

Thesis Title Anthropometric Survey of Primary Schoolchildren in Bangkoknoi District, Bangkok for Classroom Furniture Determination.

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ABSTRACT

The purposes of this study were to determine the anthropometric data of primary schoolchildren and to investigate the extent of mismatching between classroom furniture dimensions and user dimensions, also to propose the design recommendation of chairs and desks for this target group.

Sixteen anthropometric dimensions of 400 primary schoolchildren and thirteen dimensions of their used chairs and desks from five government schools in Bangkoknoi district, Bangkok were collected. The results of this study showed that all 16 anthropometric dimensions tended to increase with advancing age and school year groups, and no significant differences between genders. The comparison with other previous studies revealed the differences among races of children.

This study also found some extent of mismatching between classroom furniture and user dimensions. There were 32.0% of chairs in this study that had mismatching greater than acceptable tolerance and 88.0% of tables were higher than upper limit of acceptable tolerance. The recommended design dimensions for this population were discussed based on ergonomic considerations from the literature reviewed.