

ABSTRAK

RINI ADE OCTAVIANY. Pengembangan Sistem Informasi Manajemen Akademik Berbasis *Website* Sebagai Upaya Peningkatan Efektivitas Pengelolaan Akademik Sekolah. Pascasarjana Universitas Negeri Medan, 2024.

Penelitian ini bertujuan untuk (1) mengetahui kondisi faktual sistem informasi manajemen akademik yang sedang berjalan di SMA Negeri 9 Banda Aceh; (2) menemukan desain perancangan sistem informasi manajemen akademik berbasis *website*; (3) menguji tingkat validitas sistem informasi manajemen akademik berbasis *website*; (4) menguji penerapan sistem informasi manajemen akademik berbasis *website*; dan (5) menguji efektivitas implementasi sistem informasi manajemen akademik berbasis *website*. Penelitian ini menggunakan penelitian Research & Development (R&D) dengan pendekatan ADDIE (*Analysis, Design, Development, Implementation, and Evaluation*). Subjek penelitian sebanyak 258 orang peserta didik dan 54 orang guru di SMA Negeri 9 Banda Aceh dengan menggunakan teknik *proportionate stratified random sampling*. Teknik analisis data kualitatif dengan cara reduksi data, penyajian data, dan penarikan kesimpulan. Sedangkan data kuantitatif dengan uji validitas, reliabilitas, uji *system usability scale* (SUS), uji normalitas, uji *paired sample t-test*, dan uji N-Gain score. Hasil penelitian menunjukkan bahwa (1) kondisi faktual sistem manajemen akademik yang sedang berjalan di SMA Negeri 9 Banda Aceh yaitu penginputan data siswa, data guru, data mata pelajaran, data kelas, penjadwalan pelajaran, jurnal harian guru, pelaporan perangkat ajar dan bahan ajar masih dilakukan secara konvensional; (2) sistem informasi manajemen akademik berbasis *website* dirancang meliputi fitur manajemen data siswa dan guru, pendataan kelas dan mata pelajaran, penginputan jurnal harian guru, perangkat ajar, bahan ajar siswa, dan pengelolaan jadwal pelajaran; (3) kelayakan sistem informasi manajemen akademik berbasis *website* yang dikembangkan berada pada kategori sangat layak digunakan dengan hasil sebesar 90,29%. Instrumen yang digunakan juga valid digunakan sebagai alat ukur, dan reliabel atau konsisten dalam mengukur; (4) hasil *usability* pada uji coba terbatas memperoleh skor rata-rata SUS sebesar 76 dengan kategori *acceptable*, pada uji coba lapangan utama skor rata-rata SUS sebesar 72 dengan kategori *acceptable*, dan pada uji coba lapangan operasional skor rata-rata SUS sebesar 84 dengan kategori *acceptable*; dan (5) efektivitas implementasi sistem informasi manajemen akademik berbasis *website* menunjukkan cukup efektif dalam meningkatkan kegiatan pengelolaan akademik di SMA Negeri 9 Banda Aceh dilihat berdasarkan nilai N-Gain score sebesar 0,6568 berada pada kategori sedang, dan persentase sebesar 65,68%.

Kata Kunci: Sistem Informasi, Akademik, Efektivitas, Pengembangan

ABSTRACT

RINI ADE OCTAVIANY. Development of Academic Management Information System Based on *Website* as an Effort to Improve the Effectiveness of School Academic Management. Postgraduate School of State University of Medan, 2024.

This research aims to (1) determine the factual conditions of the academic management information system currently in operation at SMA Negeri 9 Banda Aceh; (2) devise the design of a web-based academic management information system; (3) test the validity of the web-based academic management information system; (4) test the implementation of the web-based academic management information system, and (5) assess the effectiveness of the implementation of the web-based academic management information system. This study employs the Research & Development (R&D) methodology with the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) approach. The research subjects are 258 students and 54 teachers at SMA Negeri 9 Banda Aceh, using the proportionate stratified random sampling technique. Qualitative data analysis involves data reduction, presentation, and conclusion drawing. In contrast, quantitative data analysis includes validity and reliability tests, system usability scale (SUS) tests, normality tests, paired sample t-tests, and N-Gain score tests. The results of the research indicate that (1) the factual condition of the academic management system currently in operation at SMA Negeri 9 Banda Aceh includes manual input of student data, teacher data, subject data, class data, lesson scheduling, teacher daily journals, and reporting of teaching aids and instructional materials; (2) the web-based academic management information system is designed to include features such as student and teacher data management, class and subject data collection, input of teacher daily journals, teaching aids, student instructional materials, and lesson scheduling management; (3) the feasibility of the developed web-based academic management information system falls into the highly feasible category with a result of 90.29%. The instruments used are also valid as measurement tools and reliable or consistent in measurement; (4) usability test results in limited trials obtained an average SUS score of 76 with an acceptable category; in the main field trial, the average SUS score was 72 with an acceptable category, and in the operational field trial, the average SUS score was 84 with an acceptable category; and (5) the effectiveness of the implementation of the web-based academic management information system shows that it is quite effective in improving academic management activities at SMA Negeri 9 Banda Aceh, as evidenced by an N-Gain score of 0.6568 in the moderate category and a percentage of 65.68%.

Keywords: Information System, Academic, Effectiveness, Development