Guidelines for developing academic information management between internal departments for graduate students Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University

Sasanant Rattanapornpisit[1] and Wisut Siriponnoppakun[2]

[1,2] Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, Bangkok, Thailand

E-mail: [1]sasanant.ra@ssru.ac.th, [2]wisut.si@ssru.ac.th

Abstract

Factors Affecting Graduate Student's Graduation According to Criteria of System Organization in Educational Institution From the analysis of problems and obstacles to the work of academic data management, it resulted in the survey of the development guidelines and the solutions to the problems that arise from the work. In order to use those factors to analyze the development guidelines for academic data management between internal units of graduate students, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, to apply the guidelines for systematic promotion. This research aims to study the development guidelines for academic data management between internal units of students systematically. To the guidelines for work that indicate the quality and academic standards of graduate education management. The research applied qualitative research methods. Through the analysis of data collection, basic principles of academic documents, surveying the current situation of students' academic documents, data collection techniques, academic document preparation, knowledge management systems, and access to knowledge of internal units, observing research and collecting guidelines for the development of data management between internal units. And using the literature research method to analyze data resources of the academic document creation process, document management system development, and resources of students' academic documents as guidelines for development and analysis of problems that the unit should pay attention to. The research results found that creating a data management guideline to promote data management by drafting the educational management guideline from documents and analyzing the appropriateness of the feasibility of developing a document management system. By improving the knowledge of data into the information system to be consistent and appropriate for application in the work of personnel to the development of the curriculum and competence of the operators to be efficient, consistent with academic standards, beneficial for international students who will come to study and reduce the number of graduations that do not meet the criteria, resulting in the quality and academic standards of graduate education management, Bachelor of Fine Arts Program, Visual Arts and Design, Suan Sunandha Rajabhat University.

Keywords: Academic Data, Data Management, Development Guidelines

1. Introduction

Factors affecting graduate students' graduation according to the criteria. One important thing in educational management in various educational institutions is the management of teaching and learning so that students can graduate according to the specified time frame in the curriculum. This shows that only a small number of students in the institution graduate according to the criteria, which means that those students have to spend more time studying, which is a waste of time. In addition, the institution itself has to use more resources to take care of students. In addition, graduation that is not according to the normal study period also affects the next generation of students who continue their studies. The more students graduate after the specified time frame, the more resources the institution has to use. Since there are many international students in the Visual Arts and Design graduate program, it affects the process of preparing academic documents because the guidelines must be correct according to the principles and academic standards. Therefore, the management of academic documents and the integration of information systematically that can be accessed by all units are very important in order to check and filter the accuracy from the same database that is easily accessible and fast. The overall factors in delaying graduation and graduation according to the criteria of graduate students in the Faculty of Humanities and Social Sciences, Maha Sarakham University are at a high level. When considering each aspect, it can be seen that the research advisor aspect has the highest average value, followed by the management aspect of the program. In terms of students' personal characteristics, procedures, regulations, practices, research knowledge, services, academic research sources, and finally, students' personal problems, respectively, it is important to supervise and monitor the workload of student thesis control under each faculty advisor. In order to be appropriate and comprehensive, a seminar should be held for the thesis advisors and related persons to develop a plan and project for developing a thesis system, a thesis consultation model, and to set appropriate and effective thesis control standards, thesis publication criteria, student study periods, and graduation, as well as to announce it as faculty policy to lead to tangible implementation (Wornwattana, 2020).

Due to the current problem, it was found that the work process for document verification for students is delayed because the work plan is not certain, and the data management unit can access all units to verify documents in the same database, resulting in delays in work and a lack of good communication.

Although the current Chinese program in Thailand has many shortcomings in management, curriculum, teaching materials, teachers, etc. With the increasing rise of Chinese teaching in the country, international Chinese volunteers continue to enter Thailand to work, the training of local Chinese teachers in Thailand and the China is studying, and a new generation of Thai Chinese teachers are constantly growing. We believe that with the care and support of the relevant education departments and learning in China and Thailand, many problems of the Chinese program in Thailand will also be improved. (Zhang & Boonphadung, 2024)

The strategy for effective academic administration of school administrators consists of the following important contents: the meaning of school administrators, the planning process, the strategy for school administration, the principles of effective academic administration, and the strategy for academic administration in schools. Academic work is considered the heart of school administration. It is work that must be developed and improved in order to improve teaching and learning to be effective in line with educational goals. Therefore, school administrators must have strategies for academic administration because academic work is an

important work that responds to the success of academic work or the desired teaching and learning management. Therefore, academic administration is an important job for administrators who must be responsible for using the principles to effectively administer this aspect of the school, allowing the school to progress. The process of academic administration of the school is therefore considered a challenge to the abilities of school administrators (Siththada, 2024).

Personnel file management plays a vital role in the management of staff in higher vocational colleges. Higher vocational colleges should fully recognize the importance of personnel file management and take effective measures to strengthen its management. First of all, higher vocational colleges should pay more attention to personnel file management, formulate and relevant policies and operational norms to ensure the standardization and sustainability of file management. Secondly, it is necessary to improve the information level of personnel files and introduce advanced technical means to make the storage, retrieval and processing of files more efficient and convenient. In addition, the confidentiality and security of archives should be strengthened to ensure that personal privacy is not infringed.

In short, by strengthening the management of personnel files, higher vocational colleges can improve the efficiency and quality of staff management, and create good conditions for personnel training and development. This will contribute to the long-term development and overall competitiveness of colleges and universities, and lay a solid foundation for the sustainable development of higher vocational education in China (Gao & Noichun, 2024)

The status and main problems of education management informatization of Education Management, combined with literature analysis, and draws on the excellent cases and experiences of education management informatization of colleges and universities at home and abroad. The development of college education management has proposed the following countermeasures: 1. Establish the concept of education management development in the information age. 2. Strengthen the top-level design of the education management development system in the academic management system of universities. 3. Develop a strategic plan for the development of educational management informatization. 4. Strengthening organizational leadership and developing the education management system in the educational management system. 5. Clarify the development framework of the education management system in the academic management system.6. Improve the construction of the education management development system in the academic management system of universities. (Xiao & Siththada, 2024).

From the analysis of the problems and obstacles to academic data management work, it resulted in a survey to study approaches and things that need to be developed to solve problems arising from work. Therefore, the researcher is interested in studying the factors affecting graduate students' graduation according to the criteria in order to use those factors to analyze the development of academic data management between internal units of graduate students. Faculty of Fine Arts, Suan Sunandha Rajabhat University, towards the application of guidelines for systematic promotion of practice, reduction of work time and development of work results to reduce the number of graduations that do not meet the criteria, resulting in the quality and academic standards of graduate education management.

2. Research Objectives

To study the development guidelines for systematic academic data management between internal student departments.

3. Research Methodology

The study of "Guidelines for developing academic information management between internal departments for graduate students Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University" In this research, the researcher used qualitative research methods by studying documents from literature and research, including collecting field data through observation, interviews, studying concepts, processes and strategies, and collecting all the obtained data and analyzing the data in order. The research steps and methods are as follows:

The researcher surveyed academic documents, academic document data management patterns, graduation criteria for graduate students at Suan Sunandha Rajabhat University, thesis and independent study manuals of the Graduate School, Suan Sunandha Rajabhat University, and knowledge related to the document management system between internal agencies, techniques for creating universal databases, and surveyed academic documents of students in the graduate program in Visual Arts and Design.

3.1 Research instrument:

The research applied qualitative research methods through descriptive analysis. The research instruments were as follows:

3.1.1 The instruments used in qualitative research included document data collection, surveys and unstructured observations. The researcher collected relevant data using qualitative research methods through literature reviews, such as literature searches and related research. Explore and observe the current situation from academic data of graduate students in the Visual Arts and Design program, Suan Sunandha Rajabhat University.

3.1.2 Lessons learned through knowledge management with the objective of studying the development of academic data management between internal departments of graduate students in the Faculty of Fine Arts, Suan Sunandha Rajabhat University. Study the details of the work procedures to be a guideline for improvement and can be used as knowledge in the work to reduce time and develop work in the program.

3.2. Data Collection:

This research collected guidelines for developing academic data management between internal departments of graduate students in the Faculty of Fine Arts, Suan Sunandha Rajabhat University, including document data collection, surveys, and observations.

The researcher surveyed the current situation of academic documents of students in the Visual Arts and Design program at Suan Sunandha Rajabhat University, studied the basic principles of academic documents, data collection techniques, academic document preparation techniques, knowledge management systems, academic document database preparation techniques, document storage problems, and access to knowledge of internal departments. The unstructured observation method was used to observe research and collect guidelines for developing data management between internal departments, and literature research was used to analyze data on resources of academic document creation processes, document management

system development, and academic document resources of students in the Visual Arts and Design program at Suan Sunandha Rajabhat University, as guidelines for developing and analyzing problems that departments should pay attention to.

3.3 Data analysis: Gathered from the above research methods.

3.3.1 Data analysis from literature studies, efficient research collection, academic document management service guidelines, development of academic document data management between internal departments, thesis and independent study manual of the Graduate School, Suan Sunandha Rajabhat University, academic document data of students and documents related to the academic standards of graduate education management by analyzing the issues in finding guidelines and possibilities for developing academic document data management, organizing, searching for database connections through descriptive data presentation, showing data relationships, developing a database for collecting academic documents, determining mechanisms and measures for accessing between internal departments through improving the operating system, determining directions and creating a mechanism for linking teaching and learning, including operating standards, to create integration and improve the database system.

3.3.2 Data analysis from document surveys, collecting research documents with knowledge in creating an academic document data management system, and guidelines for accessing data according to standard criteria, to find relationships and guidelines for working towards developing guidelines for developing academic data management between internal departments of graduate students, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University.

3.3.3 Data analysis from unstructured observations by observing academic documents, understanding of research methods of students in the Visual Arts and Design Program, Suan Sunandha Rajabhat University, and academic data management of students between internal departments, to be a database system for checking, operating, and expressing opinions, to analyze documents according to the standards that come from accessible databases.

4. Research Results

The researcher intends to develop academic data management between internal departments of graduate students, Faculty of Fine Arts, Suan Sunandha Rajabhat University, towards a guideline for developing a data management system with a common standard between departments systematically. The creation of knowledge for application in research creates a guideline for improvement and can be used as knowledge for development and reduction of work time. It is a guideline for personnel in checking document data with the same standards and formats, consistent with academic standards, beneficial for international students who will come to study and also beneficial in the process of taking care of international students at the graduate level, Bachelor of Fine Arts Program, Visual Arts and Design, Suan Sunandha Rajabhat University, and the knowledge and guidelines can be further developed in the future to create the greatest benefit for students and advisors. The research results found that:

From the discovery of data management problems that result in delays in graduation, data relationships, developing databases to standards, determining mechanisms and measures for data management through improving the operating system, developing and improving the database system, setting directions and creating a mechanism linking the curriculum action plan and academic data management to create integration according to research methods, helping

the operation to be efficient, there should be a time frame to strictly stimulate progress in checking data of each internal department involved.

4.1 Big Data working process

4.1.1 Storage: This is the process of collecting all data from various sources, whether it is quality data or data that is expected to be useful, whether it is text data, document files, image files, video files, recorded audio files, will be collected here.

4.1.2 Data processing: After the data is collected in one place, the data will be categorized into groups that are related or have the closest relationship, giving the most similar results, and then being converted into data formats to bring this existing data into the processed data system.

4.1.3 Data analysis (Analyst): Data analysis and data presentation After all the data has been grouped and categorized, it will be analyzed to find all the patterns of relevance that may not be visible to the naked eye, whether it is finding marketing trends, customer needs, trends that may occur in the future, and other useful data, and presenting them in various formats, such as images or graphs.

Figure 1: Database development cycle
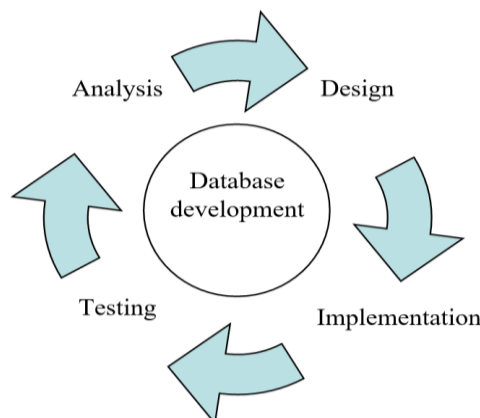
Source: Author

4.2 Benefits of using Big Data

Big Data can be applied to many sectors, whether it is the public or private sectors. This section will discuss the benefits of Big Data. If applied to the business sector, it will allow you to understand your customers better by using the database in Big Data to study the behavioral characteristics of consumers, such as how they decide to choose products. Can you present your existing products to meet customer needs? If not, can you replace them with other existing products? You can analyze future market needs. Various data searched on the internet, including various social media, can be collected to find out what is trending or popular at the moment. What trends are being searched or talked about the most? You can analyze that data and plan in advance. If you have a good plan and can do it quickly, you can easily lead the trend by using data from Big Data.

Future planning is more effective. From the available data, the results of analysis from Big Data can be used to help with planning and decision-making, both in terms of reducing costs

and increasing productivity by collecting various data. Within the organization to analyze whether it is the production process, raw material usage data, it will be possible to know whether there are any internal problems in the organization or not, which part needs to be improved, in order to be able to solve problems quickly, to prevent production errors, predict potential problems from using data from Big Data to predict market demand, which in addition to predicting the future, can also be used to analyze and develop further that in the future, what events can happen, and then use that data to plan, adjust policies, and organizational management methods to be able to solve problems quickly that may occur in the future, reduce the budget for IT investment in the future after using Big Data in the organization, it can greatly reduce IT budget costs because the obtained data can be used for other purposes and also help reduce the cost of hiring IT staff in many positions that can be replaced by Big Data.

4.3 Precautions for using Big Data

4.3.1 Choose to believe in yourself more than the data obtained from Big Data. Failure after using Big Data The management team still chooses to believe in themselves more, even though the data obtained from Big Data is already reasonable.

4.3.2 Choose the wrong problem-solving tools After starting to use Big Data in the organization, but because Big Data may be a new technology in the organization, people in the organization may still choose to use older technologies that are more familiar to them to solve problems, causing the use of Big Data technology in the organization to be unsuccessful.

4.3.3 Lack of IT skilled personnel Because Big Data technology is a modern technology, it is necessary to use personnel with knowledge and expertise in IT. If there is a lack of personnel in this area, it may be difficult to use Big Data in the organization successfully.

4.3.4 There may be problems that Big Data cannot solve. The use of Big Data technology in the organization may also have problems that Big Data cannot solve in this part. It may be a problem with the internet or a lack of personnel with IT skills.

4.3.5 The use of Big Data technology may go against the organization's planning. Implementing Big Data in the organization will not be successful if there is no good support from the organization or if other plans are given more importance.

4.3.6 Lack of sufficient data collection Many organizations may lack additional data collection, which many organizations avoid finding data themselves because it increases the steps in the work process.

Big Data, a technology that helps marketing to be effective with data Big Data is a useful technology that can be applied in many areas, whether it is national planning, business planning in an organization, educational planning, medical planning, and many other areas. Although Big Data is very useful, if there is no good support from the organization, it may not be successful. In addition, it requires investment in the beginning and requires personnel with a lot of IT knowledge and skills. Efficient internet connection is also very important, both in connecting, searching for and collecting data. In the future, Big Data technology will be very important in daily life because all available data can be analyzed and processed.

4.4 Data management development

Organization means a group of people who come together to work to achieve certain common goals. Each organization has different goals and missions. The important role of the document manager is to implement the document management plan (Records management

program: RMP) to meet the organization's goals. Therefore, document managers must have a clear understanding of the organization and its context, analyze the organizational context that affects document management, design and drive the implementation of the document management plan to respond to the needs of the organization and each operator appropriately. This chapter will discuss the characteristics of the document management plan, analyze the organizational context, and develop a document management plan, which are important parts and are what guarantee the success of document management in the organization. The term document management plan is represented by the abbreviation RMP. In some cases, the document management plan.

4.5 Development of the document system

The process of designing and implementing a document system (Records system) in an organization to be able to operate sustainably may rely on the framework of designing a document system according to DIRKS (Designing andImplementing Recordkeeping Systems) developed by the National Archives of Australia, which consists of 8 steps, but some steps may be skipped, as follows:

4.5.1 Preliminary investigation is a survey, examination of the current status, and feasibility of developing a system for the organization. The principle is to collect data to identify the mission, structure, and characteristics of the organization, understand the factors affecting the organization's document management needs, understand the organization's mission, activities, technological infrastructure, stakeholders, and various risks.

4.5.2 Analysis of business activity is an analysis of the structure, mission, process, and activities, and separate external factors affecting the organization's operations by using various analysis techniques to understand the organization in detail, which will lead to Classification schemes, which are important tools in document management of the organization. The scheme will tell the structure of the document management system and the relationship between documents and activities that create documents. It is an important basis for controlling content and facilitating the management and use of documents.

4.5.3 Identification of record keeping requirements is a study of laws, operational activities, and others to determine the requirements for document management. In terms of legal evidence and organizational knowledge, the types of needs include document creation, storage, aging and destruction, retrieval and access, and evaluation.

4.5.4 Assessment of existing systems: This is to examine what the existing systems are and find out which parts of the system do not meet the organization's document management needs. This is to know which systems are currently used to handle documents, and to plan for future document management. An important tool for understanding is the Records survey, which helps document managers evaluate the documents and systems that have been used in the past. This allows them to know what tasks the organization performs, what structures and environments affect document creation and maintenance, and to discover how long the old system has met their needs and identify when the system has not met their needs.

4.5.5 Identification of strategies for record keeping: This is the application, selection, or combination of policies, standards, guidelines, work procedures, and principles of practice. The choice of strategies must be appropriate for the organization's environment, culture, and capabilities.

4.5.6 Design of a record keeping system: This is the design of the system according to the selected strategy.

4.5.7 Implementation of a record keeping system: This is to ensure that all elements of the developed system meet the needs of the organization. Educate personnel about the new system. Disseminate the transformation of old data to the new system and manage changes.

4.5.8 Post-implementation review is the collection of data on the efficiency of the system through various methods, such as surveying or interviewing personnel about their satisfaction with the system to find out which systems are currently used for document management, as well as planning for future document management. An important tool for understanding is the Records survey, which helps document managers evaluate the documents and systems that have been used in the past. This allows them to know what tasks the organization performs, what the environmental structure is, and how it maintains documents. They also discover how long the old system has met their needs and identify when the system did not meet their needs, which will lead to improvements and solutions to problems that arise.

5. Conclusion

The study on "Guidelines for developing academic information management between internal departments for graduate students, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University", the researcher analyzed the research results as follows: From the discovery of data management problems that result in delays in graduation, not in accordance with the criteria, data relationships, developing databases to be standardized, determining mechanisms and measures for data management through improving the operating system, developing and improving the database system, setting directions and creating a mechanism system to link between the curriculum action plan and academic data management to create integration according to the research methodology, helping the work to be efficient, there should be a time frame to strictly stimulate progress in checking data of each internal department involved.

From the analysis of the problems and obstacles to the work of academic data management, it resulted in a study of guidelines and things that need to be developed to solve problems that arise from work. Therefore, the researcher is interested in studying the factors that affect the graduation according to the criteria of graduate students in order to use those factors to analyze the development guidelines for academic data management between internal departments of graduate students, Faculty of Fine and Applied Arts, Suan Sunandha Rajabhat University, to apply the guidelines for systematic promotion, reduce the time of work and develop work results to reduce the number of graduations that do not meet the criteria, resulting in the quality and academic standards of graduate education management. Creating guidelines for data management to promote data management by drafting guidelines for education management from documents and analyzing the appropriateness of the possibility of developing a document management system by improving the knowledge of data into the information system to be consistent and appropriate for personnel implementation, to participate in knowledge management processes to be applied in work and to develop the results of the curriculum and the competencies of workers to be efficient.

5.1 Database Management is the management of data sources that are collected in a central location to respond to the use of applications efficiently and reduce data duplication and data conflicts that occur within the organization. In the past, data storage was often independent of each other without data linkages. Waste space in storing data, for example, an organization will have separate personnel files, payroll files, and benefits files. When the executives need information from any employee, they have to look up all 3 files, which is inconvenient. Therefore, the idea of combining all 3 files and storing them in a central location as a database was born. This led to the creation of a database management system (DBMS), which requires a specific program to create and maintain the database and allows users to apply it to the data by retrieving the data and using other ready-made programs to create work using the data in the database. This shows the combination of 3 data files. Advantages of a database system include reducing complexity. Disadvantages of a database system include software costs and expenses for experts.

Data management Data is the facts that occur from an activity through observation, recording, interviewing, and designing questionnaires. The obtained data is still raw data. It cannot be used for decision-making in management actions, and the collected data is often not organized. There may be duplication of data or the same type of data may conflict. Therefore, the organization must have a plan for managing the database. Good data will benefit from the information that is organized.

5.2 Guidelines for developing academic data management between internal departments of graduate students, Faculty of Fine Arts, Suan Sunandha Rajabhat University Data is evidence of actions, administration, and operations (Evidence of the act) Many types of documents in the organization are prepared according to the assigned authority for use in administration and operations. Work tools (Basic tool) Everyday work requires documents as a tool for almost all work. Documents are a medium (Means) Communication in the organization, both formal and informal, requires documents as a medium to create mutual understanding and to be able to carry out activities smoothly, such as circulars, announcements, newsletters. Data management as knowledge (Knowledge) Documents in the organization It is something that records knowledge and experience. When it is accumulated, it becomes a valuable knowledge of the organization. It can be used to plan, determine strategies, policies, and develop in various areas effectively. 3. Database design is important for database system management (DBMS). This is because the data in the database must study the relationship of the data, the structure of the data, access to the data, and the process that the application program will call the database. Therefore, the methods of creating a database can be divided into 3 types: 1) Relational database 2) Network database and 3) Hierarchical database. The development of academic data management between internal departments of graduate students, Faculty of Fine Arts, Suan Sunandha Rajabhat University systematically helps reduce the complexity of data within the organization by consolidating data in one place and the controller overseeing the use of data, accessing data, utilizing data, and maintaining security. Reduce data redundancy in cases where data is isolated, reduce data confusion within the organization, program development and maintenance costs after the system is complete will be reduced when compared to the old model, there is flexibility in expanding the database, updating and modifying is easier, and data access and convenience in using information are increased, which supports data management results between agencies. Guidelines for the development of academic data management between internal departments, together with literature analysis and drawing on excellent case studies and experiences of data

management in Thailand and abroad, development of graduate school data management has proposed following measures:

Table 1: Guidelines for the development of academic data management between internal departments

No.	Guidelines for the development
Database Management	Define the concept of the development process of academic data storage between units.
Data Management Development	Strengthen the design of the academic data management development system in the university's academic management system between internal units.
	Develop a strategic plan for the development of academic data management information.
	Strengthen organizational standards and develop an academic data management system in a modern system.
	Clarify the development framework of the academic data management system in the academic management system.
Design and improve data management development	Improve creation of academic data management development system between units in the university's academic management system.

Source: Author

This research aims to develop academic data management between internal departments of graduate students in the Faculty of Fine Arts, Suan Sunandha Rajabhat University, towards a systematic approach to the development of a data management system with shared standards between departments. The creation of knowledge for application in research leads to guidelines for improvement and can be used as knowledge for development and reduction of work time. It is a guideline for personnel in checking document data with the same standards and formats, consistent with academic standards, beneficial for international students who will study and also beneficial in the process of taking care of international students at the graduate level, Bachelor of Fine Arts Program, Visual Arts and Design, Suan Sunandha Rajabhat University, and the knowledge and guidelines can be further developed in the future to create the greatest benefit for students and advisors.

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