

# School Head's Innovative Management of Academic Records on the Educational Institution's Operations

Edralyn Jamora Bigcas

Laguna State Polytechnic University Sta. Cruz Laguna 4009 PHILIPPINES

Email address: edralynbigcas@gmail.com

**Abstract**—The study examined the relationship between school heads' innovative management of academic records and the operational performance of educational institutions. Specifically, it aimed to determine the level of implementation of school heads' management of academic records. It also sought to assess the level of operations at educational institutions, among teachers, and among students. Lastly, it also tested the significant relationship of school heads' innovative management of academic records on the different educational operations. The study employed a descriptive quantitative correlational research design. Data were gathered through structured survey questionnaires administered to teachers from public secondary schools within the Division of Santa Rosa City. Statistical tools, including the mean, standard deviation, and Pearson Product-Moment Correlation, were used to assess the level of implementation and determine the significance of relationships among variables. Findings revealed that innovative management practices in academic record systems were generally implemented across institutions. Similarly, institutional operations were positively perceived in terms of assessment fairness, accessibility, and support services. The results further indicated statistically significant, moderate-to-strong positive correlations between innovation management and institutional operational performance. This implied that higher levels of digitalization, automation, data integration, and security measures were associated with improved efficiency, transparency, and responsiveness in school operations. The study established that innovative academic record management significantly contributed to enhancing institutional effectiveness in different operations. The study established that school heads' innovative management of academic records plays a significant role in enhancing the operational performance of educational institutions that leads to rejection of the Hypotheses. This concludes that higher levels of digitalization, automation, data integration, and security measures are associated with improved efficiency, transparency, and responsiveness in school operations. Further, it is recommended that the school leaders may sustain and strengthen the innovation initiatives and technological infrastructure for essential promotion of effective institutional management and ensuring quality educational service delivery.

**Keywords**— School Heads' Management, Innovation, Academic Records, Innovation Practices, Digitalization.

## I. INTRODUCTION

Educational leadership plays a vital role in ensuring school effectiveness and institutional performance, particularly in the context of rapidly changing educational demands. In the 21st century, the role of school heads has expanded from traditional administrative supervision to include innovation, strategic management, and data-driven decision-making. As emphasized by Leithwood et al. (2020), leadership is second only to classroom instruction in influencing student learning

outcomes. This highlights the critical responsibility of school heads in managing institutional processes effectively. Leadership that fosters innovation and continuous improvement not only strengthens administrative systems but also enhances teacher performance and student achievement.

The transition of academic record management from paper-based to digital systems underscores the need for innovative leadership. Countries such as Finland, Singapore, and South Korea demonstrate how integrated information systems can improve efficiency, transparency, and evidence-based decision-making in schools, as supported by the Organization for Economic Co-operation and Development (2020). These developments highlight that effective school leadership involves not only managing operations but also embracing technological advancements. Fullan (2020) notes that leadership requires the ability to respond to complex challenges and drive meaningful change. In this context, the adoption of digital systems in academic record accountability in school operations.

Innovative leadership also plays a crucial role in improving institutional efficiency by integrating digital tools into the management of academic records. According to Bush (2020), effective leadership combines managerial competence with visionary thinking and the ability to harness innovation. Digital systems, such as automated grading and data analytics, allow school heads to monitor student performance, support instructional planning, and reduce administrative workload. In the Philippine setting, the Department of Education, guided by Republic Act No. 9155, mandates school heads to ensure efficient school operations, including reliable academic record management. Studies have shown that schools adopting digital record systems experience improved efficiency, enhanced collaboration, and more accurate data management, contributing to better decision-making and accountability.

Given these developments, it is essential to examine how school heads use innovative strategies to manage academic records and how these practices influence overall school operations. Effective leadership in this area requires adaptability, technological competence, and a commitment to continuous improvement.

The integration of digital record management systems strengthens institutional performance by promoting transparency, supporting data-driven governance, and improving service delivery to stakeholders. Hence, the study on School Heads' Innovative Management of Academic Records on Educational Institution Operations seeks to explore how innovation-driven leadership contributes to

operational efficiency and the overall quality of education in the digital era.

*1.1 Statement of the Problem*

*Problem/s which were addressed by the research*

This study examined the School Heads' Innovative Management of Academic Records and its relationship to the Educational Institution's Operations.

Specifically, it sought to answer the following sub-problems:

1. What is the level of Schools' Innovation Management of Academic Records in terms of:
  - 1.1 Digitization;
  - 1.2 cloudbase storage;
  - 1.3 automated workflows;
  - 1.4 information retrieval;
  - 1.5 blockchain technology
  - 1.6 data analytics and artificial intelligence; and
  - 1.7 standard and security?
2. What is the level of Educational Institution Operations of the Institution as to:
  - 2.1 Operational Efficiency;
  - 2.2 accuracy; and
  - 2.3 transparency?
3. What is the level of Educational Institution Operation of Teachers as to:
  - 3.1. Reduce Workload;
  - 3.2. ease of monitoring; and
  - 3.2. data-driven decision?
4. What is the level of Educational Institution Operation of Students as to:
  - 4.1. Fair and accurate assessment;
  - 4.2. improve access; and
  - 4.3. better support services?
5. Is there a significant relationship between the Schools' Innovation Management of Academic Records and Educational Institution Operations?
6. Is there a significant relationship between the Schools' Innovation Management of Academic Records and Educational Institution Operations of Teachers?
7. Is there a significant relationship between the Schools' Innovation Management of Academic Records and Educational Institution Operations of Students?

II. METHODOLOGY

The study employed a descriptive quantitative correlational research design. Data were gathered through structured survey questionnaires administered to teachers from public secondary schools within the Division of Santa Rosa City. Statistical tools, including the mean, standard deviation, and Pearson Product-Moment Correlation, were used to assess the level of implementation and determine the significance of relationships among variables.

III. RESULTS AND DISCUSSION

This chapter presents, analyzes, and interprets data gathered from teachers on the innovative management of academic records and their relationship to the operational

performance of educational institutions. The results were organized according to the study's specific objectives and research questions to provide a clear understanding of the levels of innovation and institutional operations. Furthermore, the findings were discussed in relation to existing literature and studies to highlight patterns, implications, and areas for improvement.

*Level of Schools' Innovation Management of Academic Records*

The following table shows the statement, mean, standard deviation, remarks, and verbal interpretation. This includes key dimensions such as digitization, cloud-based storage, automated workflows, information retrieval systems, data analytics, and adherence to standards and security protocols. Assessing this level is essential in determining how effectively schools transition from traditional record-keeping methods to more efficient, accurate, and transparent digital systems. It also provides insights into school heads' capacity to lead and sustain innovation in administrative processes, which, in turn, influences overall institutional performance. The following table presents the statements, mean scores, standard deviations, corresponding remarks, and verbal interpretations to describe the level of innovation in academic records management in schools.

Table 1 presents the level of school heads' innovative management of

Table 1. Level of Schools' Innovation Management of Academic Records in terms of Digitization

Statements	Mean	SD	Remarks
The school systematically converts paper-based academic records into digital formats.	5.22	1.25	Frequently Observed
Digital record-keeping has improved the accessibility and efficiency of academic data management.	5.07	1.45	Frequently Observed
The school provides the necessary tools and resources for digitizing academic records.	5.01	1.38	Frequently Observed
Staff are well-trained to handle digitized academic records effectively.	5.04	1.34	Frequently Observed
Digitization has reduced errors and redundancy in record management.	5.16	1.34	Frequently Observed
Weighted Mean		5.10	
SD		1.33	
Verbal Interpretation			Very High

With an overall weighted mean of 5.10 (SD = 1.33), verbally interpreted as Frequently Observed. Among the indicators, the statement "The school systematically converts paper-based academic records into digital formats" had the highest mean of 5.22 (SD = 1.25), suggesting that schools have established structured processes for digitizing records, although variability in responses indicates inconsistent implementation across respondents. This was followed by "Digitization has reduced errors and redundancy in record management" with a mean of 5.16 (SD = 1.34), indicating that respondents generally perceive digital systems as improving record accuracy and efficiency, though the moderate standard deviation reflects varying experiences. Meanwhile, "Digital record-keeping has improved accessibility and efficiency of academic data management" posted a mean of 5.07 (SD =

1.45), and “Staff is well-trained to handle digitized academic records effectively” had a mean of 5.04 (SD = 1.34), implying that while improvements in accessibility and staff capability are evident, there remain gaps in training and system optimization. Lastly, “The school provides necessary tools and resources for digitizing academic records” received the lowest mean of 5.01 (SD = 1.38), indicating that although resources are available, they may not yet be fully sufficient or uniformly distributed. The standard deviations across all indicators, ranging from 1.25 to 1.45, suggest moderate variability, reflecting differences in digital readiness and implementation effectiveness among schools.

The findings indicate that school heads demonstrate a moderate level of innovation in managing academic records through digitization, driven by the ongoing transition from traditional to digital systems. While schools have initiated systematic digitization processes and recognize its benefits in improving efficiency and reducing errors, the moderate level of implementation suggests that full integration has not yet been achieved. Variations in staff training, resource availability, and the accessibility of digital systems highlight areas that require strategic leadership, continuous professional development, and infrastructure enhancement. This implies that school heads play a critical role in strengthening institutional operations through innovation, but sustained investments in digital capacity, technical support, and staff readiness are necessary to achieve higher levels of efficiency, accuracy, and operational effectiveness. Ultimately, strengthening digitized academic record management can enhance institutional decision-making, accountability, and service delivery, thereby improving overall educational operations.

Table 2. Level of Schools’ Innovation Management of Academic Records in terms of Cloud base Storage

Statements	Mean	SD	Remarks
The school uses secure cloud storage for maintaining academic records.	5.00	1.65	Moderately Implemented
Cloud-based systems allow real-time access to records for authorized personnel	5.00	1.65	Moderately Implemented
Data stored in the cloud is regularly backed up to prevent data loss.	4.40	1.65	Moderately Implemented
Cloud storage solutions have improved collaboration among administrative staff.	5.03	1.65	Moderately Implemented
The school ensures compliance with data privacy policies in using cloud services.	4.70	1.71	Moderately Implemented
Weighted Mean		4.57	
SD		1.65	
Verbal Interpretation		High	

Table 2 presents the level of school heads’ innovative management of academic records through cloud-based storage, with an overall weighted mean of 4.57 (SD = 1.65), interpreted as Moderately Implemented. Among the indicators, “Cloud storage solutions have improved collaboration among administrative staff” obtained the highest mean of 5.03 (SD = 1.65), indicating that cloud-based systems have contributed positively to enhancing coordination and workflow efficiency among school personnel. With a mean of 5.00 (SD = 1.65), this was followed by "The school uses

secure cloud storage for maintaining academic records" and "Cloud-based systems allow real-time access to records for authorized personnel, suggesting that schools recognize the importance of secure and accessible digital storage, although implementation may vary across institutions. Meanwhile, “The school ensures compliance with data privacy policies in using cloud services” obtained a mean of 4.70 (SD = 1.71), reflecting moderate adherence to data privacy standards, with relatively higher variability indicating differences in policy enforcement and awareness. The lowest mean was observed in “Data stored in the cloud is regularly backed up to prevent data loss” (Mean = 4.40, SD = 1.65), suggesting that backup procedures may not yet be fully systematic or consistently practiced. The standard deviations, ranging from 1.65 to 1.71, indicate moderate variability in responses, reflecting differences in cloud storage infrastructure, technical support, and implementation practices among schools.

Overall, the findings indicate that school heads moderately implement cloud-based storage systems as part of their innovative management of academic records. The results suggest that cloud technology has contributed to improved collaboration, accessibility, and secure storage of academic data, supporting more efficient institutional operations. However, the moderate level of implementation also reveals challenges related to consistent backup procedures, full compliance with data privacy standards, and the uniform adoption of cloud systems across schools. These findings highlight the critical role of school heads in strengthening digital infrastructure, enforcing data protection policies, and promoting systematic cloud storage practices. Enhancing training, improving technological resources, and ensuring consistent backup and security measures are essential steps toward maximizing the benefits of cloud-based systems. Strengthened cloud storage implementation can enhance data security, operational efficiency, and institutional responsiveness, ultimately improving the overall management and effectiveness of educational institutions.

Table 3. Level of Schools’ Innovation Management of Academic Records in terms of Automated Workflows

Statements	Mean	SD	Remarks
Routine record management tasks are automated in the system.	5.04	1.64	Moderately Implemented
Automation has reduced manual workload and increased operational efficiency	5.00	1.54	Moderately Implemented
The automated system provides timely notifications and updates for record-related tasks.	5.02	1.64	Moderately Implemented
Errors in record processing have decreased due to automation.	5.00	1.65	Moderately Implemented
The school continually updates its automated systems for optimal performance.	5.00	1.58	Moderately Implemented
Weighted Mean		6.64	
SD		1.60	
Verbal Interpretation		High	

Table 3 displays the level of school heads’ innovative management of academic records through automated workflows, with an overall weighted mean of 5.01 and a

standard deviation of 1.60, interpreted as Moderately Implemented. Among the indicators, "Routine tasks related to record management are automated in the system" obtained the highest mean of 5.04 (SD = 1.64), indicating that schools have moderately adopted automation to streamline routine record management processes. This was followed by "The automated system provides timely notifications and updates for record-related tasks," with a mean of 5.02 (SD = 1.64), suggesting that automated systems facilitate timely communication and improved coordination. In the interim, the average score for "Automation has reduced manual workload and increased operational efficiency," "Errors in record processing have decreased due to automation," and "The school continually updates its automated systems for optimal performance" was 5.00, with standard deviations of 1.54, 1.65, and 1.58, respectively. These findings indicate that automation moderately supports efficiency, accuracy, and system performance, although variability in responses suggests differences in system effectiveness, technological infrastructure, and staff familiarity across schools.

Overall, the findings indicate that automated workflows are moderately implemented as part of school heads' innovative management of academic records. The results suggest that automation has improved operational efficiency, reduced manual workload, minimized errors, and enhanced the timeliness of record-related processes. However, the moderate level of implementation indicates that automation systems may not yet be fully optimized or consistently utilized across schools. This highlights the need for continuous system upgrades, technical support, and staff training to ensure effective utilization of automated systems. School heads play a critical role in promoting automation by investing in technological infrastructure and ensuring proper system maintenance. Strengthening automated workflows can improve institutional efficiency, accuracy, and responsiveness, ultimately enhancing overall educational operations and administrative effectiveness.

*Level of Schools' Innovation Management of Academic Records in terms of Information Retrieval*

Table 4 shows the level of school heads' innovative management of academic records in information retrieval, with an overall weighted mean of 4.76

With an overall weighted mean of 4.76 and a standard deviation of 1.56, interpreted as Moderately Implemented. Among the indicators, "Academic records can be retrieved quickly and accurately when needed" obtained the highest mean of 4.86 (SD = 1.62), indicating that retrieval systems moderately support timely and accurate access to academic records. This was followed by "The retrieval system supports multiple search filters for efficient data access" with a mean of 4.82 (SD = 1.62), suggesting that retrieval systems provide functional search features that enhance accessibility. The average score for the statements that "retrieval procedures are standardized and user-friendly" and "staff can easily navigate the system to locate specific student or academic records" was 4.72 (SD = 1.56) and 4.71 (SD = 1.52), respectively, indicating that while systems are generally

usable, there are still areas for improvement in system design and user training. The lowest mean was observed for "The retrieval process minimizes downtime and supports decision-making," with a score of 4.67 (SD = 1.53), suggesting that retrieval systems moderately support administrative decision-making but may still experience occasional inefficiencies or delays. The standard deviations ranging from 1.52 to 1.62 indicate moderate variability in responses, reflecting differences in system efficiency, accessibility, and staff proficiency across schools.

Table 4. Level of Schools' Innovation Management of Academic Records in terms of Information Retrieval

Statements	Mean	SD	Remarks
Academic records can be retrieved quickly and accurately when needed.	4.86	1.62	Moderately Implemented
The retrieval system supports multiple search filters for efficient data access.	4.82	1.62	Moderately Implemented
Staff can easily navigate the system to locate specific student or academic records.	4.71	1.52	Moderately Implemented
Retrieval procedures are standardized and user-friendly.	4.72	1.56	Moderately Implemented
The retrieval process minimizes downtime and supports decision-making.	4.67	1.53	Moderately Implemented
Weighted Mean			4.76
SD			1.56
Verbal Interpretation			High

Overall, the findings indicate that information retrieval systems are moderately implemented in the innovative management of academic records among school heads. The results suggest that retrieval systems support accessibility, efficiency, and usability, enabling school personnel to access academic data when needed. However, the moderate level of implementation suggests that retrieval systems may not yet be fully optimized for speed, usability, and reliability. This highlights the need for continuous system enhancements, staff training, and improvements to technological infrastructure. Strengthening information retrieval systems can significantly enhance administrative efficiency, support data-driven decision-making, and improve overall institutional operations. Effective retrieval systems are essential components of innovative academic record management, enabling school heads to perform their administrative functions more efficiently and accurately.

*Level of Schools' Innovation Management of Academic Records in terms of Blockchain Technology*

A study by Alammary et al. (2019) found that blockchain technology has significant potential to transform academic records management by providing secure, tamper-proof, and verifiable digital records. The study emphasized that blockchain enhances transparency, prevents unauthorized alterations, and ensures the authenticity of academic credentials. However, the researchers noted that many educational institutions remain in the early stages of adoption due to limited technical expertise and infrastructure. This supports the present study's findings that blockchain technology is implemented but not yet fully explored, as reflected in the moderate mean scores.

Table 5. Level of Schools' Innovation Management of Academic Records in terms of Blockchain Technology

Statements	Mean	SD	Remarks
The school explores blockchain technology to ensure the authenticity of academic records.	3.94	1.90	Implemented
Blockchain provides a secure, tamper-proof record-keeping system.	4.11	1.89	Implemented
Staff have a basic understanding of how blockchain enhances record integrity.	4.04	1.88	Implemented
Blockchain-based solutions prevent unauthorized modification of records.	4.11	1.88	Implemented
The school is open to adopting blockchain for future innovations in record management.	4.31	1.90	Moderately Implemented
Weighted Mean	4.11		
SD	1.88		
Verbal Interpretation	Moderately High		

It can be gleaned from Table 5 that the level of school heads' innovative management of academic records using blockchain technology, with an overall weighted mean of 4.11 and a standard deviation of 1.88, is interpreted as Implemented. Among the indicators, "The school is open to adopting blockchain for future record management innovations" had the highest mean of 4.31 (SD = 1.90), indicating that schools demonstrate a moderate level of openness to integrating blockchain technology into future academic records management. This suggests a growing awareness among school heads of the potential benefits of blockchain technology. Meanwhile, "Blockchain provides a secure and tamper-proof record management system" and "Blockchain-based solutions prevent unauthorized modification of records" both obtained a mean of 4.11, with standard deviations of 1.89 and 1.88, respectively, indicating that respondents recognize blockchain's capability to enhance record security and integrity. Similarly, "Staff have a basic understanding of how blockchain enhances record integrity" obtained a mean of 4.04 (SD = 1.88), suggesting that staff possess a foundational awareness of blockchain technology, although deeper technical knowledge may still be limited. The lowest mean was observed in "The school explores blockchain technology to ensure the authenticity of academic records," with a mean of 3.94 (SD = 1.90), indicating that while blockchain exploration has begun, its practical application remains in the early stages. The relatively high standard deviations, ranging from 1.88 to 1.90, indicate variability in awareness, readiness, and implementation levels across schools

Overall, the findings indicate that blockchain technology is implemented at a basic level in the innovative management of academic records, reflecting an emerging but not yet fully developed technological innovation among schools. While school heads recognize the potential of blockchain technology to enhance security, prevent unauthorized modifications, and ensure record authenticity, its actual adoption remains limited. The openness to adopting blockchain in the future suggests a positive institutional readiness for innovation, but gaps in technical knowledge, infrastructure, and system integration remain. These findings highlight the importance of increasing awareness, providing training, and strengthening technological capacity to support blockchain integration. As an emerging

technology, blockchain has strong potential to enhance transparency, security, and trust in academic record management, thereby improving institutional operations and strengthening school heads' roles in promoting innovative administrative practices.

Table 6. Level of Schools' Innovation Management of Academic Records in terms of Data Analytics and Artificial Intelligence

Statements	Mean	SD	Remarks
Data analytics tools are used to monitor and improve record management efficiency.	4.42	1.78	Implemented
AI-based systems help predict trends and needs in academic record processing.	4.03	1.79	Implemented
Data-driven insights help school leaders make informed decisions.	4.68	1.73	Moderately Implemented
The school uses AI to detect inconsistencies or errors in records.	3.91	1.79	Implemented
Staff receive training on using data analytics tools for better management.	4.19	1.82	Implemented
Weighted Mean	4.25		
SD	1.77		
Verbal Interpretation	Moderately High		

Table 6 shows that school heads have largely implemented practices involving data analytics and artificial intelligence (AI) to improve the management of academic records. Respondents reported high mean scores for the use of data analytics tools to monitor and improve record management efficiency (M = 4.42, SD = 1.78) and staff training on data analytics (M = 4.19, SD = 1.82), indicating consistent application of these strategies. AI-based systems that assist in predicting trends and the schools' use of AI for detecting errors in records yielded moderately high means (M = 4.03, SD = 1.79, and M = 3.91, SD = 1.79, respectively), showing that these practices are implemented but with some variation in perception or consistency. The highest mean was for data-driven decision making (M = 4.68, SD = 1.73), rated "Moderately Implemented," suggesting that school leaders increasingly rely on analytics to guide operational decisions. The overall weighted mean of 4.25 (SD = 1.77) indicates that schools are collectively implementing data analytics and AI in academic record management, although there remains room for deeper integration and greater systemic consistency.

The findings reveal a strong inclination toward innovative strategies that enhance academic record operations through both data analytics and AI. School heads are effectively leveraging analytics tools, as reflected by the high mean scores in efficiency monitoring and staff training, signaling an understanding of their value in promoting accuracy and performance. The slightly lower mean scores for AI applications, particularly trend prediction and error detection, highlight that while AI systems are present, they may still be emerging or unevenly adopted across institutions. The relatively high reliance on data-driven insights suggests that data interpretation, more than technology itself, currently drives operational decision making. Overall, the results point to a progressive but evolving implementation of data analytics and AI in academic record management, emphasizing a strategic but cautious adoption of advanced technology.

It is evident that academic record management innovation in schools is anchored more strongly in practical data analytics tools and human-centered interpretations than in fully automated AI functions. School heads appear confident in using analytics to inform decisions and empower staff, reflecting organizational readiness. However, AI’s predictive and diagnostic capabilities are used only moderately, suggesting potential barriers such as limited infrastructure, technical expertise, or budget constraints. The data collectively suggests that schools are moving beyond basic record keeping toward more sophisticated, analytics-informed operations, but have not yet fully maximized the potential of AI systems. This mixed but positively trending pattern underscores a transitional phase in which data literacy and human facilitation remain central forces in academic record innovation.

Table 7. Level of Schools’ Innovation Management of Academic Records in terms of Standard and Security

Statements	Mean	SD	Remarks
The school follows established standards in managing academic records.	4.95	1.48	Moderately Implemented
Access to academic records is limited to authorized personnel only.	5.27	1.31	Moderately Implemented
Security protocols are regularly updated to protect academic data.	5.00	1.42	Moderately Implemented
The school conducts audits to ensure compliance with data protection laws.	4.92	1.48	Moderately Implemented
There is a disaster recovery plan to safeguard academic records in emergencies.	4.68	1.62	Moderately Implemented
Weighted Mean	4.97		
SD	1.45		
Verbal Interpretation	High		

Table 7 presents the level of school innovation management of academic records in terms of standards and security. The findings reveal that schools implement measures at a moderate level to ensure the protection, confidentiality, and integrity of academic records, as evidenced by an overall weighted mean of 4.97 (SD = 1.45), indicating Moderately Implemented. Among the indicators, limiting access to academic records to authorized personnel obtained the highest mean score (M = 5.27, SD = 1.31), indicating that schools prioritize controlled access to sensitive information. This is followed by regularly updating security protocols (M = 5.00, SD = 1.42) and adherence to established standards in managing academic records (M = 4.95, SD = 1.48), suggesting that institutions recognize the importance of compliance with security and management frameworks. Similarly, conducting audits to ensure compliance with data protection laws (M = 4.92, SD = 1.48) reflects schools’ efforts to maintain accountability and legal adherence. Meanwhile, the presence of disaster recovery plans to safeguard academic records during emergencies received the lowest mean score (M = 4.68, SD = 1.62), although still moderately implemented, indicating that while schools have contingency plans, there is room for strengthening emergency preparedness. Overall, the findings suggest that schools are taking significant steps to secure academic records but may still need to enhance consistency and comprehensiveness in their security practices.

The results indicate that schools recognize the critical importance of safeguarding academic records through standardization and security protocols. The high mean score for restricting access to authorized personnel suggests that confidentiality is a major priority among school heads, reflecting compliance with privacy and data protection principles. Likewise, regular updates to security protocols and adherence to established standards demonstrate institutional awareness of evolving cybersecurity risks. However, the slightly lower rating for disaster recovery planning implies that emergency preparedness and long-term data resilience may not yet be fully optimized. This variation suggests that while foundational security measures are in place, some advanced or preventive strategies may still require improvement.

Overall, the moderate implementation level reflects a transitional stage in which schools are actively strengthening their academic records security systems but may still face challenges such as limited resources, infrastructure, or technical expertise.

The findings demonstrate that school heads are progressively implementing standard and security measures to protect academic records, reflecting a growing commitment to responsible data governance. Schools show strong awareness of access control, security protocols, and compliance monitoring, which are essential components of secure academic record management. However, the moderate level of implementation suggests that security practices are still developing and may not yet be fully institutionalized across all areas, particularly in emergency preparedness and recovery planning. This highlights the need for more comprehensive data security frameworks, continuous monitoring, and capacity-building to ensure sustainable, resilient academic record systems. Strengthening these practices will enhance institutional reliability, compliance with legal requirements, and protection of sensitive educational data.

Table 8. Level of Educational Institution Operations of Institution as to Operational Efficiency

Statements	Mean	SD	Remarks
The institution efficiently manages academic records with minimal delay.	5.34	1.32	Agree
Record management supports smooth administrative operations.	5.53	1.29	Agree
The system ensures the timely processing of academic transactions and reports.	5.58	1.22	Agree
Workflows are well-organized, reducing redundancy in record-related tasks.	5.47	1.27	Agree
The institution optimizes resources to improve record management operations.	5.45	1.27	Agree
Weighted Mean	5.48		
SD	1.26		
Verbal Interpretation	Agree		

Table 8 reveals the level of educational institution operations in terms of operational efficiency, particularly in managing academic records. The results show that respondents generally agree that their institutions operate efficiently, as reflected in the overall weighted mean of 5.48 (SD = 1.26), indicating Agree. Among the indicators, the system’s ability to ensure timely processing of academic

transactions and reports received the highest mean score ( $M = 5.58, SD = 1.22$ ), indicating strong effectiveness in handling academic processes. This is followed by the management of records supporting smooth administrative operations ( $M = 5.53, SD = 1.29$ ) and well-organized workflows that reduce redundancy in record-related tasks ( $M = 5.47, SD = 1.27$ ), suggesting that record management systems contribute significantly to streamlined administrative functions. Additionally, the institution’s ability to optimize resources to improve record management operations ( $M = 5.45, SD = 1.27$ ) demonstrates efficient utilization of available resources. Lastly, efficiently managing academic records with minimal delay ( $M = 5.34, SD = 1.32$ ) also received a high rating, confirming the institution’s capability to maintain timely and effective record handling. Overall, the findings indicate that educational institutions have established efficient operational systems that support effective academic record management and administrative performance.

The findings indicate that academic record management plays a vital role in enhancing institutional operational efficiency. The high mean scores across all indicators demonstrate that institutions have developed structured workflows, efficient systems, and effective resource management practices, contributing to smooth administrative functioning. The highest rating for timely processing of academic transactions suggests that record management systems are functioning effectively to support critical administrative tasks such as reporting, enrollment, and documentation. Furthermore, organized workflows and resource optimization indicate that institutions are strategically managing their processes to reduce inefficiencies and improve productivity. The relatively low standard deviations also suggest consistency in respondents’ perceptions, indicating widespread agreement on the effectiveness of institutional operations. These results reflect the positive impact of innovative academic record management practices on institutional efficiency.

The results confirm that efficient academic record management is a key driver of operational effectiveness in educational institutions. Schools that implement structured record systems, organized workflows, and timely processing mechanisms are better able to support administrative functions and improve overall institutional performance. This demonstrates that effective academic record management is not only an administrative function but also a strategic tool that enhances institutional productivity and service delivery. Continuous improvement and integration of advanced record management systems will further strengthen institutional efficiency and operational effectiveness.

Table 9 shows the level of educational institution operations regarding the accuracy of academic record management. The findings reveal that respondents generally agree that their institutions maintain a high level of accuracy in academic record management, as reflected in the overall weighted mean of 5.54 ( $SD = 1.28$ ). Among the indicators, maintaining academic records free from errors or discrepancies received the highest mean score ( $M = 5.63, SD = 1.17$ ), indicating strong confidence in the reliability of

institutional records. Similarly, accuracy in academic records contributing to credible institutional reporting obtained a high mean ( $M = 5.62, SD = 1.30$ ), highlighting the importance of accurate records in ensuring institutional credibility. Staff regularly cross-checking data and strict implementation of data validation procedures both received identical mean scores ( $M = 5.55, SD = 1.24$  and  $SD = 1.28$ , respectively), indicating consistent practices in ensuring data correctness and consistency. Meanwhile, the presence of built-in verification processes in the system received the lowest mean score ( $M = 5.31, SD = 1.44$ ), although it was still interpreted as Agree, suggesting that, while verification systems exist, there may still be opportunities to further enhance automated validation mechanisms. Overall, the findings indicate that educational institutions maintain accurate academic records through systematic validation, verification, and monitoring practices.

Table 9. Level of Educational Institution Operations of Institution as to Accuracy

Statements	Mean	SD	Remarks
Academic records maintained by the institution are free from errors or discrepancies.	5.63	1.17	Agree
The system has built-in verification processes to ensure record accuracy.	5.31	1.44	Agree
Staff regularly cross-check data to maintain consistency and correctness.	5.55	1.24	Agree
Data validation procedures are strictly implemented in all academic record transactions.	5.55	1.28	Agree
Accuracy in academic records contributes to credible institutional reporting.	5.62	1.30	Agree
Weighted Mean	5.54		
SD	1.28		
Verbal Interpretation	Agree		

The results demonstrate that accuracy is a well-established component of academic record management within educational institutions. The high ratings across all indicators suggest that schools have implemented effective mechanisms, such as data validation procedures, staff cross-checking, and verification systems, to ensure the accuracy and reliability of academic records. The highest ratings for error-free records and credible institutional reporting highlight the strong link between record accuracy and institutional integrity. These findings also suggest that school heads prioritize quality control measures to prevent discrepancies that could affect student records, reporting, and decision-making. The slightly lower rating for built-in verification processes may indicate that, while manual validation practices are strong, there are opportunities to further strengthen automated verification systems. Overall, the results confirm that accuracy is a critical operational strength, supported by systematic, consistent record management practices.

The findings confirm that accurate academic record management significantly contributes to efficient and credible operations at educational institutions. Schools that implement strict validation procedures, consistent monitoring, and systematic verification mechanisms are more likely to maintain reliable and trustworthy academic records. This accuracy enhances institutional credibility, supports effective reporting, and strengthens administrative decision-making. The strong agreement among respondents reflects institutional

commitment to maintaining data integrity, which is essential for both internal operations and external accountability. These results further suggest that school heads' innovative management practices positively influence the accuracy and reliability of academic records, thereby improving the overall effectiveness and credibility of institutional operations.

Table 10. Level of Educational Institution Operations of Institution as to Transparency

Statements	Mean	SD	Remarks
The institution provides clear and accessible information regarding academic records.	5.71	1.14	Agree
Policies and procedures for record management are transparent to all stakeholders.	5.56	1.27	Agree
Authorized individuals can easily verify the authenticity of academic documents.	5.60	1.30	Agree
The institution upholds accountability and openness in all record-related transactions.	5.65	1.36	Agree
Transparency in record management fosters trust among teachers, students, and parents.	5.69	1.14	Agree
Weighted Mean	5.65		
SD	1.22		
Verbal Interpretation	Agree		

Table 10 presents the level of transparency in academic record management across educational institutions. The results indicate that respondents agree that their institutions maintain a high level of transparency, as reflected by the overall weighted mean of 5.65 (SD = 1.22), interpreted as Agree. Among the indicators, providing clear and accessible information regarding academic records received the highest mean score (M = 5.71, SD = 1.14), indicating that institutions prioritize making academic information readily available to stakeholders. This is followed by transparency, which fosters trust among teachers, students, and parents (M = 5.69, SD = 1.14), highlighting the important role of openness in strengthening stakeholder confidence. Similarly, the institution's accountability and openness in record-related transactions (M = 5.65, SD = 1.36) and the ability of authorized individuals to verify the authenticity of academic documents (M = 5.60, SD = 1.30) received high ratings, indicating effective transparency mechanisms. Meanwhile, transparency of policies and procedures for record management (M = 5.56, SD = 1.27) also received strong agreement, suggesting that institutional guidelines are clearly communicated to stakeholders. Overall, the findings demonstrate that educational institutions have established transparent academic record management systems that promote accountability, accessibility, and trust.

The findings indicate that transparency is a strong operational component of academic record management within educational institutions. The consistently high mean scores across all indicators suggest that institutions have implemented clear policies, accessible information systems, and verification mechanisms that promote openness and accountability. The highest rating for providing accessible academic information underscores the institution's commitment to ensuring stakeholders are well informed. Additionally, the strong agreement that transparency fosters trust underscores the importance of open record management practices in strengthening relationships among stakeholders.

These results also suggest that school heads' innovative management strategies contribute to the development of reliable, transparent record systems. The relatively low standard deviations indicate consistent perceptions among respondents, reflecting widespread confidence in the institution's transparency practices.

The findings confirm that transparent academic record management significantly enhances institutional accountability, stakeholder trust, and operational effectiveness. Schools that provide accessible information, clear policies, and reliable verification systems create an environment of openness that strengthens institutional credibility. Transparency ensures that academic records are properly managed, verifiable, and accessible to authorized stakeholders, which supports efficient decision-making and reporting processes. The strong level of agreement among respondents suggests that school heads' innovative management practices positively contribute to transparent institutional operations. Continued emphasis on transparency will further strengthen institutional governance, stakeholder confidence, and the overall effectiveness of academic record management systems.

*Level of Educational Institution Operation of Teachers to Reduce Workload*

Table 11 presents the level of educational institution operations in terms of reducing teachers' workload through digital academic record management. The results reveal that respondents agree that digital systems significantly reduce teachers' workload

Table 11. Level of Educational Institution Operation of Teachers to Reduce Workload

Statements	Mean	SD	Remarks
The digital management of academic records lessens the teachers' administrative workload.	5.65	1.45	Agree
Automation tools simplify the encoding and retrieval of student data.	5.69	1.42	Agree
The system reduces the time spent on repetitive documentation tasks.	5.70	1.46	Agree
Digital systems allow teachers to focus more on teaching than on clerical tasks.	5.66	1.44	Agree
Technology integration improves overall teacher productivity and efficiency.	5.82	1.29	Agree
Weighted Mean	5.71		
SD	1.40		
Verbal Interpretation	Agree		

As reflected by the overall weighted mean of 5.71 (SD = 1.40), interpreted as Agree. Among the indicators, technology integration improving overall teacher productivity and efficiency received the highest mean score (M = 5.82, SD = 1.29), indicating that digital tools play a crucial role in enhancing teacher performance. This is followed by the system reducing time spent on repetitive documentation tasks (M = 5.70, SD = 1.46) and automation tools simplifying encoding and retrieval of student data (M = 5.69, SD = 1.42), suggesting that digital systems streamline administrative processes. Additionally, digital systems that allow teachers to focus more on teaching than on clerical tasks (M = 5.66, SD = 1.44) and that lessen teachers' administrative workload (M =

5.65, SD = 1.45) also received high ratings, indicating that academic record automation effectively supports teachers in managing their responsibilities. Overall, the findings demonstrate that digital academic record management contributes significantly to reducing workload and improving teachers' efficiency.

The findings indicate that digital academic record management systems play a critical role in reducing teachers' administrative burden and enhancing productivity. The high mean scores across all indicators suggest that automation and digital tools effectively streamline documentation processes, reduce repetitive clerical work, and simplify data retrieval. The highest rating for technology integration improving productivity highlights the transformative impact of digital innovation in educational institutions. These results suggest that school heads' innovative management of academic records contributes to creating a more efficient work environment for teachers. By minimizing administrative workload, digital systems enable teachers to allocate more time and effort toward instructional tasks, thereby improving overall teaching effectiveness. The consistency of responses further indicates widespread recognition of the benefits of digital record management in supporting teachers' professional responsibilities.

The findings confirm that innovative academic record management systems significantly reduce teachers' workload and enhance their productivity and efficiency. Automation, digital storage, and streamlined documentation processes allow teachers to focus more on instructional responsibilities rather than clerical tasks. This contributes to improved time management, reduced administrative stress, and enhanced teaching effectiveness. The strong agreement among respondents reflects the positive impact of school heads' innovative management strategies in promoting a supportive and efficient work environment. These results emphasize the importance of integrating technology in academic record management to improve institutional operations and teacher performance.

Table 12. Level of Educational Institution Operation of Teachers as to Ease of Monitoring

Statements	Mean	SD	Remarks
The system enables easy tracking of student performance and progress.	5.76	1.27	Agree
Teachers can easily access their students' updated academic records.	5.66	1.23	Agree
The platform provides real-time updates on student submissions and grades.	5.67	1.42	Agree
Data retrieval tools help teachers identify students needing intervention.	5.54	1.46	Agree
The monitoring system promotes accurate and efficient reporting of student outcomes.	5.69	1.38	Agree
Weighted Mean	5.67		
SD	1.34		
Verbal Interpretation	Agree		

Table 12 presents the level of educational institution operations in terms of ease of monitoring student academic records. The findings indicate that respondents agree that digital academic record management systems facilitate effective monitoring of student performance, as reflected by

the overall weighted mean of 5.67 (SD = 1.34), interpreted as Agree. Among the indicators, the system enabling easy tracking of student performance and progress received the highest mean score (M = 5.76, SD = 1.27), indicating that digital systems provide effective monitoring tools for teachers. This is followed by the monitoring system's promotion of accurate and efficient reporting of student outcomes (M = 5.69, SD = 1.38), highlighting its role in supporting reliable reporting processes. Similarly, the platform providing real-time updates on student submissions and grades (M = 5.67, SD = 1.42) and teachers' ability to readily access updated academic records (M = 5.66, SD = 1.23) demonstrate the accessibility and responsiveness of digital record systems. Meanwhile, data retrieval tools that help teachers identify students needing intervention received the lowest mean score (M = 5.54, SD = 1.46), although they were still interpreted as Agree, indicating that digital systems effectively support early identification of student needs. Overall, the findings suggest that digital academic record systems enhance teachers' ability to monitor student performance efficiently and accurately.

The results indicate that digital academic record management systems significantly improve teachers' ability to monitor student performance and academic progress. The high mean scores across all indicators suggest that digital platforms provide accessible, real-time, and reliable information that supports instructional monitoring and decision-making. The highest rating for easy tracking of student progress underscores the effectiveness of digital systems in providing teachers with timely, relevant academic information. Additionally, real-time updates and easy access to records improve responsiveness and allow teachers to address student needs more efficiently. The slightly lower rating for identifying students needing intervention suggests that while monitoring tools are effective, there may be opportunities to further enhance analytical features that support targeted interventions. Overall, the findings demonstrate that school heads' innovative management of academic records contributes to improved monitoring efficiency and instructional effectiveness.

The findings confirm that innovative academic record management systems significantly enhance teachers' ability to monitor student performance and academic outcomes. Digital platforms provide real-time access to accurate, up-to-date information, enabling teachers to make informed instructional decisions and provide timely support to students. These systems improve reporting accuracy, facilitate early identification of student needs, and strengthen overall instructional monitoring. The strong agreement among respondents reflects the positive impact of school heads' innovative management practices on the development of efficient and effective monitoring systems. Continued integration of advanced monitoring tools will further enhance instructional effectiveness, student support, and overall institutional performance.

Table 13 presents the level of educational institution operations regarding teachers' use of data-driven decision-making. The findings indicate that respondents agree that academic record management systems effectively support

data-driven instructional practices, as reflected by the overall weighted mean of 5.71 (SD = 1.15), interpreted as Agree. Among the indicators, data insights helping teachers identify patterns in student learning and performance and data-driven approaches fostering continuous improvement in teaching practices both received the highest mean scores (M = 5.74, SD = 1.09 and SD = 1.06, respectively), indicating that data utilization plays a vital role in enhancing instructional effectiveness. This is followed by teachers using generated reports to adjust classroom interventions (M = 5.71, SD = 1.21) and teachers using academic data to make informed instructional decisions (M = 5.70, SD = 1.21), demonstrating the practical application of data in improving teaching strategies. Meanwhile, the system providing analytics that support planning and assessment strategies received the lowest mean score (M = 5.63, SD = 1.25), although it was still interpreted as Agree, suggesting that analytics tools are effective but may have further potential for enhancement. Overall, the findings demonstrate that academic record management systems significantly support teachers in utilizing data to improve instructional planning, assessment, and student outcomes.

Table 13. Level of Educational Institution Operation of Teachers as to Data-Driven Decision

Statements	Mean	SD	Remarks
Teachers use academic data to make informed instructional decisions.	5.70	1.21	Agree
The system provides analytics that support planning and assessment strategies.	5.63	1.25	Agree
Data insights help teachers identify patterns in student learning and performance.	5.74	1.09	Agree
Teachers use generated reports to adjust classroom interventions.	5.71	1.21	Agree
Data-driven approaches foster continuous improvement in teaching practices.	5.74	1.06	Agree
Weighted Mean	5.71		
SD	1.15		
Verbal Interpretation	Agree		

The results indicate that data-driven decision-making is a well-established practice supported by academic record management systems in educational institutions. The high mean scores across all indicators suggest that teachers actively use academic data, analytics, and reports to inform instructional decisions and improve student learning outcomes. The highest ratings for identifying student learning patterns and fostering continuous improvement highlight the importance of data in enhancing teaching effectiveness and instructional planning. These findings also suggest that school heads' innovative management of academic records provides teachers with accessible and reliable data that supports informed decision-making. The relatively low standard deviations indicate consistent agreement among respondents, reflecting widespread recognition of the value of data analytics in improving teaching practices. Overall, the results demonstrate that academic record systems play a critical role in promoting evidence-based instructional practices.

The data confirms that innovative academic record management systems significantly enhance teachers' ability to make data-driven instructional decisions. The availability of

accurate, timely, and organized academic data enables teachers to identify student needs, adjust instructional strategies, and improve overall teaching effectiveness. These systems promote continuous professional improvement by providing insights that support planning, assessment, and intervention. The strong agreement among respondents reflects the positive impact of school heads' innovative management strategies in fostering a data-driven culture within educational institutions. Strengthening data analytics capabilities and promoting continuous data utilization will further enhance instructional quality, student performance, and institutional effectiveness.

Table 14. Level of Educational Institution Operation of Students as to Fair and Accurate Assessment

Statements	Mean	SD	Remarks
The system ensures fairness and transparency in grading and evaluation.	5.74	1.13	Agree
Students' grades are accurately recorded and reflected in the system.	5.67	1.17	Agree
Errors in grade encoding and reporting are minimized.	5.68	1.10	Agree
Students are given access to verify their academic performance.	5.31	1.59	Agree
The assessment process promotes accountability and trust between students and teachers.	5.61	1.21	Agree
Weighted Mean	5.61		
SD	1.24		
Verbal Interpretation	Agree		

Table 14 presents the level of educational institution operations in terms of fair and accurate assessment of students through academic record management systems. The findings indicate that respondents agree that the system supports fairness and accuracy in student assessment, as reflected by the overall weighted mean of 5.61 (SD = 1.24), interpreted as Agree. Among the indicators, ensuring fairness and transparency in grading and evaluation received the highest mean score (M = 5.74, SD = 1.13), indicating that the system promotes equitable assessment practices. This is followed by minimizing errors in grade encoding and reporting (M = 5.68, SD = 1.10) and ensuring that students' grades are accurately recorded and reflected in the system (M = 5.67, SD = 1.17), suggesting that academic record systems contribute significantly to accuracy and reliability. Additionally, promoting accountability and trust between students and teachers (M = 5.61, SD = 1.21) also received strong agreement, highlighting the role of transparent record systems in strengthening academic relationships. Meanwhile, providing students access to verify their academic performance received the lowest mean score (M = 5.31, SD = 1.59), although still interpreted as Agree, indicating that while access is available, there may be opportunities to further enhance student engagement and accessibility. Overall, the findings demonstrate that academic record management systems support fair, accurate, and transparent student assessment.

The results indicate that academic record management systems play a vital role in ensuring fairness, accuracy, and transparency in student assessment. The high mean scores across all indicators suggest that digital record systems

effectively minimize grading errors, maintain accurate academic records, and promote equitable evaluation practices. The highest rating for fairness and transparency highlights the institution’s commitment to maintaining objective and reliable assessment processes. Additionally, the strong agreement that the system promotes accountability and trust indicates that accurate academic records strengthen the integrity of the assessment process. The slightly lower rating for student access to verify academic performance suggests that while systems are in place, further improvements in accessibility and student engagement may enhance transparency. Overall, the findings confirm that innovative academic record management contributes significantly to maintaining fair and accurate student assessment.

The findings confirm that innovative academic record management systems enhance fairness, transparency, and accuracy in student assessment processes. Digital systems ensure that grades are properly recorded, errors are minimized, and assessment procedures are conducted with integrity. These practices promote accountability among teachers and trust among students, contributing to a fair and credible academic environment. The results also highlight the importance of providing students with access to their academic records to strengthen transparency and engagement. The strong agreement among respondents demonstrates that school heads’ innovative management of academic records positively influences fair and accurate student assessment, thereby improving institutional credibility and student confidence in the evaluation process.

Table 15. Level of Educational Institution Operation of Students as to Improve Access

Statements	Mean	SD	Remarks
Students can conveniently access their academic records online.	4.96	1.78	Slightly Agree
The system allows students to view their grades and progress at any time.	4.94	1.86	Slightly Agree
Online platforms reduce the need for physical transactions in record retrieval.	5.24	1.57	Slightly Agree
Accessibility features support inclusivity for all learners.	5.26	1.54	Slightly Agree
The ease of access encourages students to take responsibility for their academic progress.	5.30	1.54	Agree
Weighted Mean	5.14		
SD	1.65		
Verbal Interpretation	Slightly Agree		

Table 15 reveals the level of educational institutions’ operations in improving students’ access to academic records through digital systems. The findings reveal that respondents slightly agree that academic record management systems improve student access, as reflected by the overall weighted mean of 5.14 (SD = 1.65), interpreted as Slightly Agree. Among the indicators, ease of access encouraging students to take responsibility for their academic progress received the highest mean score (M = 5.30, SD = 1.54), interpreted as Agree, indicating that accessible record systems promote student accountability. This is followed by accessibility features supporting inclusivity for all learners (M = 5.26, SD = 1.54) and online platforms reducing the need for physical transactions in record retrieval (M = 5.24, SD = 1.57),

suggesting that digital platforms enhance convenience and inclusivity. Meanwhile, students being able to conveniently access their academic records online (M = 4.96, SD = 1.78) and the system allowing students to view grades and progress anytime (M = 4.94, SD = 1.86) received the lowest mean scores, although still interpreted as Slightly Agree, indicating that accessibility features are present but may not yet be fully optimized or consistently experienced by all students. Overall, the findings suggest that academic record systems moderately improve accessibility, but further enhancements may be needed to maximize student access and usability.

The results indicate that while digital academic record management systems improve students’ access to academic information, the level of accessibility remains moderate compared to other operational areas. The highest rating for encouraging student responsibility highlights the positive impact of accessible academic records on student engagement and accountability. However, the relatively lower ratings for convenient online access and real-time grade viewing suggest that some students may experience limitations related to system availability, usability, or technological infrastructure. The slightly higher standard deviation also indicates variability in students’ experiences, suggesting inconsistencies in access across different users or contexts. These findings imply that while school heads have implemented digital record systems, there may still be technical, infrastructural, or implementation challenges that affect the full realization of accessibility benefits.

It can be confirmed that innovative academic record management systems are improving students’ access to academic information, promoting greater convenience, inclusivity, and student responsibility. However, the slightly lower level of agreement compared to other operational areas indicates that accessibility remains an area for further development. Strengthening digital platforms, improving system usability, and ensuring consistent access will enhance students’ ability to monitor their academic progress effectively. Improved accessibility will also support student autonomy, engagement, and academic accountability. These findings highlight the importance of continuous technological enhancement and infrastructure support to fully realize the benefits of innovative academic record management systems for students.

*Level of Educational Institution Operation of Students for Better Support Services*

Table 16 presents the level of educational institution operations in terms of providing better support services to students through innovative academic record management systems.

The findings reveal that respondents agree that digital record management enhances student support services, as reflected by the overall weighted mean of 5.46 (SD = 1.52), interpreted as Agree. Among the indicators, record management innovations that improve communication between students and school offices received the highest mean score (M = 5.57), indicating that digital systems facilitate more efficient, accessible communication channels. This is

followed closely by the system providing timely updates about academic requirements and deadlines (M = 5.54) and efficient record management enhancing the delivery of academic support services (M = 5.53), suggesting that digital systems contribute to timely and effective service delivery. Additionally, the institution’s digital operations contribute to a more responsive, student-centered system (M = 5.46), further demonstrating the role of innovation in enhancing institutional responsiveness. Meanwhile, students receiving immediate feedback through the digital platform received the lowest mean score (M = 5.17), interpreted as Slightly Agree, indicating that while feedback mechanisms are present, they may not yet be fully optimized. Overall, the findings indicate that innovative academic record management systems significantly improve the quality and responsiveness of student support services.

Table 16. Level of Educational Institution Operation of Students for Better Support Services

Statements	Mean	SD	Remarks
Record management innovations improve communication between students and school offices.	5.57	5.57	Agree
The system provides timely updates about academic requirements and deadlines.	5.54	5.54	Agree
Students receive immediate feedback through the digital platform.	5.17	5.17	Slightly Agree
Efficient record management enhances the delivery of academic support services.	5.53	5.53	Agree
The institution’s digital operations contribute to a more responsive and student-centered system.	5.46	5.46	Agree
Weighted Mean	5.46		
SD	1.52		
Verbal Interpretation	Agree		

The results indicate that innovative academic record management systems play a crucial role in enhancing the delivery of student support services. The high mean scores suggest that digital platforms improve communication efficiency, provide timely updates, and strengthen institutional responsiveness to student needs. The highest rating for improved communication underscores the importance of digital systems in enabling faster, more effective interaction between students and school offices. However, the relatively lower rating for immediate feedback suggests that there may still be delays or limitations in providing real-time responses through digital platforms. This implies that while digital record management systems have improved support services, further enhancements in system responsiveness and feedback mechanisms may strengthen their effectiveness. Overall, the findings demonstrate that school heads’ innovative management practices significantly improve student-centered services and institutional responsiveness.

The findings confirm that innovative academic record management systems enhance student support services by improving communication, providing timely updates, and promoting institutional responsiveness. Digital platforms enable faster access to information, streamline service delivery, and support a more student-centered educational environment. These systems strengthen the connection between students and institutional services, thereby improving

student experience and satisfaction. The results highlight the important role of school heads’ innovative management strategies in fostering efficient and responsive support systems. Continued improvement in feedback mechanisms and digital communication tools will further enhance student support services and overall institutional effectiveness.

*Significant Relationship between Schools’ Innovation Management of Academic Records and Educational Institution Operations*

Table 17 displays the significant relationship between Schools’ innovation

Management of Academic Records and Educational Institution Operations in terms of operational efficiency, accuracy, and transparency.

Table 17. Significant Relationship between Schools’ Innovation Management of Academic Records and Educational Institution Operations

Schools’ Innovation Management of Academic Records		Operational Efficiency (OE)	Accuracy (ACC)	Transparency (TRA)
Digitalization (DIG)	Pearson Correlation	.532**	.541**	.553**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Cloud Storage (CS)	Pearson Correlation	.565**	.501**	.419**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Automation of Workflow (AW)	Pearson Correlation	.585**	.550*	.481**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Integration of Records (IR)	Pearson Correlation	.599**	.557**	.470**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Blockchain Technology (BT)	Pearson Correlation	.513**	.428**	.367**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Data Analytics and Artificial Intelligence (DAAI)	Pearson Correlation	.567**	.527**	.467**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Standards and Security (SS)	Pearson Correlation	.631**	.604**	.594**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199

The results reveal that all dimensions of innovation management of academic records show statistically significant positive relationships with institutional operations, as evidenced by the p-value of .000, which is lower than the 0.01 level of significance. Digitalization showed moderate, significant relationships with operational efficiency (r = .532),

accuracy ( $r = .541$ ), and transparency ( $r = .553$ ), indicating that digital record systems improve institutional effectiveness. Similarly, cloud storage demonstrated moderately significant relationships with operational efficiency ( $r = .565$ ), accuracy ( $r = .501$ ), and transparency ( $r = .419$ ), suggesting that cloud-based systems enhance accessibility and record reliability. The automation of workflows and integration of records also exhibited moderate positive relationships across all operational indicators, highlighting the importance of automated, integrated systems in improving efficiency and accuracy. Blockchain technology showed moderate relationships with operational efficiency ( $r = .513$ ) and accuracy ( $r = .428$ ), but a weak relationship with transparency ( $r = .367$ ), indicating emerging but still developing effectiveness in institutional transparency. Data analytics and artificial intelligence demonstrated moderately significant relationships across all operational indicators, supporting data-driven institutional management. Notably, standards and security showed the strongest relationships with operational efficiency ( $r = .631$ ), accuracy ( $r = .604$ ), and transparency ( $r = .594$ ), indicating that secure and standardized record management systems play a critical role in improving institutional operations.

The findings indicate that innovation management of academic records significantly influences the effectiveness of educational institution operations. The moderate to strong positive correlations suggest that technological innovations such as digitalization, automation, cloud storage, and analytics systems improve institutional efficiency, ensure data accuracy, and promote transparency. The strongest relationships observed in standards and security underscore the importance of robust data governance, protection, and compliance for maintaining efficient and trustworthy institutional operations. These findings suggest that school heads who effectively implement innovative academic record management systems contribute to improved institutional performance. The significant relationships across all variables confirm that innovation management is a key factor in strengthening institutional operational effectiveness.

The results confirm that the Schools' Innovation Management of Academic Records plays a vital role in enhancing educational institution operations, particularly in terms of operational efficiency, accuracy, and transparency. The integration of digital technologies, automation systems, secure storage, and data analytics improves institutional performance by ensuring reliable, accessible, and transparent academic records. Standards and security emerged as the most influential factor, highlighting the importance of protecting and properly managing academic data. These findings emphasize that school heads' innovative leadership in academic record management significantly improves institutional effectiveness. Strengthening technological infrastructure, data analytics capabilities, and security measures will further enhance operational efficiency and institutional accountability.

The results show that all computed p-values (.000) are less than the 0.01 level of significance. Therefore, the null hypothesis stating that there is no significant relationship

between Schools' Innovation Management of Academic Records and Educational Institution Operations is rejected. This indicates that innovation management of academic records has a significant positive relationship with institutional operational efficiency, accuracy, and transparency.

*Significant Relationship between the Schools' Innovation Management of Academic Records and Educational Institution Operations of Teachers*

Table 18 presents a significant relationship between Schools' Innovation Management of Academic Records and Educational Institution Operations of Teachers regarding reduced workload, ease of monitoring, and data-driven decision-making. The results reveal that digitalization has a moderate positive relationship with reduced workload ( $r = .543, p = .000$ ) and ease of monitoring ( $r = .521, p = .000$ ), and a strong positive relationship with data-driven decision-making ( $r = .610, p = .000$ ).

Table 18. Significant Relationship between the Schools' Innovation Management of Academic Records and Educational Institution Operations of Teachers

Schools' Innovation Management of Academic Records		Reduced Workload (RW)	Ease of Monitoring (EM)	Data-Driven Decision (DDD)
Digitalization (DIG)	Pearson Correlation	.543**	.521**	.610**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Cloud Storage (CS)	Pearson Correlation	.384**	.345**	.392**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Automation Workflow (AW)	Pearson Correlation	.454**	.395*	.486**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Integration Records (IR)	Pearson Correlation	.397**	.361**	.416**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Blockchain Technology (BT)	Pearson Correlation	.326**	.320**	.391**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Data Analytics and Artificial Intelligence (DAAI)	Pearson Correlation	.436**	.425**	.519**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Standards Security (SS)	Pearson Correlation	.456**	.491**	.532**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199

This indicates that digitalizing academic records significantly helps teachers lessen administrative burdens, improve monitoring of student performance, and enhance their ability to make instructional decisions based on available data. The strong correlation with data-driven decision-making suggests that digital systems provide accessible and organized information that supports evidence-based teaching practices.

Cloud storage showed weak but statistically significant relationships with reduced workload ( $r = .384, p = .000$ ), ease of monitoring ( $r = .345, p = .000$ ), and data-driven decision-making ( $r = .392, p = .000$ ). Although the relationships are weaker compared to other innovation components, this still implies that cloud-based storage contributes to improving teachers' access to academic records, enabling easier retrieval and management of student data. Automation of workflow demonstrated a moderate relationship with reduced workload ( $r = .454, p = .000$ ) and data-driven decision-making ( $r = .486, p = .000$ ), and a weak relationship with ease of monitoring ( $r = .395, p = .000$ ). This finding suggests that automation helps reduce manual processes such as grade computation, report generation, and documentation, allowing teachers to focus more on instructional tasks. Automation also supports decision-making by providing timely and organized academic information. Integration of records revealed weak relationships with reduced workload ( $r = .397, p = .000$ ) and ease of monitoring ( $r = .361, p = .000$ ), and a moderate relationship with data-driven decision-making ( $r = .416, p = .000$ ). This indicates that integrating academic records into a unified system improves accessibility and supports teachers in tracking student progress, although further improvements in system integration may enhance its impact on workload reduction and monitoring efficiency. Blockchain technology showed weak but significant relationships with reduced workload ( $r = .326, p = .000$ ), ease of monitoring ( $r = .320, p = .000$ ), and data-driven decision-making ( $r = .391, p = .000$ ). This suggests that while blockchain technology contributes to secure and reliable record management, its direct influence on teachers' operational efficiency may still be emerging or less fully utilized in the educational context. Data analytics and artificial intelligence demonstrated moderate positive relationships with reduced workload ( $r = .436, p = .000$ ), ease of monitoring ( $r = .425, p = .000$ ), and data-driven decision-making ( $r = .519, p = .000$ ). These findings indicate that analytics tools help teachers interpret student performance data more efficiently, identify learning gaps, and implement appropriate instructional interventions. The moderate correlation with data-driven decision-making highlights the important role of analytics in supporting evidence-based teaching.

Standards and security also showed moderate significant relationships with reduced workload ( $r = .456, p = .000$ ), ease of monitoring ( $r = .491, p = .000$ ), and data-driven decision-making ( $r = .532, p = .000$ ). This implies that maintaining standardized and secure academic record systems promotes reliability, accessibility, and efficiency, which enhances teachers' confidence in using academic data for instructional planning and monitoring.

Overall, the findings indicate that all components of Schools' Innovation Management of Academic Records have statistically significant positive relationships with teachers' operational efficiency. The strength of relationships ranges from weak to strong, with digitalization, standards, and security showing the greatest influence, particularly in supporting data-driven decision-making.

These results suggest that innovation in academic record management systems significantly improves teachers' efficiency by reducing administrative workload, facilitating easier monitoring of student progress, and enabling informed instructional decisions. Therefore, the null hypothesis stating that there is no significant relationship between Schools' Innovation Management of Academic Records and Educational Institution Operations of Teachers is rejected.

Table 19. Significant Relationship between the Schools' Innovation Management of Academic Records and Educational Institution Operations of

Schools' Innovation Management of Academic Records		Students		
		Fair Accurate Assessment (FAA)	and Improved Access (IA)	Better Support Services (BSS)
Digitalization (DIG)	Pearson Correlation	.695**	.530**	.670**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Cloud Storage (CS)	Pearson Correlation	.480**	.367**	.412**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Automation of Workflow (AW)	Pearson Correlation	.577**	.440*	.524**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Integration of Records (IR)	Pearson Correlation	.507**	.363**	.421**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Blockchain Technology (BT)	Pearson Correlation	.485**	.393**	.404**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Data Analytics and Artificial Intelligence (DAAI)	Pearson Correlation	.595**	.481**	.508**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199
Standards and Security (SS)	Pearson Correlation	.639**	.420**	.513**
	Sig. (2-tailed)	.000	.000	.000
	N	199	199	199

Table 19 presents the significant relationship between the Schools' Innovation Management of Academic Records and Educational Institution Operations of Students in terms of fair

and accurate assessment, improved access, and better support services. The results show that digitalization has a strong positive relationship with fair and accurate assessment ( $r = .695, p = .000$ ) and better support services ( $r = .670, p = .000$ ), and a moderate positive relationship with improved access ( $r = .530, p = .000$ ). This indicates that digital academic record systems significantly enhance the fairness and accuracy of grading by minimizing human error and ensuring transparency in academic records. Moreover, digitalization improves the delivery of student support services by enabling timely access to academic information, feedback, and institutional services. The moderate relationship with improved access suggests that digital platforms facilitate access, though certain limitations, such as internet connectivity or system availability, may still limit full access.

Cloud storage showed a moderate positive relationship with fair and accurate assessment ( $r = .480, p = .000$ ) and better support services ( $r = .412, p = .000$ ), and a weak relationship with improved access ( $r = .367, p = .000$ ). These findings suggest that cloud-based systems support secure and centralized storage of academic records, contributing to reliable assessment and improved service delivery. However, the weaker correlation with improved access indicates that while records are securely stored, accessibility may depend on infrastructure, user familiarity, or system functionality.

Automation of workflow demonstrated moderate positive relationships with fair and accurate assessment ( $r = .577, p = .000$ ), improved access ( $r = .440, p = .000$ ), and better support services ( $r = .524, p = .000$ ). This suggests that automated systems reduce manual errors in grade encoding and reporting, thereby ensuring more accurate assessment. Automation also enhances the efficiency of academic record processing, improving accessibility and strengthening institutional support services for students. Integration of records showed moderate positive relationships with fair and accurate assessment ( $r = .507, p = .000$ ) and better support services ( $r = .421, p = .000$ ), and a weak relationship with improved access ( $r = .363, p = .000$ ). This indicates that integrating student records across platforms promotes consistency and accuracy in academic information.

However, the weaker relationship with improved access may indicate that full integration across all systems and platforms has not yet been fully optimized. Blockchain technology demonstrated moderate relationships with fair and accurate assessment ( $r = .485, p = .000$ ) and better support services ( $r = .404, p = .000$ ), and a weak relationship with improved access ( $r = .393, p = .000$ ). These findings suggest that blockchain contributes to secure, tamper-proof academic records, ensuring fairness and integrity in student assessment. However, its impact on accessibility may still be limited due to the emerging nature of blockchain adoption in educational institutions. Data analytics and artificial intelligence showed moderate positive relationships with fair and accurate assessment ( $r = .595, p = .000$ ), improved access ( $r = .481, p = .000$ ), and better support services ( $r = .508, p = .000$ ). This indicates that analytics and AI enhance the accuracy of academic evaluation by providing automated validation, performance analysis, and timely feedback. These tools also

contribute to improved academic services by helping institutions respond more effectively to student needs. Standards and security demonstrated a strong positive relationship with fair and accurate assessment ( $r = .639, p = .000$ ), and moderate positive relationships with improved access ( $r = .420, p = .000$ ) and better support services ( $r = .513, p = .000$ ). This suggests that implementing standardized procedures and strong security protocols ensures the integrity, accuracy, and reliability of academic records. As a result, students benefit from fair assessment processes and improved institutional support services.

The findings indicate that all components of Schools' Innovation Management of Academic Records have statistically significant positive relationships with Educational Institution Operations of Students. The relationships range from weak to strong, with digitalization, standards, and security showing the strongest influence, particularly in ensuring fair and accurate assessment and enhancing support services.

These results imply that innovative academic record management systems play a crucial role in promoting fairness, accessibility, and quality student support services. By improving the accuracy, security, and accessibility of academic records, institutions can enhance student trust, academic transparency, and overall educational effectiveness. Therefore, the null hypothesis stating that there is no significant relationship between Schools' Innovation Management of Academic Records and Educational Institution Operations of Students is rejected.

#### IV. CONCLUSION AND RECOMMENDATIONS

This study found out that there is a significant relationship between Schools' Innovation Management of Academic Records and educational institution operations, thus, rejecting the first hypothesis indicating that innovation strengthens institutional efficiency, accuracy, and transparency.

Similarly, the study that there is a significant relationship between Schools' Innovation Management of Academic Records and Educational Institution Operations of Teachers, thus, rejecting the second hypothesis, indicating that innovation improves teachers' productivity, monitoring efficiency, and instructional decision-making.

Lastly, the study showed that there is a significant relationship between Schools' Innovation Management of Academic Records and Educational Institution Operations of Students, thus, rejecting the third hypothesis, indicating that innovation enhances fairness, accessibility, and support services.

Based on the conclusions and findings, the following recommendations were drawn:

Schools may adopt an integrated and strategic approach to the innovation management of academic records by fully transitioning from paper-based to digital systems, supported by standardized digitization protocols, secure cloud-based storage with automated backups, and continuously improved automated workflows that minimize manual tasks and human error.

To ensure efficiency and sustainability, institutions may enhance information retrieval systems through user-friendly interfaces and advanced search functions, while regularly reviewing and updating policies on data security, privacy, and compliance. At the same time, schools may gradually explore emerging technologies such as blockchain for secure, tamper-proof records, and expand the use of data analytics and artificial intelligence to support predictive insights, error detection, and data-driven decision-making.

For teachers, schools may provide continuous professional development and training on digital tools, monitoring systems, and analytics to reduce workload and strengthen instructional practices.

For students, institutions may ensure accessible, transparent, and user-friendly platforms that allow them to view records, verify grades, and receive timely feedback, thereby promoting accountability and engagement in their learning.

Furthermore, school leaders may invest in robust ICT infrastructure and technical support systems to sustain

innovation. For future researchers, further studies may be conducted to explore the long-term effectiveness of advanced technologies such as AI and blockchain in academic record management, as well as to examine contextual factors influencing successful implementation across different educational settings.

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