

**PENGEMBANGAN MEDIA *GAME* EDUKASI
INTERAKTIF *FRAKSIMATIKA* BERPENDEKATAN PMRI
(PENDIDIKAN MATEMATIKA REALISTIK INDONESIA) UNTUK
MENINGKATKAN KEMAMPUAN LITERASI NUMERASI SISWA
KELAS V SD**

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ABSTRAK

Penelitian ini dilaksanakan dengan tujuan dapat mengembangkan media *game* edukasi interaktif *Fraksimatika* berpendekatan PMRI yang valid, praktis, dan efektif dalam meningkatkan literasi numerasi siswa. Penelitian pengembangan ini melibatkan model ADDIE sebagai acuan tahapan pengembangan. Media *game* edukasi interaktif *Fraksimatika* berpendekatan PMRI merupakan subjek dari pengembangan dalam penelitian ini, sementara validitas, kepraktisan, serta efektivitas media *game* edukasi interaktif yang dikembangkan merupakan objek pengembangan dari penelitian ini. Metode wawancara, penyebaran angket, dan tes digunakan dalam penelitian ini. Penelitian pengembangan media *game* edukasi interaktif *Fraksimatika* berpendekatan PMRI memperoleh hasil yang valid, praktis, dan cukup efektif dalam meningkatkan literasi numerasi siswa. Hal tersebut dibuktikan dengan perolehan hasil uji validitas dari ahli materi 0,96 dan ahli media 0,98; uji kepraktisan dari respon guru adalah 95%, dan respon siswa melalui uji coba perorangan sebesar 92,5%, uji coba kelompok kecil sebesar 92,5%; serta uji efektivitas dengan uji-t berkorelasi memperoleh hasil t hitung 14,3 lebih besar dari nilai t tabel untuk dk = 24 pada taraf signifikansi 5% adalah 2,06 sehingga H₀ ditolak dan H₁ diterima. Uji N-gain score data *pre-test* dan *post-test* memperoleh nilai N-gain score sebesar 66%, termasuk pada kategori cukup efektif. Jadi, dapat disimpulkan bahwa pengembangan media *game* edukasi interaktif *Fraksimatika* berpendekatan PMRI valid, praktis, dan cukup efektif untuk meningkatkan literasi numerasi siswa.

Kata-kata kunci: *game* edukasi interaktif, PMRI, literasi numerasi, bilangan pecahan.

**DEVELOPMENT OF INTERACTIVE EDUCATIONAL GAME MEDIA
FRAKSIMATIKA WITH PMRI (INDONESIAN REALISTIC
MATHEMATICS EDUCATION) APPROACH TO IMPROVE STUDENTS'
NUMERACY LITERACY SKILLS FOR
5th GRADE OF ELEMENTARY SCHOOL**

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ABSTRACT

This research was conducted with the aim of developing an interactive educational game media Fraksimatika with PMRI approach that is valid, practical, and effective in improving students' numeracy literacy. This development research involves the ADDIE model as a reference for the development stages. The interactive educational game media Fractionation with PMRI approach is the subject of development in this research, while the validity, practicality, and effectiveness of the developed interactive educational game media are the object of development of this research. Interview, questionnaire, and test methods were used in this study. The research on the development of interactive educational game media Fractionation with PMRI approach obtained valid, practical, and quite effective results in improving students' numeracy literacy. This is evidenced by the acquisition of validity test results from material experts 0.96 and media experts 0.98; practicality test from teacher responses is 95%, and student responses through individual trials are 92.5%, small group trials are 92.5%; and effectiveness test with correlated t-test results obtained t count 14.3 greater than the t table value for $dk = 24$ at 5% significance level is 2.06 so that H_0 is rejected and H_1 is accepted. The N-gain score test of pre-test and post-test data obtained an N-gain score of 66%, including in the moderately effective category. So, it can be concluded that the development of interactive educational game media Fraksimatika with PMRI approach is valid, practical, and effective enough to improve students' numeracy literacy.

Key words: interactive educational game, PMRI, numeracy literacy, fractions.