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**DEVELOPING AN ONLINE SYSTEM FOR DIAGNOSING MATHEMATICS
LEARNING DIFFICULTIES BASED ON A COMPARATIVE STUDY BETWEEN
INDONESIA AND JAPAN**

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ABSTRACT

Developing an Online System for Diagnosing Mathematics Learning Difficulties Based on a Comparative Study Between Indonesia and Japan

The results of international assessment program such as PISA and TIMSS shows Indonesian students' low performance in mathematics. Nevertheless, these results and also the results of national and classroom assessments are not really used to improve educational practices. Diagnosing students' learning difficulties is also not really implemented as a follow-up step of assessment program. Therefore, the changes in educational practices might not fit students' need in their learning process. Considering this situation, this study is aimed to develop an online system for diagnosing students' learning difficulties as the basis to improve mathematic learning. The online system will be developed on the basis of a comparison of the learning difficulties experienced by Indonesian and Japanese students. The study employs research and development study. This is the first year of the study which is a phenomenological study to compare the process of diagnosing students' learning difficulties in Indonesia and Japan. The data was collected through a Focus Group Discussion (FGD) and a teachers questionnaire. The participants of this study were mathematics teachers consisted of 28 Indonesian and 10 Japanese. This first year of study found that teachers perceived that their students experience several difficulties in learning mathematics however they have not performed an in-depth diagnosis on it yet. They tend to focus on the mathematical issues rather than the process of students thinking. Therefore, teachers follow up this diagnosis results mainly focus on the remedial dan drill-practices. Based on the results of the first year study, in the second study the researchers will develop an online system for diagnosing students' learning difficulties.