

Research Title	A Development of Competency for Teacher Childhood Development Center Scaling: Multilevel Confirmatory Factor Analysis.
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The purposes of this research were to develop competency for teacher childhood development center scaling, to verify the quality and to construct the norms of competency for teacher childhood development center scaling. The sample were 2,245 teacher selected by two-stage random sampling technique. The teacher selected were Childhood Development Center under in 39 Provinces as of the 2012 academic year. The test was designed into five components: disciplined mind, synthesizing mind, creating mind, respectful mind and ethical mind. The quality of the test was measured by validity: content validity by applies Delphi technique, differential item functioning from different experience teaching groups of examinees by CFA MIMIC model, and construct validity by second order confirmatory factor analysis and multilevel - confirmatory factor analysis. Discrimination parameter of polytomous IRT model by Graded Response Model (GRM) and reliability by generalizability coefficient (G-Coefficient). The findings were as follows:

1. The competency for teacher childhood development center scaling consisted of 54 items classified into five categories factor of 13 items disciplined mind, 7 items synthesizing mind, 9 items creating mind, 10 items respectful mind and 15 items ethical mind.

2. The quality of competency test was validity, consisted of (1) content validity: each items with IOC of 0.71 to 1.00 (2) the find of differential item functioning (CFA MIMIC model) was 14 items, and (3) the construct validity of the competency for teacher childhood development center scaling by confirmatory factor analysis for empirical data. The index were $\chi^2 = 1272.795$, $df = 1098$, $p\text{-value} = .000$, $CFI = .992$, $GFI = .971$, $RMSEA = .017$. All 54 items were statistical significant at .01 level and multilevel-confirmatory factor analysis for empirical data. The index were $\chi^2 = 4.163$,

$df = 6$, $p = 0.6546$, $CFI = 1.000$, $TLI = 1.005$, $RMSEA = 0.000$, $SRMR_W = 0.005$, $SRMR_B = 0.019$. All 5 factors were statistical significant at .01 level. Discrimination parameter (α_i) ranged of 0.60 to 2.29. G -Coefficient of the whole study was 0.937

The norms of the test were divided into 5 levels; score ranked more than 269 indicating very good, between 249 to 268 indicating good, between 228 to 248 indicating middle, between 206 to 227 indicating bad and score less than 206 indicating rectification should be done.