. S., & Tamblyn, R. M. (1980). *Problem-Based Learning: An*

- Approach to Medical Education*. Springer.
- Basuki, W. A., & Wijaya, A. (2019, February). Students worksheet based on realistic mathematics education: How the effect toward reasoning ability?. In *Journal of Physics: Conference Series* (Vol. 1157, No. 2, p. 022130). IOP Publishing.
- Bell, F. H. (1978). *Teaching and Learning Mathematics (in Secondary Schools)*. WC Brown Company.
- Bell, S. (2010). Project-Based Learning for the 21st Century: Skills for the Future. *The Clearing House*, 83(2), 39-43.
- Bellwood, Peter. (1997). *Prehistory of the Indo-Malaysian Archipelago*. Academic Press.
- Biggs, J. (2003). *Teaching for Quality Learning at University*. McGraw-Hill Education.
- Biggs, J., & Tang, C. (2011). *Teaching for Quality Learning at University*. McGraw-Hill Education.
- Bishop, A. J. (1991). The symbolic technology called mathematics and its role in education. *Bulletin de la Société mathématique de Belgique. Série A*, 43(3), 223-243.
- Bishop, A. J. (1994). Cultural conflicts in mathematics education: Developing a research agenda. *For the Learning of Mathematics*, 14(2), 15-18.
- Bishop, Alan J. (2006). *Mathematics Education and Culture*. Routledge.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.
- Black, P., & Wiliam, D. (1998). *Assessment and Classroom Learning*. Assessment in Education: Principles, Policies, and Practices, 5(1), 7-74.
- Black, P., & Wiliam, D. (1998). Inside the Black Box: Raising Standards Through Classroom Assessment. *Phi Delta Kappan*, 80(2), 139-148.
- Black, Paul, & Wiliam, Dylan. (1998). Assessment and Classroom Learning. *Assessment in Education: Principles, Policy & Practice*. Artikel ini menunjukkan bagaimana penilaian formatif yang terintegrasi dalam model pembelajaran dapat meningkatkan hasil belajar.
- Blended Learning Universe. (2016). *What is Blended Learning?* [Blended Learning Universe](#).
- Bloom, B. S. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*. New York: Longmans, Green.
- Bloom, B. S. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*. New York: David McKay Co.
- Bloom, B. S. (1976). *Human Characteristics and School Learning*. McGraw-Hill.
- Bloom, B. S. (Ed.). (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*. Longmans, Green.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*. Longmans, Green and Co.
- Bloom, Benjamin S., et al. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals*. David McKay Company.
- Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method*. Englewood Cliffs, NJ: Prentice-Hall.
- Boaler, Jo. (2000). The Impact of School and Classroom Context on the Learning

- of Mathematics. *Educational Studies in Mathematics*.
- Boaler, Jo. (2009). *The Elephant in the Classroom: Helping Children Learn and Love Maths*. Souvenir Press.
- Boholano, H. (2017). Smart Social Networking: 21st Century Teaching and Learning Skills. *Research in Pedagogy*, 7(1).
- Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Report No. 1. ERIC Clearinghouse on Higher Education.
- Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom*. Jossey-Bass.
- Bordieu, P. (1990). *The Logic of Practice*. Stanford University Press.
- Borko, H., & Livingston, C. (1989). *Cognitive Processes in Teaching and Learning*. *Educational Psychologist*, 24(3), 239-252.
- Borko, H., & Livingston, C. (1989). *Research on Teacher Learning: Implications for Teacher Education*. *Educational Psychologist*, 24(3), 173-198.
- Bowers, R., & Fox, E. L. (1988). *Sports Physiology, End Edition*. Dubuque, Iowa: Wm. C.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How People Learn: Brain, Mind, Experience, and School*. National Academy Press.
- Brinkerhoff, R. O. (2006). *The Success Case Method: A Strategic Evaluation Approach to Increasing the Value of Training*. *Advances in Developing Human Resources*, 8(4), 423-431.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Brookhart, S. M. (2010). *How to Assess Higher-Order Thinking Skills in Your Classroom*. ASCD.
- Brookhart, S. M. (2013). *How to Create and Use Rubrics for Formative Assessment and Grading*. ASCD.
- Brophy, J. (2010). *Motivating Students to Learn*. Routledge.
- Brousseau, G. (1997). *Theory of Didactical Situation in Mathematics*. Dordrecht: Kluwer Academic Publishers.
- Brown, A. L., et al. (2012). *Educating for the Future: Integrating Technology into Teacher Education*. *Education and Information Technologies*, 17(2), 177-196.
- Brown, B. W., & Liedholm, C. E. (2002). Can web courses replace the classroom in principles of microeconomics? *The American Economic Review*, 92(2), 444-448.
- Brown, H. D. (2004). *Principles of Language Learning and Teaching*. Pearson Education.
- Brownell, William A. (2007). The Progressive Nature of Learning in Mathematics. *Mathematics Teachers*, 100, 26-34.
- Bruner, J. (1960). *The Process of Education*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1961). *The Process of Education*. Cambridge, MA: Harvard University Press.
- Bruner, J. (1966). *Toward a Theory of Instruction*. Harvard University Press.
- Bruner, J. (1996). *The Culture of Education*. Harvard University Press.
- Bruner, Jerome S. (1960). *The Process of Education*. Harvard University Press.

- Bruner, Jerome S. (1966). *Toward a Theory of Instruction*. Harvard University Press.
- Bruner, Jerome S. (1996). Culture and Cognition. *The American Psychologist*.
- Bruning, R., & Horn, C. (2000). Developing motivation to write. *Educational Psychologist*, 35(1), 25-37.
- Brusilovsky, P., & Millán, E. (2007). User Models for Adaptive Hypermedia and Adaptive Educational Systems. In *The Adaptive Web* (pp. 3-53). Springer.
- Budiningsih, Asri. (2015). *Belajar dan Pembelajaran*. Jakarta: PT. Rineka Cipta.
- Bungin, M. Burhan. (2006). *Sosiologi Komunikasi: Teori, Paradigma, dan Diskursus Teknologi Komunikasi di Masyarakat*. Jakarta: Kencana.
- Burhanuddin, M., & Sugiman, M. (2018, February). The Ability of Math Teachers to Develop Higher-Order Thinking Tasks. In *1st International Conference on Education Innovation (ICEI 2017)* (pp. 56-59). Atlantis Press.
- Burton, L. (1993). Implications of constructivism for achievement in mathematics. In *Constructivist Interpretations of Teaching and Learning Mathematics*. National Key Centre for Teaching and Research in School Science and Mathematics, Curtin University of Technology, Perth, Western Australia, 7-14.
- Chamberlin, S. A., & Moon, S. M. (2005). Model-eliciting activities as a tool to develop and identify creatively gifted mathematicians. *Journal of Secondary Gifted Education*, 17(1), 37-47.
- Chiam, C. L., Hong, H., Ning, F., & Tay, W. Y. (2014). Creative and critical thinking in Singapore schools.
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin*, 3, 7.
- Chukwuyenum, A. N. (2013). Impact of critical thinking on performance in mathematics among senior secondary school students in Lagos State. *IOSR Journal of Research & Method in Education*, 3(5), 18-25.
- Civil, M. (2002). Building on the cultural knowledge of students: Connecting the classroom and the community. In *Mathematics Education Across Cultures: An ICME Study Volume*. Springer.
- Clark, R. C., & Mayer, R. E. (2011). *E-learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*. Wiley.
- Clark, R. C., & Mayer, R. E. (2016). *E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*. Wiley.
- Clark, Richard E. (1994). Reconsidering Research on Learning from Media: A Focus on Cognitive Processes. *Educational Technology Research and Development*.
- Clements, D. H., & Sarama, J. (2009). *Learning and Teaching Early Math: The Learning Trajectories Approach*. New York: Routledge.
- Cobb, P., et al. (2003). *Classroom-Based Research in Mathematics Education: An Introduction*. Routledge.
- Cohen, E. G., & Lotan, R. A. (2014). *Teaching Cooperative Learning: The Challenge for Teacher Education*. In D. M. L. Tan (Eds.), *Handbook of Research on Teacher Education: Enduring Questions in Changing Contexts*. Routledge.

- Cohen, J., & Mertens, D. M. (2009). *Research Methods in Education*. SAGE Publications.
- Cohen, J., Manion, L., & Morrison, K. (2013). *Research Methods in Education*. Routledge.
- Cohen, R. J., & Swerdlik, M. E. (2005). *Psychological Testing and Assessment: An Introduction to Tests and Measurement*. Boston: McGraw-Hill.
- Cole, M. (1996). *Cultural Psychology: A Once and Future Discipline*. Harvard University Press.
- Cooke, B. D., & Buchholz, D. (2005). Mathematical communication in the classroom: A teacher makes a difference. *Early Childhood Education Journal*, 32(6), 365-369.
- Cronbach, L. J. (1951). *Coefficient Alpha and the Internal Structure of Tests*. *Psychometrika*, 16(3), 297-334.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281-302.
- Cropley, A. J. (1999). "Creativity and Cognition: Producing Effective Novelty."
- Cropley, A. J. (2006). "In Praise of Convergent Thinking." *Creativity Research Journal*.
- Cross, P. K. (1998). Classroom Research: Implementing the Model. In *The Course Syllabus: A Learning-Centered Approach* (pp. 67-78). Jossey-Bass.
- D'Ambrosio, U. (1999). Ethnomathematics: A Multicultural View of Mathematical Ideas. *For the Learning of Mathematics*.
- Dahar, R. Wi. (2011). *Teori Belajar dan Pembelajaran* (Cet. V). Jakarta: Erlangga.
- Dalyono, M. (2012). *Psikologi Pendidikan*. Jakarta: PT. Rineka Cipta.
- D'Ambrosio, U. (2001). In My Opinion: What Is Ethnomathematics, and How Can It Help Children in Schools?. *Teaching Children Mathematics*, 7(6), 308-310.
- Darling, L. H. (2006). Constructing 21st Century Teacher Education. *Journal of Teacher Education*, 57, 300-314.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1). Retrieved from <https://epaa.asu.edu/ojs/article/view/392>
- Darling-Hammond, L. (2010). *The Flat World and Education: How America's Commitment to Equity Will Determine Our Future*. Teachers College Press.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective Teacher Professional Development*. Learning Policy Institute.
- Daryanto. (2013). *Strategi Pembelajaran*. Rineka Cipta.
- Dasar, B. P. K. D. P. (2006). *Kurikulum Tingkat Satuan Pendidikan*. Jakarta: Disdik.
- Davis, F. D. (1989). *Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*. *MIS Quarterly*, 319-340.
- De Bono, E. (1967). *The Use of Lateral Thinking*. Penguin Books.
- De Lange, J. (2006). Mathematical literacy for living from OECD-PISA perspective.
- Deci, E. L., & Ryan, R. M. (2000). *Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions*. *Contemporary Educational Psychology*, 25(1), 54-67.

- Della Putri, M. A. R. L. I. Z. A. (2021). *Profil Berpikir Matematis Siswa SMP pada Materi Geometri Bangun Datar (Segiempat dan Segitiga)* (Doctoral dissertation, IAIN BENGKULU).
- Delpit, L. (1995). *Other People's Children: Cultural Conflict in the Classroom*. The New Press.
- Departemen Pendidikan Nasional. (2001). *Kurikulum Berbasis Kompetensi: Mata Pelajaran Matematika Sekolah Lanjutan Tingkat Pertama*. Jakarta: Badan Penelitian dan Pengembangan.
- Depdiknas. (2001). *Kurikulum Berbasis Kompetensi: Mata Pelajaran Matematika Sekolah Menengah Umum*. Jakarta: Badan Penelitian dan Pengembangan.
- Depdiknas. (2003). *Pedoman Khusus Pengembangan Sistem Penilaian Berbasis Kompetensi SMP*. Jakarta: Depdiknas.
- Depdiknas. (2003). *Undang-undang RI No.20 tahun 2003 tentang Sistem Pendidikan Nasional*.
- Depdiknas. (2005). *Standar Nasional Republik Indonesia: Peraturan Pemerintah Republik Indonesia*. Jakarta: Presiden Republik Indonesia.
- Depdiknas. (2007). *Kurikulum Tingkat Satuan Pendidikan (KTSP)*. Jakarta: Depdiknas.
- DeVellis, R. F. (2017). *Scale Development: Theory and Applications*. Sage Publications.
- Dewey, J. (1916). *Democracy and Education*. Macmillan.
- Dewey, J. (1933). *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*. D.C. Heath and Company.
- Dewey, J. (1938). *Experience and Education*. Kappa Delta Pi.
- Dewey, J. (1938). *Experience and Education*. New York: Macmillan.
- Dick, W., Carey, L., & Carey, J. O. (2001). *The Systematic Design of Instruction* (6th ed). USA: Harper Collins Publisher.
- Dick, W., Carey, L., & Carey, J. O. (2014). *The Systematic Design of Instruction*. Pearson Education.
- Dick, W., Carey, L., & Carey, J. O. (2015). *The Systematic Design of Instruction*. Boston: Pearson.
- 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).
- Djmarah, Syaif. Bahri. (2000). *Guru dan Anak Didik dalam Interaksi Edukatif*. Jakarta: Rineka Cipta.
- Driana, E., & Ernawati, E. (2019). Teachers' understanding and practices in assessing higher order thinking skills at primary schools. *Acitya: Journal of Teaching and Education*, 1(2), 110-118.
- Dubinsky, E. (2001). *Using a Theory of Learning in College Mathematics Courses*. Coventry: University of Warwick.
- Dubinsky, E., & McDonald, M. A. (2001). *APOS: A Constructivist Theory of Learning in Undergraduate Mathematics Education*. Netherlands: Kluwer Academic Publishers.
- Duran, R. D. (1998). *Cultural Differences and Educational Implications: Theories and Strategies for Teaching Diverse Learners*. Teacher's College Press.
- Dweck, C. S. (2006). *Mindset: The New Psychology of Success*. Random House.
- Edelson, D. C., Gordin, D. N., & Pea, R. D. (1999). *Addressing the Challenges of*

- Inquiry-Based Learning through Technology and Curriculum Design*. Journal of the Learning Sciences, 8(3), 391-450.
- Elizabeth, W. L., Zainuddin, Z., & Murni, S. M. (2020). A Semiotic Interpretation of Ornaments in Lapo Batak in Medan. *TRANSFORM Journal of English Language Teaching and Learning of FBS UNIMED*, 9(3).
- Ely, D. P. (1998). Factors that Facilitate the Implementation of Educational Technology Innovations*. Journal of Research on Computing in Education, 23(2), 298-305.
- Emmer, E. T., & Evertson, C. M. (2016). *Classroom Management for Middle and High School Teachers*. Pearson Education.
- Emmer, E. T., & Stough, L. M. (2001). Classroom management: A critical review of the research. *Review of Educational Research*, 71(1), 43-72.
- Ennis, R. H. (1985). A Logical Basis for Measuring Critical Thinking Skills. *Educational Leadership*.
- Ennis, R. H. (2011). *The Nature of Critical Thinking: An Outline of Critical Thinking Dispositions and Abilities*. In The Critical Thinking Community.
- Everson, M., & Kozok, U. (2008). Proposal for encoding the Batak script in the UCS.
- Evertson, C. M., & Harris, D. J. (1999). Classroom management and student engagement: A review of research. In *Handbook of Classroom Management: Research, Practice, and Contemporary Issues* (pp. 101-136).
- Facione, P. A. (2011). *Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction*. The Delphi Report.
- Fadel, C. (2008). *21st Century Skills: How Can You Prepare Students for the New Global Economy*. Partnerships for 21st Century Skills. Retrieved from OECD website.
- Fajar, Arnie. (2004). *Portofolio dalam Pembelajaran IPS*. Bandung: Remaja Rosdakarya.
- Faridah, E. M. I. (2019). Analisis kemampuan berpikir kritis siswa melalui soal-soal HOTS (Higher Order Thinking Skills) mata pelajaran sejarah kelas X-IPS SMAN 2 Sidoarjo. *Avatara*, 8(2).
- Fathurrohman, M. (2015). *Model-model Pembelajaran Inovatif*. Jogjakarta: Ar-Ruzz Media.
- Fauzan, A. (2002). Applying Realistic Mathematics Education (RME) in teaching geometry in Indonesian primary schools.
- Fauzan, A., Slettenhaar, D., & Plomp, T. (2002, April). Traditional mathematics education vs. realistic mathematics education: Hoping for changes. In *Proceedings of the 3rd International Mathematics Education and Society Conference* (pp. 1-4).
- Fauzi, A., & Rios, J. (2019). Integrating local wisdom into mathematics education to improve students' understanding and appreciation of cultural heritage. *International Journal of Mathematical Education in Science and Technology*, 50(5), 765-782.
- Felder, R. M., & Brent, R. (2005). *Understanding Student Differences*. Journal of Engineering Education, 94(1), 57-72.
- Feldman, K. A. (2007). Identifying Exemplary Teachers and Teaching. *New Directions for Teaching and Learning*, 2007(109), 13-28.
- Fisher, A. (2008). *Berpikir Kritis: Sebuah Pengantar*. Jakarta: Erlangga.

- Fisher, D., & Frey, N. (2008). *Checking for Understanding: Formative Assessment Techniques for Your Classroom*. ASCD.
- Fitri, M., Yuanita, P., & Maimunah, M. (2020). Pengembangan perangkat pembelajaran matematika terintegrasi keterampilan abad 21 melalui penerapan model problem based learning (PBL). *Jurnal Gantang*, 5(1), 77-85.
- Fitzgerald, T. (2011). *Cost-Effectiveness of Instructional Strategies: A Review of the Literature*. *Educational Research Review*, 6(4), 368-380.
- Flavell, J. H. (1976). "Metacognitive Aspects of Problem Solving."
- Flavell, J. H. (1979). Metacognition and Cognitive Monitoring: A New Area of Cognitive-Developmental Inquiry. *American Psychologist*, 34(10), 906-911.
- Fleming, N. D., & Mills, C. (1992). Not another inventory, rather a catalyst for reflection. *To Improve the Academy*, 11(1), 137-155. Retrieved from <https://www.researchgate.net/publication/228722890>
- Fosnot, C. T. (2005). *Constructivism: Theory, Perspectives, and Practice*. New York: Teachers College Press.
- Fosnot, Catherine Twomey. (2005). *Constructivism: Theory, Perspectives, and Practice*. Teachers College Press.
- Fraser, N. (2003). *Justice Interruptus: Critical Reflections on the "Post-Socialist" Condition*. Routledge.
- Fredericks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). *School Engagement: Potential of the Concept, State of the Evidence*. *Review of Educational Research*, 74(1), 59-109.
- 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.
- Freudenthal, H. (1991). *Revisiting Mathematics Education: China Lectures*. Dordrecht: Kluwer Academic Publishers.
- Freudenthal, H. (1991). *Revisiting Mathematics Education: What Might It Learn from Other Sciences?* Kluwer Academic Publishers.
- Fuady, A. (2016). Berfikir reflektif dalam pembelajaran matematika. *JIPMat*, 1(2).
- Fullan, M. (2001). *The New Meaning of Educational Change*. Teachers College Press.
- Gagne, R. M. (1985). *The Conditions of Learning and Theory of Instruction*. Holt, Rinehart, and Winston.
- Gagne, R. M. (1988). *Prinsip-prinsip Belajar untuk Pengajaran*. Terjemahan oleh Abdillah Hanafi dan Abdul Manan.
- Gagne, R. M. (2005). *Principles of Instructional Design*. Wadsworth Publishing.
- Gagne, R. M., & Briggs, Leslie J. (2005). *Principles of Instructional Design*. Wadsworth Publishing.
- Gagne, R. M., Wager, Walter W., Golas, Katharine C., & Keller, John M. (2005). *Principles of Instructional Design*. Wadsworth Publishing.
- Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. Basic Books.
- Gardner, H. (1983). *Frames of Mind: The Theory of Multiple Intelligences*. Basic

Books.

- Gardner, Howard. (2006). *Multiple Intelligences: New Horizons*. Basic Books.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). *What Makes Professional Development Effective? Results from a National Sample of Teachers*. *American Educational Research Journal*, 38(4), 915-945.
- Garna, Judistira K. (2000). *Metode Penelitian Sosial: Penelitian dalam Ilmu Pemerintahan*. Bandung.
- Garnett, K., Sweeney, D., & Eady, M. (2013). *The Role of Visual Design in Learning*. *Journal of Interactive Learning Research*, 24(4), 299-317.
- Gay, Geneva. (2010). *Culturally Responsive Teaching: Theory, Research, and Practice*. Teachers College Press.
- Gede, R. (2009). *Pendidikan Karakter di Sekolah*. Jakarta: Gramedia.
- George, M. Gazda. (2010). *Theories of Learning, A Comparative Approach*. University of Georgia. F.E. Peacock Publishers, Inc.
- Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration*. University of California Press.
- Gie, T. L. (1999). *Filsafat Matematika*. Yogyakarta: Yayasan Studi Ilmu dan Teknologi.
- Gokhale, A. A. (1995). *Collaborative Learning Enhances Critical Thinking*. *Journal of Technology Education*, 7(1), 22-30.
- Gómez, A. A., de la Torre, A. M., & Cebrián, J. (2019). *The Impact of Visual Design on Learning Performance in E-Learning Environments*. *Journal of Educational Computing Research*, 57(6), 1484-1504.
- Gordon, S. P., & O'Connor, K. (2006). *The Principal's Guide to School Management*. Rowman & Littlefield.
- Grant, M. (2010). *Learning in the 21st Century: The Challenge for Education*. *The Educational Forum*, 74(3), 245-261.
- Gravemeijer, K. (1994). *Developing Realistic Mathematics Education*. Utrecht: Freudenthal Institute.
- Gravemeijer, K. (1994). *Developing Realistic Mathematics Education*. Freudenthal Institute Utrecht.
- Gravemeijer, K. (1994). Developmental Design in Mathematics Education. In H. Niss (Ed.), *Investigations in Mathematics Education* (pp. 103-126). Macmillan.
- Gravemeijer, K. (1994). Educational design in mathematics education. *Jurnal Pendidikan Matematika*.
- Gravemeijer, K. (1994). Educational development and developmental research in mathematics education. *Journal for Research in Mathematics Education*, 25(5), 443-471.
- Gravemeijer, K. (2004). Design Research in Mathematics Education. In J. Garofalo, E. Fennema, & M. A. G. (Eds.), *Mathematics Education Research: Contributions from the Past and Directions for the Future*. Reston, VA: National Council of Teachers of Mathematics (NCTM).
- Gravemeijer, K. (2004). *Designing Mathematics Education Programs*. Springer.
- Gredler, M. E. (1991). *Belajar dan Membelajarkan*. Jakarta: CV.
- Greenstein, L. (2012). *Assessing 21st Century Skills: A Guide to Evaluating Mastery and Authentic Learning*. California: Corwin.

- Guilford, J. P. (1950). "Creativity." *American Psychologist*.
- Guilford, J. P. (1967). "The Nature of Human Intelligence."
- Gultom, D. J. Raja Mrpodang. (1992). *Dalihan Na Tolu Nilai Budaya Suku Batak*. Medan: CV. Armanda.
- Guntur, M. I. S., Setyaningrum, W., Retnawati, H., Marsigit, M., Saragih, N. A., & bin Noordin, M. K. (2019). Developing augmented reality in mathematics learning: The challenges and strategies. *Jurnal Riset Pendidikan Matematika*, 6(2), 211-221.
- Guskey, T. R. (2000). *Evaluating Professional Development*. Corwin Press.
- Guskey, T. R., & Sparks, D. (2004). Linking professional development to improved student learning. *Phi Delta Kappan*, 85(4), 283-288. Retrieved from <https://journals.sagepub.com/doi/abs/10.1177/003172170408500410>
- Gusnarib, G., & Rosnawati, R. (2021). *Teori-teori Belajar dan Pembelajaran*.
- Gustafson, K., & Branch, R. M. (2002). *Survey of Instructional Development Models*. New York: ERIC Clearinghouse on Information and Technology, Syracuse University.
- Guthrie, J. T., Wigfield, A., & Perin, D. (2007). *Engagement and Motivation in Reading*. In D. W. G. McGaw, M. A. (Eds.), *International Encyclopedia of Education* (Vol. 2, pp. 243-251). Elsevier.
- Gutiérrez, R. (2002). Beyond essentialism: The complexity of diversity in mathematics education. In *Mathematics Education Across Cultures: An ICME Study Volume*. Springer.
- Gutstein, E. (2006). *Rethinking Mathematics: Teaching Social Justice by the Numbers*. Rethinking Schools.
- Hadi, F. R. (2021). Kemampuan Mahasiswa Dalam Menyelesaikan Soal Matematika Bertipe High Order Thinking Skills (HOTS). *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 10(2), 872-879.
- Hadi, S. (2005). *Pendidikan Matematika Realistik*. Banjarmasin: Penerbit Tulip.
- Hamdi, S., Suganda, I. A., & Hayati, N. (2018). Developing higher-order thinking skill (HOTS) test instrument using Lombok local cultures as contexts for junior secondary school mathematics. *REiD (Research and Evaluation in Education)*, 4(2), 126-135.
- Hamzah, A., & Muhlisrarini, N. (2014). *Perencanaan dan Strategi Pembelajaran Matematika*. Jakarta: Raja Grafindo Persada.
- Hanifah, N. (2019). Pengembangan instrumen penilaian Higher Order Thinking Skill (HOTS) di sekolah dasar. In *Current Research in Education: Conference Series Journal* (Vol. 1, No. 1, p. 005).
- Hanifah, R., & Putra, A. (2018). Teachers' perceptions and practices in implementing HOTS in Indonesian secondary schools. *Indonesian Journal of Education*, 4(2), 145-158.
- Harahap, B. (2001). *Dalihan Na Tolu: Perspektif Budaya dan Hukum Adat*. Pustaka Sinar Harapan.
- Harahap, D. H., & Syarifah, R. (2017). Studi kasus kesulitan belajar matematika pada remaja. *Jurnal Psikologi*, 11(1).
- Harahap, H. (2003). *Kearifan Lokal dalam Seni dan Budaya Batak*. Medan: Universitas Sumatera Utara.
- Harahap, S. H. (2023). Penerapan Pembelajaran Matematika Berbasis Komunitas di Daerah Tapanuli. *Pendidikan dan Sosial*.

- Harden, R. M., & Lilley, P. (2010). *Essential Skills for a Medical Teacher: An Introduction to Teaching and Learning in Medicine*. Elsevier Health Sciences.
- Hargreaves, A. (1997). The Four Ages of Professionalism and Professional Learning. *Unicorn*, 23(2), 86-114.
- Hargreaves, A. (1997). *The School Leaders: A New Perspective*. [Jurnal Pendidikan].
- Hargreaves, A., & Fullan, M. (2000). Mentoring in the New Millennium. *ProQuest Education Journals*, 39(1), 50-56.
- Harris, J., & Hofer, M. (2009). *Technological Pedagogical Content Knowledge (TPACK): A Framework for Teacher Knowledge*. Teachers College Record, 111(1), 123-150.
- Harrison, R., et al. (2001). *Towards a Common Framework for Evaluating the Quality of E-Learning*. International Journal of Educational Management, 15(4), 137-148.
- Hasibuan, A. M., Saragih, S., & Amry, Z. (2019). Development of Learning Materials Based on Realistic Mathematics Education to Improve Problem Solving Ability and Student Learning Independence. *International Electronic Journal of Mathematics Education*, 14(1), 243-252.
- Haskell, R. E. (2001). *Transfer of Learning: Cognition, Instruction, and Reasoning*. Academic Press.
- Hasyim, M., & Andreina, F. K. (2019). Analisis high order thinking skill (HOTS) siswa dalam menyelesaikan soal open ended matematika. *FIBONACCI: Jurnal Pendidikan Matematika dan Matematika*, 5(1), 55-64.
- Hatano, G., & Inagaki, K. (1986). Two courses of expertise. In H. Stevenson, J. J. Stigler, & J. W. Hiebert (Eds.), *Cognition, Mathematics, and Instruction*. Cambridge University Press.
- Hattie, J. (2009). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. Routledge.
- Hattie, J., & Timperley, H. (2007). The Power of Feedback. Review of Educational Research, 77(1), 81-112.
- Heine, R. von Geldern. (1955). *The Archaeology of Southeast Asia*. Cambridge University Press.
- Heine, S. J., et al. (2006). The Cultural Construction of Self and Emotion: Implications for Social Behavior. *Psychological Review*.
- Heinich, R., Molenda, M., & Russel, J. D. (1996). *Instructional Media and Technologies for Learning*. New York: McMillan.
- Heinich, R., Molenda, M., & Russel, J. D. (2002). *Instructional Media and Technologies for Learning*. Pearson.
- Hendriana, H., Sumarmo, U., & Rohaeti, E. E. (2016). Kemampuan Komunikasi Matematik Sertakemampuan dan Disposisi Berpikir Kritis Matematik. *Delta-Pi: Jurnal Matematika dan Pendidikan Matematika*, 2(1).
- Hergenhahn, B. R., & Olson, H. (2015). *Theories of Learning*. Jakarta: Kencana.
- Heruman. (2007). *Model Pembelajaran Matematika di Sekolah Dasar*. Bandung: PT. Remaja Rosdakarya.
- Hidayati, D. N. (2019). Analisis Kesalahan Penyelesaian Soal Cerita Matematika Bertipe HOTS Berdasarkan Teori Newman pada Siswa Kelas V SD. (Doctoral dissertation, University of Muhammadiyah Malang).

- Hidi, S., & Anderson, V. (2000). *Producing Written Narratives: What Influences the Process?*. In R. Harris (Ed.), *Educational Psychology Review* (Vol. 12, No. 2, pp. 170-183).
- Hiebert, J., & Carpenter, T. P. (1992). Learning with understanding. In D. G. Grouws (Ed.), *Handbook of Research on Mathematics Teaching and Learning*. New York: Macmillan.
- Hiebert, J., Carpenter, T., Fennema, E., Fuson, K., Wearne, D., & Murray, H. (1997). *Making Sense: Teaching and Learning Mathematics with Understanding*. Heinemann.
- Hirschfeld-Cotton, K. (2008). Mathematical Communication, Conceptual Understanding, and Students' Attitudes Toward Mathematics. *Action Research Projects*, 4.
- Hji, Saleh. (2013). Pendekatan Iceberg Dalam Pembelajaran Pembagian Pecahan Di Sekolah Dasar. *Jurnal Ilmiah Program Studi Matematika STKIP Siliwangi Bandung*, 2(1).
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Sage Publications.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Sage Publications.
- Hsieh, P. H., & Chen, Y. C. (2015). The impact of higher-order thinking skills on problem-solving performance. *Educational Studies*, 41(3), 285-304. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/03055698.2015.1005960>
- Hsu, H. Y., Chang, C. Y., & Tsai, C. C. (2014). The effect of problem-based learning on critical thinking in higher education. *Educational Psychology Review*, 26(2), 143-156.
- Huang, Y. (2019). *The Role of Language in the Learning Process: A Case Study in Online Education*. *Journal of Online Learning Research*, 5(2), 123-145.
- Hudojo. (1998). *Mengajar Belajar Matematika*. Jakarta: Depdikbud.
- Hutagalung, B. H. (1989). *Dalihan Na Tolu dan Sistem Kekerabatan Batak Toba*. Penerbit Kanisius.
- Hutagalung, T. B. S. (1997). *Batak Toba dalam Perspektif Sosial Budaya*. Pustaka Sinar Harapan.
- Hutasoit, D. (2005). *Gotong Royong dalam Pendidikan Batak Toba: Sebuah Kajian Sosiokultural*. Medan: Pustaka Batak.
- Ibda, F. (2015). Perkembangan kognitif: teori Jean Piaget. *Intelektualita*, 3(1).
- IEA. (2000). *TIMSS 1999 International Mathematics Report: Findings of IEA's Trends in International Mathematics and Science Study at the Fourth and Eight Grades*. USA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College.
- IEA. (2004). *TIMSS 2003 International Mathematics Report: Findings of IEA's Trends in International Mathematics and Science Study at the Fourth and Eight Grades*. USA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College.
- IEA. (2008). *TIMSS 2007 International Mathematics Report: Findings of IEA's Trends in International Mathematics and Science Study at the Fourth and Eight Grades*. USA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College.

- IEA. (2011). *TIMSS 2011 International Results in Mathematics*. USA: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College.
- Intan, F. M., Kuntarto, E., & Alirmansyah, A. (2020). Kemampuan Siswa dalam Mengerjakan Soal HOTS (Higher Order Thinking Skills) pada Pembelajaran Matematika di Kelas V Sekolah Dasar. *JPDI (Jurnal Pendidikan Dasar Indonesia)*, 5(1), 6-10.
- Irawan, A., & Kencanawaty, G. (2017). Implementasi pembelajaran matematika realistik berbasis etnomatematika. *Journal of Medives: Journal of Mathematics Education IKIP Veteran Semarang*, 1(2), 74-81.
- Irianto, S. (1995). *Anakhonki do hamoraon di ahu*. Anak adalah harta yang paling berharga. Program Pascasarjana Universitas Indonesia.
- Izzati, N. (2014). Pengaruh Penerapan Model Pembelajaran Berbasis Proyek Terhadap Kemampuan Berpikir Kreatif Mahasiswa (Studi Kuasi Eksperimen Terhadap Mahasiswa Tadris Matematika IAIN Syekh Nurjati Cirebon). *Eduma: Mathematics Education Learning and Teaching*, 3(1).
- Jacob, B. A., Goddard, R., & Ladd, H. F. (2017). The role of classroom management in effective teaching. *Educational Evaluation and Policy Analysis*, 39(2), 216-237.
- Jarvis, M. (2011). *Teori-Teori Psikologi* (Cet. X). Bandung: Nusa Media.
- Jauhar, M. (2011). *Implementasi Paikem*. Jakarta: Prestasi Pustaka.
- Jenning, S., & Dunne, R. (1999). Math Stories, Real Stories, Real-Life Stories. Retrieved from www.ex.ac.uk/telematics/T3/maths/mathfram.html.
- Jihad, A. (2008). *Pengembangan Kurikulum Matematika*. Yogyakarta: Multi Pressindo.
- Jihad, A. D. (2010). *Evaluasi Pembelajaran*. Yogyakarta: Multi Pressindo.
- Johar, R. (2012). Domain soal PISA untuk literasi matematika. *Jurnal Peluang*, 1(1), 30.
- John, P. L. (1969). *The Origins of Intellect: Piaget's Theory*. United States of America: Library of Congress.
- Johnson, D. W., & Johnson, R. T. (1994). Cooperation and the Use of Technology: An International Perspective. In L. L. Stevick & J. W. Johnson (Eds.), *Cooperative Learning: Theory and Practice* (pp. 7-39). Allyn & Bacon.
- Johnson, D. W., & Johnson, R. T. (2009). *An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning*. *Educational Psychologist*, 44(2), 105-118.
- Johnson, D. W., Johnson, R. T., & Smith, K. A. (1998). Cooperative Learning: Improving University Instruction by Basing Practice on Validated Theory. *Journal on Excellence in College Teaching*.
- Jonassen, D. H. (1999). Designing Constructivist Learning Environments. In C. M. Reigeluth (Ed.), *Instructional-Design Theories and Models: A New Paradigm of Instructional Theory* (Vol. 2, pp. 215-239). Lawrence Erlbaum Associates.
- Jonassen, D. H. (1999). Designing Constructivist Learning Environments. *Instructional Design Theories and Models*.
- Jonassen, D. H. (2000). *Toward a Design Theory of Problem Solving*. *Educational Technology Research and Development*, 48(4), 63-85.

- Joyce, B. R., Weil, M., & Calhoun, E. (1986). *Models of Teaching* (Vol. 499). Englewood Cliffs, NJ: Prentice-Hall.
- Joyce, B., & Weil, M. (2000). *Models of Teaching*. Prentice Hall.
- Joyce, B., & Weil, M. (2009). *Models of Teaching*. Pearson.
- Joyce, B., Weil, M., & Calhoun, E. (2015). *Models of Teaching*. Pearson.
- Joyce, B., Weil, M., & Calhoun, E. (2015). *Models of Teaching*. Pearson Education.
- Judistira, K. (2001). *Garna, Ilmu-Ilmu Sosial, Dasar Konsep-Posisi*. Pascasarjana Unpad, Bandung.
- Julita, S., & Anggoro, A. F. D. (2019, July). The local culture-based learning model to improve teaching abilities for pre-service teachers. In *Journal of Physics: Conference Series* (Vol. 1179, No. 1, p. 012058). IOP Publishing.
- Junaidi, A., Hanif, M., & Lestari, R. (2019). Integrating local culture into science education: Enhancing higher order thinking skills and cultural awareness. *Journal of Science Education and Technology*, 28(5), 423-436.
- Kahoot! (2013). *Kahoot! User Experience Report*. [Kahoot](https://kahoot.com/).
- Kamii, C., & De Clark, L. H. (1985). *Young Children Reinvent Arithmetic: Implications of Piaget's Theory*. Teachers College Press.
- Kansanen, P. (2003). Studying--the realistic bridge between instruction and learning. An attempt to a conceptual whole of the teaching-studying-learning process. *Educational Studies*, 29(2-3), 221-232.
- Keller, J. M. (1983). *Motivational Design of Instruction*. In Reigeluth, C. M. (Ed.), *Instructional Design Theories and Models*. Lawrence Erlbaum Associates.
- Keller, J. M. (1987). *Development and Use of the ARCS Model of Motivational Design*. *Journal of Instructional Development*, 10(3), 2-10.
- Kemdikbud, L. (2013). *Kurikulum 2013: Pergeseran paradigma belajar abad-21*. Jakarta, Juni.
- Kementerian Pendidikan dan Kebudayaan Republik Indonesia. (2019). *Laporan Hasil PISA 2018: Matematika, Sains, dan Membaca*. Jakarta: Kemendikbud.
- Kementerian Pendidikan dan Kebudayaan Republik Indonesia. (n.d.). *Kurikulum 2013 dan Rencana Pelaksanaan Pembelajaran (RPP)*. Retrieved from <https://kemdikbud.go.id/>
- Kementerian Pendidikan dan Kebudayaan Republik Indonesia. (n.d.). *Laporan Evaluasi Kurikulum Pendidikan Nasional*. Retrieved from <https://kemdikbud.go.id/>
- Kerlinger, F. N. (1986). *Foundations of Behavioral Research* (3rd ed.). Holt, Rinehart, and Winston.
- Khadijah. (2015). *Media Pembelajaran Anak Usia Dini*. Medan: Perdana Publishing.
- Khairunnisya, K., Syahputra, E., & Ahyaningsih, F. (2023). Pengembangan Model Pembelajaran Matematika Realistik Berbasis Budaya Mandailing (PMR-B2M) untuk Meningkatkan Kemampuan Komunikasi Matematis Siswa. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 7(1), 278-288.
- Khoriyah, M., & Oktiningrum, W. (2021). Pengembangan Soal Higher Order Thinking Skills (HOTS) Berbasis Budaya Lokal Blitar untuk Mengukur Dimensi Pengetahuan Matematika Siswa kelas V Sekolah Dasar. *Bina*

- Gogik: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 8(1).
- Killion, J., & Roy, P. (2009). *Becoming a Reflective Teacher*. Corwin Press.
- Kinball, St. (1984). *Culture and the Educative Progress*. New York: Teacher College Press.
- King, F. J., Goodson, L., & Rohani, F. (1998). Higher order thinking skills: Definition, teaching strategies, assessment. Publication of the Educational Services Program, now known as the Center for Advancement of Learning and Assessment. Retrieved from www.cala.fsu.edu.
- King, J. F., Goodson, Ludwika, & Rohani, Faranak. (2010). *Higher Order Thinking Skills: Definition, Teaching Strategies, Assessment*. A Publication of The Educational Services Program. Available at www.cala.fsu.edu.
- Kirkpatrick, D. L. (1994). *Evaluating Training Programs: The Four Levels*. Berrett Koehler Publishers.
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating Training Programs: The Four Levels*. Berrett Koehler Publishers.
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating Training Programs: The Four Levels*. Berrett-Koehler Publishers.
- Klausmeier, H. J., & Goodwin, A. L. (2010). Teaching and Learning in the Cognitive Domain. Charles E. Merrill Publishing Company.
- Koentjaraningrat. (1985). *Pengantar Antropologi*. Rineka Cipta.
- Koentjaraningrat. (1987). *Pengantar Ilmu Antropologi*. Rineka Cipta.
- Koentjaraningrat. (1996). *Pengantar Ilmu Antropologi*. Jakarta: Aksara Baru.
- Kohar, A. W., Zulkardi, Z., & Darmawijoyo, D. (2014, April). Developing PISA-like mathematics tasks to promote students' mathematical literacy. In The Second South East Asia Design/Development Research (SEA-DR) International Conference April (pp. 26-27).
- Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Prentice-Hall.
- Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, 41(4), 212-218.
- Kuh, G. D. (2009). The National Survey of Student Engagement: Conceptual and Empirical Foundations. *New Directions for Institutional Research*, 141, 5-20.
- Kuh, G. D. (2009). *What Student Affairs Professionals Need to Know About Student Engagement*. *Journal of College Student Development*, 50(6), 683-706.
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2005). *Student Engagement in the First Year of College*. Jossey-Bass.
- Kurniasih, I., & Sani, B. (2014). *Implementasi Kurikulum 2013: Konsep & Penerapan*. Kata Pena.
- Laborde, Colette. (2011). *Mathematical Reasoning with Manipulatives*. Springer.
- Ladson-Billings, G. (1995). Toward a Theory of Culturally Relevant Pedagogy. *American Educational Research Journal*, 32(3), 465-491.
- Ladson-Billings, Gloria. (1994). *The Dreamkeepers: Successful Teachers of African American Children*. Jossey Bass.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press.
- Lesh, R., & Doerr, H. M. (2003). *Beyond Constructivism: Models and Modeling*

- Perspectives on Mathematics Problem Solving, Learning, and Teaching. Springer.
- Levie, W. H., & Lentz, R. (1982). *Effects of Text Illustration: A Review of Research*. Educational Technology Research and Development, 30(4), 195-232.
- Lewis, A., & Smith, D. (1993). Defining higher order thinking. *Theory into Practice*, 32(3), 131-137.
- Lewy, Zulkardi, & Aisyah, N. (2009). Pengembangan Soal untuk Mengukur Kemampuan Berpikir Tingkat Tinggi Pokok Bahasan Barisan dan Deret Bilangan di Kelas IX Akselerasi SMP Xaverius Maria Palembang. *Jurnal Pendidikan Matematika*, 14-28.
- Linn, M. B. (2000). Technology and Science Education: A Developmental View. In *Science and Technology Education for the Future: A Renewed Perspective* (pp. 67-82). Kluwer Academic Publishers.
- Lipka, J., et al. (2005). A culturally based mathematics program for Alaska Native students: The Yup'ik math curriculum. *Journal for Research in Mathematics Education*, 36(2), 111-144.
- Lubis, H. A. (2010). *The Role of Traditional Beliefs and Practices in Education: A Study on Batak Toba Society*. Medan: Universitas Negeri Medan Press.
- Lubis, M. (2020). Peran guru pada era pendidikan 4.0. *EDUKA: Jurnal Pendidikan, Hukum, Dan Bisnis*, 4(2), 0-5.
- Lubis, M. R. (2021). Pemanfaatan Data Ekonomi Lokal dalam Pembelajaran Matematika. *Jurnal Ekonomi dan Pendidikan*.
- Lubis, N. F., Sinaga, B., & Mulyono, M. (2022). Pengembangan Perangkat Pembelajaran Berbasis Pendekatan Matematika Realistik Untuk Meningkatkan Kemampuan Koneksi dan Kemandirian Belajar Siswa SMA Swasta Tunas Pelita Binjai. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 6(1), 798-811.
- Lubis, T. P. (2022). Inisiatif Penelitian dalam Pendidikan Matematika di Tapanuli. *Jurnal Penelitian Pendidikan*.
- Luka, S. S. P., Candiasa, I. M., & Aryanto, K. Y. E. (2019). Analisis Pembentukan Kelompok Diskusi Panel Siswa Menggunakan Algoritma Fuzzy C-Means dan K-Means. *Jurnal Pendidikan Teknologi dan Kejuruan*, 16(2), 267-277.
- Lunenburg, F. C., & Ornstein, A. C. (2012). *Educational Administration: Concepts and Practices*. Wadsworth Cengage Learning.
- Mager, R. F. (1984). *Preparing Instructional Objectives*. Krieger Publishing.
- Mager, Robert F. (1997). *Preparing Instructional Objectives*. Center for Effective Performance.
- Mahmudi, A. (2006). *Pengembangan kemampuan komunikasi matematika siswa melalui pembelajaran matematika*. Yogyakarta: UNY.
- Mailani, E. (2018). Potret implementasi pembelajaran berbasis high order thinking skills (HOTS) di sekolah dasar kota medan. *Jurnal Pembangunan Perkotaan*, 6(2), 102-111.
- Manik, E. (2020, November). Learning with higher order thinking skills for basic statistics subject. In *The 5th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2020)* (pp. 224-230). Atlantis Press.

- Marbun, M. A., & Hutapea, I. M. T. (1987). *Kamus Budaya Batak Toba*. Jakarta: Balai Pustaka.
- Marsigit, B. (2016). *Analisis Pengaruh Remunerasi, Budaya Organisasi Dan Gaya Kepemimpinan Terhadap Kinerja Teknisi Penerbangan Di Balai Teknik Penerbangan* (Doctoral dissertation, Universitas Mercu Buana Jakarta-Menteng).
- Martin, M. O., Mullis, I. V., & Kennedy, A. M. (2007). *Progress in International Reading Literacy Study (PIRLS): PIRLS 2006 Technical Report*. International Association for the Evaluation of Educational Achievement.
- Martini, D. R. (2023). *Pembentukan Karakter Peduli Lingkungan Melalui Pendidikan Agama Islam Bagi Peserta Didik Di Smp Negeri 12 Kecamatan Vergouwen Tambusai Utara Riau* (Doctoral dissertation, Universitas Muhammadiyah Malang).
- Martowikrido, Bernhard. (1991). *Peranan Wanita Batak Toba dalam Masyarakat*. Pustaka Sinar Harapan.
- Marzano, R. J. (2001). *Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement*. ASCD.
- Marzano, R. J. (2003). *Classroom Assessment and Grading That Work*. ASCD.
- Marzano, R. J. (2003). *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. ASCD.
- Marzano, R. J. (2007). *The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction*. ASCD.
- Marzano, R. J., & Kendall, J. S. (2007). *The New Taxonomy of Educational Objectives*. Corwin Press.
- Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works: Research-based strategies for every teacher*. ASCD.
- Mashudi, F. (2013). *Psikologi Konseling Buu Panduan Lengkap dan Praktis Menerapkan Psikologi Konseling*. Yogyakarta: Ircisod.
- Mawardi, M. (2014). Pemberlakuan Kurikulum SD/MI Tahun 2013 dan Implikasinya Terhadap Upaya Memperbaiki Proses Pembelajaran Melalui PTK. *Scholaria: Jurnal Pendidikan dan Kebudayaan*, 4(3), 107-121.
- Mayer, R. E. (2001). *Understanding Multimedia Learning: Integrating Multimedia with Learning*. In R. E. Mayer (Ed.), *The Cambridge Handbook of Multimedia Learning* (pp. 31-48). Cambridge University Press.
- Mayer, R. E. (2004). *Why Learning Is Not Always Deep: A Study of the Effect of Structure on Learning*. *Journal of Educational Psychology*, 96(2), 321-331.
- McClellan, E. R. J. (2005). *Teaching Across Cultures: Developing Culturally Responsive Pedagogy*. Routledge.
- MCEETYA. (2003). *A National Framework for Professional Standards for Teaching: Teacher Quality and Educational Leadership Taskforce*. Carlton South: MCEETYA.
- McLoughlin, C., & Lee, J. W. (2008). *The Future of Learning: In a Digital Age*. *The Australian Educational Leader*, 30(2), 12-18.
- MDESE. (2013). *Pre-service Performance Assessment (PPA): Guidelines for Teacher*. Malden: MDESE.
- Merrill, M. D. (2002). "First Principles of Instruction." *Educational Technology Research and Development*, 50(3), 43-59.
- Merrill, M. D. (2002). "First Principles of Instruction." *Educational Technology*

- Research and Development, 50(3), 43–59.
- Merrill, M. D. (2002). First Principles of Instruction. *Educational Technology Research and Development*, 50(3), 43-59.
- Merrill, M. D. (2002). *First Principles of Instruction*. Educational Technology Research and Development, 50(3), 43-59.
- Merrill, M. David. (2002). *First Principles of Instruction*. Jossey-Bass.
- Merrill, M. David. (2012). *First Principles of Instruction*. Pfeiffer.
- Merta Dhewa, K., Rosidin, U., Abdurrahman, A., & Suyatna, A. (2017). The development of Higher Order Thinking Skill (HOTS) instrument assessment in physics study. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 7(1), 26-32.
- Messick, S. (1989). *Validity*. In R. L. Linn (Ed.), *Educational Measurement* (3rd ed., pp. 13-103). New York: Macmillan.
- Meyer, D. K., & Turner, J. C. (2002). *Discovering Emotion in Classroom Motivation: A Study of the Role of Teacher Emotions*. *Journal of Educational Psychology*, 94(4), 520-535.
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of Knowledge for Teaching: Using a Qualitative Approach to Connect Homes and Classrooms. *Theory into Practice*, 31(2), 132-141.
- Morgan, C. T. (1986). *Introduction to Psychology*. New York: McGraw-Hill Book Co.
- Morrison, G. R., Ross, S. M., & Kemp, J. E. (2013). *Designing Effective Instruction*. Wiley.
- Morrison, G. R., Ross, S. M., Kalman, H. K., & Kemp, J. E. (2010). *Designing Effective Instruction*. John Wiley & Sons.
- Moschkovich, J. N. (2002). A cultural perspective on mathematical communication and learning. In *Handbook of Research on the Psychology of Mathematics Education*. Routledge.
- Muhibbin Syah. (2007). *Psikologi Pendidikan Dengan Pendekatan Baru*. Bandung: PT Remaja Rosdakarya.
- Mulyati. (2015). *Psikologi Belajar*. Yogyakarta: Andi Offset.
- Murti, M., Wiyanto, W., & Hartono, H. (2018). Studi Komparasi antara Tes Testlet dan Uraian dalam Mengukur Hasil Belajar Kognitif Siswa Kelas XI SMA Negeri 1 Gombong. *UPEJ Unnes Physics Education Journal*, 7(1), 32-41.
- Murtiyasa, B. (2016). Isu-isu kunci dan tren penelitian pendidikan matematika.
- Musrikah, M. (2018). Higher Order Thinking Skill (HOTS) Untuk Anak Sekolah Dasar Dalam Pembelajaran Matematika. *Martabat*, 2(2), 339-360.
- Nababan, R. (2012). *Estetika dan Simbolisme dalam Desain Rumah Adat Batak Toba*. Medan: Lembaga Penelitian Universitas Sumatera Utara.
- Nababan, St. Parlindungan. (2015). *Transformasi Adat Batak dalam Era Modern*. Yayasan Cipta Loka.
- Narayanan, S., & Adithan, M. (2015). Analysis of question papers in engineering courses with respect to HOTS (Higher Order Thinking Skills). *American Journal of Engineering Education (AJEE)*, 6(1), 1-10.
- Nasution, A. (2023). Kurikulum Kontekstual dalam Pembelajaran Matematika: Studi Kasus di Tapanuli. *Jurnal Pendidikan Lokal*.
- Nasution, A. B. (1980). *Hukum Adat Batak dan Implementasi Dalihan Na Tolu*.

Penerbit Alumni.

- Nasution, H. (1986). *Dedaktik Azas-Azas Mengajar*. Bandung: Jemmars.
- Nasution, M. (2015). *Tradisi dan Inovasi dalam Seni Kriya Batak Toba*. Yogyakarta: Penerbit Kanisius.
- Nasution, M. A., Lestari, E., & Sari, R. A. (2021). The effect of local culture-based learning on students' higher order thinking skills and motivation. *Journal of Educational and Developmental Psychology*, 11(2), 203-214.
- Nasution. (1982). *Berbagai Pendekatan dalam Proses Belajar dan Mengajar*. Jakarta: Bima Aksara.
- Nations, United. (2017). *World Population Prospects*. New York: United Nations.
- NCTM. (1989). *Curriculum and Evaluation Standards for School Mathematics*. Reston, VA: NCTM.
- NCTM. (1998). *Curriculum and Evaluation Standards for School Mathematics*. Reston, VA: NCTM.
- NCTM. (2000). *Principles and Standards for School Mathematics*. Reston, VA: NCTM.
- Neuendorf, K. A. (2017). *The Content Analysis Guidebook*. Sage.
- Ningrum, O. D., & Caswita. (2016). Kemampuan komunikasi matematis dengan pembelajaran berbasis inkuiri. *Prosiding*, ISBN: 978-602-1150-19-1, hal 748.
- Ningsih, P. R. (2011). Profil Berpikir Kritis Siswa SMP Dalam Menyelesaikan Masalah Matematika Berdasarkan Gaya Kognitif. (Tesis tidak dipublikasikan). Universitas Negeri Surabaya.
- Nisbett, R. E. (2003). *The Geography of Thought: How Asians and Westerners Think Differently...and Why*. Free Press.
- Nofrion, N., & Wijayanto, B. (2018). Learning activities in higher order thinking skill (HOTS) oriented learning context. *Geosfera Indonesia*, 3(2), 122-130.
- Nommensen, L. I. (1883). *The Mission to the Batak People*. Lembaga Alkitab Indonesia.
- Norton, S. (2006). *The Role of Environment in the Development of Learning*. International Journal of Teaching and Learning in Higher Education, 18(1), 1-13.
- Novak, J. D., & Gowin, D. B. (1984). "Learning How to Learn."
- Novak, J. D., & Gowin, D. B. (1984). *Learning How to Learn*. Cambridge University Press.
- Nst, F. U., Syahputra, E., & Mulyono, M. (2023). Evaluasi model pembelajaran matematika: Tinjauan teori dan praktik. *Jurnal Pendidikan Matematika*.
- Nst, F. U., Syahputra, E., & Mulyono, M. (2023). Pengembangan Model Pembelajaran Problem Based Learning Berbantuan Macromedia Flash Secara Interaktif Untuk Meningkatkan Kemampuan Pemecahan Masalah dan Kemandirian Belajar Siswa SMA Negeri 1 Binjai. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 7(1), 728-739.
- Nugroho, P. (2015). Pandangan Kognitifisme dan Aplikasinya dalam Pembelajaran Pendidikan Agama Islam Anak Usia Dini. *ThufuLA: Jurnal Inovasi Pendidikan Guru Raudhatul Athfal*, 3(2), 281-304.
- Nugroho, R. (2018). *HOT (Kemampuan Berpikir Tingkat Tinggi: Konsep, Pembelajaran, Penilaian dan Soal-Soal)*. PT Gramedia Widiasarana Indonesia.

- Nunes, T., & Bryant, P. (2009). *Children's Understanding of Mathematics: 2–6 Years*. John Wiley & Sons.
- Nunes, T., et al. (2014). *The Cultural Roots of Mathematical Understanding*. Springer.
- Nurdin, S., & Jannah, H. (2020). The implementation of higher-order thinking skills (HOTS) in mathematics teaching and learning: A case study in Indonesian primary schools. *Journal of Education and Learning*, 14(1), 72–84. Retrieved from <https://journal.uny.ac.id/index.php/jel/article/view/30955>
- Nurdyansyah, N., & Fahyuni, E. F. (2016). Inovasi model pembelajaran sesuai kurikulum 2013.
- Nurhadi, D., & Puspitasari, I. (2017). "Validitas RPS dalam Meningkatkan Capaian Pembelajaran." *Jurnal Pendidikan*, 9(2), 123–132.
- Nurhadi. (2018). Teori Belajar dan Pembelajaran Kognitivistik. Program Magister Pasca Sarjana (PPS) Prodi Pendidikan Agama Islam Universitas Islam Negeri Sutan Syarif Kasim Riau Pekanbaru.
- Nurhasanah, N., Yurniwati, Y., & Yarmi, G. (2018). Workshop Pengembangan Higher Order Thinking Skill (HOTS) Melalui Penerapan Pendekatan Saintifik Dalam Pembelajaran Di SDN Beji 1 Depok Jawa Barat. In *Prosiding Seminar dan Diskusi Pendidikan Dasar*.
- Nuzulia, N., & Zain, E. K. M. M. (2020). Pengembangan Media Roda Putar Pada Mata Pelajaran IPS Berbasis HOTS Keragaman Suku Dan Budaya Kelas 4 Di MI PSM Padangan Kabupaten Tulungagung. *Al-Madrasah: Jurnal Pendidikan Madrasah Ibtidaiyah*, 5(1), 67–79.
- O'Connor, P., & McDonald, B. (2017). *The Impact of Collaborative Learning on Student Attitudes*. *Educational Research*, 59(1), 19–32.
- OECD. (2003). *Literacy Skills for the World of Tomorrow: Further Results from PISA 2000*. Paris: OECD.
- OECD. (2004). *Learning for Tomorrow's World: First Results from PISA 2003*. Paris: OECD.
- OECD. (2007). *PISA 2006: Science Competencies for Tomorrow's World*. Paris: OECD.
- OECD. (2009). *PISA 2009: Assessment Frameworks-Key Competencies in Reading, Mathematics and Science*. Paris: OECD.
- OECD. (2010). *PISA 2009 Results: What Students Know and Can Do*. Paris: OECD.
- OECD. (2014). *PISA 2012 Results In Focus: What 15-Years-Old Know and What They Can Do With What They Know*. Paris: OECD.
- OECD. (2016). *PISA 2015 Results (Volume I): Excellence and Equity in Education*. Paris: OECD Publishing.
- OECD. (2017). *Water Charges in Brazil: The Ways Forward*. Paris: OECD.
- OECD. (2019). *PISA 2018 Results: Combined Executive Summaries*. Paris: OECD Publishing.
- OECD. (n.d.). *PISA Assessment Overview*. Retrieved from OECD PISA
- OECD. (n.d.). *PISA Mathematics Framework*. Retrieved from OECD PISA Assessment
- Ojose, B. (2011). Mathematics literacy: Are we able to put the mathematics we learn into everyday use. *Journal of Mathematics Education*, 4(1), 89–100.
- Pahliwandari, R. (2016). Penerapan Teori Pembelajaran Kognitif dalam

- Pembelajaran Pendidikan Jasmani dan Kesehatan. *Jurnal Pendidikan Olah Raga*, 5(2), 154-164.
- Pai, Y. (1990). Cultural pluralism, democracy, and multicultural education. *Adult Education in a Multicultural Society*, 11-27.
- Pajares, F. (1992). *Teachers' Beliefs and Educational Research: Clearing Up a Messy Construct*. *Review of Educational Research*, 62(3), 307-332.
- Papp, K. K., Huang, G. C., Clabo, L. M. L., Delva, D., Fischer, M., Konopasek, L., ... & Gusic, M. (2014). Milestones of critical thinking: A developmental model for medicine and nursing. *Academic Medicine*, 89(5), 715-720.
- Pardede, J. P. (2022). *Maksim dalam Upacara Mangain Boru di Desa Nagasaribu: Kajian Pragmatik* (Doctoral dissertation, Universitas Sumatera Utara).
- Pardede, V. (2006). *Dalihan Na Tolu: Pilar Kearifan Lokal Batak Toba*. Yayasan Obor Indonesia.
- Parsons, T. (1951). *The Social System*. Glencoe, IL: Free Press.
- Partnership for 21st Century Learning. (2019). *Framework for 21st Century Learning*. Retrieved from <https://www.battelleforkids.org/networks/p21>
- Partnership for 21st Century Skills. (2009). *P21 Framework Definitions*. P21. Link
- Partnership for 21st Century Skills. (2015). *Framework for 21st Century Learning*. Retrieved from P21 Framework
- Paul, R., & Elder, L. (2006). "Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life.
- Paul, R., & Elder, L. (2006). *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life*. Upper Saddle River, NJ: Pearson.
- Paul, R., & Elder, L. (2006). *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life*. Pearson Education.
- Pellegrino, A., Weiss, M., & Regan, K. (2015). Learning to collaborate: General and special educators in teacher education. *The Teacher Educator*, 50(3), 187-202.
- Pelly, U. (1995). *Teori-Teori Sosial Budaya*. Jakarta: Departemen Pendidikan dan Kebudayaan.
- Pendidikan, B. S. N. (2010). *Paradigma Pendidikan Nasional Abad XXI*. Jakarta: BSNP.
- Peraturan Pemerintah Nomor 17 Tahun 2010 Tentang Pengelolaan dan Penyelenggaraan Pendidikan, sebagaimana telah diubah dengan Peraturan.
- Perkins, D. N. (1986). "Knowledge as Design: A Strategy for Knowing."
- Sternberg, R. J. (1985). "The Triarchic Mind: A New Theory of Human Intelligence."
- Piaget, J. (1950). *The Psychology of Intelligence*. Routledge.
- Piaget, J. (1952). *The Origins of Intelligence in Children*. International Universities Press.
- Piaget, J. (1970). *Genetic Epistemology*. New York: Columbia University Press.
- Piaget, J. (1970). Piaget's Theory. In P. Mussen (Ed.), *Carmichael's Manual of Child Psychology* (pp. 703-732). Wiley.
- Piaget, J. (1970). Piaget's theory. In *Handbook of Child Psychology*. Wiley.
- Piaget, J. (1970). *The Science of Education and the Psychology of the Child*. Grossman.

- Piaget, J. (1970). *The Science of Education and the Psychology of the Child*. Orion Press.
- Piaget, J. (1970). *The Science of Education and the Psychology of the Child*. Viking Press.
- Piaget, J. (1972). "The Principles of Genetic Epistemology.
- Piaget, J. (1972). *The Principles of Genetic Epistemology*. New York: Basic Books.
- Piaget, J. (1973). *To Understand is to Invent: The Future of Education*. Viking Press. Retrieved from
- Piaget, J. (1977). *The Development of Thought: Equilibration of Cognitive Structures*. Viking Press.
- Piaget, J. (2007). *Theories of Cognitive Development*. Routledge.
- Pidarta, M. (2007). *Landasan Kependidikan: Stimulus Ilmu Pendidikan Bercorak Indonesia*. Rineka Cipta.
- Pimm, D. (1987). *Mathematics Education and Language: Interpreting Texts and Textbooks*. Routledge.
- PISA. (2018). *Pendidikan di Indonesia*. Jakarta: OECD.
- Plomp, T. (2007). *Educational Design Research*. SLO.
- Plomp, T., & Nieveen, N. (2013). *Educational Design Research: An Introduction*. SLO.
- Plomp, T., & Nieveen, N. (2013). *Educational Design Research: An Introduction*. SLO.
- PNRI. (2019). *Panduan Penulisan Soal HOTS-Higher Order Thinking Skills*. Jakarta: Pusat Penilaian Pendidikan.
- Polya, G. (1945). *How to Solve It*. Princeton University Press.
- Polya, G. (1945). *How to Solve It: A New Aspect of Mathematical Method*. Princeton University Press.
- Polya, G. (1985). *How to Solve It: A New Aspect of Mathematical Method*. New Jersey: Princeton University Press.
- Porter, A. C., Polikoff, M. S., & Smithson, J. (2007). *Is There a de Facto National Intended Curriculum? Evidence from State Content Standards*. *Educational Evaluation and Policy Analysis*, 29(4), 277-294.
- Pratama, G. S., & Retnawati, H. (2018, September). Urgency of higher order thinking skills (HOTS) content analysis in mathematics textbook. In *Journal of Physics: Conference Series* (Vol. 1097, No. 1, p. 012147). IOP Publishing.
- Pratiwi, N. W., Dewi, N. S., & Paramartha, A. Y. (2019). The reflection of HOTS in EFL teachers' summative assessment. *Journal of Education Research and Evaluation*, 3(3), 127-133.
- Prince, M. J., & Felder, R. M. (2006). Inductive teaching and learning methods: Definitions, comparisons, and research bases. *Journal of Engineering Education*.
- Puentedura, R. R. (2014). SAMR: A Model for Enhancing Teaching and Learning with Technology. Retrieved from SAMR Model for Technology Integration
- Putri, S. K., & Syahputra, E. (2019). Development of learning devices based on Realistic Mathematics Education to improve students' spatial ability and motivation. *International Electronic Journal of Mathematics Education*, 14(2), 393-400.

- Rahardjo, W., & Kurnia, D. (2021). The gap between policy and practice: Implementing HOTS in Indonesian classrooms. *International Journal of Education and Practice*, 9(1), 35-50. Retrieved from <https://www.ijep.org/article/view/1348>
- Rahayuningsih, S., & Feriyanto. (2018). Proses berpikir siswa SMA dalam memecahkan masalah matematika ditinjau dari perbedaan gaya kognitif dan perbedaan gender. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 3(12), 1664-1673.
- Rahmawati, A. (2022). *Manajemen Penyiaran Radio Sindangkasih 103.6 FM Cirebon Dalam Melestarikan Budaya Lokal Tarling Cirebonan* (Doctoral dissertation, IAIN Syekh Nurjati Cirebon S1 KPI).
- Rahmawati, D. (2015). *Efektivitas Pembelajaran Matematika Dengan Strategi REACT Berbasis Etnomatematika Dalam Meningkatkan Kemampuan Komunikasi Matematis Dan Cinta Budaya Lokal Siswa SMP Kelas VII* (Doctoral dissertation, UIN Sunan Kalijaga Yogyakarta).
- Rahyubi, H. (2012). *Teori-Teori Belajar dan Aplikasi Pembelajaran Motorik*. Majalengka: Referens.
- Raihanah, R. (2021). Pelaksanaan pemberian apersepsi pada proses pembelajaran matematika siswa kelas IV MIN 4 Tabalong.
- Rakhmawati, R. (2016). Aktivitas matematika berbasis budaya pada masyarakat Lampung. *Al-Jabar: Jurnal Pendidikan Matematika*, 7(2), 221-230.
- Ramadhani, R., Farid, F., Lestari, F., & Machmud, A. (2020). Improvement of creative thinking ability through problem-based learning with local culture based on students' gender and prior mathematics ability. *International Journal of Instruction*, 13(1), 95-112.
- Ramadhani, R., Farid, F., Lestari, F., & Machmud, A. (2020). Improvement of creative thinking ability through problem-based learning with local culture based on students' gender and prior mathematics ability. *Al-Jabar: Jurnal Pendidikan Matematika*, 11(1), 61-72.
- Ramsden, P. (1992). *Learning to Teach in Higher Education*. Routledge.
- Rangkuti, A. F., & Anggraeni, F. D. (2005). Hubungan persepsi tentang kompetensi profesional guru matematika dengan motivasi belajar matematika pada siswa SMA. *Jurnal Psikologia*, 1(2), 76-85.
- Rapih, S., & Sutaryadi, S. (2018). Perspektif guru sekolah dasar terhadap Higher Order Thinking Skills (HOTS): Pemahaman, penerapan dan hambatan. *Premiere Educandum: Jurnal Pendidikan Dasar dan Pembelajaran*, 8(1), 78-87.
- Reid, A. (1979). *The Blood of the People: Revolution and the End of Traditional Rule in Northern Sumatra*. Oxford University Press.
- Reigeluth, C. M. (1999). *Instructional Design Theories and Models: An Overview of Their Current Status*. Routledge.
- Reigeluth, C. M. (1999). *Instructional-Design Theories and Models: Volume II: A New Paradigm of Instructional Theory*. Lawrence Erlbaum Associates.
- Reiser, R. A., & Dempsey, J. V. (2012). *Trends and Issues in Instructional Design and Technology*. Pearson.
- Republik Indonesia. (2003). *Undang-Undang Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional*. Lembaran Negara Republik Indonesia Tahun 2003 Nomor 78.

- Resnick, L. B. (1987). *Education and Learning to Think*. Washington, D.C: National Academy Press.
- Retnawati, H., Djidu, H., Kartianom, A., & Anazifa, R. D. (2018). Teachers' knowledge about higher-order thinking skills and its learning strategy. *Problems of Education in the 21st Century*, 76(2), 215-230.
- Reys, R. (1998). *Helping Children Learn Mathematics*. Boston: Allyn and Bacon.
- Richardo, R. (2016, November). Program guru pembelajar: Upaya peningkatan profesionalisme guru di abad 21. In *Prosiding Seminar Nasional Matematika Dan Pendidikan Matematika*.
- Richardson, J. C., & Swan, K. (2003). *Examining Social Presence in Online Courses in Relation to Students' Perceived Learning and Satisfaction*. *Journal of Asynchronous Learning Networks*, 7(1), 68-88.
- Riyanto, B., & Putri, R. I. I. (2017, December). Mathematical modeling in realistic mathematics education. In *Journal of Physics: Conference Series* (Vol. 943, No. 1, p. 012049). IOP Publishing.
- Roblyer, M. D., & Doering, A. H. (2014). *Integrating Educational Technology into Teaching*. Boston: Pearson.
- Roediger, H. L., & Butler, A. C. (2011). *The Critical Role of Retrieval Practice in Long-Term Retention*. *Trends in Cognitive Sciences*, 15(1), 20-27.
- Rogers, C. R. (1969). *Freedom to Learn: A View of What Education Might Become*. Charles Merrill.
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). Free Press.
- Rogoff, B. (1990). *Apprenticeship in Thinking: Cognitive Development in Social Context*. Oxford University Press.
- Rogoff, B. (2003). *The Cultural Nature of Human Development*. Oxford University Press.
- Roschelle, J., et al. (2010). *Using Technology to Transform Education: A Case Study of Project 2061*. *Journal of Technology, Learning, and Assessment*, 8(6).
- Rosidin, U., Suyanta, A., & Abdurrahman, A. (2019). A combined HOTS-based assessment/STEM learning model to improve secondary students' thinking skills: A development and evaluation study. *Journal for the Education of Gifted Young Scientists*, 7(3), 435-448.
- Rothwell, W. J., & Kazanas, H. C. (2004). *Mastering the Instructional Design Process: A Systematic Approach*. John Wiley & Sons.
- Roulston, K. (2010). *Reflective Teaching in Secondary Education*. Routledge.
- Runco, M. A. (2004). "Creativity." *Annual Review of Psychology*.
- Runco, M. A., & Jaeger, G. J. (2012). "The Standard Definition of Creativity." *Creativity Research Journal*.
- Ruseffendi, E. T. (1988). *Pengajaran Matematika Modern dan Masa Kini Untuk Guru dan SPG*. Bandung: Tarsito.
- Ruseffendi, E. T. (1988). *Pengantar Kepada Membantu Guru Mengembangkan Kompetensinya dalam Pengajaran Matematika Untuk Meningkatkan CBSA*. Bandung: Tarsito.
- Ruseffendi, E. T. (1991). *Pengantar kepada Membantu Guru Mengembangkan Kompetensinya dalam Pengajaran Matematika untuk Meningkatkan CBSA*. Bandung: Tarsito.
- Ruseffendi, E. T. (1998). *Membantu Guru Mengembangkan Kompetensinya*

- dalam *Pengajaran Matematika*. Bandung: Tarsito.
- Ruseffendi, E. T. (2006). *Pengantar kepada Membantu Guru Mengembangkan Kompetensinya dalam Pengajaran Matematika untuk Meningkatkan CBSA*. Bandung: Tarsito.
- Ruseffendi, E. T. et al. (1992). *Pendidikan Matematika 3*. Jakarta: Depdikbud.
- Ryan, R. M., & Deci, E. L. (2000). *Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions*. *Contemporary Educational Psychology*, 25(1), 54-67.
- Ryan, R. M., & Deci, E. L. (2000). *Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being*. *American Psychologist*, 55(1), 68-78.
- Ryan, R. M., & Deci, E. L. (2017). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. Guilford Press.
- Saavedra, A. R., & Opfer, V. D. (2012). Teaching and learning 21st century skills: Lessons from the learning sciences. A Global Cities Education Network Report. New York: Asia Society.
- Sani, R. A. (2019). *Pembelajaran berbasis HOTS edisi revisi: Higher Order Thinking Skills* (Vol. 1). Tira Smart.
- Saragih, S., & Napitupulu, E. (2015). "The Effectiveness of Realistic Mathematics Education Approach on Problem Solving Ability and Self-Efficacy." *Journal of Mathematics Education*, 6(1), 35-47.
- Saragih, S., & Napitupulu, E. E. (2015). The effectiveness of realistic mathematics education approach on students' mathematical problem solving skills and attitudes towards mathematics. *Journal of Education and Practice*, 6(12), 159-165.
- Saraswati, P. M. S., & Agustika, G. N. S. (2020). Kemampuan berpikir tingkat tinggi dalam menyelesaikan soal HOTS mata pelajaran matematika. *Jurnal Ilmiah Sekolah Dasar*, 4(2), 257-269.
- Sardiman, A. M. (2007). *Interaksi dan Motivasi Belajar Mengajar*. Jakarta: PT. Raja Grafindo Persada.
- Sari, R. H. N. (2015, November). Literasi matematika: Apa, mengapa dan bagaimana. In *Seminar Nasional Matematika dan Pendidikan Matematika UNY* (Vol. 8, pp. 713-720). Yogyakarta: Universitas Negeri Yogyakarta.
- Sari, R., & Prabowo, R. (2019). Challenges in implementing higher-order thinking skills in Indonesian primary school education. *Jurnal Pendidikan dan Pengajaran*, 52(3), 237-248. Retrieved from <https://journal.unnes.ac.id/nju/index.php/jpp/article/view/24843>
- Schmitt, N., Jiang, H., & Jabeen, F. (2017). *The Effect of Language Complexity on Learner Performance in Online Learning Environments*. *Computers & Education*, 113, 86-94.
- Schoenfeld, A. H. (2007). Problem Solving in the Mathematics Classroom: An Overview. In *The Handbook of Research on Mathematics Teaching and Learning* (pp. 435-457). Erlbaum.
- Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Basic Books.
- Schulz, H., & FitzPatrick, B. (2016). Teachers' understandings of critical and higher order thinking and what this means for their teaching and

- assessments. *Alberta Journal of Educational Research*, 62(1), 61–86.
- Schunk, D. H. (2003). *Self-Efficacy for Reading and Writing: Influence of Modeling, Goal Setting, and Self-Evaluation*. *Reading & Writing Quarterly*, 19(2), 159-172.
- Schunk, D. H. (2004). *Learning Theories: An Educational Perspective*. Pearson.
- Schunk, D. H. (2012). *Learning Theories: An Educational Perspective*. Pearson.
- Schunk, D. H., & Zimmerman, B. (2012). *Motivation and Self-Regulated Learning: Theory, Research, and Applications*. Routledge.
- Seels, B. B., & Glasgow, R. C. (1990). *Making Instructional Design Decisions*. Prentice Hall.
- Seels, B. B., & Glasgow, R. C. (1998). *Exercises in Instructional Design*. Prentice Hall.
- Sen, A. (1999). *Development as Freedom*. Alfred A. Knopf.
- Setiawan, H., Dafik, N. D. S. L., & Lestari, N. D. S. (2014, November). Soal matematika dalam PISA kaitannya dengan literasi matematika dan keterampilan berpikir tingkat tinggi. In *Prosiding Seminar Nasional Matematika*, Universitas Jember.
- Shambaugh, N., & Magliaro, S. G. (2006). *Instructional Design: A Systematic Approach for Reflective Practice*. Allyn & Bacon.
- Shavelson, R. J., et al. (2003). *On the Evaluation of Educational Assessment and Accountability: A Research Agenda*. *Educational Evaluation and Policy Analysis*, 25(1), 43-63.
- Shoimin, A. (2014). *Model Pembelajaran Inovatif dalam Kurikulum 2013*. Yogyakarta: Ar-Ruzz Media.
- Shuell, T. J. (1986). *Cognitive Learning and School Instruction*. Longman.
- Shukla, D., & Dungsungnoen, A. P. (2016). Student's perceived level and teachers' teaching strategies of higher order thinking skills: A study on higher educational institutions in Thailand. *Journal of Education and Practice*, 7(12), 211-219.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14. Retrieved from <https://www.tcrecord.org/>
- Shulman, L. S. (1987). Knowledge and teaching: Foundation of new reform. *Harvard Educational Review*, 57(1), 1-22.
- Siahaan, A. (1992). *The Batak Toba: The Power of the Kinship System and the Relevance of Their Traditional Laws in Modern Times*. Medan: Penerbit Universitas Sumatera Utara.
- Siahaan, M. (1975). *Ekonomi Tradisional Masyarakat Batak*. Balai Pustaka.
- Siahaan, T. (2010). *Dalihan Na Tolu dalam Masyarakat Modern*. LIPI Press.
- Siegel, J. T. (1969). *The Rope of God*. University of California Press.
- Siemens, G. (2005). Connectivism: A Learning Theory for the Digital Age. *International Journal of Instructional Technology and Distance Learning*.
- Sigalingging, H. (2000). 'Tinjauan Filosofi Tentang Dalihan Na Tolu sebagai Eksistensi Masyarakat Batak'. Tugas akhir. Yogyakarta: Universitas Gajah Mada.
- Sihombing, T. M. (1986). *Filsafat Batak tentang kebiasaan-kebiasaan adat istiadat* (No. 3290). Balai Pustaka.
- Sihotang, J. (2001). *Toba Batak: The Sacred Lake and Tribal Traditions*. Yayasan

Obor Indonesia.

- Simanjuntak, B. A. (1993). *Dalihan Na Tolu sebagai Dasar Hukum Adat Batak Toba*. Gadjah Mada University Press.
- Simanjuntak, H. (2021). "Integrasi Budaya dalam Pendidikan Matematika: Studi Efektivitas PMRI." *Jurnal Pendidikan dan Kebudayaan*, 10(3), 123–135.
- Simanjuntak, M. (1998). *Adat Batak Toba: Fungsi dan Maknanya dalam Kehidupan Masyarakat*. Balai Pustaka.
- Simatupang, M. (2010). *Motif dan Simbol dalam Ulos Batak Toba*. Jakarta: Balai Pustaka.
- Simatupang, P. (2006). *Dalihan Na Tolu: Batak Toba Culture in Transition*. Jakarta: Balai Pustaka.
- Simatupang, R. (2008). *Nilai-Nilai Filosofis dalam Budaya Batak Toba dan Implikasinya terhadap Pendidikan*. Medan: Pustaka Batak.
- Simatupang, R. (2021). Pendidikan dan Pelatihan Guru Matematika di Daerah Tapanuli. *Jurnal Pengembangan Pendidikan*.
- Sinaga, B. (2007). *Buku Model PBM-B3*. Surabaya: PPs Universitas Negeri Surabaya.
- Sinaga, B. (2007). Pengembangan Model Pembelajaran Matematika Berdasarkan Masalah Berbasis Budaya Batak. Universitas Negeri Surabaya, Surabaya.
- Sinaga, B. (2016). Inovasi model pembelajaran berbasis budaya Batak. *Generasi Kampus*, 7(2).
- Sinaga, B., & Nababan, M. (2008). Pengembangan model pembelajaran matematika berdasarkan masalah berbasis budaya Batak (PBM-B3).
- Sinaga, B., Sinambela, P. N. J. M., Sitanggang, A. K., Hutapea, T. A., Sinaga, L. P., Manullang, S., ... & Bayuzetra, Y. T. (2014). *Buku guru matematika*. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Sinaga, D. S. (2022). Kearifan Lokal dalam Pendidikan Matematika di Daerah Tapanuli. *Jurnal Pendidikan Matematika*.
- Sinaga, R. (2000). *Adat budaya Batak dan kekristenan: untuk generasi muda yang beradat dan berbudaya*. Dian Utama.
- Sirate, F. S. (2012). Implementasi etnomatematika dalam pembelajaran matematika pada jenjang pendidikan sekolah dasar. *Lentera Pendidikan: Jurnal Ilmu Tarbiyah dan Keguruan*, 15(1), 41-54.
- Siregar, N., & Nara, H. (2015). *Belajar dan pembelajaran*. Penerbit Ghalia Indonesia.
- Sitompul, M. (1993). *Wanita Batak Toba: Kedudukan dan Peranannya*. LIPI Press.
- Sitompul, S. (2019). Pengaruh Model Pembelajaran Think Talk Write Berbasis Konteks Budaya Batak Toba Terhadap Kemampuan Komunikasi Dan Disposisi Matematis Siswa SMP Swasta Parulian 2 Medan. (Doctoral dissertation, UNIMED).
- Sitorus, L. (2022). Nilai-Nilai Luhur Budaya Batak Toba: Studi Kasus dalam Masyarakat Ugamo Malim. *NALAR: Jurnal Pendidikan dan Kebudayaan*, 1(2), 52-58.
- Situmorang, E. M. (2022). Peningkatan Kualitas Pendidikan Matematika melalui Penggunaan Alat Peraga Lokal. *Jurnal Pendidikan dan Teknologi*.
- Situmorang, T. B. (2011). *Suhi Ni Ampang Na Opat: Kebijaksanaan Lokal Batak Toba dalam Pendidikan Moral*. Medan: Penerbit Universitas Sumatera

Utara.

- Skinner, B. F. (1953). *Science and Human Behavior*. Macmillan.
- Slavin, R. E. (1995). *Cooperative Learning: Theory, Research, and Practice*. Allyn & Bacon.
- Slavin, R. E. (2000). *Educational Psychology Theory and Practice* (6th ed.). Boston: Johns Hopkins University.
- Slavin, R. E. (2006). *Educational Psychology: Theory and Practice* (8th ed.). Pearson Education.
- Slavin, R. E. (2018). *Educational Psychology: Theory and Practice*. Pearson.
- Smaldino, S. E., Lowther, D. L., & Russell, J. D. (2012). *Teknologi Pembelajaran dan Media untuk Belajar*. Jakarta: Kencana.
- Smith, B. L., MacGregor, J. T., Matthews, R. S., & Gabelnick, F. (2009). The benefits of collaborative learning for students. *New Directions for Teaching and Learning*, 2009(87), 5-14.
- Smith, P. L., & Ragan, T. J. (2005). *Instructional Design*. Wiley.
- Soedjadi, R. (1996). *Diagnosis Kesulitan Siswa Sekolah Dasar dalam Belajar Matematika*. Team Basic Science LPTK Dikti.
- Soedjadi, R. (2000). *Kiat Pendidikan Matematika di Indonesia*. Jakarta: Direktorat.
- Stacey, K., & Turner, R. (2012). *Assessing Mathematical Literacy: The PISA Experience*. Springer.
- Steinert, Y., et al. (2006). The Influence of Teaching on Medical Students' Learning: The Importance of Teaching Contexts. *Medical Education*, 40(8), 777-788.
- Sternberg, R. J. (1985). "The Triarchic Mind: A New Theory of Human Intelligence."
- Sternberg, R. J., & Lubart, T. I. (1999). "The Concept of Creativity: Prospects and Paradigms."
- Stiggins, R. (2007). *Assessment for Learning: An Action Guide for School Leaders*. Assessment Training Institute.
- Stufflebeam, D. L. (2002). *CIPP Evaluation Model Checklist*. Evaluation Checklists Project.
- Stufflebeam, D. L., & Shinkfield, A. J. (2007). *Evaluation Theory, Models, and Applications*. Jossey-Bass.
- Suardana, I. N., Redhana, I. W., Sudiarmika, A. A., & Selamat, I. N. (2018). Students' Critical Thinking Skills in Chemistry Learning Using Local Culture-Based 7E Learning Cycle Model. *International Journal of Instruction*, 11(2), 399-412.
- Suardana, I. N., Redhana, I. W., Sudiarmika, A. A., & Selamat, I. N. (2018). Students' critical thinking skills in chemistry learning using local culture-based 7E learning cycle model. *Journal of Chemical Education*, 95(9), 1460-1468.
- Sudibyo, B. (2005). *Rencana Strategis Departemen Pendidikan Nasional 2005-2009*. Jakarta: Pusat Informasi Humas DPIKNAS.
- Sudjana, N. (1996). *Cara belajar Siswa Aktif dalam Proses Belajar Mengajar*. Bandung: Sinar Baru.
- Sugiman. (2011). Peningkatan Pembelajaran Matematika dengan Menggunakan Pendekatan Matematika Realistik. (Online). Tersedia pada:

- <http://staff.uny.ac.id/> Diakses tanggal 12 Mei 2016.
- Sugiyarto. (2017). "Menyimak (Kembali) Integrasi Budaya di Tanah Batak Toba". *Endogami Jurnal Ilmiah Kajian Antropologi*, 1(1), 34.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- Suhendi, A., & Purwarno, A. (2018). "Student-Centered Learning Approaches: Impact on Higher Education." *Journal of Education Research*, 11(3), 67–80.
- Suherman, E. (2003). *Strategi Pembelajaran Matematika Kontemporer*. Bandung: Universitas Pendidikan Indonesia.
- Suherman, E. dkk. (2003). *Strategi Pembelajaran Matematika Kontemporer*. JICA: Bandung.
- Sujarwo. (2008). "Pendidikan di Indonesia Memprihatinkan." *Jurnal Cakrawala Pendidikan* (UNY).
- Sulastri, Y. L. (2009). Meningkatkan Kemampuan Komunikasi Matematis Melalui Pembelajaran Dengan Pendekatan Pendidikan Matematika Realistik Siswa Sekolah Menengah Pertama Di Kabupaten Bandung (Doctoral dissertation, Tesis pada SPs Universitas Pendidikan Indonesia. Bandung: tidak diterbitkan).
- Sulistiani, E., & Masrukan, M. (2017, February). Pentingnya berpikir kritis dalam pembelajaran matematika untuk menghadapi tantangan MEA. In *PRISMA, Prosiding Seminar Nasional Matematika* (pp. 605-612).
- Sulistyo, B. (2019). *Penyusunan RPS Berbasis KKNI: Strategi dan Tantangan*. Yogyakarta: Deepublish.
- Sullivan, K. M., & Gorn, G. J. (2012). *Engaging Students with Interactive Technology: The Role of Teacher Attitude*. *Journal of Educational Technology*, 9(4), 23-35.
- Sullivan, K., O'Sullivan, J., & Roberts, D. (2014). *The Role of Problem-Based Learning in Developing Student Attitudes and Skills*. *International Journal of Teaching and Learning in Higher Education*, 26(3), 454-463.
- Sumardiyono. (2004). *Karakteristik Matematika dan Implikasinya Terhadap Pembelajaran Matematika*. Yogyakarta: Direktorat Jenderal Pendidikan Dasar dan Menengah Pusat Pengembangan Penataran Guru (PPP-G) Matematika.
- Sunardi. (2016). Strategi penguatan pengembangan 4C's dalam pembelajaran matematika. In *Prosiding Seminar Nasional Pendidikan Matematika* (pp. 10-19).
- Sundari, S., Kahar, M. S., & Erwinda, E. G. (2021). Analisis kemampuan berpikir tingkat tinggi menggunakan instrumen HOTS berbasis two tier diagnostic test. *Aksioma: Jurnal Program Studi Pendidikan Matematika*, 10(4), 2726-2735.
- Suparman, Mulyasa. (2004). *Desain Instruksional Modern: Panduan Para Pengajar dan Inovator Pendidikan*. Jakarta: Erlangga.
- Suparno, Paul. (2016). *Perkembangan Kognitif Jean Piaget*. Yogyakarta: Kanisius.
- Supriadi, S. (2017). Mengembangkan kemampuan berpikir kreatif matematik mahasiswa pendidikan guru sekolah dasar melalui pembelajaran etnomatematika Sunda. *Jurnal Pengajaran MIPA*, 22(1).
- Suriasumantri, Jujun S. (2005). *Filsafat Ilmu; Sebuah Pengantar Populer*. Jakarta:

Pustaka Sinar Harapan.

- Surya, E., & Syahputra, E. (2017). Improving high-level thinking skills by development of learning PBL approach on the learning mathematics for senior high school students. *International Education Studies*, 10(8), 12-20.
- Surya, E., Purba, C., Syahputra, E., Haris, D., & Sinaga, B. (2020, August). Batak Toba culture on mathematics learning process at Medan high school. In *Journal of Physics Conference Series* (Vol. 1613, No. 1, p. 012063). IOP Publishing.
- Suryadi, D. (2005). Penggunaan pendekatan pembelajaran tidak langsung serta pendekatan gabungan langsung dan tidak langsung dalam rangka meningkatkan kemampuan berpikir matematik tingkat tinggi siswa SLTP (Doctoral dissertation, Universitas Pendidikan Indonesia).
- Susanto, A. (2013). *Teori Belajar dan Pembelajaran di Sekolah Dasar*. Jakarta: Kencana.
- Sutarto Hadi. (2005). *Pendidikan Matematika Realistik dan Implementasinya*. Banjarmasin: Tulip.
- Suwarsono. (2001). Beberapa permasalahan yang terkait dengan upaya implementasi pendidikan matematika realistik di Indonesia. *Makalah disajikan dalam Seminar Nasional tentang Pendidikan Matematika Realistik di Universitas Sanata Dharma* pada tanggal 14-15 November 2001.
- Suyadi & Maulidya Ulfa. (2013). *Konsep Dasar PAUD*. Yogyakarta: PT Remaja Rosdakarya.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
- Sweller, J. (1988). *Cognitive Load During Problem Solving: Effects on Learning*. *Cognitive Science*, 12(2), 257-285.
- Syahputra, E. (2013). Peningkatan kemampuan spasial siswa melalui penerapan pembelajaran matematika realistik. *Jurnal Cakrawala Pendidikan*, 3(3).
- Syahputra, E. (2018, December). Pembelajaran abad 21 dan penerapannya di Indonesia. In *Prosiding Seminar Nasional Sains Teknologi Humaniora dan Pendidikan (QSinastekmapan)* (Vol. 1).
- Syahputra, E., & Surya, E. (2014). The development of problem-based learning model to construct high-order thinking skill students' on mathematical learning in SMA/MA. *Journal of Education and Practice*, 5(39).
- Syahputra, E., & Surya, E. (2015). Penerapan model pembelajaran matematika dengan multi-strategi dan multimedia. *Jurnal Pendidikan Matematika*.
- Syahputra, E., & Surya, E. (2015). Pengembangan model pembelajaran berbasis pemecahan masalah untuk mengkonstruksi berpikir tingkat tinggi dalam pembelajaran matematika di SMA/MA. *SEMIRATA 2015*, 1(1).
- Syahputra, E., Surya, E., & Putra, P. D. (2021, March). The difference of the enhancement of students' mathematical disposition as an impact of ARCS-based learning model and conventional approach. In *Journal of Physics: Conference Series* (Vol. 1819, No. 1, p. 012003). IOP Publishing.
- Taba, H. (1962). *Curriculum Development: Theory and Practice*. Harcourt Brace Jovanovich.
- Taba, H. (1962). *Curriculum Development: Theory and Practice*. Harcourt, Brace & World.
- Tambunan, H., & Naibaho, T. (2019). Performance of mathematics teachers to

- build students' high order thinking skills (HOTS). *Journal of Education and Learning (EduLearn)*, 13(1), 111-117.
- Tandililing, E. (2010). Implementasi Realistic Mathematics Education (RME) di sekolah. *Guru Membangun*, 25(3).
- Tandililing, E. (2010). Pendidikan matematika realistik Indonesia. *Jurnal Pendidikan Matematika*.
- Tanujaya, B. (2016). Development of an instrument to measure higher order thinking skills in senior high school mathematics instruction. *Journal of Education and Practice*, 7(21), 144-148.
- Tarigan, D. (2006). *Pembelajaran Matematika Realistik*. Jakarta: Departemen Pendidikan Nasional Direktorat Jenderal Pendidikan Tinggi Direktorat Ketenagaan.
- Tarigan, H. (2007). *Kebudayaan Batak: Aspek dan Simbolisme*. Bandung: Penerbit Alumni.
- Tarigan, Simon. (1992). *Struktur Kekerabatan dan Peran Dalihan Na Tolu dalam Masyarakat Batak Toba*. PT Gramedia.
- Tarigan, Simon. (1992). *Struktur Sosial dan Sistem Politik Masyarakat Batak Toba*. PT Gramedia Pustaka Utama.
- Taylor, Lyn. (1993). Vygotskian scientific concepts: Implication for mathematics education. *Focus on Learning Problems in Mathematics*, 15(2-3).
- Taylor, Paul Michael. (1984). *The Folk Religions of the Toba Batak of North Sumatra*. American Ethnological Society.
- Tessmer, M. (1993). *Planning and Conducting Formative Evaluations: Improving the Quality of Education and Training*. Kogan Page.
- Teygeler, René. (1993). *Paper and Book in Ancient Toba Batak Culture*. KITLV Press.
- Tharp, R. G., & Gallimore, R. (1988). *Reading: A Journey into the World of Learning*. Cambridge University Press.
- The Partnership for 21st Century Learning. (2015). P21 Framework Definitions. Diakses 3 November 2015 dari P21 Framework Definitions.
- Thiagarajan, S. (1974). *Instructional Development for Training Teachers of Exceptional Children: A Sourcebook*.
- Thorndike, E. L. (1913). *Educational Psychology: The Psychology of Learning*. Teachers College, Columbia University.
- Thorndike, R. M. (1997). *Measurement and Evaluation in Psychology and Education* (6th ed.). Merrill.
- Thorne, A., & Thomas, G. (2009). How to increase higher level thinking. Center for Development and Learning.
- Tichelman, Frits. (1980). *The Social Evolution of Indonesia: The Asiatic Mode of Production and Its Legacy*. Springer.
- TIMSS & PIRLS International Study Center. (n.d.). *TIMSS 2023 Assessment Framework*. Retrieved from TIMSS 2023 Assessment Framework.
- TIMSS & PIRLS International Study Center. (n.d.). *TIMSS Assessment Details*. Retrieved from TIMSS Assessment Details.
- TIMSS & PIRLS International Study Center. *TIMSS 201. User Guide for the International Database Percent Correct Statistics for Released Items Mathematics – Fourth Grade*. Chestnut Hill: TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College, dan IEA.

- Tobias, S. (1994). Nurturing Critical Thinking. *Educational Leadership*, 51(2), 8–13.
- Tomlinson, C. A. (2001). *How to Differentiate Instruction in Mixed-Ability Classrooms*. Alexandria, VA: ASCD.
- Tomlinson, Carol Ann. (2001). *The Differentiated Classroom: Responding to the Needs of All Learners*. ASCD.
- Torrance, E. P. (1966). "Torrance Tests of Creative Thinking."
- Torrance, E. P. (1974). *Torrance Tests of Creative Thinking*. Bensenville, IL: Scholastic Testing Service.
- Torrance, E. P. (1974). *Torrance Tests of Creative Thinking*. Bensenville, IL: Scholastic Testing Service.
- Treffers, A. (1987). Didactical design in mathematics education. In *For the Learning of Mathematics*, 7(1), 21-27. Retrieved from JSTOR.
- Treffers, A. (1987). *Three Dimensions: A Model of Goal and Theory Description in Mathematics Education*. Dordrecht, the Netherlands: Reidel.
- Trilling, B., & Fadel, C. (2009). *21st Century Skills: Learning for Life in Our Times*. San Francisco: John Wiley & Sons, Inc.
- UBAYA. (2021). *30 Kampus Terbaik Indonesia Versi QS Asia University Rankings 2021*. Surabaya: Universitas Surabaya.
- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46(2), 153-184.
- Undang-Undang RI No. 20 Tahun 2003 tentang *Sistem Pendidikan Nasional*.
- Underbakke, M., Borg, J. M., & Peterson, D. (1993). Researching and developing the knowledge base for teaching higher order thinking. *Theory into Practice*, 32(3), 138-146.
- Van den Heuvel-Panhuizen, M. (2000). *Realistic Mathematics Education: Work in Progress*.
- Van den Heuvel-Panhuizen, M., & Drijvers, P. (2014). Realistic Mathematics Education. In S. Lerman (Ed.), *Encyclopedia of Mathematics Education* (pp. 521-525). Dordrecht, Heidelberg, New York, London: Springer.
- Van Merriënboer, J. J. G., & Kirschner, P. A. (2007). *Cognitive Load Theory in Dealing with Complex Learning Tasks*. *Educational Psychologist*, 42(3), 187-198.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2012). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 36(1), 1-16.
- Vergouwen, J. C. (2004). *Masyarakat dan Hukum Adat Batak Toba*. Yogyakarta: PT. LkiS Pelangi Aksara.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
- Wahyudin, D., & Susilana, R. (2012). *Kurikulum & Pembelajaran: Inovasi Kurikulum dan Pembelajaran*. Jakarta: Rajawali Pers.
- Wang, M. T., & Holcombe, R. (2010). Adolescent Behavioral, Emotional, and Cognitive Engagement: An Integrated Conceptualization. *Educational Psychologist*, 45(1), 1-12.

- Wardani, N., & Syahrul, F. (2016). "Peningkatan Kevalidan Buku Pegangan Mahasiswa di Perguruan Tinggi." *Jurnal Pendidikan*, 10(1), 45–52.
- Wardhani, D. A. (2018, December). Penggunaan soal higher order thinking skill (HOTS) berbasis warisan budaya Indonesia dalam kurikulum 2013 dalam melatih kemampuan berpikir kritis matematika siswa sekolah dasar. In *Seminar Nasional PGSD UNIKAMA* (Vol. 2, pp. 32-39).
- Wardhani, S. (2008). *Analisis SI dan SKL mata pelajaran matematika SMP/MTS untuk optimalisasi pencapaian tujuan*. Yogyakarta: Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga Kependidikan Matematika.
- Wardhani, Sri. (2004). *Penilaian Pembelajaran Matematika Berbasis Kompetensi*. Jogjakarta: PPPG Matematika.
- Warli. (2010). Profil kreativitas siswa yang bergaya kognitif reflektif dan siswa yang bergaya kognitif impulsif dalam memecahkan masalah matematika. Presented at the Disertasi, Surabaya: UNESA.
- Warsita, Bambang. (2016). *Teknologi Pembelajaran: Landasan Dan Aplikasinya*. Jakarta: Rineka Cipta.
- Weimer, M. (2013). *Learner-Centered Teaching: Five Key Changes to Practice*. John Wiley & Sons.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.
- Wertsch, James V. (1991). *Voices of the Mind: A Sociocultural Approach to Mediated Action*. Harvard University Press.
- Whitaker, U. (1989). *Assessing Learning: Standards, Principles, and Procedures*.
- Widiyanti, M. (2019). Implementasi Buku Panduan Dosen Sesuai SNPT: Studi Kasus di Universitas Negeri X. Deepublish.
- Widodo, T., & Kadarwati, S. (2013). Higher order thinking berbasis pemecahan masalah untuk meningkatkan hasil belajar berorientasi pembentukan karakter siswa. *Jurnal Cakrawala Pendidikan*, 5(1).
- Wiggins, G., & McTighe, J. (2005). *Understanding by Design*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Wiggins, G., & McTighe, J. (2005). *Understanding by Design*. ASCD.
- Wijaya, A. (2012). The impact of realistic mathematics education on students' mathematical reasoning and communication skills. *International Journal of Mathematics Education*, 44(3), 401-416.
- Wijaya, A. (2017). "Problem-Solving Skills in Mathematics: Impact of Realistic Mathematics Education." *Jurnal Pendidikan Matematika*, 11(2), 89–104.
- Wijaya, Ariyadi. (2012). *Pendidikan Matematika Realistik: Suatu Alternatif Pendekatan Pembelajaran Matematika*. Yogyakarta: Graha Ilmu.
- Wijaya, E. Y., Sudjimat, D. A., & Nyoto, A. (2016, September). Transformasi pendidikan abad 21 sebagai tuntutan pengembangan sumber daya manusia di era global. In *Prosiding Seminar Nasional Pendidikan Matematika* (Vol. 1, No. 26, pp. 263-278).
- Wijayanti, D. (2015). Analisis pengaruh teori kognitif Jean Piaget terhadap perkembangan moral siswa sekolah dasar melalui pembelajaran IPS. *Trihayu*, 1(2), 258-991.
- Williams, Julian. (2013). *The Role of Social Context in Learning Mathematics*. Cambridge University Press.
- Wilson, V. (2000). Education Forum on Teaching Skill. *Executive Education*

Department.

- Winfred F. Hill. (2010). *Theories of Learning*. Bandung: Penerbit Nusa Media.
- Winfred F. Hill. (2011). *Theories of Learning: Teori-teori dalam Pembelajaran, Konsepsi, Komparasi, dan Signifikan*. Bandung: Nusa Media.
- Winkel, W. S. (1989). *Psikologi Pengajaran*. Jakarta: PT. Gramedia.
- Wong, H. K., & Wong, R. T. (2009). *The Classroom Management Book*. Harry K. Wong Publications.
- Wong, L. H., et al. (2009). Student Learning and Motivation in an Online Learning Environment. *Educational Media International*, 46(3), 221-238.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*.
- Yaniawati, R. P. (2013). E-learning to improve higher order thinking skills (HOTS) of students. *Journal of Education and Learning (EduLearn)*, 7(2), 109-120.
- Yuliana, I., & Ahmad, F. (2017). The implementation of HOTS in Indonesian curriculum and its impact on teachers' teaching practices. *Jurnal Pendidikan dan Kebudayaan*, 22(4), 311-324.
- Yuliati, S. R., & Lestari, I. (2018). Higher-order thinking skills (HOTS) analysis of students in solving HOTS question in higher education. *Perspektif Ilmu Pendidikan*, 32(2), 181-188.
- Zimmerman, B. J. (2002). Becoming a Self-Regulated Learner: An Overview. *Theory into Practice*, 41(2), 64-70.
- Zulkardi, M., & Sugiman, M. (2015). Realistic mathematics education (RME) approach: Effectiveness in improving mathematical higher-order thinking skills in Indonesian secondary schools. *Journal of Mathematics Education*, 8(1), 1-16.
- Zulkardi, Z., Putri, R. I. I., & Wijaya, A. (2020). Two decades of realistic mathematics education in Indonesia. In *International Reflections on the Netherlands Didactics of Mathematics: Visions on and Experiences with Realistic Mathematics Education* (pp. 325-340).
- Zulkardi. (2003). *Realistic Mathematics Education: Theory Meets Web Technology*. Prosiding Konferensi Nasional X Matematika. Majalah Ilmiah Himpunan Matematika Indonesia. ITB. Bandung.