## PENGEMBANGAN MODEL PELATIHAN PPG MATEMATIKA UNTUK MENINGKATKAN PENALARAN DAN KOMPETENSI PROFESIONAL GURU

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## **ABSTRACT**

The main purpose of the present research project is to develop a training model for teacher professional development program (TPDP) that can foster teachers' reasoning skills and professional competences. The research method carried out is developmental research initiated by Plomp comprissing 5 phases, namely: (1) prelimenary investigation, (2) design, (3) realization/construction, (4) test, evaluation and revision, and (5) implementation.

The findings show that the training model applied is a classic TPDP model that is already prescribed with 38 credits (22 credits in the first semester and 16 credits in the second one). According to the needs, the subjects on the program, divided into 6 cycles, consist of (1) annual program and semester program for the teacher, (2) development of subject spessific pedagogy on numbers, set, and logic; algebra; geometry; calculus and trigonometry; probability and statistics, and (3) proposal for classroom action research. The model used in the training is expository and simulations of mathematics teaching in secondary schools. The quality of the products developed and used in the program that consist of learning materials, annual and semeter program template, learning activities designed for classroom action research, reasoning instrument, and professional competence instrument is qualified for good criterium.

Kata Kunci: PPG, Mathematics, teacher professional development program