

ABSTRAK

DESAIN DIDAKTIS PERSAMAAN DAN PERTIDAKSAMAAN LINEAR SATU VARIABEL MELALUI PENDEKATAN SAINTIFIK UNTUK MENGEMBANGKAN KEMAMPUAN DAN DISPOSISI KOMUNIKASI MATEMATIS SISWA

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Penelitian ini bertujuan untuk menghasilkan desain didaktis persamaan dan pertidaksamaan linear satu variabel melalui pendekatan saintifik serta mengembangkan kemampuan dan disposisi komunikasi matematis siswa kelas VII SMP. Penelitian ini mengacu pada penelitian dan pengembangan oleh *Borg and Gall*, yaitu penelitian pendahuluan, perencanaan dan pengembangan produk, validasi, revisi-revisi dan uji lapangan. Hasil validasi ahli menyatakan bahwa desain didaktis layak untuk diteliti lebih lanjut. Hasil uji lapangan menunjukkan bahwa kemampuan komunikasi matematis dalam kriteria baik dilihat dari persentase ketuntasan belajar telah terpenuhi sebesar 75%. Melalui analisis data deskriptif diperoleh hasil bahwa indikator disposisi komunikasi matematis menunjukkan peningkatan pencapaian rata-rata tiap pertemuan. Indikator disposisi komunikasi matematis yang dominan muncul adalah rasa ingin tahu dan mencari kebenaran serta pemahaman. Dengan demikian dapat disimpulkan bahwa desain didaktis persamaan dan pertidaksamaan linear satu variabel yang dikembangkan melalui pendekatan saintifik dapat mengembangkan kemampuan dan disposisi komunikasi matematis siswa.

Kata kunci: desain didaktis, kemampuan komunikasi matematis, disposisi komunikasi matematis

ABSTRACT

DIDACTIC DESIGN OF EQUATIONS AND LINEAR INEQUALITY ONE VARIABLE THROUGH SCIENTIFIC APPROACH TO DEVELOP ABILITY AND DISPOSITION OF STUDENTS MATHEMATICAL COMMUNICATION

By

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This research aimed to produce a didactic design of equations and linear inequality one variable through scientific approach to develop ability and disposition of mathematical communication of grade VII students of junior high school. This research referred to Borg and Gall's research and development procedure. This stages of development were preliminary research, planning and developing of product, validation, revisions and field tests. Expert validation resulted suggest that didactic design was feasible for further investigation. The results of field tests indicated that the ability of mathematical communication were in good criterion, saw from the percentage of mastery learning which had been fulfilled by 75%. Through the descriptive analysis had got the result that disposition of mathematical communication indicators showed an increase in the average attainment of each meeting. Disposition of mathematical communication indicators which appeared dominantly after using didactic design were curiosity and search for truth and understanding. In conclusion, the didactical design of equations and linear inequality one variable through scientific approach could develop the ability and disposition of mathematical communication.

Keywords: *didactic design, the ability of mathematical communication, disposition of mathematical communication*