

DEVELOPMENT OF A SMART PLANNING PROTOTYPE MODEL IN THE GOVERNANCE OF GREEN LABORATORIES FACULTY OF MEDICINE, YOGYAKARTA STATE UNIVERSITY

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ABSTRACT

Increasing universal health service coverage is one of the targets for achieving the SDGs for a healthy and prosperous life. One of UNY's commitments to be able to contribute to this is through the opening of a Medicine study program. However, laboratories have potential impacts on the environment. Therefore, in designing laboratories for the Faculty of Medicine, environmentally based management is needed, including implementing a green laboratory approach. The development of a green laboratory requires intelligent planning using information technology. Smart applications for developing green laboratories according to the UI Green Metrics ranking are an innovative approach for campus sustainable waste management as a form of higher education awareness of sustainable development, sustainable research, campus greening and its social impact. This research aims to develop a prototype of an intelligent laboratory planning system for the Faculty of Medicine with a green laboratory concept that is feasible, practical and credible. This research was designed as research and development using the design thinking process method to produce a green laboratory prototype which will be developed within 2 years. These stages consist of empathy, define, ideate, prototype, and test which are integrated between stages. In this first year, the stages that have been successfully carried out are the stage of drafting a prototype concept (ideate) which was successfully prepared after going through literature studies, focus group discussions and prototype content preparation workshops. In the second year, it is hoped that this prototype concept design can be developed into an application and the research will continue to the feasibility and practicality validation test stage (test). The final result of this research is a tested prototype product that can be used to assist the process of developing a green laboratory for the Faculty of Medicine.

Kata Kunci: *medical laboratory, SDGs, green university, green laboratory, greenmetrics*