

## ABSTRAK

**Tetty Khairani Nasution. Pengembangan Bahan Ajar Matematika Berbasis Strategi Metakognitif Untuk Meningkatkan Kemampuan Berpikir Kreatif Siswa.** Tesis. Medan: Program Studi Pendidikan Matematika Program Pascasarjana Universitas Negeri Medan. 2017

Penelitian ini bertujuan mendeskripsikan: (1) validitas dan efektivitas modul matematika berbasis strategi metakognitif untuk meningkatkan kemampuan berpikir kreatif. (2) peningkatan kemampuan berpikir kreatif dengan menggunakan modul. Penelitian ini pengembangan dengan modifikasi model 4-D oleh Thiagarajan, Semmel dan Semmel melalui tahap *define, design, develop* dan *disseminate*. Untuk tahap *disseminate* tidak dibahas secara mendalam hanya secara terbatas di sekolah penelitian. Subjek penelitian adalah peserta didik kelas X-4 SMA N 5 Padangsidempuan pada uji coba 1 sebanyak 30 peserta didik dan peserta didik kelas X-MIA3 MAN 1 Medan pada uji coba 2 sebanyak 28 peserta didik.

Hasil penelitian menunjukkan yakni pada uji coba 1 bahan ajar berupa modul, RPP, LKS memenuhi kriteria valid serta instrumen dengan sedikit revisi. Bahan ajar efektif pada uji coba 1 dan 2 ditinjau berdasarkan aktivitas aktif peserta didik berada pada interval toleransi waktu dengan persentasi terbesar adalah aktivitas mengungkapkan alasan. Nilai kemampuan pendidik uji coba 1 dan 2 masing-masing 3,16 dan 3,19 dengan kriteria cukup baik. Respon positif peserta didik terhadap komponen dan proses pembelajaran pada uji coba 1 dan 2 masing-masing 93,83% dan 98,03% juga memenuhi kriteria efektif. Peningkatan kemampuan berpikir kreatif peserta didik ditinjau dari nilai postes uji coba 1 dan 2 untuk setiap indikator. Peningkatan juga terjadi pada indikator keaslian dan kerincian.

Kata Kunci : Pengembangan bahan ajar, modul matematika berbasis strategi metakognitif, kemampuan berpikir kreatif.

## ABSTRACT

**Tetty Khairani Nasution. The Development of Mathematics Learning Material Based on Metacognitive Strategy to Increase Mathematical Creative Thinking Ability of Student.** Thesis. Medan: Mathematics Education Postgraduate Programme, State University of Medan, 2017.

This research aims to describe: (1) the validity and effectiveness of mathematics modules based on metacognitive strategy to increase mathematics creative thinking ability of student. (2) the increasing of creative thinking ability student using module. This research develop by modification of 4-D model by Thiagaran, Semmel and Semmel through define, design, develop and disseminate stages. Disseminate stage is not discussed in depthly, but only on limited basic in the field of research. The subject of research were student of class X-4 SMA N 5 Padangsidempuan on trial 1 of 30 students and student of class X-MIA3 MAN 1 Medan on trial 2 of 28 students.

The result of the research showed that: on trial 1 the learning materials such as in the form of module, lesson plan, worksheet are on valid criteria as well as instruments require a little revision. The effective learning materials on trials 1 and 2 are assessed based on active activity of students are at the timing tolerance interval with the largest percentage is the activity of reveal the reasons. Teacher competition value trials 1 and 2 respectively 3.16 and 3.19 with fairly good criteria. Positive responses of students to the components and learning process in trials 1 and 2 respectively 93.83% and 98.03% also meet the effective criteria. Improving students' creative thinking ability can be seen from post test value on trial 1 and 2 for each indicator. The increasing also occurs in indicators of originality and elaboration.

**Keywords:** Development of mathematics materials, mathematics module based on metacognitive strategy, creative thinking ability.

