

Course-based Undergraduate Research References

- Auchincloss, L.C., S.L. Laursen, J.L. Branchaw, K. Eagan, M. Graham, D. Hanauer, G. Lawrie, et al. (2014) "Assessment of Course-Based Undergraduate Research Experiences: A Meeting Report." *CBE-Life Sciences Education* 13 (1): 29–40.
- Bell, D. (2016) "The reality of STEM education, design and technology teachers' perceptions: a phenomenographic study". *International Journal of Technology and Design Education* 26 (61). doi:10.1007/s10798-015-9300-9
- Brownell, J.E. and L.E. Swaner (2009) "Outcomes of High-Impact Educational Practices: A Literature Review" Washington, DC: Association of American Colleges and Universities.
- Brownell, S.E. and M.J. Kloser. (2015) "Toward a conceptual framework for measuring the effectiveness of course-based undergraduate research experiences in undergraduate biology". *Studies in Higher Education* 40: 525-544
- Brownell, S.E., M.J. Kloser, T. Fukami, and R. Shavelson. (2012.) "Undergraduate Biology Lab Courses: Comparing the Impact Of Traditionally Based 'Cookbook' and Authentic Research-Based Courses on Student Lab Experiences." *Journal of College Science Teaching* 41 (4): 36–45.
- Byrd, S. (2016) "Designing Research Projects". Oral presentation at the Council on Undergraduate Research Institute: Beginning Research at a Predominately Undergraduate Institution. Crystal City, VA
- Chase, A.M., Clancy, H.A., Lachance, R.P., Mathison, B.M., Chiu, M.M. and G.C. Weaver. (2017) "Improving critical thinking via authenticity: the CASPiE research experience in a military academy chemistry course." *Che. Educ. Res. Pract.* 18: 55-63.
- Corwin, L.A., Graham, M.J., and E. L. Dolan. (2015) "Modeling Course-Based Undergraduate Research Experiences: An Agenda for Future Research and Evaluation." *CBE-Life Sciences Education* 14 (1). 10.1187/cbe.14-10-0167
- Healey, M. (2005) "Linking research and teaching exploring disciplinary spaces and the role of inquiry-based learning". In: Barnett, R. (ed.) *Reshaping the university: new relationships between research, scholarship and teaching*. Maidenhead: McGraw-Hill/Open University Press, 30–42.
- Healey, M. and A. Jenkins. (2009) "Developing undergraduate research and inquiry". York, England: Higher Education Academy
- Jones, M.T., A.E.L. Barlow, and M. Villarejo. (2010) "Importance of undergraduate research for minority persistence and achievement in biology." *The Journal of Higher Education* 81(1): p. 82-115. 10.1353/jhe.0.0082

- Kowlaski, J. R., Hoops, G.C. and R.J. Johnson (2016) "Implementation of a Collaborative Series of Classroom-Based Undergraduate Research Experiences Spanning Chemical Biology, Biochemistry, and Neurobiology." *CBE Life Science Education* 15(4): 55.
10.1187/cbe.16-02-0089
- Kuh, George D. (2008) "High-impact educational practices: What they are, who has access to them, and why they matter." AAC&U, Washington, D.C. 34 pp.
- Laursen SL, Hunter A-B, Seymour E, Thiry H, Melton G. (2010) "Undergraduate Research in the Sciences: Engaging Students in Real Science." San Francisco: Jossey-Bass.
- Lopatto D. (2004) "Survey of undergraduate research experiences (SURE): first findings." *Cell Biol Educ.* 3:270–277.
- Lopatto D, Tobias S. (2010) "Science in Solution: The Impact of Undergraduate Research on Student Learning." Washington, DC: Council on Undergraduate Research.
- Lopatto, D., Hauser, C., Jones, C. J., Paetkau, D., Chandrasekaran, V., Dunbar, D., ... & Bedard, J. E. (2014) "A central support system can facilitate implementation and sustainability of a classroom-based undergraduate research experience (CURE) in genomics." *CBE—Life Sciences Education*, 13(4), 711-723.
- National Research Council. (2003) "BIO 2010: Transforming Undergraduate Education for Future Research Biologists". Washington, DC: National Academies Press.
- President's Council of Advisors on Science and Technology (2012) "Report to the President: Engage to excel: Producing one million additional college graduates with degrees in science, technology, engineering, and mathematics."
- Robnett, R.D., M.M. Chemers, and E.L. Zurbriggen, (2015) "Longitudinal associations among undergraduates' research experience, self-efficacy, and identity." *Journal of Research in Science Teaching* 52(6): p. 847-867. 10.1002/tea.21221
- Rodenbusch, S. (2016) "How to design a sequence of research courses for First-year STEM students". Oral presentation at the Association of American Colleges and Universities (AAC&U) Transforming STEM Higher Education Conference. Boston, MA.
- Shaffer, C. D., Alvarez, C., Bailey, C., Barnard, D., Bhalla, S., Chandrasekaran, C., ... & Eckdahl, T. T. (2010) "The Genomics Education Partnership: successful integration of research into laboratory classes at a diverse group of undergraduate institutions." *CBE—Life Sciences Education*, 9(1), 55-69.
- Shortlidge, E. E., Bangera, G., & Brownell, S. E. (2016) "Faculty perspectives on developing and teaching course-based undergraduate research experiences." *BioScience*, 66(1), 54-62.

Shortlidge, E. E., Bangera, G., & Brownell, S. E. (2017) "Each to their own CURE: Faculty who teach course-based undergraduate research experiences report why you too should teach a CURE." *Journal of microbiology & biology education*, 18(2).