

REFERENCES

- Sarabi-Asiabar,A., Mehdi J., Jamil, S., Shahram, T., Rouhollah, Z., Hadi, P., Mohammad, S., and Lida Shams (2015) The relationship between learning style preferences and gender, educational major and status in first year medical students: a survey study from iran. *Iran Red Crescent Med J*.17 (1): 1-6
- Alkali, Y.S and Y. A. Hamburger. (2004). *Cyber psychology & behavior*. 7(4): 421-429
- Ambrose, Susan A. (Eds.) (2010) *How learning works: seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass
- Ametller, J., & Pinto, R. (2002). Students' reading of innovative images of energy at secondary school level. *International Journal of Science Education*, 24 (3): 285-312.
- Anderson, L.W. and Krathwohl, D. R. (Eds.) (2001). *A taxonomy for learning, teaching and assessing: A revision of Bloom's taxonomy of educational objectives: Complete Edition*. New York: Longman.
- Arikunto, S.(2011) *Dasar-Dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara
- Arneson, J.B. and E. G. Offerdahl. (2018)Visual literacy in Bloom: Using Bloom's Taxonomy to Support Visual Learning Skills. *CBE—Life Sciences Education*. 17: 1-8
- Atilboz, G. N. (2004) 9th grade students understanding levels and misconceptions about mitosis and meiosis. *Journal of Gazi educational faculty*. 24(3): 147-157
- Badeleh, M.T., Charkazi, A. R., Asayesh, H., Ahmadi, A. R., Hoseini, S. A. .(2011) Study Skills in Golestan University of Medical Sciences: A Neglected Need. *Journal of health* 8(4):643-49
- Bandura A. (1986) *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, New Jersey: Prentice Hall.
- Barger, J.B. (2016) Visual Literacy in Anatomy. Dissertation. Department of Anatomy & Cell Biology Indiana University.
- Beier, M. E., & Ackerman, P. L. (2004). A reappraisal of the relationship between span memory and intelligence via "best evidence synthesis." *Intelligence*, 32: 607– 619.

- Bell, J. (2013) Visual literacy skills of students in college-level Biology: learning outcomes following digital or hand-drawing activities. *The Canadian Journal for the Scholarship of Teaching and Learning*. 5(1):1-13
- Bire, A.L., Uda, G., Josua, B. (2014) Pengaruh Gaya Belajar Visual, Auditorial, Dan Kinestetik Terhadap Prestasi Belajar Siswa. *Jurnal Kependidikan* 44(2):168-174
- Bors, D. A., & Forrin, B. (1995). Age, speed of information processing, recall, and fluid intelligence. *Intelligence*, 20: 229 –248.
- Boström, L., & Lassen, L. (2006) Unraveling learning, learning styles, learning strategies and meta-cognition. *Education and Training*. 48(2/3):178-189.
- Breckler, J.; Chia, S.T.;Kemi, R. (2011). Academic performance and learning style self-predictions by second language students in an introductory biology course. *Journal of the Scholarship of Teaching and Learning*. 11(4): 26 – 43.
- Brumberger, E. (2011), Visual literacy and the digital native: An examination of the Millennial Learner. *Journal of Visual Literacy*. 30(1): 19-46.
- Bulent, Alci, Karatas Hakana , Balyer Aydina.2015. An analysis of Undergraduates' Study Skills. *Procedia - Social and Behavioral Sciences* 197 (2015): 1355 – 1362
- Burgner, D., & Hewstone, M. (1993). Young children's causal attributions for success and failure: “self-enhancing boys” and “self-derogating girls”. *British Journal of Developmental Psychology* 11: 125-129
- Campitelli, G., & Gobet, F. (2011). Deliberate Practice: Necessary But Not Sufficient. *Current Directions in Psychological Science*. 20: 280-285.
- Chan Y.H. Biostatistics 104: correlational analysis. *Singap Med J*. 2003;44(12):614–619.
- Clark, D. C., and Mathis, P. M. (2000). Modelling mitosis and meiosis, a problem solving activity. *The American biology teacher*. 62(3): 204-206.
- Considine, D., Horton, J., Moorman, G. (2009). Teaching and reaching the millennial generation through media literacy. *Journal of Adolescent & Adult Literacy*. 52(6): 472–481
- Congos, D. H. (2011) *Starting Out in Community College*.Chicago, Il: McGraw Hill
- Damon, W. (1991) Problems in direction in socially shared cognition. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspectives on socially*

- shared cognition* (pp. 384-397). Washington, DC: American Psychological Association.
- Deluchi, J., Rohwer, W. and Thomas, J. (1987) 'Study-Time Allocation as a Function of Grade Level and Course Characteristics', *Contemporary Educational Psychology* 12: 365–80
- diSessa, A.A, Metarepresentation: Native Competence and Targets for Instruction. *Cognition and Instruction*. 22, 293- 331 (2004).
- Dobson J.L.(2010) A comparison between learning style preferences and sex, status, and course performance. *Adv Physiol Educ*. 34(4):197-204.tho
- Dwyer, F. M. (1972). *A guide for improving visualized instruction*. State College, PA: Learning Services.
- Emanuel, Richard and Siu, Challons-Lipton. (2013) Visual Literacy and the Digital Native: Another Look. *Journal of Visual Literacy*. 32(1):1-20
- Evans, M. A., Watson, C., and Willows, D. M. (1987). *A naturalistic inquiry into illustrations in instructional textbooks*. In H. A. Houghton, & D. M. Willows (Eds.), *The psychology of illustrations: Vol. 2. Instructional issues*, New York: Springer-Verlag.
- Fibriana, F., S. D. Pamelasari., L.S. Aulia. 2017. Measuring Visual Literacy Skills on Students' Concept Understanding of Genetic Transfer Material. *Journal of Physics: Conference Series*, 824 (1):1-8
- Fleming, N. D. (2001). *Teaching and learning styles: VARK strategies*. Christchurch, New Zealand: Author.
- Fleming, N.D. and Mills, C. (1992) Not Another Inventory, Rather a Catalyst for Reflection. *To Improve the Academy*. 11: 137-155
- Fleming ND. VARK. (2018) A Guide to Learning Styles 2009 [cited 2018]; Available from: <http://www.varklearn.com/english/page.asp?p=questionnaire>.
- Fleming, M. L., and Levie, W. H. (1978). *Instructional message design*. Englewood Cliffs, NJ: Educational Technology Publications.
- Georgiou, S. (1999). Achievement attributions of sixth grade children and their parents. *Educational Psychology*, 19: 399-412.
- Gettinger, Maribeth and Seibert, J.K. (2002) Contributions of Study Skills to Academic Competence. *School Psychology Review*. 31 (3): 350-365

- Ghazvini, S.H and M. Khajehpour. (2011). Gender differences in factors affecting academic performance of high school student. *Procedia Social and Behavioral Sciences* 15 : 1040–1045
- Gilbert,. J. K.. 2005..Visualization in science education. Springer-Verlag New York Inc
- Gropengieber, H., & Riemeier, T. (2008) On the roots of difficulties in learning about cell division: Process based analysis of students' conceptual development in teaching experiments. *International journal of science education*. 30(7): 923-939
- Haghverdi, H.R., Biria, R. & Karimi, L. (2010). Note-taking Strategies and Academic Achievement. *Journal of Language and Linguistic Studies* 6 (1): 75-109
- Hannafin, M. J., & Peck, K. (1988). *The design, development, and evaluation of instructional software*. New York: Macmillan Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. New York, NY: Routledge.
- Hassanbeigi, 2011. The relationship between study skills and academic performance of university students. *Procedia - Social and Behavioral Sciences* 30 (2011): 1416 – 1424
- Hattie J, Biggs J, Purdie N. 1996. Effects of learning skills interventions on student learning. *Rev Educ Res*. ;66:99–13
- Hong, E. and Kit-hung, L. (2000) Preferred homework style and homework environment in high-versus low-achievement Chinese student. *Educational Psychology*. 20(2): 125-137
- Houtte, M. V. (2004) Why boys achieve less at school than girls: the difference between boys' and girls' academic culture. *Educational Studies*. 30(2): 139-157
- Hull, Kerry Hull;Samuel, Wilson;Rachel, Hopp; Audra, Schaefer; Jon, Jackson. (2016) Determinants of Student Success in Anatomy and Physiology: Do Prerequisite Courses Matter? A Task Force Review 2016. *Journal of the Human Anatomy and Physiology Society*. 20(2): 38-45
- Husmann, P.R., J. B. Barger, Audra, F. Schutte. (2016) Study Skills in Anatomy and Physiology: Is There a Difference? *Anatomical sciences education*. 9(1): 18-27
- James S, D'Amore A, Thomas T.(2011) Learning preferences of first year nursing and midwifery students: utilising VARK. *Nurse Educ Today* 31(4):417-23

- Kivinen, Kari. (2003). assessing motivation and the use of learning strategies by secondary school students in three international school. Electronic Dissertation. Finland: University of Thempere.
- Khursid, F.; Afifa, T.; Farah, N. (2012). Relationship between Study Habits and Academic Achievement among Hostel Living and Day Scholars' University Students. *British Journal of Humanities and Social Sciences* 3(2): 34-42. ISSN 2048-1268
- Kleitman, S. & Stankov, L. (2007). Self-confidence and metacognitive processes. *Learning and Individual Differences*, 17: 161-173.
- Kucan, L., & Beck, I. (1997). Thinking aloud and reading comprehension research: Inquiry, instruction, and so- cial interaction. *Review of Educational Research*, 67: 271-299.
- Kruger, D., Fleige, J., & Riemeier, T. (2006). How to foster an understanding of growth and cell division. *Journal of biological education*, 40(3): 135-140.
- Lent, J. A. (1980). *Visual literacy in the third world: A brief literature review and problem analysis*. Paper presented at Broadcast Education Association, Las Vegas, USA.
- Levie, W. H., & Lentz, R. (1982). Effects of text illustrations: A review of research. *ECTJ*, 30(4): 195–232.
- Lewis, J., & Wood Robinson, C. (2000). Genes, chromosomes, cell division and inheritance - do students see any relationship? *International journal of science education*, 22(2), 177- 195.
- Lightbody, P., Siann, G., Stocks, R., & Walsh, D. (1996). Motivation and attribution at secondary school: the role of gender. *Educational Studies* 22: 13-25.
- Linn, M. C. and Petersen, A. C. (1985) Emergence and characterization of sex differences in spatial ability: A meta-analysis. *Child Dev* 56, 1479–1498.
- Linn, M. C., Lewis, C., Tsuchida, I., & Songer, N. B. (2000). Beyond fourth-grade science: Why do US and Japanese students diverge? *Educational Researcher*, 29(3), 4-14.
- Lowe, R.K. (2000). Visual Literacy and Learning in Science. *ERIC Digest*. ED463945
- Maeda, Y. and Yoon, S. Y. (2013) A meta-analysis on gender differences in mental rotation ability measured by the Purdue spatial visualization tests: Visualization of rotations (PSVT:R). *Educ. Psychol. Rev.* 25, 69–94

- Massoumian, B. (1989). Successful teaching via two-way interactive video. *TechTrends*, 34(2): 16–19.
- Mayer, R.E. (2002). Multimedia learning. *The Psychology of Learning and Motivation*, 41: 85-139. Elsevier Science.
- Mayer, R. E., Steinhoff, K., Bower, G., & Mars, R. (1995). A generative theory of textbook design: Using annotated illustrations to foster meaningful learning of science Text. *ETR&D*, 43(1): 31–43.
- McGuire L., Adam, R., Drew, N. (2015). Peer Group Norms and Accountability Moderate the Effect of School Norms on Children's Intergroup Attitudes. *Child development* 86(4): 1290–1297.
- Mertler, C. C., & Charles, C. M. (2008). *Introduction to Educational Research (7th ed.)*. Boston, MA: Pearson.
- Mnguni, L.E. (2007). *Development of a Taxonomy for Visual Literacy in the Molecular Life Sciences*. Thesis. School of Biochemistry, Genetics, Microbiology and Plant Pathology. Pietermaritzburg: University of KwaZulu-Natal.
- Mnguni, L. (2016). Visual literacy skills among molecular biology students. In J. Kriek, B. Bantwini, C. Ochonogor, J.J. Dhlamini & L Goosen. Towards effective teaching and meaningful learning in Mathematics, Science and Technology. Proceedings of the ISTE International Conference on Mathematics, Science and Technology Education. 2016. 24 - 28 October 2016, Kruger National Park, Mopani camp, Phalaborwa, Limpopo, South Africa. Pp 418-427 (ISBN: 978-1-86888-907-5)
- Mnguni L, Schönborn K, Anderson T. (2016). Assessment of visualization skills in biochemistry students. *South African Journal of Science* 112(9/10): 1-8
- Moje, E. B. (2002). Refraining adolescent literacy research for new times: Studying youth as a resource. *Reading Research and Instruction*, 41(3): 211-228.
- Mulyani, A. (2017). Penguasaan Mahasiswa Calon Guru Biologi terhadap Representasi Visual dalam Botani Phanerogamae. *Scientiae Educatia: Jurnal Pendidikan Sains* 6 (1): 15-21
- Murphy RJ, Gray SA, Straja SR, Bogert MC.(2004) Student learning preferences and teaching implications. *J Dent Educ* 68(8):859-66.
- Naqvi, S.; Gladson, C.; Udayakumari, M.; Dhafra, A. (2018) Study Skills Assessment among Undergraduate Students at a Private University College in Oman. *Mediterranean Journal of Social Sciences* 9(2):139-147

- Nonis, S.A. and G.I. Hudson. (2010). Performance of College Students: Impact of Study Time and Study Habits. *Journal of Education for Business*, Taylor & Francis Group, 85: 229–238
- Nurlia, Yusminah, H., Rachmawaty, M., Oslan, J., A. Mushawwir T.(2017) Hubungan Antara Gaya Belajar, Kemandirian Belajar, dan Minat Belajar dengan Hasil Belajar Biologi Siswa. *Jurnal Pendidikan Biologi*, 6(2): 321-328
- OECD, 2016. Country note: *Programme International for Student Assessment (PISA) result from PISA 2015*. OECD Publishing. www.oecd.org
- Olive, T. (2004) . Working memory in writing: empirical evidence from the dual-task technique. *European Psychologist*, 9 (1): 32 -42 .
- O'Mahony, S.M., Amgad ,S., Mary H., Siun, O., Colm, M.P. (2016) Association Between Learning Style Preferences and Anatomy Assessment Outcomes in Graduate-Entry and Undergraduate Medical Students. *Anat Sci Educ* 00:1-9
- O'Neil, K. E. (2011). Reading pictures: Developing visual literacy for greater comprehension. *The reading teacher*, 65 (3): 214-223
- O'Neale, L. D & Shannie, H. (2013) An Investigation of the Learning styles and Study Habits of Chemistry Undergraduates in Barbados and their Effect as Predictors of Academic Achievement in Chemical Group Theory. *Journal of Educational and Social Research* 3 (2): 107-122
- Pepe, kadir. 2012. A research of the relationship between study skills of students and their GPA. *Procedia - Social and Behavioral Sciences* 47 (2012) 1048 – 1057
- Peyman, H. (2014) Using VARK Approach for Assessing Preferred Learning Styles of First Year Medical Sciences Students: A Survey from Iran. *J Clin Diagn Res*. 8(8): 1-4
- Pettersson, R. (1989). *Visuals for information: Research and practice*. Englewood Cliffs, NJ: Educational Technology Publications.
- Pettersson, R. (1993). *Visual information*. Englewood Cliffs, NJ: Educational Technology Publications.
- Prensky, M. (2001). Digital natives: digital immigrants [Electronic version]. *MCB University Press: On the Horizon*, 9(5): 1-5.
- Quillin, K., & Thomas, S. (2015). Drawing-to-learn: A framework for using drawings to promote model-based reasoning in biology. *CBE-Life Sciences Education*, 14: 1–16.

- Quinco-Cadosales MN (2013) The study skills of first year Education students and their academic performance. *IAMURE Int. J. Educ*, 6:57-69.
- Saka, A., Cerrah, L., Akdeniz, A. R., & Ayas, A. (2006). A cross age study of the understanding of three genetic concept: how do they image the gene, DNA and chromosome? *Journal of science education and technology*, 15(2), 192-202.
- Sarabdeen, J. (2013), Learning styles and training methods. *IBIMA Communications*, 2013 (2013): 1-9.
- Schönborn, K. J. and Anderson, T. R. 2010. Bridging the educational research-teaching practice gap: Foundations for assessing and developing biochemistry students' visual literacy. *Biochem Mol Biol Educ* 38 (5): 347-354
- Schurgin, M.W. & JI Flombaum (2014). Building Tolerant Long-Term Memories Through (Object) Persistence. *Journal of Vision* 14 (10), 30-30
- Schurgin, M.W. & JI Flombaum (2015). Invariant object recognition enhanced by object persistence. *Journal of vision* 15 (12), 239-239
- Schutte, Audra F. 2016. 'Who is Repeating Anatomy? Trends in an Undergraduate Anatomy Course. *Anatomical Sciences Education*, 9: 171-78.
- Schwartz, D. L. (1995). The emergence of abstract representations in dyad problem solving. Journal of the Learning Sciences*, 4(3): 321-354.
- Stern, E., Aprea, C., & Ebner, H. G. (2003). Improving cross-content transfer in text processing by means of active graphical representation. *Learning and Instruction*, 13(2): 191-203.
- Shernoff, D.J. & M Csikszentmihalyi. 2009. Cultivating engaged learners and optimal learning environments. *Handbook of positive psychology in schools*: 131-145
- Slater JA, Lujan HL, DiCarlo SE. (2007). Does gender influence learning style preferences of first-year medical students? *Adv Physiol Educ* 31(4): 336-42.
- Sternberg, R.J., Grigorenko, E.L., Zhang, L. (2008) Styles of learning and thinking matter in instruction and assessment. *Perspectives on Psychological Science*, 3: 486–506.
- Suryani, Ema. 2017. Hubungan Kreativitas Dan Gaya Belajar Terhadap Hasil Belajar Kognitif Biologi SMA. *Bioedukasi* 8 (2): 150-162

- Taiyeb, A. M. dan Nurul Mukhlisa. (2015) Hubungan Gaya Belajar Dan Motivasi Belajar Dengan Hasil Belajar Biologi Siswa Kelas Xi Ipa Sma Negeri 1 Tanete Rilau. *Jurnal Bionature* 16 (1): 8-16
- Tinklin, T. (2003) Gender Differences and High Attainment. *British Educational Research Journal*, 29: 307-325
- Thompson, J. B. (1995). *The Media and Modernity : A Social Theory of the Media*. England: John Wiley & Sons
- Unsworth, N. (2010). On the division of working memory and long-term memory and their relation to intelligence: A latent variable approach. *Acta Psychologica*, 134, 16 –28.
- Valerdi, R., Jain, R., Ferris, T., & Kasser, J. (2009) An Exploration of matching teaching to the learning preferences of systems engineering graduate students. In *19th Annual International Symposium of the International Council on Systems Engineering, INCOSE 2009* 3: 1439-1456
- Venville, G., Gribble, S., Donovan, J. 2005. An Exploration of Young Children's Understandings of Genetics Concepts from Ontological and Epistemological Perspectives. *Science Education*, 89: 614–633.
- Von, Glasersfeld (1995) *Radical Constructivism: A Way of Knowing and Learning. Studies in Mathematics Education Series: 6*. England: Falmer Press, Taylor & Francis Inc.
- Ward, Nigel & Tatsukawa, Hajime. (2003). A Tool for Taking Class Notes. *International Journal of Human-Computer Studies*.
- Wehrwein, E. A. ;Heidi L. L.; Stephen E. D. 2007. Gender differences in learning style preferences among undergraduate physiology students. *Adv Physiol Educ* 31: 153–157
- Whitacre, M.P. & Saul, E.W. (2016) High School Girls' Interpretations of Science Graphs: Exploring Complex Visual and Natural Language Hybrid Text. *International Journal of Science and Mathematics Education* 14: 1387.
- White, B., Kahriman A., Luberic, L., & Idleh, F. (2010). Evaluation of software for introducing protein structure: Visualization and simulation. *Biochemistry and Molecular Biology Education* 38(5): 284-289.
- Williamson, M. F., & Watson, R. L. (2007). Learning styles research: Understanding how teaching should be impacted by the way learners learn: Part III: Understanding how learners' personality styles impact learning. *Christian Education Journal*, 4(1): 62-77.

Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education, 11*: 167-177.

Zimmerman, B. J., & Martinez-Pons, M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal, 23*, 614- 628