

## REFERENCES

- Abubakar, R.Bada, Oguguo, O.Dokubo. (2011). Age and Gender As Predictors of Academic Achievement of College Mathematics and Science Students. *International Association for Teaching and Learning (IATEL)*, 1.
- Amedu, Odagboyi Isaiah. (2015). The Effects of Gender and Mathematics Ability on Academic Performance of Students in Chemistry. *Journal of Education and Practice* , 1.
- Aurah, Catherine M., Cassady, Jerell C., McConnell, Tom J. (2014). Predicting Problem Solving Ability From Metacognition and Self-efficacy Beliefs on A Cross Validated Sample. *British Journal of Education*.
- Aurah, Catherine Muhonja., Cassady, Jerrell Craig., McConnell, Tom John. (2014). Genetics Problem Solving in High School Testing in Kenya: Effects Of Metacognitive Prompting During Testing. *Electronic Journal of Science Education*, 18.
- Bannert, Maria., Mengelkamp, Christoph. (2013). Scaffolding Metacognition and Learning with Hypermedia and Hypertext. In R. A. Azevedo, A. Roger , & A. Vincent (Eds.), *International Handbook of Metacognition and Learning Technologies* (Vol. 26). New York: Springer International Handbooks of Education.
- Bull, Glen., Robinsin, Saron P., Greenhil, Valerie. (2010, September). *21st Century Knowledge and Skills in Educator Preparation*. USA: AACTE.
- Burton, E. (2010, February 23rd). Research Brief "High Level Thinking and Questioning Strategies". *Education Partnerships, Inc*, p. 1.
- Chatzipanteli, Athanasia., Digelidis, Nikolaos. (2011). The Influence of Metacognitive Prompting on Students' Performance in a Motor Skills Test in Physical Education. *International Journal of Sports Science and Engineering*, 1.
- Cumming, Geoff., Fidler, Fiona., Vaux, David L. (2007, April 1). Error Bars in Experimental Biology. *The Journal of Cell Biology*, p. 3.
- Davidson, Janet E., Deuser, Rebecca., Sternberg, Robert, J. (1994). The Role of Metacognition in Problem Solving. In J. .. Metcalfe, *Metacognition: Knowing about Knowing*. A Bradford book. London, England: MIT Press.
- Dewey, J. (1933). *How we think*. Heath, Lexington MA. Second revised edition.: Kansas City Mo. Public Library.
- Dictionary, R. H. (2017). *Genetics*. Retrieved February 01, 2017, from Dictionary.com: <http://www.dictionary.com/browse/genetics>
- Fancsali, C. (2003). What We Know About Girls, STEM, and Afterschool Programs. In M. S. Froschl, *The Science, Gender and After School* (A

*Research Action Agenda*) (p. 8). New York: Educational Equity Concepts and Academy for Educational Development.

Fauzi, K. M. (2009). Peranan Kemampuan Metakognitif dalam Pemecahan Masalah Matematika Sekolah Dasar. *Jurnal Kultura*, 13-14.

Forsthuber, Bernadette., Horvath, Anna., Motiejunaite, Akvile. . (2010). *Gender Differences in Educational Outcomes : Study on the Measures Taken and the Current Situation in Europe*. Education, Audiovisual and Culture Executive Agency.

Granger, Robert C., Grant, William T. (2008). After-school programs and academics: Implications for policy, practice,. *SRCD Social Policy Report*, 12.

Grunspan, Daniel Z., Eddy, Sarah L., Brownell, Sara E., Wiggins, Benjamin L., Alison Daniel Z. Grunspan 1 \* , Sarah L. Eddy , Brownell, Sara E., Wiggins, Benjamin L., Alison, J Crowe., Goodreau, Steven M. . (2016). Males Under-Estimate Academic Performance of Their Female Peers in Undergraduate Biology Classrooms. *PLOS ONE*, 5.

Haambokoma, C. (2007). Nature and Causes of Learning Difficulties in Genetics at High School Level in Zambia. *Journal of International Development and Corporation*, 5.

Hartman, H. J. (2002). Metacognition in Science Teaching and Learning. In H. J. Hartman, & H. J. Hartman (Ed.), *Metacognition in Learning and Instruction (Theory, Research and Practice)* (Vol. 19). New York: Springer Science Business Media B.V.

Hoffman, Bobby., Spatariu, Alexandru. (2008). The Influence of Self-efficacy and Metacognitive Prompting on Math Problem solving Efficiency. *Contemporary Educational Psychology*, 33, 875-893.

Hollingworth, Rowan W., McLoughlin, Catherine. (2000). Developing First Year Science Students' Problem Solving Skills: Can We Do it Online? *ASCILITE 2000 conference proceedings*.

Ildayanti. (2017). *Hubungan Kemampuan Berpikir Kritis dan Kesadaran Metakognitif dengan Hasil Belajar Biologi Siswa Kelas XI IPA SMA Negeri di Kabupaten Pinrang*. Makassar: Universitas Negeri Makassar.

Jaleel, Sajna. (2016). A Study on the Metacognitive Awareness of Secondary. *Universal Journal of Educational Research*, 1.

Kapa, E. (2007). Transfer from Structured to Open-ended Problem Solving in a Computerized metacognitive environment. *Learning and Instruction*, 688-707.

- Karagoz, Meryem., Cakir, Mustafa. (2011). Problem Solving in genetics: Conceptual and Procedural Difficulties. *Educational Sciences: Theory & Practice*.
- Khan. (2017). *Biology*. Retrieved 5 3, 2017, from Khan Academy: <https://www.khanacademy.org/science/biology>
- Liliana, Ciascai., Lavinia, Haiduc. (2011). Gender Differences in Metacognitive Skills. A Study of the 8th Grade Pupils in Romania. *Social and Behavioral Sciences*, 5.
- Lin, X. (2001). Designing metacognitive activities. *Educational Technology Research & Development*, 5.
- Listiana, Lina., Susilo, Herawati., Suwono, Hadi., Suwarsini, Endang. (2015). Contributions of Metacognitive Skills Toward Students' Cognitive Biology Through The Implementation of GITTW (Group Investigation Combined With Think Talk Write) Strategy. *Prociding ICTTE FKIP UNS* , 413.
- Mandal, A. (2013, March 18). *What is Genetics?* Retrieved February 01, 2017, from News-Medical.net - An AZoNetwork Site: <http://www.news-medical.net/life-sciences/What-is-Genetics.aspx>
- McLeod, S.(2015). *Biological Psychology*.Retrieved 5 2017, 3, from Simply Psychology:<https://www.simplypsychology.org/biologicalpsychology.html>
- Mevarech, Z., & Kramarski, B. (1997). IMPROVE: A Multidimensional Method for Teaching Mathematics in Heterogeneous Classrooms. *American Educational Research Journal*, 365–394.
- PISA. (2014). *PISA Result : Are boys and girls equally prepared for life?* OECD Publishing.
- Rani, Rekha., Govil, Punita. (2013). Metacognition and Its Correlates : A Study. *International Journal of Advancement in Education and Social Sciences*, 23-24.
- Reisberg, D. (2013). Problem Solving. *The Oxford Handbook of Cognitive Psychology*, 1-2.
- Saido, Gulistan Mohammed., Siraj, Saedah ., Nordin, Abu Bakar Bin., Saadallah, Omed. (2015). Higher Order Thinking Skills Among Secondary School Students in Science Learning. *The Malaysian Online Journal of Educational Science* , 17.
- Scott, F. J. (2016). A Simulated peer-assessment approach to improve students' performance in numerical problem-solving questions in high school biology. *Journal of Biological Education*, 1.
- Srinivasan, P., Pushpam, Maria. (2016). Exploring the Influence of Metacognition and Metaemotion Strategies on the Outcome of Students of IX Std. *American Journal of Educational Research*, 1.

- Sudjana. (2005). *Metoda Statistika*. Bandung.: Penerbit Tarsito.
- Sulviana, Anis., Jufri, A.W., Azizah, Afriana. (2018). Pengaruh Model Pembelajaran 5E terhadap Kesadaran Metacognitif dan Sikap Ilmiah siswa pada Mata Pelajaran IPA di MTsN 1 Mataram. *Prociding Seminar Nasional Pendidikan Biologi*, 23.
- Tanner, K. D. (2012). Promoting Student Metacognition. *CBE-Life Sciences Education*, 1.
- Udousoro, U. J. (2011). The Effects of Gender and Mathematics Ability on Academic Performance of Students in Chemistry. *An International Multidisciplinary Journal*, 9.
- Williams, C. (1995, April 10). Difficulties Experienced by Year 10 Students When Solving. *A Thesis Submitted in Partial Fufilmcnt of the Requirements for the Award of Unchelor of Education with Honours at the Faculty of Education, Edith Cowan University*.
- Wilson, L. O. (2016). *Anderson and Krathwohl – Bloom’s Taxonomy Revised*. Retrieved May 2, 2017, from The Second Principle (The work of Leslie Owen Wilson, Ed. D.): <http://thesecondprinciple.com/teaching-essentials/beyond-bloom-cognitive-taxonomy-revised/>
- Wismath, Shelly., Orr, Doug., Zhong, Maggie. . (2014). Student Perception of Problem Solving Skills. *Transformative Dialogues: Teaching & Learning Journal*, 13.
- Wu, J. Y. (2014). Gender differences in online reading engagement, metacognitive strategies, navigation skills and reading literacy. *Journal of Computer Assisted Learning*, 5.
- Yasir, Mochammad., Ibrahim, Muslimin., Widodo, Wahono. (2015). Pengembangan Perangkat Pembelajaran Biologi Berbasis. *Jurnal Pengajaran MIPA*, 11.
- Yeigh, T. (2007). Information-processing and perceptions of control: How attribution style affects task-relevant processing. *Australian Journal of Educational & Developmental Psychology*, 2.
- Zhang, Wen-Xin., Hsu, Ying-Shao., Wang, Chia-Yu., Ho, Yu-Ting. (2015). Exploring the Impacts of Cognitive and Metacognitive Prompting on Students’ Scientific Inquiry Practices Within an E-Learning Environment. *International Journal of Science Education*, 18.