Optimizing Student Information Management: A Holistic Examination of Implementation Strategies

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ABSTRACT: This study explores the implementation of a Student Information and Accounting System (SIAS) at Benguet State University with the aim of enhancing academic efficiency. A thorough analysis evaluates the impact of SIAS on educational processes, records management, and transaction processing, focusing on assessing its effectiveness in improving administrative and academic operations, streamlining student information management, and enhancing overall academic performance. The findings underscore the importance of transitioning to such a system to boost efficiency, reduce errors, and improve student services. Recommendations include integrating SIAS with the university's website, implementing security measures, and conducting regular evaluations to align the system with evolving institutional needs. This abstract underscores the significance of adopting an online Student Information System for improved management and service delivery at Benguet State University.

Keywords: Student Information and Accounting System, Benguet State University, Implementation, Administrative Operations, Records Management

INTRODUCTION

Student information and accounting systems in schools emphasize the necessity for tailored accounting systems, integration of intelligent technologies, and data-driven approaches to improve educational operations, financial management, and student information tracking. This literature review aligns with Sustainable Development Goal 4 (SDG 4), which aims to ensure quality education, lifelong learning, and inclusive educational facilities. It advocates for tailored accounting systems, technology integration, and data-driven strategies to enhance educational processes and infrastructure, aligning with SDG 4’s targets.

Student Information System (SIS) is a software tool that facilitates educational institutions in digitizing and efficiently managing student information. It centralizes student data, including personal details, academic records, attendance, and more, streamlining administrative tasks such as registration and grade reporting. Gopal (2023) emphasizes that
SIS improves efficiency by automating administrative tasks, allowing staff to focus on core activities like teaching.

In Indonesia, schools are urged to update management practices, including adopting school information systems like SIS, for efficient operations (Aminurrohman & Firdonsyah, 2021). Similarly, Benguet State University acquired the Student Information and Accounting Systems (SIAS) in pursuit of improved processes and aligning with its mission.

SIAS features include a filing system, management system, mathematical computation for fees, report generation, streamlining enrollment, grading, and administrative tasks. Electronic enrollment ensures accuracy and timely reporting of student transactions.

The literature review discusses SIAS implementation benefits, challenges, and stakeholder impacts, providing insights and recommendations. Researchers emphasize the importance of technology in improving educational systems, with SIAS positively impacting students' satisfaction and institutional efficiency.

Digital capital and effective information management enhance communication, transparency, and parent-school relationships. Government reports aid institutions in enhancing their systems and supporting student success through data-driven decision-making.

The Technology Acceptance Model (TAM) explains users' acceptance and use of technology based on perceived usefulness and ease of use. SIAS's automation in universities optimizes workflow, resource management, and transparency, aligning with digital transformation goals.

Learning Management Information Systems (LMIS) further enhances decision-making, data analysis, and organizational efficiency. They provide essential information for planning, evaluation, and continuous improvement in educational settings (Mtani & Mbelwa, 2022).

In the rapidly evolving landscape of education, the need for efficient and streamlined systems to manage student information and accounting has become increasingly important. The implementation of a Student Information and Accounting System (SIAS) is a potential solution to enhance the system and improve the procedure. This literature review aims to provide a comprehensive analysis of the SIAS implementation, its benefits, challenges, and the impact on the stakeholders. By examining case studies and best practices, this review seeks to offer insights and recommendations for successful SIAS implementation. The literature review covers various aspects, including system design, data management, user experience, security, and financial management. It also explores the potential impact of SIAS implementation on institutional efficiency. This literature review is an essential resource for educators, administrators, policymakers, and researchers interested in leveraging technology to improve administrative efficiency.
Overall, technological integration, tailored systems, and data-driven approaches are essential for improving educational processes, resource management, and decision-making in schools and universities.

Student Information and Accounting System (SIAS) desktop and web-based system produced by Digital Software Consultancy that offers universities, colleges, and private and government schools as an integrated registrar, cashiering, budget and accounting system (Paculaba, 2022). It is an online and offline or web-based platform for student and accounting information systems. In the Philippines, private and state universities and colleges use this platform. As of 2023, 124 schools used SIAS; in the Cagayan Valley Region 15 schools used this platform, in the Cordillera there are 25 schools, Isabela and Quirino province there are 14 schools, Nueva Vizcaya 4 schools, Central Luzon 3 schools, Ilocos Region 8 schools, Metro Manila 5 schools, Bicol Region 18 schools, Mindoro 2 schools, Negros Occidental and Iloilo 6 schools, Samar and Leyte 9 schools, Palawan 1 state university, and Mindanao there are 3 schools which use SIAS as there school platform for student and accounting system (Digisoftph, n.d.).

Hence, Benguet State University in La Trinidad, Benguet aimed to acquire a long-term, reliable, and secure Information Technology (IT) solution that automates the existing processes in the enrollment, accounting, and student information system. The university purchased a computerized technology and adopted the Student Information and Accounting Systems (SIAS) in April 2010. The acquisition and implementation of such a program are in pursuance of the institution’s mission of “imbuing people with excellence and social consciousness that actively generate and promote environment-friendly technologies that improve the quality of life (Ablaza et al). This is also in compliance with the Anti Red Tape Act of 2007 and the Ease of Doing Business where processes of the government are streamlined.

DISCUSSION

A student information system (SIS) is a software application for tracking and managing student data (Houston, 2021). School administrators use an SIS to store and analyze student performance data, and track attendance, contact information, and others. It is also known as student information management system (SIMS), student records system (SRS), student management system (SMS), campus management system (CMS), or school management system (SMS).

Some common functions of an SIS which handling the admissions process; enrolling new and continuing students; automatically creating class and teacher schedules; handling records of examinations, assessments, marks and grades, and academic progression, maintaining records of absences and attendance, providing statistical reports, accounting, and budgeting services.

According to Aman (2023), a SIS focuses on administrative tasks and student data management, such as enrollment, grade recording, and attendance tracking. On the other hand, an LMS is primarily designed to deliver and manage course content, track student progress in coursework, and facilitate online learning and collaboration. The most innovative educational institutions use fully integrated SIS and LMS to streamline processes and ensure
consistency across both platforms. These differences contribute to the unique strengths and capabilities of each school management software, allowing institutions to choose the one that best aligns with their specific requirements and preferences.

In Benguet State University, a student information system, called Student Information and Accounting System (SIAS) was purchased about thirteen (13) years ago (2010) to serve its purpose, that is, to automate the administration of student information and accounting processes. Included in this system are its modules and subsystems, which make the automation of storing and retrieving data possible. It includes registrar/enrollment, curriculum evaluation, performance, and class schedules. It also contains an accounting system that handles the students' financial transactions (Gumba et al., 2021). Modules (and its subsystems) refer to “a portion of a program that carries out a specific function and may be used alone or combined with other modules of the same program”.

Like in many institutions, administration at school has many levels and needs solid organization and structure to ensure effective provision of education. School management software is designed to make every day administrative tasks easier and faster. The software helps staff to take care of administration tasks simply and quickly, in ways that avoid overlap in tasks and improve efficiency. Using this software, administrative tasks can be completed on a web-based computerized system, instead of manually or on a desktop application that is not connected to a school-wide system.

CONCLUSIONS

The evaluated publications emphasized the importance of effectively utilizing education to enhance the Student Information and Accounting System (SIAS) not only improves employees’ knowledge and skills but also prepares them for the dynamic business environment and the evolving accounting profession. The study indicates that the inclusion of computerized accounting in education positively impacts student attendance, performance, and overall academic outcomes, demonstrating the significant benefits of incorporating technology-driven learning tools in educational settings.

RECOMMENDATIONS

Each University should identify how digitalization can support and enhance its services and operations. And most importantly, they should outline the specific actions and initiatives that each department needs to take to achieve the digital transformation goals. To create alignment, encourage different departments to maintain open communication, collaborate, and exchange feedback. University should share updates on their progress and challenges regularly, and the digital transformation team should be there to support and guide employees where necessary.

This indicates a comprehensive approach, considering various aspects related to student information management. It suggests that the research examines not only technical aspects but also organizational, procedural, and possibly even cultural factors that influence the implementation of student information systems.
This emphasizes the practical aspect focusing on strategies for implementing or improving student information systems. It suggests that the study investigates not only the theoretical aspects of student information management but also provides actionable insights into how to effectively implement or enhance these systems in real-world educational settings.

REFERENCES