

# Differential Item Functioning as a Means to Examine the Strengths and Weaknesses of Electronic Reading Literacy of Macao Students

Pou-Seong Sit

Electronic reading assessment (ERA) is a new form of international assessment in the PISA 2009 Reading Literacy Study. Using students' online reading responses in the field trial, the present study examined Macao 15-year-old students' unexpected strengths and weaknesses through differential item functioning. Specifically, characteristics of ERA items identified as having country by item interactions were analyzed to throw light on the item format (multiple choice versus constructed response) and the reading aspects (i.e. access and retrieve, integrate and interpret, reflect and evaluate) that the students were good at and/or weak in. Through the use of released items after the field trial by the PISA Consortium, it is possible to examine item content so as to have a more concrete idea of Macao students' online Chinese reading capabilities and limitations.

Keywords: reading literacy, electronic assessment, differential item functioning, PISA

Pou-seong Sit, Assistant Professor, Faculty of Education, University of Macau