

# Development of Problem Based Learning Models with the Humanist Approach Oriented to Math-literacy and Management of Math-Anxiety Students

by DR. ALI MAHMUDI, M.PD.

## ABSTRACT

This study aims to produce a problem based learning model in mathematics with a humanist approach that can improve math-literacy and reduce math-anxiety of junior high school students. The development model used is 4-D (Define, Design, Develop, Disseminate) from Thiagarajan. The feasibility of the developed model was assessed in terms of validity, practicality, and effectiveness. The targeted development products of this research are the teacher's manual, learning implementation plan, student worksheet, powerpoint of learning material, instruments to measure math-literacy and math-anxiety, 1 scientific article that will be published in a journal nationally accredited, and 1 scientific article that will be published in reputable international journals.

The research results obtained are preliminary results based on limited product trials on 33 students of class VIII C of SMP Negeri 4 Wates Kulon Progo which were observed by 5 observers resulting in findings that: (1) Mathematical learning based on problems with a humanist approach can make students are enthusiastic in learning; (2) For the topic of completing the Two Variable Linear Equation System using graphics, the apperception part must be added by painting a straight line; (3) The worksheet must provide examples of questions that students can ask to motivate students to write questions; (4) Student worksheet needs to be added to the practice of mathematical literacy problems.

Kata Kunci: *Problem-based learning, humanist, math-literacy, math-anxiety.*