

C240460 : MAJOR EDUCATIONAL MEASUREMENT AND EVALUATION

KEY WORD: EQUATING / EQUIPERCENTILE / LINEAR

WORANATE PICHITGRERKPOL : A COMPARISON OF QUALITY BETWEEN
EQUIPERCENTILE AND LINEAR EQUATING METHODS. THESIS ADVISOR :
ASSI. PROF. TAWEEWAT PITAYANOL, Ph.D. 118 pp. ISBN 974-581-331-1

The purpose of this study was to compare the quality of equating methods between equipercentile and linear methods when the difficulty of the tests were either nearly the same or difference and the examinees' abilities were nearly the same or difference. Evaluation of the results was based on an external criterion. The external criterion was employed a cross-validation technique to compare their equating adequacies. The population were 6,752 mathayom suksa 2 students in academic year 1991 in Ayutthaya province. The samples for equating were 900 and the samples for cross-validation were 240. The tools to measure the equating were three mathematic tests with 40 items each and each composed of 20 anchor items. Two methods were employed for equating in each case : the equipercentile and linear methods. The table of equivalent scores were constructed for each method. The finding can be summarized as follow :

1. When the difficulty of the tests were nearly the same and the examinees' abilities were nearly the same, the linear method was better than the equipercentile method.
2. When the difficulty of the tests were nearly the same and the examinees' abilities were difference, the equipercentile method was better than linear method.
3. When the tests were difference in difficulty and the examinees' abilities were nearly the same, the equipercentile method was better than the linear method.
4. When the tests difficulty and the examinees' abilities were both different, both equating methods were at unsatisfactory level.