

References

- AdvancED. (2016a). AdvancED STEM certification: An overview of the STEM standard and indicators. Retrieved from http://www.advanc-ed.org/sites/default/files/documents/state-resources/STEM%20Standard_web-ready.pdf
- AdvancED. (2016b). AdvancED STEM certification frequently asked questions (FAQ). Retrieved from <https://www.advanc-ed.org/services/stem-certification/advanced-stem-certification-frequently-asked-questions-faq>
- AdvancED. (2016c). We are AdvancED. Retrieved from <https://www.advanc-ed.org/about-us>
- Allen, D. E., Duch, B. J., & Groh, S. E. (1996). The power of problem-based learning in teaching introductory science courses. In L. Wilkerson & W. H. Gijsselaers (Eds.), *Bringing problem-based learning to higher education: Theory and practice* (pp. 43–52). San Francisco: Jossey-Bass. <https://doi.org/10.1002/tl.37219966808>
- Barrows, H. S. (1996). Problem-based learning in medicine and beyond: A brief overview. In L. Wilkerson & W. H. Gijsselaers (Eds.), *Bringing problem-based learning to higher education: Theory and practice* (pp. 3–12). San Francisco: JosseyBass. <https://doi.org/10.1002/tl.37219966804>
- Betebner, D.W. (2008). A primer on student growth percentiles. Retrieved from the Georgia Department of Education website: <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Documents/Aprimeronstudentgrowthpercentiles.pdf>
- Bicer, A., Navruz, B., Capraro, R. M., & Capraro, M. M. (2014). STEM schools vs. non-stem schools: Comparing students mathematics state based test performance. *International Journal of Global Education*, 3(3), 8–18. Retrieved from <http://www.ijtase.net/ojs/index.php/ijge/article/view/345/436>
- Cinar, D., & Bayraktar, S. (2013). The effects of the problem based learning approach on higher order thinking skills in elementary science education. Retrieved from https://s3.amazonaws.com/academia.edu.documents/3468910/4.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1508790095&Signature=Y39QmhKIYQ5M2YQ6JU9k%2Feuqb0c%3D&response-content-disposition=inline%3B%20filename%3D%20THE_EFFECTS_OF_THE_PROBLEM_BASED_LEARNIN.pdf
- Denmark, V. (2015, Spring). AdvancED launches STEM certification pilot. *The Source: Improving the Quality of STEM Education*. Retrieved from <http://www.advanc-ed.org/source/advanced-launches-stem-certification-pilot>
- Farner, K. (2015, May 18). Peachtree Ridge receives AdvancED STEM certification. *Gwinnett Daily Post*. Retrieved from <http://www.gwinnettdailypost.com>
- Ferreira, M. M., & Trudel, A. R. (2012). The impact of problem-based learning (PBL) on student attitudes toward science, problem-solving skills, and sense of community in the classroom. *Journal of Classroom Interaction*, 47(1), 23–30.

- Field, A. P. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Los Angeles, CA: Sage.
- Gaddis, M. (2012, October). The STEM shortage and educational accountability policy solutions. Retrieved from the Century Foundation website:
<https://tcf.org/content/commentary/the-stem-shortage-and-educational-accountability-policy-solutions/>
- Gallagher, S. A. (1997). Problem-based learning: Where did it come from, what does it do, and where is it going? *Journal for the Education of the Gifted*, 20(4), 332–362. <https://doi.org/10.1177/016235329702000402>
- Gallagher, S. A., & Gallagher, J. J. (2013). Using problem-based learning to explore unseen academic potential. *Interdisciplinary Journal of Problem-Based Learning*, 7(1). <https://doi.org/10.7771/1541-5015.1322>
- Georgia Department of Education. (n.d.-a). Georgia Milestones assessment system. Retrieved from <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Pages/Georgia-Milestones-Assessment-System.aspx>
- Georgia Department of Education. (n.d.-b). Georgia student growth model. Retrieved from <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Pages/Georgia-Student-Growth-Model.aspx>
- Georgia Department of Education. (n.d.-c). GSGM data files. Retrieved from <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Pages/GSGM-Data-Files.aspx>
- Georgia Department of Education. (2015a). Model of combining SGPs. Retrieved from <http://www.gadoe.org/Curriculum-Instruction-and-Assessment/Assessment/Documents/GSGM/CombiningSGPs%20121515.pdf>
- Georgia Department of Education. (2015b). The Georgia STEM certification application. Retrieved from <http://stem.wpgadoe.org>
- Gijselaers, W. H. (1996). Connecting problem based practices with educational theory. In L. Wilkerson & W. H. Gijselaers (Eds.), *Bringing problem-based learning to higher education: Theory and practice* (pp. 13–21). San Francisco: JosseyBass. <https://doi.org/10.1002/tl.37219966805>
- Glynn, S. M., & Muth, K. D. (1994). Reading and writing to learn science: Achieving scientific literacy. *Journal of Research in Science Teaching*, 31(9), 1057–1073. <https://doi.org/10.1002/tea.3660310915>
- Green, S. B., & Salkind, N. J. (2008). *Using SPSS for Windows and MacIntosh: Analyzing and understanding data* (5th ed.). Upper Saddle Creek, NJ: Pearson Prentice Hall.
- Grider, C. (1993). Foundations of cognitive theory: A concise review. Retrieved from ERIC database. (ED372324)
- Honey, M., Pearson, G., & Schweingruber, H. (Eds.). (2014). *STEM integration in K-12 education: Status, prospects, and an agenda for research*. Washington, D.C.: The National Academies Press.
- Judson, E. (2014). Effects of transferring to STEM-focused charter and magnet schools on student achievement. *The Journal of Educational Research*, 107, 255–266. <https://doi.org/10.1080/00220671.2013.823367>
- National Research Council. (2011). *Successful K-12 STEM education: Identifying*

- effective approaches in science, technology, engineering, and mathematics. Washington, D.C.: The National Academies Press.
- National Research Council. (2013). Monitoring progress toward successful K–12 STEM education: A nation advancing? <https://doi.org/10.17226/13509>
- Oner, A. T., & Capraro, R. M. (2016). Is STEM academy designation synonymous with higher student achievement? *Education and Science*, 41(185), 1–17. <https://doi.org/10.15390/EB.2016.3397>
- Proudfoot, D. E., & Kebritchi, M. (2017). Scenario-based elearning and STEM education: A qualitative study exploring the perspectives of educators. *International Journal of Cognitive Research in Science, Engineering and Education*, 5(1), 7–18. <https://doi.org/10.5937/IJCRSEE1701007P>
- Schmidt, W. H. (2011, May). STEM reform: Which way to go. Paper commissioned for the workshop on Highly Successful STEM Schools or Programs for K–12 STEM Education, Washington, D.C. Retrieved from http://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_072642.pdf
- STEM Georgia. (2012). What is STEM education? Retrieved from <http://stemgeorgia.org/>
- Triola, M. F. (2010). *Elementary statistics* (11th ed.). Boston: Addison-Wesley.
- Walz, M. (2012). Georgia certifies first STEM school. Retrieved from <http://www.gpb.org/news/2012/03/07/georgia-certifies-first-stem-school>
- Young, V. M., House, A., Wang, H., Singleton, C., & Klopfenstein, K. (2011, May). Inclusive STEM schools: Early promise in Texas and unanswered questions. Paper commissioned for the Workshop on Highly Successful STEM Schools or Programs for K–12 STEM Education, Washington, D.C. Retrieved from http://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_072639.pdf