

For oral presentation

## In Order to Launch Worldview Education

KAWASAKI, Ken  
Kochi University of Technology  
Japan  
kenknym@aqr.e-catv.ne.jp

Worldview Education is science education where science teachers draw students' attention to differences between the scientific worldview and students' inherent worldview, and is critical to science education conducted in communities where people's first languages do not have any fully established method of composing abstract nouns. This presentation illuminates a problem shared by these communities, and shows that the problem will be overcome in worldview education where metalanguage plays a key role. The problem stems from the fact that people in these communities respectively internalize worldviews different from the scientific worldview characterized by a dichotomous structure. The structure consists of the phenomenal world and the world of Idea, where things are universal and immutable, then abstract. Although the scientific way of thinking bridges a gap between the two worlds, students in these communities do not have any linguistic locus of the scientific way of thinking. Worldview education can offer the locus when science teachers realize that students have internalized worldviews different from the scientific worldview. Worldview education begins with science teachers' explanation of differences between the scientific worldview and students' inherent worldviews in the respective communities. The explanation can be properly called metalanguage if it is accepted that a language is associated with a worldview. Science teachers' use of such metalanguage will remind students of what they have internalized and improve their understanding of the scientific worldview. Worldview education will lead students to make correct understandings of scientific concepts and to nurture sound cultural identity at the same time.

Key words: worldview education, metalanguage, cultural identity, the scientific worldview