

ABSTRACT

Sustainable design is becoming a major focus in the modern design industry, with an emphasis on using resources wisely and minimizing environmental impact. The modular concept has been recognized as a design concept that can support sustainable design, with its ability to reduce waste from materials and energy used in the production and use process. Modular systems provide ease of mobilization, installation, and customization that can help optimize limited space. This research focuses on designing a modular storage box that can accommodate additional storage in boarding rooms. This research was conducted using a qualitative method based on facts in the field, starting from conducting questionnaires, interviews, observations and literature studies. Followed by the design process using the User Centered Design (UCD) method and identifying the persona of the user. The results show that students who live in boarding houses need storage boxes that are durable, easy to disassemble, and can store various items. The furniture designed is a storage box with a single bodied modular system, a knockdown system for easy mobilization, a stackable configuration system and using material, namely blockboard.

Keywords : Sustainable Design, Modular Storage Box, Limited Space (boarding room)