ABSTRAK

PENGEMBANGAN PROTOTIPE MODUL SEMPOA SEBAGAI PANDUAN BERHITUNG PENGURANGAN DENGAN TEKUN BAGI SISWA KELAS I SD

Wulan Agesti
Universitas Sanata Dharma
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Penelitian ini dilatar belakangi oleh adanya kebutuhan siswa dan guru terhadap media dan sarana panduan pembelajaran pada materi operasi hitung pengurangan bilangan cacah 1-99. Selain itu juga dilatar belakangi oleh adanya masalah berkaitan dengan kurang tekunnya siswa dalam belajar. Tujuan dari penelitian ini adalah menghasilkan Prototipe Modul Sempoa untuk Berhitung Pengurangan dan Melatih Karakter Tekun Siswa Kelas I SD dan mengetahui kualitas prototipe modul tersebut.

Penelitian ini merupakan jenis penelitian dan pengembangan *(R&D)*. Prosedur pengembangan penelitian ini menggunakan model ADDIE yaitu (1) *Analyze*, (2) *Design*, (3) *Development*, (4) *Implementation*, dan (5) *Evaluation*. Prototipe modul divalidasi oleh ahli sempoa dan ahli matematika dengan skor rata-rata 2,85 (dari rentang nilai 1-4) termasuk kategori "baik" sehingga layak diujicobakan setelah diperbaiki. Uji coba dilakukan kepada 2 siswa kelas I SD dengan hasil menunjukkan bahwa siswa memberikan pendapat produk membantu siswa belajar operasi hitung pengurangan menggunakan sempoa dan melatih karakter tekun siswa kelas I SD. Sikap tekun siswa saat menggunakan produk menunjukan skor rerata 75% siswa melakukan belajar dengan tekun. Prototipe Modul Sempoa untuk Berhitung Pengurangan dan Melatih Karakter Tekun Siswa Kelas I SD dapat digunakan untuk mengenalkan sempoa, sarana belajar pengurangan hingga bilangan puluhan menggunakan sempoa, berhitung cepat, dan belajar dengan sikap tekun.

Kata kunci: penelitian dan pengembangan, modul sempoa, pengurangan, tekun.

ABSTRACT

SEMPOA'S MODULE PROTOTYPE DEVELOPMENT AS A GUIDANCE ON SUBSTRACTION COUNTING OPERATION WITH IMPROVINGDILIGENT BEHAVIOR FOR 1ST GRADE ELEMENTARY STUDENTS

Wulan Agesti
Universitas Sanata Dharma
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This research was conducted because of the teachers and students' needs on learning media and guidance for substrction counting operation on whole number from 1-99. Besides that, it was also done since there were problems related to lack on diligent behavior in their learning. The aim on this research is to create a Sempoa's module prototype for substrction counting operation and to train the 1st grade of elementary students' diligent behavior and also to know the quality of this prototype module.

This research used Research and Development (R&D) as the methodology. And the researcher used ADDIE type as the development procedure model. ADDIE stands for (1) Analyze, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. This prototype module has been validated by sempoa expert and mathematics expert with the average score 2,85 out of 4. It was categorized as 'good' and fulfilled the standard for being applied on learning after some revisions.This prototype module was applied on 2 1st grade elementary students.

The result of this research is that students gave opinions that the product could help the students to learn substrction operations using abacus and improving students' diligent behavior. Students' diligent behavior when they're using the module showed the average score 75%. It indicated that students were studying diligently. Sempoa Prototype Module on Substraction Counting Operation and Diligent Behavior Training can be used as introduction to sempoa technique, learning media for substrction counting operation from 1-99 using sempoa, fast-count technique learning, and to train diligent behavior.

Keywords: *research and development, sempoa module, substrction, diligence.*