

**Mathematical teaching and learning by qualitative evaluation
using ‘Open-Approach Method’ in school activities**

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Summary :

We will mention some findings concerning the use of both the ‘open-approach method’ and the ‘open-ended problem’ to make clear the meaning of ‘both activities by students and mathematics are open’. The aims of instruction using the ‘open-approach method’ are to foster both creative and mathematics thinking in problem solving by students simultaneously. From quantitative to qualitative evaluation of mathematical activities, which are the expression of both mathematical ideas and processes of the ways of thinking used to solve problems, are very useful. In order to develop this usefulness, we make the model for examining these activities which are convenient enough for us to deal with the students’ many kinds of processes of solving the problems.

Reference :

Nohda, Nobuhiko. (2000). Teaching by open-approach method in Japanese mathematics classroom. In Proceedings of the 24th Conference of the International Group for the Psychology of Mathematics Education (vol.1, pp.39-53). Hiroshima, JAPAN.

