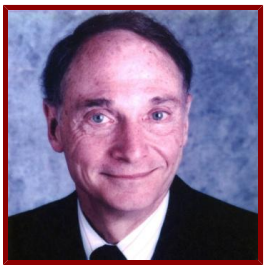
Stanford



Rich Shavelson

Margaret Jacks Professor of Education, Emeritus

GSE Faculty Affairs

Curriculum Vitae available Online

CONTACT INFORMATION

- **Admin. Support**

  Elayne Weissler-Martello

  Email elayne@stanford.edu

Bio

BIO

His current work focuses on the design of assessments and assessment systems that measure college students learning, both their development of competence/ achievement and so-called “soft-skills” such as perspective taking. He co-created the Collegiate Learning Assessment with Steve Klein and built statistical models for estimating value added for the CLA and other college-level assessments. This work is summarized in Measuring College Student Learning: Accountability in a New Era (2010, Stanford University Press) and in recent papers on the measurement and statistical modeling of competence.

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, GSE Faculty Affairs

ADMINISTRATIVE APPOINTMENTS

- I James Quillan Dean, School of Education, (1995-2000)
- Emeritus Professor of Psychology (by courtesy), School of Humanities and Sciences, (1995- present)
- Professor Emeritus, Stanford Graduate School of Education, (1995- present)
- Emeritus Affiliated Faculty, Stanford Institute for the Environment, (2005-2007)

HONORS AND AWARDS

- Humboldt Fellowship, Humboldt Foundation, Germany (1994)
- AERA Review of Research Award, American Educational Research Association (2008)
- AERA Review of Research Award, American Educational research Association (1978)
- E.F. Lindquist Award, American Educational Research Association (2011)
- R.L. Linn Award, American Educational Association (2016)
- E.L. Thorndike Award, American Psychological Association (2010)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Assistant Professor of Education, UCLA (1973 - 1975)
- Associate Professor of Education, UCLA (1975 - 1979)

- Professor of Education, UCLA (1979 - 1987)
- Dean, Graduate School of Education, University of California (1987 - 1993)
- Professor of Education, UCSB (1987 - 1996)
- Professor of Education, UCSB with an affiliated appointment in Statistics and Applied Probability (1993 - 1996)
- Vice Chair and Chair, Board on Testing and Assessment National Academy of Science (1993 - 1998)
- Board Member, Yosemite National Institutes/ NatureBridge (1996 - 2008)
- Board Member, The Spencer Foundation (1997 - 2005)
- Education Advisory Council (Chair), NatureBridge (2009 - 2012)
- Board Member, BSCS (formerly Biological Sciences Curriculum Study) (2009 - 2018)
- Chair, BSCS Board (2016 - 2018)
- Member and Vice Chair Governance Committee, Stanford Historical Society (2017 - 2019)

PROFESSIONAL EDUCATION

- PhD, Stanford University , Educational Psychology (1971)
- MA, San Jose State College , Psychology (1967)
- BA, University of Oregon , Psychology (1964)

Research & Scholarship

RESEARCH INTERESTS

- Assessment & Evaluation
- Higher Education
- Quantitative Methods

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Assessment of learning in higher education (including the Collegiate Learning Assessment); accountability in higher education; higher education policy.

Publications

PUBLICATIONS

- **The Godfather: David Berliner** *EDUCATION POLICY ANALYSIS ARCHIVES*
  Shavelson, R.
  2026; 34 (28): 23-24
- **Rescue an Enterprise from Failure: An Innovative Assessment Tool for Simulated Performance** *ASSESSMENT OF LEARNING OUTCOMES IN HIGHER EDUCATION: CROSS-NATIONAL COMPARISONS AND PERSPECTIVES*
  Oser, F., Mueller, S., Obex, T., Volery, T., Shavelson, R. J.
  edited by ZlatkinTroitschanskaia, O., Toepper, M., Pant, H. A., Lautenbach, C., Kuhn, C.
  2018: 123–44
- **Performance indicators of learning in higher education institutions: an overview of the field** *RESEARCH HANDBOOK ON QUALITY, PERFORMANCE AND ACCOUNTABILITY IN HIGHER EDUCATION*
  Shavelson, R. J., Zlatkin-Troitschanskaia, O., Marino, J. P.
  edited by Hazelkorn, E., Coates, H., McCormick, A. C.
  2018: 249–63
- **International Performance Assessment of Learning in Higher Education (iPAL): Research and Development** *ASSESSMENT OF LEARNING OUTCOMES IN HIGHER EDUCATION: CROSS-NATIONAL COMPARISONS AND PERSPECTIVES*
  Shavelson, R. J., Zlatkin-Troitschanskaia, O., Marino, J. P.

edited by ZlatkinTroitschanskaia, O., Toepper, M., Pant, H. A., Lautenbach, C., Kuhn, C.
2018: 193–214

- **Gavriel Salomon: In Memoriam** *EDUCATIONAL PSYCHOLOGY REVIEW*
  Berliner, D., Phillips, D., Zeidner, M., de Corte, E., Shavelson, R., de Ibarrola, M., Clark, R.
  2016; 28 (2): 207–13
- **On the practices and challenges of measuring higher education value added: the case of Colombia** *ASSESSMENT & EVALUATION IN HIGHER EDUCATION*
  Shavelson, R. J., Domingue, B. W., Marino, J. P., Molina Mantilla, A., Morales Forero, A., Wiley, E. E.
  2016; 41 (5): 695-720
- **The international state of research on measurement of competency in higher education** *STUDIES IN HIGHER EDUCATION*
  Zlatkin-Troitschanskaia, O., Shavelson, R. J., Kuhn, C.
  2015; 40 (3): 393-411
- **Beyond Dichotomies Competence Viewed as a Continuum** *ZEITSCHRIFT FUR PSYCHOLOGIE-JOURNAL OF PSYCHOLOGY*
  Blomeke, S., Gustafsson, J., Shavelson, R. J.
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- **On the Factorial Structure of the SAT and Implications for Next-Generation College Readiness Assessments** *EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT*
  Wiley, E. W., Shavelson, R. J., Kurpius, A. A.
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- **Factors Contributing to Problem-Solving Performance in First-Semester Organic Chemistry** *JOURNAL OF CHEMICAL EDUCATION*
  Lopez, E. J., Shavelson, R. J., Nandagopal, K., Szu, E., Penn, J.
  2014; 91 (7): 976-981
- **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*
  Yin, Y., Tomita, M. K., Shavelson, R. J.
  2014; 36 (4): 531-552
- **Self-regulated learning study strategies and academic performance in undergraduate organic chemistry: An investigation examining ethnically diverse students** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*
  Lopez, E. J., Nandagopal, K., Shavelson, R. J., Szu, E., Penn, J.
  2013; 50 (6): 660-676
- **On an Approach to Testing and Modeling Competence** *EDUCATIONAL PSYCHOLOGIST*
  Shavelson, R. J.
  2013; 48 (2): 73-86
- **Context matters: volunteer bias, small sample size, and the value of comparison groups in the assessment of research-based undergraduate introductory biology lab courses.** *Journal of microbiology & biology education : JMBE*
  Brownell, S. E., Kloser, M. J., Fukami, T., Shavelson, R. J.
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- **Understanding Academic Performance in Organic Chemistry** *JOURNAL OF CHEMICAL EDUCATION*
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  2011; 88 (9): 1238-1242
- **Validating the use of concept-mapping as a diagnostic assessment tool in organic chemistry: implications for teaching** *CHEMISTRY EDUCATION RESEARCH AND PRACTICE*
  Lopez, E., Kim, J., Nandagopal, K., Cardin, N., Shavelson, R. J., Penn, J. H.
  2011; 12 (2): 133-141
- **Measuring college learning responsibly: Accountability in a new era**
  Shavelson, R.
  Stanford University Press.2010

- **Supporting Valid Interpretations of Learning Progression Level Diagnoses** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*
  Steedle, J. T., Shavelson, R. J.
  2009; 46 (6): 699-715
- **Generalizability theory and its contribution to the discussion of the generalizability of research findings** *Generalizing from educational research*
  Shavelson, R. J., Webb, N. M.
  2009: 13-32
- **Supporting valid interpretations of learning progression level diagnoses** *Journal of Research in Science Teaching: The Official Journal of the National Association for Research in Science Teaching*
  Steedle, J. T., Shavelson, R. J.
  2009; 46 (6): 699-715
- **The limitations of portfolios** *Inside Higher Ed*
  Shavelson, R. J., Klein, S., Benjamin, R.
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- **Direct measures in environmental education evaluation: Behavioral intentions versus observable actions** *Applied Environmental Education and Communication*
  Camargo, C., Shavelson, R.
  2009; 8 (3-4): 165-173
- **Assessing School Effectiveness** *EVALUATION REVIEW*
  Klein, S., Freedman, D., Shavelson, R., Bolus, R.
  2008; 32 (6): 511-525
- **Measuring Knowledge Structure: Reliability of Concept Mapping Assessment in Medical Education** *ACADEMIC MEDICINE*
  Srinivasan, M., McElvany, M., Shay, J. M., Shavelson, R. J., West, D. C.
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- **Application of Generalizability theory to concept map assessment research** *APPLIED MEASUREMENT IN EDUCATION*
  Yin, Y., Shavelson, R. J.
  2008; 21 (3): 273-291
- **From Formal Embedded Assessments to Reflective Lessons: The Development of Formative Assessment Studies** *APPLIED MEASUREMENT IN EDUCATION*
  Ayala, C. C., Shavelson, R. J., Ruiz-Primo, M. A., Brandon, P. R., Yin, Y., Furtak, E. M., Young, D. B.
  2008; 21 (4): 315-334
- **Teachers' decision making: From Alan J. Bishop to today** *Critical issues in mathematics education*
  Borko, H., Roberts, S. A., Shavelson, R.
  Springer.2008: 37–67
- **Reflections on quantitative reasoning: An assessment perspective** *Calculation vs. context: Quantitative literacy and its implications for teacher education*
  Shavelson, R. J.
  2008: 27-47
- **Application of generalizability theory to concept map assessment research** *Applied Measurement in Education*
  Yin, Y., Shavelson, R. J.
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  Srinivasan, M., McElvany, M., Shay, J. M., Shavelson, R. J., West, D. C.
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- **Assessing school effectiveness** *Evaluation Review*
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- **On the Impact of Formative Assessment on Student Motivation, Achievement, and Conceptual Change** *APPLIED MEASUREMENT IN EDUCATION*
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- **On the Fidelity of Implementing Embedded Formative Assessments and Its Relation to Student Learning** *APPLIED MEASUREMENT IN EDUCATION*
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- **A brief history of student learning assessment: How we got where we are and a proposal for where to go next**
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- **Lee J. Cronbach.** *Proceedings of the American Philosophical Society*
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- **On the development and evaluation of a shell for generating science performance assessments** *INTERNATIONAL JOURNAL OF SCIENCE EDUCATION*
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- **Gender and racial/ethnic differences on performance assessments in science** *EDUCATIONAL EVALUATION AND POLICY ANALYSIS*
  Klein, S. P., Jovanovic, J., Stecher, B. M., McCaffrey, D., SHAVELSON, R. J., HAERTEL, E., SOLANOFLORES, G., Comfort, K.
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  RUIZPRIMO, M. A., SHAVELSON, R. J.
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- **On the structure of social self-concept for pre-, early, and late adolescents: A test of the Shavelson, Hubner, and Stanton (1976) model** *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY*
  Byrne, B. M., SHAVELSON, R. J.
  1996; 70 (3): 599-613
- **ON GETTING IT RIGHT** *EDUCATIONAL EVALUATION AND POLICY ANALYSIS*
  SHAVELSON, R. J., NOREEN, N. M.
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- **SELF-CONCEPT - VALIDATION OF CONSTRUCT INTERPRETATIONS** *REVIEW OF EDUCATIONAL RESEARCH*
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- **METHOD FOR EXAMINING SUBJECT-MATTER STRUCTURE IN INSTRUCTIONAL MATERIAL** *JOURNAL OF STRUCTURAL LEARNING*
  SHAVELSON, R. J., GEESLIN, W. E.
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- **EFFECTS OF POSITION AND TYPE OF QUESTION ON LEARNING FROM PROSE MATERIAL - INTERACTION OF TREATMENTS WITH INDIVIDUAL-DIFFERENCES** *JOURNAL OF EDUCATIONAL PSYCHOLOGY*
  SHAVELSON, R. J., BERLINER, D. C., Ravitch, M. M., LOEDING, D.
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- **CRITERION-REFERENCED TESTING - COMMENTS ON RELIABILITY** *JOURNAL OF EDUCATIONAL MEASUREMENT*
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