

# EXPLORING THE DATA MANAGEMENT IN A SCHOOL DIVISION

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**Abstract** - The study explored data management in a City Division. The study utilized the mixed method design. The participants of the study were the forty (40) administrative officers in the four districts of Tabuk City. The result showed that data management in the City Division was fully implemented. The best practices identified were ICT integration, established and clear policy formulation. It was also revealed that the challenges encountered were mismanagement of files, related issues, limited training. The proposed program for enhancement of identified are establishment of enhanced data management and training and seminars. The results suggest that the Department of Education may implement a structured audit schedule; conduct training and awareness programs on record management; utilize E-Learning platforms on leveraging online training resources.

**Keywords:** *Data, Management, Modernization, Records*

## I. INTRODUCTION

The credibility of information is the main concern that is highly required by most information society. As the information is used by the organization, agencies and communities which involves many activities involved in handling and managing the information. These include the process information as resources, assets, and evidence for any business transaction activities. However, the issues of manipulation, misuse, and mishandling the information slightly occurred within information society communities. This is where mutual understanding of the actual meaning of information needs to be properly spelled out. Effective records management is essential for any organization, large or small, because information and data are the foundation of any business. No organization can run without data since there will be no clear standards or norms to follow when performing tasks. Data and historical data are critical for projecting and assessing customers in various scenarios and developing a good response.

Records management is a method for controlling the creation, maintenance, acquisition, and disposal of information, regardless of its format. In other terms, it relates to the management of a company's important information from creation through disposal. Records management is a corporate function similar to other organizational functions. It is similar to human resources, finance, and estate management to name a few. Therefore, it should be recognized as a specific corporate function (sic, program) within an organization. Essentially, records management should receive the necessary levels of organizational support to ensure effectiveness (Smith, 2019). World Bank and International Records Management Trust (2021) stated that records are indispensable for the efficient management of organizations but are often undervalued. He said that many African countries have consistently emphasized the importance of improving the quality of records management as a basis for decision-making, more timely service delivery, and financial savings. Due to the nature

and complexity of records – since creation, receipt, use, maintenance, and disposition – as organizational resources proper records management and care is vital. Managing records is as essential as managing other valuable organizational assets. Records management is a fundamental activity of public administration.

The management of public records is an integral part of the effective administration and governance of public sector agencies and facilitates sound decision-making. Management of public records in many African countries has been characterized as an area of crisis. Improperly managed records adversely affect the broad scope of public service reforms, and development projects are often difficult to implement and sustain effectively in the absence of well managed records (World Bank and International Records Management Trust, 2021). Not only public records, but also private enterprise records need and efficient management and care. Records management is the act of planning, controlling, directing, organizing, training, promoting and after managerial activities involves with the respect of records creation reads maintenance and used and financial disposition. Record management is that administrative system which contains itself with the control of records and their information from their creation to their ultimate disposal (Alison, 2019).

Retrieval of information forms an integral part in the organizations information system because users can only access the stored information, if only there is a sequence of activities they have to do before getting the information. This would otherwise be cumbersome for users to get what they want from amass of information materials, with no retrieval system. This can be achieved through the implementation of using a centralized system such that the mass of information materials can be easily accessed from a single point. Centralized systems have a number of advantages among which include data integrity, ease of staff training and support among others. Bowen (2023) characterize Records Management as a necessary activity that helps to improve an organization and it can be a part of the culture of organization. The aim of this management is to provide to the people the information that is needed easily and quickly. The storage and the use of the produced records offer many opportunities to the organization that adopts it.

From this, to further enhance the delivery of the Schools Division of Tabuk City to its clientele in terms of records management, a study is deemed necessary. Studying records management in the Schools Division is crucial for ensuring efficient organization, retrieval, and protection of important documents. It also promotes transparency and accountability within the division which allows for smoother operations and decision-making. Records management being the fiber where information and data traverses is an important area to look on to improve management of this information and data. Thus, this study becomes relevant as it contributes to improving the performance and service delivery of the Schools Division in records management.

## II. METHODS

This study employed a multi-method research design. A quantitative approach was used to describe the profile of respondents in terms of age, gender, educational attainment, best practices in data management, and the extent of implementation of data management in the Tabuk City Schools Division. A basic qualitative approach was also employed to identify challenges encountered in data management and to propose programs to enhance records management in the division. The participants of the study were forty (40) administrative officers from the four districts of Tabuk City, selected through simple random sampling. Data were collected using a questionnaire adopted from Dieu (2022) entitled “School Data Management Practices”, which consisted of three parts: Part one gathered personal information including age, gender, ethnic affiliation, educational attainment, and trainings attended; Part two measured the extent of implementation of records management; and Part three included open-ended questions to identify best practices, challenges, and proposed programs in records management. Prior to data collection, permission was obtained from the Office of the Schools Division Superintendent, and respondents were assured of their rights, anonymity, and the confidentiality of their responses. The researcher personally administered and retrieved the questionnaires to clarify any questions and conducted interviews to further explore the challenges and proposed solutions. Ethical considerations included obtaining full consent, ensuring voluntary participation, maintaining strict confidentiality, and properly citing all sources. Data were analyzed using frequency counts and percentages to describe respondent profiles, weighted mean to assess the extent of records management implementation, and ANOVA to compare perceptions across respondents. Qualitative responses were examined using thematic analysis to identify key challenges and proposed programs for improving records management.

## III. RESULTS

### Profile of Respondents

Table 1. Profile of the Respondents

Profile	Frequency	Percentage
<b>Age</b>		
20-35	22	55.00
36-50	10	25.00
56 an above	8	20.00
<b>Sex</b>		
Female	35	13.00
Male	5	87.00
<b>Educational Attainment</b>		
Bachelor’s Degree	33	83.00
Master’s Degree	5	12.00
Doctorate Degree	2	5.00
<b>Status</b>		
Single	7	18.00
Married	33	82.00
Widow/er	0	
Separated	0	
<b>Year of Service</b>		
1-5	16	40.00
6-10	20	50.00
11 and above	4	10.00
<b>Position</b>		
AO	40	100.00

Majority of the respondents belong to the age group 20-30 years old, and most are female. Bachelor’s degree obtained the highest frequency. Most of them have 6-10 years of service and are administrative officers.

### Extent of Implementation of Data Management

Table 2.1 The Extent of Implementation of Data Management

Areas	Mean	Description
<b>1. Data Governance</b>		
1.1 Establish clear policies and procedures for data management	3.58	Fully Implemented
1.2 Define roles and responsibilities for data stewardship	3.42	Fully Implemented
Sub-Area Mean	3.50	Fully Implemented

Data governance is fully implemented. “Establishing clear policies and procedures for data management” and “Defining roles and responsibilities for data stewardship” were both rated as fully implemented.

Table 2.2 The Extent of Implementation of Data Management

Areas	Mean	Description
<b>2. Classify Records</b>		
2.1 Develop a classification scheme to organize records by type, function, or department	3.6	Fully Implemented
2.2 Use consistent naming conventions for easy retrieval	3.65	Fully Implemented
Sub-Area Mean	3.63	Fully Implemented

As to the classification of records the respondents described it as fully implemented. Using consistent naming conventions for easy retrieval and developing a classification scheme to organize records by type, function, or department lower described as fully implemented.

Table 2.3 The Extent of Implementation of Data Management in the Schools Division

Areas	Mean	Description
<b>3. Implement Retention Schedule</b>		
3.1 Define how long different types of records should be retained	3.47	Fully Implemented
3.2 Regularly review and update retention schedule based on legal and operational requirement	3.45	Fully Implemented
Sub-Area Mean	3.63	Fully Implemented

The implementation retention schedule was perceived as fully implemented. All the indicators of defining how long different types of records should be retained, and Regular review and update retention schedule based on legal and operational requirement were fully implemented.

Table 2.4 The Extent of Implementation of Data Management in the Schools Division

Areas	Mean	Description
4.Ensure Security and Access Control		
4.1Implement security measures to protect sensitive records from unauthorized access	3.55	Fully Implemented
4.2Define access levels based on roles and responsibilities	3.5	Fully Implemented
Sub-Area Mean	3.53	Fully Implemented

Ensuring security and access control is fully implemented. Among its indicator, “Implement security measures to protect sensitive records from unauthorized access and “Define access levels based on roles and responsibilities were also described as fully implemented.

Table 2.5 The Extent of Implementation of Data Management in the Schools Division

Areas	Mean	Description
5.Utilize Technology		
5.1Invest in records management software for efficient storage, retrieval, and tracking	3.4	Fully Implemented
5.2Consider digitizing paper records to reduce physical storage needs	3.25	Implemented
Sub-Area Mean	3.33	Full Implemented

On the utilization of technology, the respondents perceived it as fully implemented. Investing in records management software for efficient storage, retrieval is fully implemented while tracking and considering digitizing paper records to reduce physical storage needs was implemented.

Table 2.6 The Extent of Implementation of Data Management in the Schools Division

Areas	Mean	Description
6.Regular audits and Reviews		
6.1. Conduct regular audits to ensure compliance with records management policies	3.15	Implemented
6.2. Review records periodically to identify those that can be archived or disposed of	3.28	Fully Implemented
Sub-Area Mean	3.22	Implemented

Conduct of regular audit and reviews is described as implemented. Review records periodically to identify those that can be archived or disposed of” was claimed as fully implemented while “Conduct regular audits to ensure compliance with records management policies” was perceived as implemented.

Table 2.7 The Extent of Implementation of Data Management in the Schools Division

Areas	Mean	Description
7.Training and Awareness		
7.1Provide training for employee on record management policies and procedures	3.15	Implemented
7.2Promote awareness of the importance of proper records management	3.25	Implemented
Sub-Area Mean	3.20	Implemented

On training awareness the respondents believed it was implemented. “Promote awareness of the importance of proper records management” and “Provide training for employee on record management policies and procedures” were implemented.

Table 2.8 The Extent of Implementation of Data Management in the Schools Division

Areas	Mean	Description
8.Document Retention and Disposal Procedures		
8.1. Establish clear procedures for the secure disposal of records that are no longer needed	3.20	Implemented
8.2. Ensure that disposal methods comply with legal and regulatory requirements	3.28	Fully Implemented
Sub-Area Mean	3.24	Implemented

On the area of document retention and disposal procedures it was described as implemented. “Ensure that disposal methods comply with legal and regulatory requirements” was thought as fully implemented while “Establish clear procedures for the secure disposal of records that are no longer needed” was implemented.

Table 2.9 The Extent of Implementation of Data Management in the Schools Division

Areas	Mean	Description
9.Plan for Disaster Recovery		
9.1Develop a disaster recovery plan for records, including backup procedures and recovery processes	3.23	Implemented
9.2. Regularly test the plan to ensure effectiveness	3.28	Fully Implemented
Sub-Area Mean	3.26	Full Implemented

Planning for disaster category was fully implemented. Among the indicators, “Regularly test the plan to ensure effectiveness” and Develop a disaster recovery plan for records, including backup procedures and recovery processes were fully implemented.

Table 2.10. Summary of the Extent of Implementation of Data Management

Indicators	Mean	Description
1. Data Governance	3.50	Fully Implemented
2.Classify Records	3.63	Fully Implemented
3.Implement Retention Schedule	3.63	Fully Implemented

4.Ensure Security and Access Control	3.53	Fully Implemented
5.Utilize Technology	3.33	Fully Implemented
6.Regular audits and Reviews	3.32	Implemented
7.Training and Awareness	3.20	Implemented
8.Document Retention and Disposal Procedures	3.24	Implemented
9.Plan for Disaster Recovery	3.26	Fully Implemented
Overall Weighted Mean	3.37	Fully Implemented

As a whole data management of the Schools Division of Tabuk City were fully implemented. Classify records and implement retention schedule were rated highest as fully implemented followed by data governance and ensure security and access control, still described as fully implemented. Training and awareness and document retention and disposal procedures got the lowest perception as implemented.

### Significant Difference on the Extent of Implementation of Data Management in the Schools Division

Table 3. Significant difference extent of Implementation of Data Management in the Schools Division of Tabuk City when group according to profiles

Profile	p-value	Interpretation
Age	0.74	Not Significant
Sex	0.82	Not Significant
Educational Attainment	0.78	Not Significant
Status	0.65	Not Significant
Years in Service	0.02	Significant
Position	0.78	Not Significant

The results show that there is a significant difference in the perceptions of the respondents on the extent of implementation of records management in the school's division as to years in service and no significant difference age, sex, educational attainment status, and position were found.

Table 3.1. Post-Hoc Test Analysis on the Significant Difference on the Implementation of Record Management when Grouped According to Years of Service

Position	Mean	1-5 Years	6-10 Years	11 Years and Above
1-5 Years	3.40	-	-	-
6-10 Years	3.38	0.99	-	-
11 Years and Above	3.69	0.04*	0.06*	-

Significant differences were found between those who gained the longest service and 1-5 years and those with 6-10 years length of service. This implies that the respondents who have 11 years an above experience testify that data management in the city schools division are fully implemented.

### Best Practices in Data Management in Tabuk City Schools Division

Thematic analysis of the data revealed that the data management in Tabuk City Division has several best practices. These practices include: (a) ICT Integration, and (b) Established and clear policy formulation.

### THEME 01: ICT integration

The administrative officers identified that the ICT INTEGRATION is one of the best practices that the Tabuk City Division Office has implemented.

*R01: Our best practice is the scanning and uploading of documents on one drive to avoid loss and accessibility purposes.*

*R03: Mabalin tayu agonline request ti issuances, agiscan ti documents for future use; ken agonline tracking ti documents nga naipasa.*

*(We can make online requests for issuances, scan documents for future use, and track submitted documents online.)*

*R15: The document Online Tracking System ti ammu nga best practice tayu ta saan amin met nga division offices ket kasta.*

*(The Document Online Tracking System is what I know as our best practice because not all division offices have this.)*

### THEME 02: Established and clear policy

Most of the participants also said that the Department of Education-Tabuk City's established and clear policy formulation is one of the best practices the agency has implemented. They explained that the advantages of developing and documenting clear records policies, creating comprehensive management strategies, ensuring confidentiality, and implementing systematic tracking and organized filing are substantial.

*R6: Mayat ta napanunot ti opisiales tayu iti Dep-Ed nga nagdevelop ken nagdocument iti nalawag nga record policy. (It's good that our Dep-Ed officials thought of developing and documenting a clear record policy)*

*R12: Create clear records management policy; and regular reviews on staff trainings.*

*R38: Pagmayatan na ket kumpidensyal iti panag store ken panagmanage da ti personal records ti empleyados, studyante ken amin nga cliente.*

*(What is appreciated is their confidentiality in storing and managing the personal records of employees, students, and all clients).*

### Challenges Encountered in Data Management in Tabuk City Schools Division

The data reveals that data management in the Division faced several challenges in data management. These challenges include: (a) mismanagement of files, (b) ICT Related Issues, and (c) limited training.

### THEME 01: Mismanagement of Files

One challenge that they are facing is the mismanagement of files. They said that the mismanagement of files can have profound and far-reaching effects on an organization. When records are not properly maintained, the consequences can range from operational inefficiencies to significant legal and financial repercussions. They explained that the mismanagement of files can have devastating effects on an organization. Damaged old files without backups, lost documents, inadequate tracking systems, and excessive paperwork all contribute to operational inefficiencies and increased risks. These

challenges can lead to financial losses, legal complications, and a decline in stakeholder trust.

*R01: Some old files are damaged and have no available backup file to use.*

*R03: Adu latta ti mapukpukaw nga document iti opisina . (Many documents are still being lost in the office.)*

*R09: The tracker documents are lost and are not supported with another record such as a logbook. The tracked documents cannot be validated online on the approval of the document requested or needed.*

*R14: Some Administrative Officers lose some important documents due to many paperwork. They cannot remember where they place the documents or files.*

*R15: Dagiti daduma nga dokumento ket naikabil iti sabali nga filing box ken maisubli nga saan na aproban. (Some documents are placed in a different filing box and returned without approval.)*

*R19: Ada latta masubsubli a dokumento gapu ta haan nagna ti proseso.*

*(There are still documents being returned because they did not go through the process.)*

## THEME 02: ICT Related Issues

ICT System was one of the challenges faced in the implementation of data management. One of the most significant challenges faced during the digitization and automation process is the unavailability of a stable internet connection. They struggle to access essential documents, leading to delays in decision-making and workflow disruptions. Secondly, they said that lack of control over who can view or edit sensitive information raises serious security concerns; and thirdly occurrence of lost documents that are not properly saved in document tracking systems.

*R08: Ti maysa nga issue nga makitkita mi ket diay digitalization ken automation ta haan nga amin nga AOs tayu ket nalaing agcomputer. (One issue that we see is digitalization and automation because not all of our staff are skilled with computers)*

*R09: Awan iti nasayaat nga internet connection nga isu ti manglapped ti panag access iti daduma nu kailangan ti record. (There is no good internet connection, which hinders access to others when records are needed).*

*R14: Saan nga amin ket maka access ijay link nga pangipasaan ti reports wennu document. (Not all can access the link where to submit the reports or document.)*

*R20: Diay ayan ko nga school narigat signal, di karkarun ti internet isu nga narigat nu adda kasapulan ta I access. Kasapulan nga agsubli lattan Bulanao. (In my school location, the signal is weak, and the internet is unstable, making it difficult to access things when needed. I have to go back to Bulanao.)*

## THEME 03: Limited Trainings

It was also disclosed that another challenge was the limited training of the DepEd Staff and employees. They said that one of the primary effects of inadequate resources is information overload. As

educational institutions strive to keep up with the demands of modern education, teachers and administrative staff are often inundated with vast amounts of data and documentation. Moreover, the lack of resources often translates into insufficient employee training. Inadequate training can hinder their ability to effectively utilize data systems, manage classroom dynamics, or implement innovative teaching strategies and the insufficient funding, outdated technology, and limited access to educational materials can create significant barriers to effective teaching and learning.

*R04: Kasapulan mi nga agtraining met tapnu manayunan ti ammu mi ken maging productive kami met ti trabaho mi. (We need to undergo training as well, so we can improve our knowledge and become more productive in our work.)*

*R14: Iti kastuy nga trabaho mi ket maikan kami kuma met ti training tapnu pumintas ti panagtrabaho mi. (In this kind of work, we should also be given training so that we can improve our performance.)*

*R15: For me, one problem is that trainings are only limited and not all are allowed to join.*

## IV. DISCUSSION

### Extent of Implementation of Records Management in the Schools' Division of Tabuk City

The extent of implementation of records management in the schools' division of Tabuk City is fully implemented. This suggests significant positive implications for organizational efficiency, accountability, decision-making, compliance, communication, continuous improvement, and ultimately, organizational outcomes. This achievement reflects a commitment to enhancing the educational environment and ensuring that administrative processes support the overarching goals of the division. Similarly, Alcano (2022) also revealed that records management in the City Schools Division in Batangas are implemented to a "great extent". Classification of records is a very important aspect of data management. The DepEd can ensure that its operations are streamlined, responsive, and aligned with its educational goals. This practice not only supports administrative functions but also contributes to a more effective and transparent educational system that benefits students, educators, and stakeholders alike.

The findings are the same with Satima (2022) who revealed that the classification of records in data management within the Department of Education offers significant advantages that enhance organizational efficiency, data integrity, compliance, and decision-making. Ensuring security and access control was categorized as fully implemented. This is supported by Ingle (2022) who explained that it is also necessary to develop stronger encryption algorithms because what the industry currently assumes pinnacle of safety will soon be a legacy technique. Thus, concepts like Access Control and Identity Management have to be coupled into one single solution. Only then it is possible to architect more robust software solutions for secure data management. Regular audits and reviews is a very significant activity in data management. The records will be enhanced by the employees concerned because there is a need to inform the teachers and other employees thus, they have to complete their records. Yusuf (2022) discovered that data auditing had an overall positive effect on self-reported records management awareness, compliance, and reception.

Training and awareness has the lowest mean but described as implemented. There is a need for the administrative officers to be updated all the time on the current trends especially on the use of technology to be able to transmit report on time and attain efficiency in data management. Alavi (2021) who explained the idea of Alavi & Leidner (2001) that training enhances the understanding of data management principles, which leads to standardized practices among administrative officers. It resulted in higher data quality, as officers became adept at accurately entering and managing data. The reduction in errors contributes to more reliable information, which is crucial for decision-making processes. Among the specific indicators, "Use consistent naming conventions for easy retrieval" was fully implemented. This is very important in file management because data are in order. Gibbon (2021) revealed that standardized naming practices create a common language that facilitates communication among employees. When all team members adhere to the same naming conventions, it reduces misunderstandings and misinterpretations of data, leading to more effective teamwork and project outcomes.

"Developing a classification scheme to organize records by type, function, or department". A well-defined classification scheme allows for easier and quicker access to records. As noted by McLeod (2021), when records are systematically categorized by type, function, or department, staff members can efficiently locate the information they need without sifting through unrelated documents. This streamlined retrieval process saves time and enhances productivity, enabling educators and administrators to focus on their core responsibilities. Establishing clear policies and procedures for data management, Implementing security measures to protect sensitive records from unauthorized access, are as important as the others. According to McKinsey & Company (2021), having defined protocols allows for efficient data sharing while maintaining security and privacy. This streamlined access is essential for collaborative projects, such as curriculum development and policy evaluation, enabling teams to work together more effectively.

Establishing clear procedures for the secure disposal of records that are no longer needed should not be taken for granted as records may be needed even if they are already old. Siponen (2021) revealed that establishing clear procedures for the secure disposal of records that are no longer needed is essential for effective data management in the Department of Education. The benefits include the protection of sensitive information, compliance with legal requirements, reduction of storage costs, enhanced data management efficiency, support for data governance initiatives, and mitigation of risks related to data breaches. Conduct of regular audits to ensure compliance with records management policies and providing training for employees on record management policies and procedures are categorized as implemented. This finding is supported by Rathi (2021) who found that many educational institutions operate under tight budgets, which can limit their ability to allocate sufficient funds for comprehensive audit processes. In the Department of Education, this resource constraint may lead to audits being deprioritized or conducted less frequently than necessary, compromising compliance efforts. The number of years in service stands out as a critical factor. This could indicate that experience and tenure in a role are more influential than other demographic variables.

### **Best Practices in Data Management in Tabuk City Schools Division**

Majority of the participants explained that the transition to digital storage reduces the need for physical filing systems, thereby enhancing space efficiency. Offices can minimize clutter and optimize

their work environment. Additionally, OneDrive provides robust backup and security features, ensuring that documents are protected from loss due to physical damage or theft. This peace of mind allows organizations to focus on their core activities without worrying about the safety of their critical documents.

Moreover, the ability to submit online requests for issuances and access scanned documents represents a significant advancement in administrative processes. This approach streamlines the request process, making it more efficient and user-friendly. Individuals can submit requests at their convenience, reducing the time spent on administrative tasks and improving overall workflow. The transparency provided by this system allows users to track the status of their requests, fostering a sense of accountability and improving communication between requesters and administrators. Furthermore, having scanned documents available for future use enhances convenience. Users no longer need to sift through physical files; instead, they can quickly access the necessary documents online, saving valuable time and effort that enhances the agency's overall workflow.

These practices enhance consistency, compliance, accountability, and efficiency within organizations. By prioritizing effective records management, organizations can navigate the complexities of data handling while safeguarding sensitive information and fostering trust with stakeholders. Ultimately, these efforts contribute to a more organized, productive, and ethical organizational environment. The established and clear policy formulation within the Department of Education is vital for ensuring effective governance, accountability, and operational efficiency. Policies serve as guiding frameworks that shape decision-making, promote consistency, and enhance the overall quality of education.

The integration of ICT into data management practices is vital for enhancing efficiency, accuracy, and accessibility within the Department of Education. Effective ICT integration not only streamlines processes but also fosters a data-driven culture that supports informed decision-making. This is supported by Rathi (2021) who found that continuous evaluation and improvement of ICT integration practices are essential for adapting to evolving needs and technologies. Moreover, Kuhlthau (2020) emphasizes that regular assessments of technology use and data management effectiveness can help identify areas for growth. The Department of Education-Tabuk City's established and clear policy formulation is one of the best practices the agency has implemented. They explained that the advantages of developing and documenting clear records policies, creating comprehensive management strategies, ensuring confidentiality, and implementing systematic tracking and organized filing are substantial. The established and clear policy formulation within the Department of Education is vital for ensuring effective governance, accountability, and operational efficiency. Policies serve as guiding frameworks that shape decision-making, promote consistency, and enhance the overall quality of education.

According to Rathi (2021), well-defined policies help administrators and educators understand their roles and responsibilities, leading to more informed and consistent decisions. In the absence of clear policies, decision-making can become arbitrary, resulting in confusion and inefficiencies. Further, McLeod (2021) emphasizes that clear policies outline expectations for behavior and performance, making it easier to hold individuals and organizations accountable for their actions. In the Department of Education, this accountability is crucial for ensuring that all stakeholders are

responsible for adhering to regulations and standards, thereby fostering a culture of integrity and transparency.

### **Challenges Encountered in Data Management in Tabuk City Schools Division**

One challenge that they are facing is the mismanagement of files. They said that the mismanagement of files can have profound and far-reaching effects on an organization. When records are not properly maintained, the consequences can range from operational inefficiencies to significant legal and financial repercussions. Mismanagement of files can have devastating effects on an organization. Damaged old files without backups, lost documents, inadequate tracking systems, and excessive paperwork all contribute to operational inefficiencies and increased risks. These challenges can lead to financial losses, legal complications, and a decline in stakeholder trust.

One challenge that they are facing is the mismanagement of files. They said that the mismanagement of files can have profound and far-reaching effects on an organization. When records are not properly maintained, the consequences can range from operational inefficiencies to significant legal and financial repercussions. The findings are supported by Mella (2020) who revealed that one of the challenges faced by office personnel is how to keep all the documents well-sorted out, properly labeled, and easily retrieved when necessary. He explained that once the documents are not properly sorted, it leads to missing or misplaced files and data.

It was also revealed that despite the fact ICT System is one of the best practices of the DepEd-Tabuk City, it has also faced challenges in its implementation. One of the most significant challenges faced during the digitization and automation process is the unavailability of a stable internet connection. They struggled to access essential documents, leading to delays in decision-making and workflow disruptions. Secondly, they said that lack of control over who can view or edit sensitive information raises serious security concerns; and thirdly occurrence of lost documents that are not properly saved in document tracking systems. According to Akmad (2024), he found that teachers experienced task submission delays due to internet connectivity's erratic nature. They also found accessing online resources to be time-consuming. Furthermore, it was clear that poor internet connection reduced students' enthusiasm and ability to participate, resulting in communication challenges and affecting the promptness of finishing group projects. When the internet connection was strong, students and teachers accessed resources more quickly, conducted research more efficiently, and submitted their academic tasks on time. Conversely, poor connectivity led to significant delays and increased stress, negatively impacting their academic performance. As educational institutions strive to keep up with the demands of modern education, teachers and administrative staff are often inundated with vast amounts of data and documentation.

It was also disclosed that another challenge was the limited training of the DepEd Staff and employees. They said that one of the primary effects of inadequate resources is information overload. As educational institutions strive to keep up with the demands of modern education, teachers and administrative staff are often inundated with vast amounts of data and documentation. Moreover, the lack of resources often translates into insufficient employee training. Inadequate training can hinder their ability to effectively utilize data systems, manage classroom dynamics, or implement innovative teaching strategies and the insufficient funding, outdated technology,

and limited access to educational materials can create significant barriers to effective teaching and learning.

The third challenge identified was the limited training of the DepEd Staff and employees. As educational institutions strive to keep up with the demands of modern education, teachers and administrative staff are often inundated with vast amounts of data and documentation. Sweeney (2022) highlighted that the significant impact of limited training on the data management practices of DepEd staff and employee such as reduced data quality, inefficiency in data handling, challenges in adopting new technologies, and inadequate understanding of data privacy underscore the need for comprehensive training programs. The majority of the respondents identified that one program that can be proposed to Tabuk City Division is the establishment of enhanced database management which will benefit the agency in the sense that, the establishment of an enhanced database management system in DepEd brings numerous advantages that significantly can improve educational administration and outcomes. From improved data accessibility and accuracy to streamlined processes and better resource management, this initiative positions DepEd to meet the evolving needs of the education sector. Alonzo (2021), emphasized that a well-structured database allows for quick retrieval of information, reducing the time spent on data searches and minimizing errors associated with manual record-keeping. This accessibility is vital for educational administrators in making timely and informed decisions that can positively affect student outcomes. Moreover, Reyes (2020) emphasizes that an effective DBMS automates many routine tasks, such as data entry and reporting, which frees up staff time for more strategic initiatives.

The second proposal focuses on the provision of additional training and seminars for DepEd Administrative Officers because it enhances individual performance and contributes to the overall success of educational institutions. From skill development and increased efficiency to improved job satisfaction and adaptability, these initiatives play a vital role in fostering a competent and motivated workforce. Most of them also said that by investing in the professional growth of administrative staff, organizations position themselves for greater effectiveness and resilience in meeting the challenges of the educational landscape. According to Bautista (2020), targeted training programs help staff understand modern record management techniques, including digital filing systems and data security protocols. This competence is crucial for maintaining accurate and organized records, which are essential for efficient administrative operations. It was also noted by Dela Cruz (2020), that regular seminars provide opportunities for staff to learn about the latest trends and best practices in record management. By staying updated, officers can better navigate issues such as data privacy regulations and technological advancements, ensuring compliance and efficiency.

### **V. CONCLUSION AND RECOMMENDATIONS**

Record management in the Schools Division of Tabuk City is fully implemented. Classifying records and ensuring security and access control were practices that the division well- attained. However, training for personnel was identified as an immediate need to further improve records management. On the other hand, the participants identified the mismanagement of files, limited training of administrative officers, and ICT-related issues such as poor internet connection and lack of control over data viewing are the challenges that they are facing in the implementation of the records management. To enhance the records management the establishment of enhanced data management and allocation of funds for professional development of employees are imperative.

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