



Maria Jose FIGUEROA

Home Country
Colombia

Degree
PhD in Science
Education

Expertise
Science Assessment

Research Focus
Science Assessment
of Students' Learning

Host University
Stanford University,
United States

Fellowship Awarded
2006

Born and raised in Bogotá, Colombia, Maria Jose Figueroa obtained her undergraduate degree in biology from University of the Andes in 2000 and her master's degree in science education from Columbia University in New York, United States in 2004. She then worked for five years with Pequeños Científicos, an inquiry-based science education program that trains teachers in methodologies for teaching science in public schools. She also taught a course in science education at the University of the Andes in Bogotá for several semesters.

Maria is pursuing her PhD in science education at Stanford University. Her research interest lies in science assessment of students' learning, and she is involved in two research projects. The first looks at ways in which students interact in a science-inquiry based classroom with an emphasis on gender interactions. Some research questions she is looking at include: How do boys and girls interact in a group? What are the gender differences of the social and cognitive profile of small groups? Is the gender profile related to science motivation and achievement results?

Maria's second research project involves looking at differences in the science achievement of students who participate in inquiry-based science education programs compared to students who don't. She is developing different mechanisms to measure student achievement, including assessments that have multiple choice and open-ended questions, as well as performance assessments. As part of this study, she is looking at how students perceive and relate with science. Through this work, she hopes to understand the best methodologies to teach science and to inspire children in scientific realms.

Maria plans to teach at the University of the Andes in her home country as well as to continue her involvement in science teaching at the elementary level. She is interested in reducing the gender gap in science careers in Colombian universities such as the Andes.