The Effects of Basic Aid to the Student Grading and Progress Monitoring System for the Basic Education at St. Clare College of Caloocan

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ABSTRACT

The rapid advancement of technology has transformed the way educational institutions manage academic information and monitor student performance. Traditional methods of recording grades and tracking student progress often involve manual processes that can be time-consuming, prone to errors, and difficult for stakeholders to access. To address these challenges, St. Clare College of Caloocan implemented the Basic Aid Digital System, a web-based platform designed to support grading, attendance monitoring, and academic progress tracking. This study aimed to determine the effectiveness of the system in improving the management of student records and enhancing communication among teachers, students, and parents.

A quantitative correlational research design was employed in the study. Data were collected from 80 student respondents, 10 teachers, and parents or guardians of elementary learners through pre-survey and post-survey questionnaires. Statistical tools such as weighted mean, standard deviation, and Pearson correlation coefficient were utilized to analyze the gathered data. The findings revealed that the implementation of the Basic Aid Digital System contributed to improved efficiency in grading, easier access to academic records, and greater transparency in monitoring student performance. Results also showed a high level of satisfaction among users, particularly in terms of convenience, accessibility, and reliability. Furthermore, the statistical analysis indicated a strong positive relationship between the use of the system and the effectiveness of student grading and progress monitoring.

Based on the findings, the study concludes that the Basic Aid Digital System serves as a practical and reliable tool for academic management. Its implementation supports more efficient monitoring of student performance and strengthens collaboration among teachers, students, and parents.

Keywords: Basic Aid Digital System, Student Grading, Progress Monitoring, Educational Technology, Academic Management, Digital Records

INTRODUCTION AND LITERATURE REVIEW

Monitoring student performance is one of the most important responsibilities of educational institutions. Accurate records of grades, attendance, and academic progress enable schools to evaluate learning outcomes, identify areas that require improvement, and provide appropriate support to students. For many years, schools have relied on manual methods of recording and managing academic information. Although these traditional approaches have served their purpose, they often require a significant amount of time and effort from teachers and administrative personnel. The process of recording grades, preparing reports, and updating student records manually may also increase the possibility of errors, delays, and inconsistencies in information management.

As technology continues to become an integral part of education, schools are increasingly exploring digital solutions that can improve efficiency and accuracy in academic processes. The integration of information systems into educational settings has made it possible to automate routine tasks, organize records more effectively, and provide stakeholders with timely access to important information. Through digital platforms,

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teachers can manage academic records more efficiently, students can monitor their own performance, and parents can stay informed about their children's educational progress. These developments have contributed to the growing adoption of technology-based systems in schools worldwide.

Recognizing the need for a more efficient approach to academic monitoring, St. Clare College of Caloocan introduced the Basic Aid Digital System. The platform was developed to provide a centralized system for managing attendance records, grades, announcements, and student progress. Unlike traditional paper-based methods, the system allows authorized users to access academic information in real time. Teachers can update records more efficiently, students can review their academic standing whenever necessary, and parents can monitor their children's performance without waiting for quarterly reports or scheduled meetings. By providing faster access to information, the system aims to strengthen communication and collaboration among all stakeholders involved in the educational process.

This study focuses on evaluating the effectiveness of the Basic Aid Digital System in supporting student grading and progress monitoring within the Basic Education Department of St. Clare College of Caloocan. Specifically, it seeks to determine whether the system improves efficiency, accessibility, transparency, and overall user satisfaction. The study also examines the challenges encountered during implementation and identifies areas that may require further improvement.

The growing interest in digital academic management systems is supported by numerous local and international studies. Research on automated grading systems has consistently demonstrated their ability to reduce the workload of educators while improving the accuracy of academic records. Studies have shown that automated systems minimize computational errors and shorten the time required to process grades, allowing teachers to focus more on instruction and student development. The use of technology in grading has also contributed to greater consistency in assessment practices, resulting in more reliable academic records.

Similarly, studies on digital progress monitoring have emphasized the value of real-time access to academic information. Educational researchers have found that students perform better when they are able to monitor their progress regularly and receive timely feedback regarding their academic standing. Digital monitoring systems allow educators to identify learning difficulties at an earlier stage and provide appropriate interventions before academic problems become more serious. These systems also promote accountability among students by encouraging them to take a more active role in their learning.

Another significant development in educational technology is the adoption of cloud-based information systems. Modern student information systems allow academic records to be stored securely while remaining accessible to authorized users from different locations. This feature is particularly beneficial for parents who may not always have the opportunity to visit schools due to work or personal responsibilities. By providing convenient access to grades, attendance records, and school announcements, digital platforms strengthen the connection between schools and families and encourage greater parental involvement in student learning.

Despite the advantages associated with digital systems, several challenges remain. Researchers have identified issues such as internet connectivity limitations, insufficient technological resources, and varying levels of digital literacy among users. Some stakeholders may require additional training to fully utilize the features of newly implemented systems. Moreover, institutions must ensure that adequate technical support and system maintenance are available to sustain long-term effectiveness. These concerns highlight the importance of proper planning, continuous improvement, and stakeholder participation during system implementation.

The literature reviewed in this study suggests that digital grading and monitoring systems can significantly improve educational management by increasing efficiency, transparency, and accessibility. The findings of previous studies provide a strong foundation for evaluating the effectiveness of the Basic Aid Digital System. By examining its implementation within the Basic Education Department of St. Clare College of Caloocan, this study contributes to the growing body of knowledge on the use of educational technology in academic monitoring and management. Ultimately, the research seeks to determine how digital innovation can support better educational outcomes and strengthen collaboration among teachers, students, and parents.

METHODOLOGY

This study utilized a quantitative correlational research design to assess the effectiveness of the Basic Aid Digital System in student grading and progress monitoring within the Basic Education Department of St. Clare College of Caloocan. The researchers selected this approach because it allows for the collection and analysis of numerical data, making it possible to examine the relationship between the implementation of the system and its impact on academic monitoring practices. Through this design, the study was able to determine whether the use of the system contributed to improvements in grading efficiency, accessibility of records, and overall monitoring of student performance.

The participants of the study consisted of students, teachers, and parents or guardians from the Basic Education Department during the School Year 2025–2026. A total of 90 respondents participated in the study, including 80 students and 10 teachers. For learners in the elementary level, parents or guardians answered the survey questionnaire on their behalf to ensure that responses accurately reflected their experiences and observations. The inclusion of different stakeholder groups provided a broader perspective regarding the implementation and effectiveness of the system.

To ensure fair representation among respondents, the researchers employed stratified random sampling using the fishbowl technique. The population was grouped according to grade levels, and participants were selected proportionally from each group. This sampling method was chosen because it minimizes bias and ensures that every subgroup within the population is adequately represented, resulting in more reliable and balanced findings.

Data were gathered through a researcher-made questionnaire designed specifically for the objectives of the study. The instrument consisted of demographic questions and evaluation statements focusing on grading efficiency, accessibility of information, transparency of records, user satisfaction, and system usability. Responses were measured using a four-point Likert scale ranging from Strongly Disagree to Strongly Agree. The absence of a neutral option encouraged respondents to provide a clear opinion regarding each statement.

The development of the Basic Aid Digital System followed the Iterative and Incremental Agile Software Development Life Cycle model. The process began with planning and requirements gathering, followed by system design, development, testing, deployment, and maintenance. Throughout each phase, feedback from teachers, students, and parents was collected and considered to ensure that the system addressed the actual needs of its users. This continuous improvement approach allowed the researchers to refine system features and enhance usability before final implementation.

Before conducting the survey, approval was obtained from the school administration and informed consent was secured from all participants. The questionnaires were distributed personally by the researchers and were collected after completion. The gathered data were encoded, organized, and analyzed using statistical tools such as frequency, percentage, weighted mean, standard deviation, and Pearson Product-Moment Correlation Coefficient. These statistical measures enabled the researchers to evaluate respondents' perceptions and determine the relationship between the implementation of the Basic Aid Digital System and the effectiveness of student grading and progress monitoring.

RESULTS AND DISCUSSION

The findings of the study indicate that the implementation of the Basic Aid Digital System had a positive impact on the grading and progress monitoring practices of the Basic Education Department. Prior to the implementation of the system, respondents were asked to evaluate their expectations regarding the proposed platform. The pre-survey results revealed an overall favorable perception toward the adoption of a digital monitoring system. Students obtained an average weighted mean of 3.30, interpreted as Agree, while teachers recorded a higher weighted mean of 3.63, interpreted as Strongly Agree. Parents also expressed positive expectations with a weighted mean of 3.10. The overall grand weighted mean of 3.34 suggests that stakeholders recognized the potential benefits of transitioning from a manual process to a digital platform.

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The results show that students believed real-time access to grades and attendance records would help them become more aware of their academic standing and encourage them to take greater responsibility for their studies. Teachers viewed the system as a valuable tool for reducing the time required for grade computation, organizing records, and generating academic reports. Parents, on the other hand, expressed optimism that the system would provide quicker access to academic information and strengthen communication between the school and home. These findings indicate that all stakeholder groups shared a common expectation that the system would improve academic monitoring and information accessibility.

Following the deployment of the Basic Aid Digital System, respondents were asked to evaluate their actual experiences using the platform. The post-survey findings revealed an improvement in overall satisfaction and perceived effectiveness. Students reported a weighted mean of 3.54, indicating strong agreement that the system helped them monitor their academic progress more effectively. Teachers maintained a high level of satisfaction with a weighted mean of 3.63, reflecting their appreciation for the efficiency and convenience provided by the system. Parents also showed increased satisfaction, obtaining a weighted mean of 3.26. The overall grand weighted mean increased to 3.48, which falls under the Strongly Agree category.

The increase in scores from the pre-survey to the post-survey suggests that the system successfully met many of the expectations of its users. Students found it easier to keep track of grades, attendance records, and academic performance. Teachers benefited from automated record management and reduced administrative workload, allowing them to focus more on instructional responsibilities. Parents appreciated the opportunity to monitor their children's progress without having to wait for periodic report cards or school meetings.

To further determine the effectiveness of the system, the researchers conducted a Pearson correlation analysis. The results revealed a strong positive relationship between the implementation of the Basic Aid Digital System and the effectiveness of student grading and progress monitoring. This finding indicates that improvements in academic monitoring were closely associated with the use of the digital platform. The statistical evidence supports the conclusion that the system contributes significantly to improving educational management and information accessibility.

Despite the positive outcomes, respondents identified several challenges during implementation. Some users experienced difficulties related to internet connectivity, while others required additional guidance in navigating certain system features. Parents, particularly those who were less familiar with technology, expressed the need for proper orientation and training to maximize the benefits of the platform. These concerns highlight the importance of continuous technical support, user education, and regular system maintenance to ensure long-term effectiveness.

Overall, the results demonstrate that the Basic Aid Digital System serves as a practical and effective solution for academic record management and student monitoring. The findings reinforce the growing body of research supporting the use of digital technologies in educational institutions to improve efficiency, transparency, and stakeholder engagement.

CONCLUSION

The findings of this study demonstrate that the Basic Aid Digital System is an effective platform for enhancing student grading and progress monitoring within the Basic Education Department of St. Clare College of Caloocan. The implementation of the system addressed several limitations associated with traditional paper-based processes, particularly in terms of efficiency, accessibility, and record management. By providing a centralized digital platform, the system enabled users to access academic information more conveniently and accurately.

The results revealed that students, teachers, and parents responded positively to the implementation of the system. Students appreciated the ability to monitor their academic performance regularly, which encouraged greater awareness and responsibility toward their studies. Teachers benefited from a more efficient method of managing grades, attendance records, and reports, reducing the administrative burden commonly associated

with manual processes. Parents also gained easier access to their children's academic information, allowing them to become more actively involved in monitoring educational progress.

The improvement observed between the pre-survey and post-survey results suggests that the system successfully met the expectations of its users. The increase in overall satisfaction demonstrates that stakeholders recognized the value of having immediate access to academic information and a more organized method of monitoring student performance. Furthermore, the correlation analysis confirmed that the implementation of the system was significantly associated with improvements in grading and progress monitoring practices.

Although several challenges were encountered during implementation, including internet connectivity concerns and varying levels of technological familiarity among users, these issues were not substantial enough to outweigh the benefits provided by the system. With appropriate training, technical support, and continuous enhancement, these challenges can be effectively addressed to ensure sustained system performance and user satisfaction.

In conclusion, the Basic Aid Digital System represents a meaningful contribution to the modernization of academic management processes. The study supports the continued use and further development of digital monitoring systems as effective tools for improving efficiency, transparency, and communication within educational institutions. As schools continue to adapt to technological advancements, systems such as Basic Aid can play an important role in promoting better educational outcomes and stronger collaboration among teachers, students, and parents.

REFERENCES

1. Alruwais, N., Wills, G., & Wald, M. (2020). Advantages and challenges of automated grading systems in education. International Journal of Advanced Computer Science and Applications, 11(2), 45–53.
2. Anderson, P., Williams, R., & Thomas, J. (2023). Data-driven decision-making in educational institutions through learning analytics. Educational Technology Research and Development, 71(1), 120–135.
3. Bai, X., Zhang, Y., & Li, H. (2021). Artificial intelligence-assisted grading systems and academic assessment. Computers and Education, 168, 104–118.
4. Johnson, M., Smith, A., & Brown, K. (2021). Digital grading platforms and academic efficiency in higher education. Journal of Educational Technology Systems, 49(3), 289–304.
5. Kim, S., Park, J., & Lee, H. (2020). Cloud-based student information systems for educational management. International Journal of Educational Management, 34(5), 802–817.
6. Martinez, L., Gomez, R., & Cruz, P. (2022). Web-based academic monitoring systems and student performance tracking. Journal of Learning Analytics, 9(2), 55–72.
7. Morales, A., Santos, M., & Reyes, J. (2023). Challenges in implementing educational technologies in developing countries. Philippine Journal of Information Technology, 15(1), 21–36.
8. Nguyen, T., Pham, D., & Tran, H. (2022). Learning analytics and early intervention systems for student success. Educational Data Science Review, 6(1), 33–49.
9. Torres, R., Dela Cruz, J., & Mendoza, P. (2021). Factors affecting the adoption of school information systems in Philippine educational institutions. Asia Pacific Journal of Education, 41(4), 612–628.