

Design and Development of Primary School Furniture using Bamboo



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Abstract:

School Furniture is one of the important amenities provided in classrooms where the children spend most of their time with learning activities for long hours. School furniture is made up of different types of wood and also metal. One such material is bamboo. Bamboo is a rapid growing grass with an impressive variability. The chemical composition and mechanical properties of the bamboo culm allow a broad use such as construction material.

Bamboo furniture has been called as a green or eco-friendly material for furniture since the natural resources are being depleted. It can be used both in building structure, interior design and furniture structures to make long-lasting and competitive products due of its many advantages. Hence in order to change the school furniture made up of normal wood bamboo has been used.

A 1:1 mock-up model had been made to validate the final concept and feedback was collected from students. Major student's needs such as simple interface for usability, aesthetics and ergonomics were satisfied by the final design. Student's response on final design was positive and satisfying.



Digital rendering and mock-up model of bamboo furniture