

The Operation Research For Cognitive Design System And Item-Generation Assistant Engine: An Implementation Case In A Two Dimension Spatial Visualization Ability Test

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Abstract

To implement the integrated cognitive assessment model that Lin and Liu(1997a) proposed, the study focuses on using the basic ideas in cognitive design system and item-generation assistant engine in developing test of two dimension spatial visualization ability, to achieve the two goals: (1) applying the procedural framework of cognitive design system (Embretson, 1994) to develop two dimension spatial visualization ability test, (2) designing test-generation assistant engine to help researcher to effectively control item characteristics, to systematically write items, to conveniently modify items and print test form. Based on the results of the research, an improvement of the idea framework of integrated cognitive assessment model has been made.

Keywords: cognitive measurement, LLTM

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