

Meta Analyses and Reviews on Research Efficacy

2023

Müller, C., Mildenerger, T., & Steingruber, D. (2023). Learning effectiveness of a flexible learning study programme in a blended learning design: why are some courses more effective than others?. *International Journal of Educational Technology in Higher Education*, 20(1), 10.

2020

Raes, A., Detienne, L., Windey, I., & Depaepe, F. (2020). A systematic literature review on synchronous hybrid learning: Gaps identified. *Learning Environments Research*, 23(3), 269-290.

Martin, F., Sun, T., & Westine, C. D. (2020). A systematic review of research on online teaching and learning from 2009 to 2018. *Computers & Education*, 159, 104009.

Vallée, A., Blacher, J., Cariou, A., & Sorbets, E. (2020). Blended learning compared to traditional learning in medical education: Systematic review and meta-analysis. *Journal of Medical Internet Research*, 22, e16504.

2019

Ali, R. (2019). Is blending the solution? A systematic literature review on the key drivers of blended learning in higher education. *The Maldives National Journal of Research*, 7, 29-42.

Castro, M. D. B., & Tumibay, G. M. (2019). A literature review: Efficacy of online learning courses for higher education institution using meta-analysis. *Education and Information Technologies*, 1-19.

2018

Cheng, L., Ritzhaupt, A. D., & Antonenko, P. (2018). Effects of the flipped classroom instructional strategy on students' learning outcomes: A meta-analysis. *Educational Technology Research and Development*, 1-32.

O'Hare, C., & Girvin, B. (2018). A narrative overview of the effectiveness of E-Learning in pharmacy education. *Journal of Pharmacy and Pharmaceutical Sciences*, 1, 9-23.

2017

Vo, H. M., Zhu, C., & Diep, N. A. (2017). The effect of blended learning on student performance at course-level in higher education: A meta-analysis. *Studies in Educational Evaluation, 53*, 17-28.

2016

Liu, Q., Peng, W., Zhang, F., Hu, R., Li, Y., & Yan, W. (2016). The effectiveness of blended learning in health professions: systematic review and meta-analysis. *Journal of Medical Internet Research, 18*(1).

2015

Brinson, J. R. (2015). Learning outcome achievement in non-traditional (virtual and remote) versus traditional (hands-on) laboratories: A review of the empirical research. *Computers @ Education, 87*, 218-237.

McCutcheon, K., Lohan, M., Traynor, M., & Martin, D. (2015). A systematic review evaluating the impact of online or blended learning vs. face-to-face learning of clinical skills in undergraduate nurse education. *Journal of Advanced Nursing, 71*(2), 255-270.

Sohn, K., & Romal, J. B. (2015). Meta-analysis of student performance in micro and macro economics: online vs. face-to-face instruction. *The Journal of Applied Business and Economics, 17*(2), 42.

2014

Bernard, R. M., Borokhovski, E., Schmid, R. F., Tamim, R. M., & Abrami, P. C. (2014). A meta-analysis of blended learning and technology use in higher education: from the general to the applied. *Journal of Computing in Higher Education, 26*(1), 87-122.

Merchant, Z., Goetz, E. T., Cifuentes, L., Keeney-Kennicutt, W., & Davis, T. J. (2014). Effectiveness of virtual reality-based instruction on students' learning outcomes in K-12 and higher education: A meta-analysis. *Computers @ Education, 70*, 29-40.

2013

Keengwe, J., & Kang, J. J. (2013). A review of empirical research on blended learning in teacher education programs. *Education and Information Technologies, 18*(3), 479-493.

Means, B., Toyama, Y., Murphy, R., & Baki, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. *Teachers College Record*, 115(3), 1-47.

2012

Lampton, M. A., & Hill, R. J. (2012). Impact of Hybrid Instruction on Student Achievement in Post-Secondary Institutions: A Synthetic Review of the Literature. *Journal of Instructional Research*, 1, 49-58.

Patterson, B. J., Krouse, A. M., & Roy, L. (2012). Student outcomes of distance learning in nursing education: an integrative review. *CIN: Computers, Informatics, Nursing*, 30(9), 475-488.

2011

Tamim, R. M., Bernard, R. M., Borokhovski, E., Abrami, P. C., & Schmid, R. F. (2011). What forty years of research says about the impact of technology on learning a second-order meta-analysis and validation study. *Review of Educational Research*, 81(1), 4-28.

2010

Clark, S., & Chinburg, S. (2010). Research performance in undergraduates receiving face to face versus online library instruction: A citation analysis. *Journal of Library Administration*, 50(5-6), 530-542.

Shachar, M., & Neumann, Y. (2010). Twenty years of research on the academic performance differences between traditional and distance learning: Summative meta-analysis and trend examination. *Journal of Online Learning and Teaching*, 6(2), 318.

2008

Cook, D. A., Levinson, A. J., Garside, S., Dupras, D. M., Erwin, P. J., & Montori, V. M. (2008). Internet-based learning in the health professions: a meta-analysis. *JAMA*, 300(10), 1181-1196.

2007

Zhang, L., Watson, E. M., & Banfield, L. (2007). The efficacy of computer-assisted instruction versus face-to-face instruction in academic libraries: a systematic review. *The Journal of Academic Librarianship*, 33(4), 478-484.

2006

Allen, M., Bourhis, J., Mabry, E., Burrell, N. A., & Timmerman, C. E. (2006). Comparing distance education to face-to-face methods of education. *Classroom Communication and Instructional Processes: Advances through Meta-analysis*, 229-244.

Lou, Y., Bernard, R. M., & Abrami, P. C. (2006). Media and pedagogy in undergraduate distance education: A theory-based meta-analysis of empirical literature. *Educational Technology Research and Development*, 54(2), 141-176.

Sitzmann, T., Kraiger, K., Stewart, D., & Wisher, R. (2006). The comparative effectiveness of web-based and classroom instruction: A meta-analysis. *Personnel Psychology*, 59(3), 623-664.

Tallent-Runnels, M. K., Thomas, J. A., Lan, W. Y., Cooper, S., Ahern, T. C., Shaw, S. M., & Liu, X. (2006). Teaching courses online: a review of the research. *Review of Educational Research*, 76(1), 93-135.

Williams, S. L. (2006). The effectiveness of distance education in allied health science programs: A meta-analysis of outcomes. *The American Journal of Distance Education*, 20(3), 127-141.

2005

Zhao, Y., Lei, J., Yan, B., Lai, C., & Tan, H. S. (2005). What makes the difference? A practical analysis of research on the effectiveness of distance education. *Teachers College Record*, 107(8), 1836-1884.

2004

Allen, M., Mabry, E., Mattrey, M., Bourhis, J., Titsworth, S., & Burrell, N. (2004). Evaluating the effectiveness of distance learning: A comparison using meta-analysis. *Journal of Communication*, 54(3), 402-420.

Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., Wozney, L., Walset, P. A., Fiset, M., & Huang, B. (2004). How does distance education compare with classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research*, 74(3), 379-439.

2003

Shachar, M., & Neumann, Y. (2003). Differences between traditional and distance education academic performances: A meta-analytic approach. *The International Review of Research in Open and Distributed Learning*, 4(2).

Swan, K. (2003). Learning effectiveness online: What the research tells us. *Elements of Quality Online Education, Practice and Direction*, 4(1), 13-47.

Zirkle, C. (2003). Distance education and career and technical education: A review of the research literature. *Journal of Vocational Education Research*, 28(2), 161-181.

2000

Machtmes, K., & Asher, J. W. (2000). A meta-analysis of the effectiveness of telecourses in distance education. *The American Journal of Distance Education*, 14(1), 27-46.

Saba, F. (2000). Research in distance education: A status report. *The International Review of Research in Open and Distributed Learning*, 1(1).

Pre-2000

Phipps, R., & Merisotis, J. (1999). What's the difference? A review of contemporary research on the effectiveness of distance learning in higher education. *Journal of Distance Education*, 14(1), 102-114.