

Publications

- Blomeke, S., Gustafsson, J-E., & Shavelson, R. (2015). Approaches to competence measurement in higher education. *Zeitschrift für Psychologie*, 223(1), 1–2.
- Blomeke, S., Gustafsson, J-E., & Shavelson, R. (2015). Beyond dichotomies: Competence viewed as a continuum. *Zeitschrift für Psychologie*, 223(1), 3–13.
- Fu, A. C., Peterson, L., Kannan, A., Shavelson, R. J., & Kurpius, A. (2015). A framework for summative evaluation in informal science education, *Visitor Studies* 18(1), 17-38.
- Li, M., Shavelson, R.J., Yin, Y., & Wiley, E. (2015). Generalizability theory. In R. Cautin & S. Lilienfeld Eds., *Encyclopedia of Clinical Psychology*. NY: Wiley.
- Shavelson, R., Fu, A., Kurpius, A., & Wiley, E. (2015). Evidence-based practice in science education. In R. Gunstone (Ed.), *Encyclopedia of Science Education*. NY: Rutledge.
- Zlatkin-Troitschanskaia, O., Shavelson, R.J., & Kuhn, C. (2015). The International State of Research on Measurement of Competency in Higher Education. *Studies in Higher Education*, 40(3), 393-411.
- Hyytinen, H., Holmab, K. Tooma, A., Shavelson, R.J., & Lindblom-Ylänne, S. (2014). The complex relationship between students' critical thinking and epistemological beliefs in the context of problem solving. *Frontline Learning Research* 6, 1-25 (available at <http://journals.sfu.ca/flr/index.php/journal/article/view/124>).
- Lopez, E., Shavelson, R., Nandagopal, K., Szu, E., & Penn, J. (2014). Ethnically diverse students' knowledge structures in first-semester organic chemistry. *Journal of Research in Science Teaching*, 51(6), 741–758.
- Lopez, E., Shavelson, R., Nandagopal, K., Szu, E., & Penn, J. (2014). Factors contributing to problem-solving in first-semester organic chemistry. *Journal of Chemical Education*, 91, 976–981.
- Shavelson, R.J. (2014). Comments on conceptual and measurement challenges in modeling competency. In Toepper, M., Zlatkin-Troitschanskaia, O., Kuhn, C., Schmidt, S. & Brückner, S. (Eds.), *Advancement of Young Researchers in the Field of Academic Competency Assessment – Report from the International Colloquium for Young Researchers from November 14-16, 2013 in Mainz (KoKoHs Working Papers, 5)*. Berlin & Mainz: Humboldt University & Johannes Gutenberg University.
- Wiley, E.W., Shavelson, R.J., & Kurpius, A.A. (2014). On the factorial structure of the SAT and implications for next-generation college readiness assessments. *Educational and Psychological Measurement*, 74(5), 859-874.
- Yin, Y., Tomita, M., & Shavelson, R.J. (2014). Using formal embedded formative assessments aligned with a short-term learning progression to promote conceptual change and achievement in science. *International Journal of Science Education*, 36(4), 531-552.

- Brownell, S.E., Kloser, M.J., Fukami, T., & Shavelson, R.J. (2013). Context matters: A comparison using volunteers and non-volunteers in a research-based introductory biology lab course. *Journal of Microbiology & Biology Education*, 24(2), 176-182.
- Edelson, D.C., Shavelson, R.J., & Wertheim, J.A., Eds. (2013). *Road Map for 21st Century Geography Education Project—Assessment: Recommendations and Guidelines for Assessment in Geography Education*. Washington, DC: National Geographic Society.
- Kloser, M.J., Brownell, S.E., Shavelson, R.J. & Fukami, T. (2013). Effects of a research-based ecology lab course: A study of nonvolunteer achievement, self-confidence, and perception of lab course purpose. *Journal of College Science Teaching*, 42(3), 72-81.
- Lopez, E.J., Nandagopal, K., Shavelson, R.J., Szu, E., & Penn, J. (2013). Self-Regulated Learning Study Strategies and Academic Performance in Undergraduate Organic Chemistry: An Investigation Examining Ethnically Diverse Students. *Journal of Research in Science Teaching*, 50(6), 660–676.
- Shavelson, R.J. (2013). On an approach to testing and modeling competence. *Educational Psychologist*, 48(2), 73-86.
- Shavelson, R.J., & Kurpius, A. (2013). *Assessing and Accounting for College Learning*. Kyoto, Japan: Doshisha University Press.
- Wiley, E.W., Webb, N.M., & Shavelson, R.J. (2013). In K.F. Geisinger (Ed.), *The generalizability of test scores*. *APA Handbook of Testing and Assessment in Psychology: Vol. 1. Test Theory and Testing and Assessment in Industrial and Organizational Psychology*. Washington, DC: American Psychological Association
- Brownell, S.E., Kloser, M.J. Fukami, T., & Shavelson, R. (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.
- Furtak, Shavelson, Shemwell, and Figueroa (2012). To teach or not to teach through inquiry: Is that the question? In S. Carver & J. Shrager (Eds.), *The journey from child to scientist: Integrating cognitive development and the education sciences*. Washington, D.C.: American Psychological Association.
- Shavelson, R.J. (2012). An approach to testing and modeling competencies. In S. Blömeke, O. Zlatkin-Troitschanskaia, C. Kuhn & J. Fege (Eds.), *Modeling and Measuring Competencies in Higher Education: Tasks and Challenges*. Boston: Sense.
- Shavelson, R.J. (2012). Assessing business-planning competence using the Collegiate Learning Assessment as a prototype. *Empirical Research in Vocational Education and Training*, 4, 77–90.
- Shavelson, R.J., & Kurpius, A. (2012). Reflections on Learning Progressions. In A. Alonzo and A. Gotwals (Eds.), *Learning progressions in science. Current challenges and future directions*. Boston: Sense.
- Webb, N. M., Shavelson, R. J., & Steedle, J. (2012). Generalizability theory in assessment contexts. In Secolsky, C. & Denison, D.B. (Eds.), *Handbook of measurement, assessment and evaluation in higher education*. NY: Routledge.
- Wiley, E.W. Webb, N.M., & Shavelson, R.J. (2012). The generalizability of test scores. In C. Secolsky & D.B. Denison (Eds.), *Handbook of Measurement, Assessment, and Evaluation in Higher Education*. NY: Routledge.
- Shavelson, R.J. (2011). Issues in conducting rigorous and relevant research in education. In the Research Council of Norway (Ed.), *Rigor and relevance in educational research: Report from the*

March Seminar 2010 Oslo: The Research Council of Norway
(www.forskningsradet.no/publikasjoner).

Shavelson, R.J. (2010). On the measurement of competency. *Empirical Research in Vocational Education and Training*, Vol. 2(1), 43-65.