

## ABSTRAK

**QURRATU ‘AININ. Pengembangan Model Pembelajaran Kooperatif Tipe *Think Talk Write* (TTW) Berbasis Budaya Batak dan *Adobe Flash* Untuk Meningkatkan Kemampuan Berpikir Kritis Matematis Siswa SMA Negeri 1 Medan.** Tesis. Medan: Program Studi Pendidikan Matematika Pasca Sarjana Universitas Negeri Medan, 2022.

Produk dari penelitian pengembangan ini adalah sebuah model pembelajaran *Think Talk Write* (TTW) Berbasis Budaya Batak dan *Adobe Flash* yang valid, praktis dan efektif yang dapat meningkatkan kemampuan berpikir kritis matematis siswa. Penelitian ini bertujuan untuk mengembangkan model pembelajaran *Think Talk Write* (TTW) Berbasis Budaya Batak dan *Adobe Flash* yang valid, praktis dan efektif. Desain penelitian yang digunakan adalah desain Plomp. Subjek uji coba dalam penelitian ini adalah siswa X-MIA<sup>-8</sup> dan X-MIA<sup>-10</sup> SMA Negeri 1 Medan T.A. 2021/2022. Hasil dari proses pengembangan model pembelajaran ini adalah (1) model pembelajaran *Think Talk Write* (TTW) Berbasis Budaya Batak dan *Adobe Flash* beserta perangkat pembelajaran termasuk dalam kategori valid; (2) kriteria kepraktisan model pembelajaran *Think Talk Write* (TTW) Berbasis Budaya Batak dan *Adobe Flash* menggunakan perangkat pembelajaran termasuk dalam kategori tinggi; dan (3) kriteria keefektifan model pembelajaran *Think Talk Write* (TTW) Berbasis Budaya Batak dan *Adobe Flash* berdasarkan pada: (a) ketuntasan belajar siswa secara klasikal sebesar 88,89%; (b) kriteria pencapaian penggunaan waktu pembelajaran termasuk dalam kategori tinggi; (c) kriteria pencapaian kemampuan guru mengelola pembelajaran termasuk dalam kategori baik; dan (d) banyak siswa yang memberikan respon positif terhadap komponen dan kegiatan pembelajaran telah tercapai.

Kata Kunci : Penelitian Pengembangan, Model Pembelajaran, *Think Talk Write*, Budaya Batak, *Adobe Flash*, Kemampuan Berpikir Kritis

## ABSTRACT

**QURRATU 'AININ. Development of Cooperative Learning Think Talk Write Models Based on Batak Cultural and Adobe Flash to Improve Mathematical Critical Thinking Ability Students of SMA Negeri 1 Medan.**  
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The products of this development research are valid, practical and effective learning model Think Talk Write (TTW) based Batak cultural and Adobe Flash which can improve students' mathematical critical thinking ability. This study aims to develop a learning model of Think Talk Write (TTW) based on Batak culture and Adobe Flash that is valid, practical and effective. The research design was used Plomp's design. The test subjects in this development research were X-MIA<sup>-8</sup> and X-MIA<sup>-10</sup> students of SMA Negeri 1 Medan T.A. 2021/2022. The results of the development process of learning model Think Talk Write (TTW) based on Batak culture and Adobe Flash are (1) learning model of Think Talk Write (TTW) based on Batak culture and Adobe Flash along with learning tools are included in the valid category; (2) the criteria for the practicality of using Think Talk Write (TTW) based on Batak culture and Adobe Flash learning tools are included in the high category; and (3) the criteria for the effectiveness of the model of Think Talk Write (TTW) based on Batak culture and Adobe Flash based on: (a) classical student learning completeness are 88.89%; (b) the criteria for achieving the use of learning time are in the high category; (c) the criteria for achieving the teacher's ability to manage learning are in the good category; and (d) many students who gave positive responses to the components and learning activities had been achieved.

**Keywords:** Learning Materials, Plomp Development Model, Think Talk Write, Batak Cultural, Adobe Flash, and Mathematical Critical Thinking Abilities

