

## **ABSTRAK**

# **PENGEMBANGAN MODEL PEMBELAJARAN IPAS BERBASIS STEM-SRSD UNTUK MENINGKATKAN KETERAMPILAN NUMERASI DAN BERPIKIR KRITIS SISWA SEKOLAH DASAR**

**Oleh**

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Penelitian ini bertujuan untuk mendeskripsikan validitas, kepraktisan, dan efektivitas model pembelajaran IPAS berbasis STEM-SRSD untuk meningkatkan keterampilan numerasi dan berpikir kritis siswa Sekolah Dasar. Penelitian ini menggunakan pendekatan campuran (*mixed method*) dengan desain penelitian *embedded experimental model*. Penelitian campuran merupakan metode penelitian yang mengkombinasikan antara penelitian kualitatif dengan penelitian kuantitatif. Jenis penelitian pengembangan ini mengacu pada prosedur pengembangan 4D (*four-D*). Model penelitian dan pengembangan model 4D terdiri atas 4 tahapan, yaitu; *define, design, develop, and disseminate* yang dikembangkan oleh Thiagarajan (1974). Teknik analisis data menggunakan analisis persentase terhadap skor validitas dan kepraktisan, serta analisis untuk efektivitas. Hasil analisis data menunjukkan model pembelajaran GREAT valid untuk meningkatkan keterampilan numerasi dan berpikir kritis siswa Sekolah Dasar. Validitas model pembelajaran GREAT dari ketiga validator diperoleh nilai hasil akhir 78,85% dengan keputusan valid dan kriteria tinggi/baik. Kepraktisan model pembelajaran GREAT memperoleh rata-rata persentase skor 95,79% dengan kriteria sangat praktis. Efektivitas model pembelajaran GREAT memperoleh *N-Gain* 0,59 termasuk dalam kriteria sedang atau efektif. Berdasarkan hasil analisis data yang telah dilakukan, dapat disimpulkan bahwa: 1) model pembelajaran GREAT dinyatakan valid untuk meningkatkan keterampilan numerasi dan berpikir kritis siswa Sekolah Dasar. 2) model pembelajaran GREAT dinyatakan praktis untuk meningkatkan keterampilan numerasi dan berpikir kritis siswa Sekolah Dasar. 3) model pembelajaran GREAT dinyatakan efektif untuk meningkatkan keterampilan numerasi dan berpikir kritis siswa Sekolah Dasar.

**Kata Kunci:** Model Pembelajaran GREAT, IPAS, Keterampilan Numerasi, Berpikir Kritis.

## **ABSTRACT**

### **DEVELOPMENT OF A LEARNING MODEL BASED ON NATURAL AND SOCIAL SCIENCES (IPAS) STEM-SRSD TO IMPROVE STUDENTS' NUMERATION AND CRITICAL THINKING SKILLS ELEMENTARY SCHOOL**

**By**

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This research aims to describe the validity, practicality and effectiveness of the STEM-SRSD-based Natural and Social Sciences (IPAS) learning model to improve elementary school students' numeracy and critical thinking skills. This research uses a mixed method with an embedded experimental model research design. Mixed research is a research method that combines qualitative research with quantitative research. This type of development research refers to the 4D (four-D) development procedure. The 4D model research and development model consists of 4 stages, namely; define, design, develop, and disseminate developed by Thiagarajan (1974). The data analysis technique uses percentage analysis of validity and practicality scores, as well as analysis for effectiveness. The results of data analysis show that the GREAT learning model is valid for improving elementary school students' numeracy and critical thinking skills. The validity of the GREAT learning model from the three validators obtained a final result value of 78.85% with a valid decision and high/good criteria. The practicality of the GREAT learning model obtained an average percentage score of 95.79% with very practical criteria. The effectiveness of the GREAT learning model obtained an N-Gain of 0,59, which is included in the medium or effective criteria. Based on the results of the data analysis that has been carried out, it can be concluded that: 1) the GREAT learning model is declared valid for improving the numeracy and critical thinking skills of elementary school students. 2) the GREAT learning model is declared practical for improving the numeracy and critical thinking skills of elementary school students. 3) the GREAT learning model is declared effective for improving the numeracy and critical thinking skills of elementary school students.

**Keywords:** GREAT Learning Model, IPAS, Numeracy Skills, Critical Thinking.