

## ABSTRAK

**Christina Arum Pratiwi, 2021. *Pengembangan Perangkat Pembelajaran Berbasis Gamifikasi melalui Wordwall pada Materi Teorema Pythagoras untuk Membangun Minat Belajar dan Hasil Belajar Siswa*. Skripsi. Yogyakarta: Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.**

Penelitian ini bertujuan untuk mendeskripsikan (1) proses pengembangan perangkat pembelajaran berbasis gamifikasi melalui *Wordwall* pada materi Teorema Pythagoras sebagai inovasi dalam pembelajaran matematika untuk membangun minat belajar dan hasil belajar siswa, dan (2) efektivitas implementasi perangkat pembelajaran berbasis gamifikasi melalui *Wordwall* pada materi Teorema Pythagoras untuk membangun minat belajar dan hasil belajar siswa.

Penelitian ini menggunakan *Research and Development* (R&D) yang dikembangkan oleh Sugiyono. Langkah-langkah penelitian ini meliputi potensi dan masalah, mengumpulkan data, desain produk, validasi desain, revisi desain produk, dan uji coba produk. Subjek penelitian ini adalah 17 siswa kelas VIII A dan 17 siswa kelas VIII B SMP Kanisius Bambanglipuro tahun ajaran 2019/2020. Teknik pengumpulan data penelitian ini adalah validasi perangkat pembelajaran, penyebaran angket, dan pemberian tes yang meliputi *pretest*, *posttest*, serta soal-soal *Wordwall*.

Hasil penelitian ini adalah pertama, proses pengembangan perangkat pembelajaran berbasis gamifikasi melalui *Wordwall* terdiri dari enam tahapan, yaitu (1) wawancara dengan guru mata pelajaran matematika kelas VIII SMP Kanisius Bambanglipuro untuk menemukan potensi dan masalah, (2) mengumpulkan data dengan mengkaji Kompetensi Dasar pada materi Teorema Pythagoras menjadi beberapa indikator pencapaian kompetensi, (3) menyusun desain perangkat pembelajaran, seperti RPP, soal *pretest*, soal *posttest*, dan lembar angket minat belajar siswa, (4) validasi desain produk yang telah dibuat, (5) melakukan revisi pada RPP dan lembar angket minat belajar siswa, dan (6) mengujicobakan desain produk sebanyak tiga kali pada siswa kelas VIII A dan VIII B di SMP Kanisius Bambanglipuro. Kedua, implementasi perangkat pembelajaran berbasis gamifikasi melalui *Wordwall* pada materi Teorema Pythagoras efektif untuk membangun minat belajar dan hasil belajar siswa. Keefektifan tersebut didasari oleh hasil tiga kriteria keefektifan pada penelitian ini, yaitu (1) 88,23% siswa memiliki minat belajar pada kategori minimal berminat sesudah mengikuti pembelajaran berbasis gamifikasi melalui *Wordwall*, (2) persentase jumlah siswa dengan nilai pengerjaan soal *Wordwall* yang tuntas KKM untuk pertemuan pertama adalah 79%, pertemuan kedua sebesar 76%, dan pada pertemuan ketiga sebesar 94%, dan (3) 88,24% siswa memperoleh nilai akhir (*posttest*) yang tuntas KKM dan persentase tersebut tergolong dalam kategori kecakapan akademik yang sangat baik.

**Kata kunci :** *Research and Development*, Gamifikasi, *Wordwall*, Minat Belajar, Hasil Belajar

**ABSTRACT**

**Christina Arum Pratiwi, 2021. *Development of Gamification-Based Learning Tools through Wordwall on Pythagorean Theorem Material to Build Student Interest and Learning Outcomes*. Thesis. Yogyakarta: Mathematics Education Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University.**

This study aims to describe (1) the process of developing gamification-based learning tools through Wordwall on the Pythagorean Theorem material as an innovation in mathematics learning to build interest in learning and student learning outcomes, and (2) the effectiveness of implementing gamification-based learning tools through Wordwall on the Pythagorean Theorem material. to build interest in learning and student learning outcomes.

This research uses Research and Development (R&D) which was developed by Sugiyono. The steps of this research include potentials and problems, collecting data, product design, design validation, product design revision, and product testing. The subjects of this study were 17 students of class VIII A and 17 students of class VIII B of SMP Kanisius Bambanglipuro for the 2019/2020 academic year. The data collection techniques for this research were validation of learning tools, distributing questionnaires, and administering tests that included pretest, posttest, and Wordwall questions.

The results of this study are first, the process of developing gamification-based learning tools through Wordwall consists of six stages, namely (1) interviews with mathematics subject teachers for class VIII SMP Kanisius Bambanglipuro to find potential and problems, (2) collect data by reviewing Basic Competencies in the Pythagorean Theorem material becomes several indicators of competency achievement, (3) composes the design of learning devices, such as lesson plans, pretest questions, posttest questions, and student learning interest questionnaire sheets, (4) validates product designs that have been made, (5) revises lesson plans and student learning interest questionnaires, and (6) tested the product design three times on class VIII A and VIII B students at Kanisius Bambanglipuro Junior High School. Second, the implementation of gamification-based learning tools through Wordwall on the Pythagorean Theorem material is effective for building interest in learning and student learning outcomes. The effectiveness is based on the results of the three effectiveness criteria in this study, namely (1) 88.23% of students have an interest in learning in the minimally interested category after participating in gamification-based learning through Wordwall, (2) the percentage of students with the value of completing the KKM on Wordwall questions. for the first meeting it was 79%, the second meeting was 76%, and at the third meeting it was 94%, and (3) 88.24% of students got the final score (posttest) that was completed KKM and the percentage was classified in the category of very good academic skills.

**Keywords :** Research and Development, Gamification, Wordwall, Interest in Learning, Learning Outcomes