

## ABSTRAK

POMMER SIMBOLON. Upaya Meningkatkan Kemampuan Pemecahan Masalah Matematis Siswa melalui Penerapan Model Pembelajaran Berdasarkan Masalah Berbasis Budaya Batak (PBM-B3) Pada Kelas XII IPS SMA Negeri 1 Galang.

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Tujuan Penelitian: Mengetahui peningkatan kemampuan pemecahan masalah matematis, mengetahui peningkatan ketuntasan belajar matematika, dan mendeskripsikan kadar aktivitas aktif belajar para siswa kelas XII IPS SMA Negeri 1 Galang dalam pelaksanaan model PBM-B3 serta mendeskripsikan tingkat kemampuan guru mengelola model PBM-B3 di kelas XII IPS SMA Negeri 1 Galang. Penelitian ini adalah penelitian tindakan kelas di SMA Negeri 1 Galang Kabupaten Deli Serdang. Subjek penelitian adalah siswa kelas XII IPS 2 tahun Pelajaran 2012-2013 terdiri dari 11 orang laki-laki dan 21 orang perempuan. Objek penelitian: 1) Objek proses adalah penerapan model PBM-B3, perangkat pembelajaran antara lain RPP, Buku Pegangan Siswa, Lembar Aktivitas Siswa, Buku Pegangan Guru, lembar observasi. 2) Objek produk adalah kemampuan pemecahan masalah matematis. Data-data penelitian diperoleh dari lembar observasi siswa dan guru, tes kemampuan pemecahan matematis siswa (TKPMM), tes hasil belajar (THB) dan angket respon siswa. Hasil validasi instrumen penelitian dalam kategori baik dapat digunakan dengan revisi sedikit, dan Hasil validasi perangkat pembelajaran dalam kategori baik dapat digunakan tanpa revisi. Hasil uji coba instrument TKPMM, THB memiliki validitas dalam kategori valid. Penelitian dilaksanakan 2 siklus dan tes diberikan pada setiap akhir siklus. Hasil tindakan siklus I dan siklus II: 1) hasil TKPMM siklus I rata-rata 3,4, dan secara klasikal kategori baik 9,4%, siklus II rata-rata nilai 6,2 dan secara klasikal kategori baik 81%. 2) hasil THB siklus I rata-rata 6,0, dan secara klasikal kategori baik 46,9%. Siklus II rata-rata nilai 7,6 dan secara klasikal kategori baik 87,4%. 3) hasil observasi aktivitas aktif siswa siklus I terdapat 1 dari 5 aktivitas memenuhi toleransi persentase waktu ideal (PWI), siklus II terdapat 5 dari 5 aktivitas memenuhi toleransi PWI. 4) hasil observasi kemampuan guru mengelola model PBM-B3 pada siklus I rata-rata nilai 3,5 (kategori cukup). Siklus II rata-rata nilai 4 (kategori baik). Kesimpulan penelitian 1) Penerapan model PBM-B3, dapat meningkatkan kemampuan pemecahan masalah matematis siswa. 2) Penerapan model PBM-B3, dapat meningkatkan ketuntasan belajar matematika siswa. 3) Penerapan model PBM-B3 dapat meningkatkan aktivitas belajar aktif siswa. 4) Penerapan model PBM-B3, dapat meningkatkan kemampuan guru dalam mengelola model PBM-B3. Peneliti menyarankan 1) Model PBM-B3 menjadi alternatif dikelas untuk meningkatkan kemampuan pemecahan masalah matematis, dan meningkatkan ketuntasan belajar matematika siswa. 2) perangkat pembelajaran dan instrumen penelitian ini dapat dijadikan referensi bagi guru.

**Kata Kunci:** Model, Pembelajaran Berdasarkan Masalah, Kemampuan Pemecahan Masalah Matematis Siswa.



## ABSTRACT

POMMER SIMBOLON. Effort to enhance the student mathematical problem solving ability through applying the Batak culture problem based instruction (BCPBI) model in Galang state senior high school 1 on grade XII Social programs.  
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The research aims: To know ability enhance of student mathematical problem solving ability, to know enhance the mathematics learn passed and to descript the active learn activity by student grade XII social program Galang state senior high school through applying the BCPBI and so to descript the ability level of teacher to manage the BCPBI on grade XII social program Galang state 1 senior high school. This research is a classroom action research in Galang state 1 senior high school on study year 2012-2013. Research subject is all students grade XII social program Galang state 1 senior high school, male are 11 and female are 21. Research object, 1) Object of process is aplying the BCPBI model, and learn preparation as soon as learn plan (*RPP*), Student hand book (*Buku pegangan siswa*), Teacher hand book (*Buku pegangan guru*), student activity sheet (*LAS*) and observation sheet, 2) Object of product is the student matematical problem solving ability. Research data prepare from observation sheets, problem solving ability test (*TKPMM*), mathematics learn passed test (*THB*) and the students responces questioner. Validation result of the research instruments is good category with thin revision, and the learn preparation is good category without revision. Trying result of the research instruments are valid in validity criterion. The study comprised two cycles and the test given at the end of each cycle. The result of the action research, 1) The average value of *TKPMM* I cycles is 3,4 and classical good category is 9,4%, the average value of *TKPMM* II cycles is 6,2 and classical good category is 81%. 2) The verage value of *THB* I cycles is 6,0 and classical good category is 46,9%, the average value of *THB* cycles II is 7,6 and classical good category is 87,4%, 3) 1 of 5 activity are reached the ideal time percent (*PWI*) on I cycles, and 5 of 5 activity reached the *PWI* on II cycles. 4) Level of the teacher ability to manage BCPBI model average value is 3,5 (enought category) on I cycles and average value is 4 (good category) on II cycles. Conclusion 1) through applying BCPBI model to enhance students mathematical problem solving ability, 2) through applying BCPBI model to enhance matematics learn passed level, 3) through applying BCPBI model to enhance student active learn activity, 4) through applying BCPBI model to enhance ability level for teacher to manage the BCPBI model. Suggestion 1). BCPBI model is a good alternative to effort to enhance student mathematical problem solving ability and effort to enhance mathematics learn passed level, 2) learn preparation and research instrument of BCPBI model is a good decide to get that as a referencies.

**Key words:** Model, Batak culture, Problem based instruction, Student Mathematical Problem Solving ability

