

SP - (16336) - HOW TO ADAPT AN ESD EDUCATIONAL OUTCOME TEST TO THE NEEDS OF PRIMARY SCHOOL CHILDREN

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Short Abstract

Educational outcomes assessment is confounded by an individual's general literacy. Therefore the reliability and validity of longitudinal research with school-aged children is challenging and methods are needed that allow testing continuously from primary to upper-secondary school.

This study is aiming to develop an indicator test to assess the outcome of ESD considering the pupils' reading skills. This test examines their knowledge, their motivation and their actions with regard to sustainability, largely independently of 3rd- to 6th-grades' reading skills. A vignette-based assessment including coherent text-image combinations was used intending to avoid reading-skill bias. Findings about difficulties of primary school students in questionnaires can be explained by their lower free cognitive capacity, lower reading skills and a lower vocabulary and, furthermore, the performance of pupils with a low socio-economic status often is inferior in questionnaire-based surveys targeting behavior.

This study aims at the validity problem to be explained by the reading skills, especially in primary school children. Comic-like vignettes were developed following an Educational-Design-Research approach and it was tested in two consecutive pilot studies ($N_{\text{Test1}} = 102$ pupils, randomly divided into 4 test books and $N_{\text{Test2}} = 150$ pupils (age 9 ± 2)).

An initial survey compares the outcomes of the vignette test in contrast to a questionnaire-based survey in (i) social focal schools and (ii) in schools attended by pupils with a higher socio-economic status.

The results indicate comparable outcomes for the vignette test in both groups while significant differences are revealed in the questionnaire-based survey. High correlations between reading difficulty and the general item difficulty exist, results of linguistic simplification during the iterative vignette construction are reported. As conclusion, context-rich dilemma situations (vignettes) presented by comic drawings are suitable for longitudinal testing and further consequences for the development and validation of vignettes and items are discussed.