

INTISARI

Pemilihan peserta lomba tingkat kecamatan di SDN 1 Ngolodono selama ini dilakukan berdasarkan penilaian subjektif guru dan kepala sekolah tanpa kriteria yang baku dan terdokumentasi, sehingga menimbulkan ketidakpuasan di kalangan wali murid dan siswa. Penelitian ini bertujuan untuk merancang dan menguji kelayakan Sistem Pendukung Keputusan (SPK) rekomendasi pemilihan peserta lomba tingkat kecamatan menggunakan metode *Simple Additive Weighting* (SAW) sebagai solusi atas permasalahan tersebut. Metode penelitian yang digunakan adalah mixed methods, menggabungkan pendekatan kualitatif melalui observasi dan wawancara dengan pendekatan kuantitatif melalui kuesioner dan perhitungan SAW. Analisis kebutuhan sistem dilakukan menggunakan analisis SWOT, sedangkan pengembangan sistem dilakukan dengan metode Rapid Application Development (RAD) berbasis website menggunakan *framework* Laravel dan database MySQL. Sistem dirancang untuk menghitung nilai preferensi setiap siswa berdasarkan kriteria nilai akademik, keaktifan, dan kedisiplinan, kemudian menghasilkan perankingan siswa secara otomatis, objektif, dan transparan. Hasil pengujian Black Box Testing terhadap 38 skenario pada 16 modul sistem menunjukkan bahwa seluruh fungsi berjalan sesuai kebutuhan dengan status "Berhasil". Hasil pengujian User Acceptance Test (UAT) menggunakan skala Likert memperoleh persentase sebesar 90,09% dengan kategori "Sangat Setuju", yang menunjukkan bahwa sistem yang dibangun layak digunakan dan diterima dengan baik oleh pengguna. Dengan demikian, penerapan metode SAW pada SPK berbasis website ini terbukti mampu membantu SDN 1 Ngolodono dalam menentukan peserta lomba secara lebih objektif, efektif, dan transparan.

Kata Kunci: Sistem Pendukung Keputusan, *Simple Additive Weighting*, Rapid Application Development, Pemilihan Peserta Lomba, Sekolah Dasar.

ABSTRACT

The selection of competition participants at the sub-district level in SDN 1 Ngolodono has been conducted based on the subjective judgment of teachers and the principal, without standardized and documented criteria, resulting in dissatisfaction among parents and students. This study aims to design and evaluate the feasibility of a Decision Support System (DSS) for recommend selecting sub-district competition participants using the Simple Additive Weighting (SAW) method as a solution to this problem. The research employed a mixed-methods approach, combining qualitative methods through observation and interviews with quantitative methods through questionnaires and SAW calculations. System requirements analysis was carried out using SWOT analysis, while the system was developed using the Rapid Application Development (RAD) method as a web-based application built with the Laravel framework and MySQL database. The system was designed to calculate each student's preference value based on academic scores, class participation, and attendance criteria, and to automatically generate an objective and transparent student ranking. Black Box Testing on 38 scenarios across 16 system modules showed that all functions performed as expected, with a "Successful" status. User Acceptance Test (UAT) results, measured using a Likert scale, obtained a percentage of 90.09%, categorized as "Strongly Agree," indicating that the developed system is feasible and well accepted by its users. These findings confirm that the implementation of the SAW method in this web-based DSS effectively helps SDN 1 Ngolodono select competition participants in a more objective, effective, and transparent manner.

Keywords: Decision Support System, Simple Additive Weighting, Rapid Application Development, Competition Participant Selection, Elementary School.