Stanford



Maria Ruiz-Primo

Associate Professor of Education

Graduate School of Education

CONTACT INFORMATION

- **Admin. Support**

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Bio

BIO

Maria Araceli Ruiz-Primo is an Associate Professor at the Graduate School of Education, Stanford University. Her work, funded mainly by the National Science Foundation and the Institute of Education Sciences, examines assessment practices and the assessment of student learning both in the classroom and in large-scale assessment programs. Her publications address the development and evaluation of multiple learning assessment strategies, including concept maps and students' science notebooks, and the study of teachers' informal and formal formative assessment practices, such as the use of assessment conversations and embedded assessments. She also has conducted research on the development and evaluation of assessments that are instructionally sensitive and instruments intended to measure teachers' formative assessment practices. Recently she has worked on the analysis of state testing programs. She was co-editor of a special issue on assessment in the Journal of Research in Science Teaching and a special issue on classroom assessment in the Journal of Educational Measurement. She has published in Science, Educational Measurement: Issues and Practices, the Journal of Research in Science Teaching, and other major technical educational research journals.

ACADEMIC APPOINTMENTS

- Associate Professor, Graduate School of Education

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Committee Member, IDEAL Provostial Fellows Selection Committee (2022 - present)
- Committee Member, DARE Selection Advisory Committee (2023 - present)

Research & Scholarship

RESEARCH INTERESTS

- Assessment & Evaluation
- Learning Sciences
- Measurement in Education
- Science Education
- Teacher Professional Development

Teaching

COURSES

2026-27

- Cognition and Learning: EDUC 364 (Win)
- Introduction to Program Evaluation: EDUC 278 (Spr)

2025-26

- Cognition and Learning: EDUC 364 (Win)

2024-25

- Classroom Assessment: EDUC 276 (Spr)
- Cognition and Learning: EDUC 364 (Aut)
- Foundational Course in Testing: EDUC 142 (Aut)
- Interpreting and Using Test Scores: EDUC 485 (Spr)
- Introduction to Program Evaluation: EDUC 278 (Spr)

2023-24

- Cognition and Learning: EDUC 364 (Aut)
- Foundational Course in Testing: EDUC 142 (Aut)
- Introduction to Program Evaluation: EDUC 278 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Jesse Ramirez

Doctoral (Program)

Micaela Bonilla, Eunjung Myoung

Publications

PUBLICATIONS

- **Introduction to the Special Issue on Classroom Assessment (vol 56, pg 667, 2019)** *JOURNAL OF EDUCATIONAL MEASUREMENT*
  Wilson, M., Ruiz-Primo, M., Paek, P.
  2020

- **Introduction to the Special Issue on Classroom Assessment** *JOURNAL OF EDUCATIONAL MEASUREMENT*
  Wilson, M., Ruiz-Primo, M., Paek, P.
  2019; 56 (4): 667–69

- **Exploring the Utility of Sequential Analysis in Studying Informal Formative Assessment Practices** *EDUCATIONAL MEASUREMENT-ISSUES AND PRACTICE*
  Furtak, E. M., Ruiz-Primo, M. A., Bakeman, R.
  2017; 36 (1): 28-38

- **Curriculum Mapping as a Strategy for Supporting Teachers in the Articulation of Learning Goals** *JOURNAL OF SCIENCE TEACHER EDUCATION*
  Giamellaro, M., Lan, M., Ruiz-Primo, M., Li, M., Tasker, T.
  2017; 28 (4): 347–66

- **The Effect of Sequential Cues of Item Contexts in Science Assessment** *INTERNATIONAL JOURNAL OF TESTING*
  Wang, T., Li, M., Thummaphan, P., Ruiz-Primo, M.
  2017; 17 (4): 322–50
- **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
- **On the Impact of Curriculum-Embedded Formative Assessment on Learning: A Collaboration between Curriculum and Assessment Developers** *APPLIED MEASUREMENT IN EDUCATION*
  Shavelson, R. J., Young, D. B., Ayala, C. C., Brandon, P. R., Furtak, E. M., Ruiz-Primo, M. A., Tomita, M. K., Yin, Y.
  2008; 21 (4): 295-314
- **On the Impact of Formative Assessment on Student Motivation, Achievement, and Conceptual Change** *APPLIED MEASUREMENT IN EDUCATION*
  Yin, Y., Shavelson, R. J., Ayala, C. C., Ruiz-Primo, M. A., Brandon, P. R., Furtak, E. M., Tomita, M. K., Young, D. B.
  2008; 21 (4): 335-359
- **On the Fidelity of Implementing Embedded Formative Assessments and Its Relation to Student Learning** *APPLIED MEASUREMENT IN EDUCATION*
  Furtak, E. M., Ruiz-Primo, M. A., Shemwell, J. T., Ayala, C. C., Brandon, P. R., Shavelson, R. J., Yin, Y.
  2008; 21 (4): 360-389
- **Exploring teachers' informal formative assessment practices and students' understanding in the context of scientific inquiry** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*
  Ruiz-Primo, M. A., Furtak, E. M.
  2007; 44 (1): 57-84
- **Windows into the mind** *HIGHER EDUCATION*
  Shavelson, R. J., Ruiz-Primo, M. A., Wiley, E. W.
  2005; 49 (4): 413-430
- **Comparison of two concept-mapping techniques: Implications for scoring, interpretation, and use** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*
  Yin, Y., Vanides, J., Ruiz-Primo, M. A., Ayala, C. C., SHAVELSON, R. J.
  2005; 42 (2): 166-184
- **Evaluating students' science notebooks as an assessment tool** *INTERNATIONAL JOURNAL OF SCIENCE EDUCATION*
  Ruiz-Primo, M. A., Li, M., Ayala, C., Shavelson, R. J.
  2004; 26 (12): 1477-1506
- **On the evaluation of systemic science education reform: Searching for instructional sensitivity** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*
  Ruiz-Primo, M. A., SHAVELSON, R. J., Hamilton, L., Klein, S.
  2002; 39 (5): 369-393
- **Comparison of the reliability and validity of scores from two concept-mapping techniques** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*
  Ruiz-Primo, M. A., Schultz, S. E., Li, M., SHAVELSON, R. J.
  2001; 38 (2): 260-278
- **Note on sources of sampling variability in science performance assessments** *JOURNAL OF EDUCATIONAL MEASUREMENT*
  Shavelson, R. J., Ruiz-Primo, M. A., Wiley, E. W.
  1999; 36 (1): 61-71
- **Toward a science performance assessment technology** *7th EARLI Conference*
  SHAVELSON, R. J., Solano-Flores, G., Ruiz-Primo, M. A.
  PERGAMON-ELSEVIER SCIENCE LTD.1998: 171–84
- **Rhetoric and reality in science performance assessments: An update** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*

RUIZPRIMO, M. A., SHAVELSON, R. J.
1996; 33 (10): 1045-1063

- **Problems and issues in the use of concept maps in science assessment** *JOURNAL OF RESEARCH IN SCIENCE TEACHING*
  RUIZPRIMO, M. A., SHAVELSON, R. J.
  1996; 33 (6): 569-600