

# THE DEVELOPMENT OF WASTE MANAGEMENT SYSTEM IN UNIVERSITAS NEGERI YOGYAKARTA

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## ABSTRACT

Higher education is a barometer of society in waste management. Garbage is one of the thorny problems faced by society, in the management process, it requires a comprehensive and integrated effort from upstream to downstream to provide benefits for health, save the environment, the economy, and have an impact on changing people's behavior. Yogyakarta State University (UNY) is a tertiary institution that has experienced very rapid development in academic activities. The increase in academic activity has consequences for an increase in the amount of waste. So far, the amount of waste generated from academic activities has not been identified, both the type and character, as well as the management of a good management system. This study aims to identify the types and characteristics of the waste produced by UNY; calculate the volume of waste; and create a good waste management system at UNY.

This research uses the development method with 4 main stages, namely pre-development, development, validation, and system use. This research was conducted at Yogyakarta State University, Karang Malang Campus. The research was carried out within a period of 3 years. The objects of research are all faculties, institutions and postgraduates, especially in waste management in each work unit. Data collection techniques are the methods used to obtain research data. The stages of developing the Waste Management System use several data collection techniques including observation, interviews, documents, questionnaires, and FGD. Observation instruments are used to observe the type and capacity of waste in work units. This research and development research is more dominant in presenting data with descriptive statistical analysis. The use of secondary data from interviews was processed qualitatively using the Atlas.ti application, while quantitative analysis used the SPSS application.

The output of this research is in the form of academic papers on waste management systems, international seminar speakers. The level of technological readiness (TKT) in this study is at the TKT-2 level.

*Kata Kunci: Waste management system, types of waste, waste characteristics, YSU*