THE STUDY OF SATISFACTION WITH THE USE OF EQUIPMENT IN THE HYBRID LEARNING CLASSROOM FACULTY OF SCIENCE AND TECHNOLOGY, SUAN SUNANDHA RAJABHAT UNIVERSITY

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Abstract

The research entitled "A Study of Satisfaction with the Use of Equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University" aims to study the level of satisfaction with the use of equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University, as well as to investigate the problems, obstacles, and needs arising from the use of such equipment. The sample group consisted of 99 academic personnel. The research instrument was a questionnaire, which was divided into three parts as follows: Part 1: General information of the respondents. Part 2: Questions regarding the level of satisfaction with the use of equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University. Part 3: Suggestions and recommendations. The statistical methods used for data analysis included frequency distribution, percentage, mean, and standard deviation.

Keywords: Hybrid Learning Classroom, User Satisfaction, Educational Technology

Introduction

According to the vision of Suan Sunandha Rajabhat University, which is *"A leading creator of professionals for sustainable social development,"* the university has set a clear direction for its institutional development. It has established the SSRU "KEEP" Model as a framework for management and monitoring of operational systems to ensure continuous improvement, ultimately aiming to become a model university in accordance with its 15-year vision. From this management approach, the university has also defined the SSRU (SWITCH) Development Goals to achieve its strategic objectives and transform into a digital university.

At present, Suan Sunandha Rajabhat University places great importance on the use of technology in teaching and learning for academic staff and students, as well as providing technological facilities that support the operations of both academic and supporting personnel. Given the rapid advancement of technology and innovation, the university recognizes the need to adapt its teaching methods through various forms of learning that integrate media, equipment, and information technology to enhance classroom instruction.

The Faculty of Science and Technology, as an academic division, has the vision to *"Provide education, conduct research, and create innovations in science and technology to produce professional graduates equipped with future skills, coupled with moral and ethical integrity, for sustainable national development in the digital era."* Its main mission is to produce high-quality, ethical graduates in science and technology to serve and develop society.

To support this mission, the university has provided the faculty with Hybrid Learning Classroom equipment to facilitate both on-site and online teaching, learning activities, and

training programs. The Audio-Visual and Information Section is responsible for managing the equipment, updating software, checking hardware performance, and ensuring all systems are in proper condition before use Given the importance of these developments, the researcher aims to study the level of satisfaction with the use of Hybrid Learning Classroom equipment at the Faculty of Science and Technology, Suan Sunandha Rajabhat University, in order to utilize the research findings to improve the quality of the equipment and enhance user satisfaction.

Research Objectives

1. To study the level of satisfaction with the use of equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University.
2. To study the problems, obstacles, and needs arising from the use of equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University.

Scope of the Research

Population

The population used in this research consisted of 99 academic personnel from the Faculty of Science and Technology, Suan Sunandha Rajabhat University.

Sample Group

The sample size was determined using the Taro Yamane (1970) formula, resulting in a total of 79 samples. The sampling was conducted using Stratified Random Sampling followed by Simple Random Sampling methods.

Scope of Content

The content scope was divided as follows

1. Personal Factors — including gender, age, educational level, and frequency of classroom use per week.
2. Study Factors — the level of satisfaction with the use of equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University, in four aspects:
   - 2.1 Physical environment
   - 2.2 Educational equipment
   - 2.3 Educational support technology
   - 2.4 Service personnel

Research Instrument

The instrument used in this research was a questionnaire, consisting of three parts as follows:

- Part 1: Questions about the general information of the respondents, presented in the form of a checklist, covering gender, age, educational level, and the number of times per week they used the Hybrid Learning Classroom.
- Part 2: Questions regarding the level of satisfaction with the use of equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University. This section covers four aspects
- Part 3: Suggestions for improving the efficiency and effectiveness of operations. This part consisted of open-ended questions (Open-Ended Questions)

Research Duration

February 1 – August 31, 2025

Research Methodology

Data Analysis

In the study on satisfaction with the use of equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University, the researcher presents the results of the data analysis as follows:

1. Research Findings

Part 1: Analysis of respondents' personal information, including gender, age, educational level, and the number of times per week they used the Hybrid Learning Classroom.

Part 2: Analysis of the level of satisfaction with the use of equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University, in four aspects, namely:

1) Physical environment
2) Educational equipment
3) Educational support technology
4) Service personnel

The analysis was conducted using Frequency Distribution and Percentage methods

Research Results

Results of the General Information Analysis of Respondents

The analysis revealed that most of the respondents were female, totaling 51 persons (64.6%), while male respondents numbered 28 persons (35.4%). Most respondents were aged 31–40 years, totaling 32 persons (40.5%). Regarding educational background, the majority held a Master's degree, totaling 62 persons (78.5%). Most respondents used the Hybrid Learning Classroom 1–3 times per week, totaling 37 persons (46.8%).

Results of the Analysis of Mean and Standard Deviation on the Level of Satisfaction with the Use of Equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University, are as follows:

Physical Environment

Overall, the satisfaction level was high. The item *"The lighting is sufficient and appropriate"* had the highest mean score ($\bar{X}$ = 3.987), while *"The classroom is adequately prepared for use"* had the lowest mean score (= 3.848).

Educational Equipment

Overall, the satisfaction level was high. The item *"The number of media/equipment is adequate for use"* had the highest mean score ($\bar{X}$ = 3.823), while *"The media/equipment are convenient to use"* had the lowest mean score ($\bar{X}$ = 3.684).

Educational Support Technology

Overall, the satisfaction level was high. The item *"The internet network signal is accessible"* had the highest mean score ($\bar{X}$ = 4.17), while *"The stability of the computer operating system is reliable"* had the lowest mean score ($\bar{X}$ = 3.98).

Service Personnel

Overall, the satisfaction level was high. The item *"Overall satisfaction with staff services"* had the highest mean score ($\bar{X}$ = 4.101), while *"Staff provide assistance and guidance for efficient equipment use"* had the lowest mean score ($\bar{X}$ = 3.692).

Discussion

Level of Satisfaction with the Use of Equipment in the Hybrid Learning Classroom, Faculty of Science and Technology, Suan Sunandha Rajabhat University

The researcher discussed the findings as follows:

1. Physical Environment

Overall, the level of satisfaction was high. This is because the classroom had sufficient and appropriate lighting, comfortable temperature, and was clean and orderly. In addition, the number of tables and chairs was adequate and suitable, and the classroom was well-prepared for use.

2. Educational Equipment

Overall, the level of satisfaction was high. This is due to the availability of sufficient and well-prepared media/equipment provided by staff. The equipment was of good quality, audio systems (microphones/speakers) were efficient, and the media and equipment were convenient to use.

3. Educational Support Technology

Overall, the level of satisfaction was high. Respondents found that the equipment system was easy to access, and applications for online learning such as Google Meet and Zoom were convenient to use. The live broadcasting quality was clear, the internet/Wi-Fi system was stable, and the computer operating system functioned continuously. Moreover, the software provided covered users' needs, and the Hybrid Learning system was efficiently managed to support both teaching and learning.

4. Service Personnel

Overall, the respondents' satisfaction level was high. This is because the staff demonstrated knowledge and expertise in using and troubleshooting equipment, were polite and attentive in their service, and provided helpful guidance and assistance for the effective use of the equipment.

References

Kohnke, L., & Goria, C. (2022). Students' perceptions of Hybrid-Flexible (HyFlex) classroom technology: A case study. *The International Journal of Information and Learning Technology, 39*(5), 519–532. https://doi.org/10.1108/IJILT-02-2022-0036

Nakin, N. (2023). *Development of a hybrid learning management model based on active learning and digital platforms to promote digital intelligence for undergraduate teacher education students at Rajabhat University* [Doctoral dissertation, Naresuan University]. Naresuan University Intellectual Repository.

Netwong, T. (2008). *A study of student satisfaction toward the use of university buildings at Suan Dusit Rajabhat University*. Faculty of Humanities and Social Sciences, Suan Dusit Rajabhat University.

Sirichanchayakul, C. (2008). *A study of satisfaction after using the Hybrid Learning System of the University of the Thai Chamber of Commerce* [Master's thesis, University of the Thai Chamber of Commerce]. University of the Thai Chamber of Commerce Repository.

Sriviboon, C., Kaewrattanapat, N., Khaengkhan, M., Nookhong, J., & Pintuma, S. (2024, March). Classification of undergraduate students' adaptability levels in hybrid learning using machine learning techniques. In *Proceedings of the International Academic Multidisciplinary Research Conference in Hokkaido 2024* (pp. 1–8).

Thiamkaew, N. (2018). *Student satisfaction with the quality of services of the Office of Academic Resources, Mahasarakham University, Academic Year 2017*. Mahasarakham University.