

# **The Development of Skills of Using Information Technology and Communication for Learning Management in the 21st Century of Personnel of the Demonstration School of Suan Sunandha Rajabhat University**

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## **ABSTRACT**

The objectives of this research are to 1) study the problems and needs of using information technology and communication for learning management in the 21<sup>st</sup> century for personnel at the Demonstration School of Suan Sunandha Rajabhat University, Bangkok 2) develop skills in using information technology and communication for learning management in the 21<sup>st</sup> century for personnel at the Demonstration School of Suan Sunandha Rajabhat University, Bangkok. Population was 89 people used in this research including the personnel at the Demonstration School of Suan Sunandha Rajabhat University. The research tools consisted of an interview form, an opinion questionnaire, and evaluation forms of development skill. Data were analyzed using basic statistics, including frequency, percentage, mean, and standard deviation and analyze content.

The results of the research found that 1) problem conditions and needs for using of information technology and communication for learning management in the 21<sup>st</sup> century in management infrastructure personnel development in terms of organizing the learning process. It found that the school had organized the using of information technology and communication at a high level. Personnel have a need for personnel development first followed by infrastructure to organize the learning process and management, respectively, for 2) developing skills in using information technology and communication for organizing learning in the 21<sup>st</sup> century for personnel. It found that the school has developed skills in various areas for personnel and teachers in using of information technology and communication for teaching and learning at a moderate level.

**Keywords:** *Development skill, Information Technology, Learning management.*

## **INTRODUCTION**

Thailand has announced using of an information technology policy framework. It sets out three important missions: investing in equitable national information infrastructure; investing in good education of citizens and information workers, improving the role of the government sector to provide better service and build a strong foundation for the information industry. To serve as a compass to guide the development of information technology in Thailand during the first decade of the 21st decade in order to raise the economy and quality of life of Thai people and bring Thailand into a society of wisdom and learning. (Knowledge-based Economy and Society) [1]

Information technology is developing rapidly. There are improvements in tools and equipment that are useful for information work all the time, causing the professional world to turn to improving mechanisms. in their profession to keep up with the information society in order to keep up with world trends Therefore, information technology Therefore, it plays a very important role at present and is likely to play an even greater role in the future. Because technology is a tool for operating information efficiently. From production, storage, processing, retrieving information communications, exchanging and sharing information resources to their full benefit. Therefore, educational institutions must have an educational administration and management system that leads to the quality of the students. Including an information system that is efficient, systematic, accurate, complete, up-to-date and able to retrieve information at all times. The educational institution administrators can use this in deciding various operations according to the quality assurance system within the educational institution. effectively It is considered that the management and information system of the educational institution It is very important and necessary in carrying out the educational quality assurance of educational institutions. to achieve the goal of developing the quality of educational institutions meets the required standards and covers the mission of quality management [2]

Current condition Learning management of personnel of the Demonstration School of Suan Sunandha Rajabhat University information technology is used as a guideline for organizing learning and work. From preliminary data, it is found that personnel use information technology to participate at a moderate level. In the past learning management, it was found that teachers still faced problems. Lack of skills in using information technology and communication not in accordance with the school's administrative policy [3]

From the reasons mentioned above, the researcher is interested in studying. About information technology and communication for learning in the 21st century of personnel at the Demonstration School of Suan Sunandha Rajabhat University for school personnel to be able to organize the exchange of knowledge Seeking new knowledge, emphasizing the pursuit of knowledge by oneself and create a learning society that can learn throughout life. And in order to use the research results obtained to improve and develop teachers' skills in using information and communication technology for learning in the 21st century.

## **OBJECTIVES**

1) Study the problems and needs of using information and communication for learning management in the 21st century of personnel at the Demonstration School of Suan Sunandha Rajabhat University.

2) Develop skills in using information and communication technology for learning management in the 21st century of personnel at Demonstration School of Suan Sunandha Rajabhat University.

## **METHODOLOGY**

In researching the problems of using information and communication technology for learning management in the 21st century among personnel at the Demonstration School of Suan Sunandha Rajabhat University there are 4 areas:

1. Management refers to the process of managing and setting directions for the efficient and effective use of information technology resources. In order to achieve the goals and get maximum benefits

2. In terms of infrastructure, it means that the school has management in place. To facilitate the use and management of information technology, consisting of hardware, software, database, network, processes, and people.

3. Personnel development refers to management to have information technology personnel in schools, as well as the development of teachers and personnel. It focuses on creating knowledge and understanding in working to have a good attitude towards the work and the organization. As well as creating skills and expertise in information technology operations.

4. Organizing the learning process means using information technology, communication tools and computer networks. Used to promote and support student learning activities. Organizing teaching activities for teachers

For developing skills in using information and communication technology for learning management in the 21st century, it is knowledge and understanding of skills in using information and communication technology according to the guidelines of Google Workspace for Education, which is considered a set of tools and services of Google designed specifically for educational institutions. Services are available worldwide to qualified educational institutions. In this regard, Google Company has prepared various applications to support the work as follows:

- 1) Gmail is a free email service developed by Google with 15 Gb of storage space. Today, Gmail is widely used. At present, it is used as an email service for sending and receiving mail and is used as a user to access various Google services such as Google Drive, Google Photo and Google Meet, etc.

- 2) Hangouts (Google Talk) is an instant messaging service for both typing and voice communication. that teachers can apply to teaching and learning design very well

- 3) Google Calendar is Google's online calendar used for recording information. Event activities include scheduling appointments. You can send an invitation message. Can share calendars with people others and can search for various activities

- 4) Google Documents is an online service that can handle various types of documents without any cost, whether it be printing reports. Making slides to present work or manage documents like spreadsheets, etc.

- 5) Google Site is a personal website. that the creator created to present new articles and exchange knowledge. Criticize news or others as well as disseminate the work so that others can use it. Teaching media or various news that you want to inform students through the online world, etc.

Research on development of skills in the use of information and communication technology for learning management in the 21st century of personnel at Demonstration School of Suan Sunandha Rajabhat University. The researcher followed various steps, which can be summarized in Table 1.

Table 1: shows the steps in conducting the research.

| Research Plan  | Methodology   | Result  |
|--|---|---|
| <b>Step 1<br/>Planning</b>                           | <ul style="list-style-type: none"> <li>- Document synthesis and related research</li> <li>- Design the research process</li> </ul>  | <ul style="list-style-type: none"> <li>- concept</li> <li>- Research framework</li> </ul>   |
| <b>Step 2<br/>Practice (Action)</b>                  | <ul style="list-style-type: none"> <li>- Survey of conditions, problems, and needs for using information and communication technology for learning management in the 21st century.</li> <li>- Develop skills in using information technology and communication for learning in the 21st century.</li> </ul> | <ul style="list-style-type: none"> <li>-Conditions, problems, and needs for the use of information and communication technology</li> <li>-Knowledge and ability to use information and communication technology for learning management in the 21st century.</li> </ul> |
| <b>Step 3<br/>Skills Assessment<br/>(Evaluation)</b> | <ul style="list-style-type: none"> <li>- Assessment of skills in the use of information and communication technology</li> </ul>   | <ul style="list-style-type: none"> <li>Personnel are able to use information technology and communication for learning management in the 21st century.</li> </ul>   |
| <b>Step 4<br/>Reflection</b>                         | <ul style="list-style-type: none"> <li>- Bring results to analyze to reflect operating results. Propose to management</li> </ul>  | <ul style="list-style-type: none"> <li>Guidelines for implementing the use of information technology and communication for quality learning management in the 21st century</li> </ul>   |

From the research idea and the steps in conducting the research. The researcher has summarized the research framework as follows:

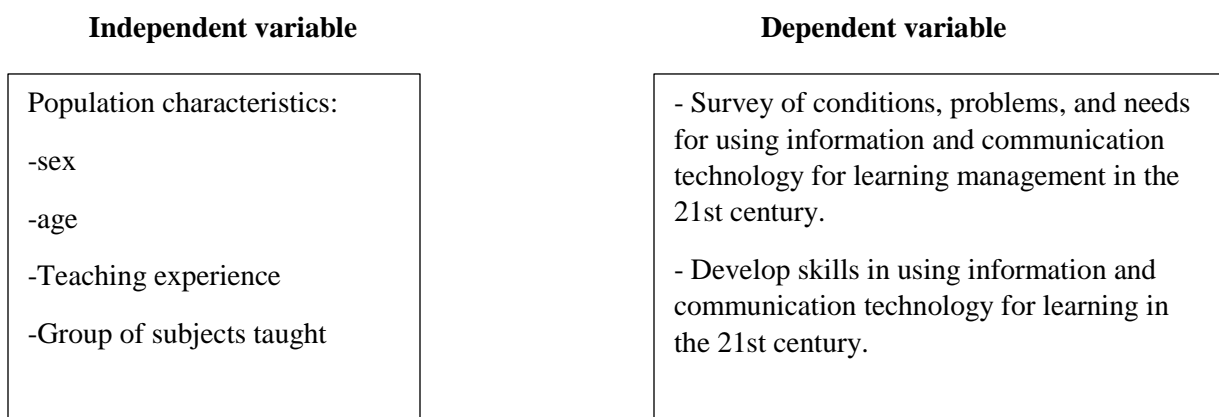


Figure 1: Shows the research concept.

## RESULTS

1. Conditions of the use of information and communication technology for learning management in the 21st century. The results can be summarized as follows.

1.1 In terms of management, it was found that there was a system for using information and communication technology. Information technology and communication are used to store student and staff information using the Orange program in the registration system. Information and communication technology equipment is also used to increase the efficiency of each department's work. There are ready-made programs used in library work. School co-op work the budget is used to support training to develop knowledge and skills in the use of information and communication technology adequately.

1.2 In terms of infrastructure, it was found that the school has arranged information technology equipment to organize teaching and learning. computer printer document scanner Projector CD and DVD players as well as the use of computer programs for teaching and learning and web browsers. Internet use the internet is used to search for information. Use online communication

1.3 In terms of personnel development, it was found that personnel use computers to perform their jobs. Every personnel have a personal computer in their work room. Every personnel have a portable computer. Personnel can use freeware software. and open source Staff can use social media such as Facebook, LINE, Twitter. Staff can use electronic mail (E-mail) as well as the electronic office system within the university.

1.4 In terms of organizing the learning process, it was found that computers were used to prepare learning management plans, knowledge sheets, worksheets, and tests. Computers were used to store scores and process them. Use computers to produce teaching media. Use a computer and projector It is a teaching tool. Use computer laboratories or audio-education rooms for teaching and learning. Bring teaching media in the form of multimedia lessons from the website to use in teaching activities. Search for information on the Internet for use in teaching and learning. In addition, personnel also provide opportunities for students to study, research and seek knowledge from the internet network as additional teaching content.

2. Results of developing skills in using information and communication technology for learning management in the 21st century.

| <b>Google Workspace for Education</b> | <b>Mean</b> | <b>S.D.</b> | <b>Interpretation</b> |
|---------------------------------------|-------------|-------------|-----------------------|
| <b>Gmail</b>                          | 3.56        | 1.25        | a lot                 |
| <b>Hangouts (Google Talk)</b>         | 3.10        | 0.97        | moderate              |
| <b>Google Calendar</b>                | 3.09        | 0.56        | moderate              |
| <b>Google Documents</b>               | 3.67        | 1.10        | a lot                 |
| <b>Google Site</b>                    | 3.65        | 0.68        | a lot                 |
| <b>Total</b>                          | <b>3.41</b> | <b>0.91</b> | <b>moderate</b>       |

## DISCUSSIONS

The results of the research found that 1) problem conditions and needs for using of information technology and communication for learning management in the 21st century in management infrastructure personnel development in terms of organizing the learning process. It found that the school had organized the using of information technology and communication at a high level [4]. Personnel have a need for personnel development first followed by infrastructure to organize the learning process and management, respectively, for 2) developing skills in using information technology and communication for organizing learning in the 21st century for personnel. It found that the school has developed skills in various areas for personnel and teachers in using of information technology and communication for teaching and learning at a moderate level. In addition, the study results of the researcher were consistent with Phromkhuntong and Satsananan [4] and Phromkhuntong and Satsananan [5]. The study of the happiness in the personnel work of Suan Sunandha Rajabhat University said that age was related to happiness in every aspect of work from the above. So, age is considered a translator and important factor affect to work including the influence factors of develop the follow up process on performance report as well.

## ACKNOWLEDGEMENTS

The researchers are very grateful to those experts for dedicating their precious time to examine and review research instruments, provide information, advice, consultancy, opinions, and suggested some good techniques. The researchers gratitude to Suan Sunandha Rajabhat University for granting 2023 funding support. We are thankful to the students at the Demonstration School of Suan Sunandha Rajabhat University to devote times for learning and cooperate to do activities successfully. The appreciation goes to the school supports, English subject teachers, staff of the school, and colleagues who give this chance to work with together.

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