## 10 - Science Curriculum and Educational Policy | Empirical

## SP - (16637) - SCIENTIFIC LITERACY AND AGENCY WITHIN THE SCIENCE CURRICULUM IN CHILE: A CRITICAL DISCOURSE ANALYSIS

Betzabé Torres-Olave (Chile)<sup>2</sup>; Gonzalo Guerrero (Chile)<sup>1</sup>

1 - Institute of Education, University College London; 2 - School of Education, University of Bristol

## Short Abstract

This proposal presents a critical discourse analysis of a science curriculum. We analysed two official documents of Ministry of Education of the first and second level of secondary science education in Chile. For this study, three-dimensional model of Fairclough (1989) was used, according to which every discursive event must be analysed based on three complementary dimensions: i) as a text, ii) as a discursive practice and iii) as a social practice. The investigation aimed at answering the following research questions: How the different visions of scientific literacy are operating or are being promoted within science curriculum? How students' and teachers' agency is declared within those documents? To answer these questions, we position ourselves from a Freirean critical realist approach, exploring and interpreting critically the different discourses that exist within the science curriculum and understanding the curriculum as a dialectical process, a social event between the action of planning, executing, and evaluating education. In doing so, we evidence, based on the three dimensions analysed, tensions among different approaches, paradigms, and perspectives for both concepts (scientific literacy and agency), in the transition from one cycle to another. The first document with a predominant neoliberal approach of scientific literacy and the second one with focus on citizenship, democracy and social justice. As a social practice, in both documents teachers appears under the idea of curriculum implementers, to a certain extent, in a banking model where teachers are containers to receive someone else's curriculum expertise or wisdom. The foregoing imbalance raises potential tensions based on teachers' performance and on students' agency who have to transit from a passive role and then consider themselves as active subjects who question the ways of producing knowledge understanding their role within environmental conflicts within current socio-political structures.