

Pramasdyahsari, Agnita Siska. In 2010. "Effectiveness of Primary School Mathematics Learning with the Environment and Equipment Utilization Manipultif as Exhibit Exploration Vehicle Development Capability Son." Thesis Department of Mathematics Faculty of Mathematics and Natural Sciences, State University of Semarang. Advisors I: Dra. Isti Hidayah, M. Pd, Advisor II: Drs. Sugiarto.

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According to the results of research on Stigler and Heibert (in Soedjadi, 2000) that 78% of all math topics taught, the teachers convey the procedures and ideas but without adding to it. Under the regulations the Minister of National Education Republic of Indonesia No. 41 year 2007 about the standards process for elementary and secondary education units, the implementation of the core activities is the process of learning – to achieve basic competency, which is conducted interactive, inspiring, exciting, challenging, to motivate learners to – participate actively, and to provide sufficient room for initiative, creativity – bag, and independence according to their talents, interests and physical and psychological development of learners. Through the utilization of environmental and manipulative teaching aids is expected to make learning math can be Edutainment Elementary exploration capability development of children. Therefore, this study aims to determine the level of mathematics teaching effectiveness of elementary schools with environmental pemanfaatan and manipulative teaching aid as a vehicle for exploring the ability of child development. Elementary School selected for the study Sekaran 01 class V on the material and scale comparison. From this background, formulated a few problems that (1) How is the quality of the learning process with the use of elementary mathematics environments and manipulative teaching aids in the exploration capabilities mengembangkan children? (2) Does the elementary school mathematics instruction with environmental pemanfaatan and manipulative teaching aids effectively as a vehicle for exploring the ability of child development?

This research included in this type of research experiments that represent the research phase of the study continued research and development with reference to the standard process in Permendiknas No. 41 Year in 2007. The results of this study were (1) The quality of the learning process with the use of elementary mathematics environments and manipulative teaching aid in developing a child's exploration ability is high enough in terms of exploration activities amounted to 86.75%, the level of learners' learning motivation for 85.07%, interest rates study of students 94.75%, the response of students at 100% and the results of study of students with mastery learning 83.33%. (2) Teaching Elementary Mathematics by exploiting the environment and manipulative teaching aids effectively as a vehicle for exploring the ability of child development is marked by a significant increase in interest, the response spur active learners in exploration activities, as well as the level of motivation to study and mastery of Learning test results if compared to the previous learning phase.

From the above discussion and conclusions, some suggestions that may be recommended are (1) To achieve the quality of the learning process and good learning results in developing a child's ability through the use of environmental exploration and APM device that required adequate preparation and the preparation of teachers in implementing these devices. (2) Teachers at other schools will adopt the model of mathematics learning environment with the use of manipulative and visual aids necessary to conform to the characteristics of students and their school environment - each making it more effective to be a vehicle for the development of exploration ability learners. (3) Teachers,

lecturers and students to better collaborate and cooperate in the development of learning tools and environments with the use of manipulative teaching aids that can improve the ability of child exploration

