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**FACTORS AFFECTING THE OPERATION OF THE INTERNAL EDUCATION  
QUALITY ASSURANCE SYSTEM ACCORDING TO THE CRITERIA FOR  
DEVELOPING EDUCATIONAL QUALITY TOWARDS EXCELLENCE (EdPE<sub>x</sub>)  
UDON THANI EDUCATIONAL CENTER SUAN SUNANDHA RAJABHAT  
UNIVERSITY**

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### **Abstract**

This study aims to examine the factors that influence the implementation of the internal quality assurance system based on the Education Quality Development Standards (EdPE<sub>x</sub>) at the Udon Thani Provincial Study Center, Suan Sunandha Rajabhat University. The sample group for this study consisted of 32 staff members. The collected data were analyzed using statistical methods, including mean, standard deviation, and percentage, to assess the factors impacting the EdPE<sub>x</sub> system's implementation. The study found that the factors contributing to the success of the EdPE<sub>x</sub> system include support from management in terms of administration and direction, effective communication between management and staff, and a clear process within the EdPE<sub>x</sub> system. Additionally, the involvement of staff at all levels, as well as the participation of stakeholders, including students, played a significant role in driving the system forward. Accurate evaluation and continuous improvements in the EdPE<sub>x</sub> system were identified as key factors in ensuring the system's effective operation. However, resource allocation at each stage of implementation, as well as planning and resource utilization, still have limitations that require improvement. The overall assessment results indicated that the implementation of the EdPE<sub>x</sub> system at the Udon Thani Provincial Study Center is highly effective, with an average score of 78.54%, reflecting a good level of operation and continuous efforts toward educational excellence. This study highlights the importance of management support, clear planning, and participation from all stakeholders in driving the EdPE<sub>x</sub> system to improve internal educational quality.

**Keywords:** Factor, Operation, Quality Assurance

### **Introduction**

The Education Criteria for Performance Excellence (EdPE<sub>x</sub>) 2020-2023 is a version developed by the Office of the Permanent Secretary of the Ministry of Higher Education, Science, Research, and Innovation, through the subcommittee on the development and enhancement of education quality towards excellence. It was adapted from the Baldrige Criteria for Performance Excellence 2019-2020 of the United States to suit the context of Thai education. This version provides a framework for higher education institutions to use in developing educational quality management systems to achieve international excellence. The EdPE<sub>x</sub> criteria in this version have been revised from the previous 2015-2018 version, with a focus on balancing standards that reflect national or international benchmarks for excellence. This allows institutions with different levels of development to access and implement the criteria, creating an integrated performance management system that has been proven to be

effective in leading organizations toward excellence. At the same time, the criteria have been simplified for easier use (Subcommittee on the Development and Enhancement of Education Quality Towards Excellence, 2021).

Suan Sunandha Rajabhat University aims to drive the internal quality assurance system according to the EdPEX criteria as a tool for managing organizational performance to develop the university towards excellence. The university also recognizes the importance and benefits of developing university quality. The internal quality assurance system is a crucial mechanism in enhancing educational standards and building confidence in the quality of educational institutions. By implementing the EdPEX criteria at the Udon Thani Educational Center, the university aims to elevate the management quality and achieve sustainable results. EdPEX is a globally recognized standard that promotes continuous improvement in work processes, the development of outcomes that meet stakeholder needs, and the creation of value for the organization. However, this process faces several factors that may impact its success, such as staff readiness, resource management capabilities, understanding of the EdPEX process, and support from leadership.

The evaluation at the course level serves as a guideline for improving the quality assurance system in online course management. This helps resolve issues related to traditional quality assurance systems, which involve multiple steps and can be cumbersome. For instance, writing self-assessment reports during the process involves compiling both narrative and numerical data, making it difficult to align the information with the specified standards and indicators. This often results in difficulties in retrieving information, delays in report preparation, data redundancy, and a high risk of errors. Furthermore, administrators struggle to track the progress of report preparation for each course (Singkhonket et al., 2017).

In the context of the Udon Thani Educational Center, which has unique geographical characteristics and provides educational services across multiple provinces, studying and analyzing the factors influencing the operation of the EdPEX quality assurance system is essential for determining ways to improve and develop the management system for optimal efficiency.

Studying the factors influencing the implementation of the EdPEX quality assurance system will help the organization identify strengths, areas for improvement, and appropriate solutions. This is beneficial for sustainable development and achieving excellence in the education system, aligning with the EdPEX criteria, and supporting national education development policies, such as the National Education Plan and Sustainable Development Goals (SDGs), particularly in providing inclusive and equitable education.

### **Research Objectives**

1. To study the factors influencing the implementation of the internal quality assurance system according to the Education Criteria for Performance Excellence (EdPEX) at the Udon Thani Educational Center, Suan Sunandha Rajabhat University.

2. To analyze the factors influencing the implementation of the internal quality assurance system according to the Education Criteria for Performance Excellence (EdPEX) at the Udon Thani Educational Center, Suan Sunandha Rajabhat University.

### **Scope of the Research**

1. Population Scope

- 1.1 The population consists of the staff at the Udon Thani Educational Center, Suan Sunandha Rajabhat University.

1.2 The sample group was selected using a purposive sampling method, with a total of 32 individuals.

## 2. Content scope

This questionnaire is designed to gather information on factors that impact the implementation of the internal quality assurance system according to the Education Criteria for Performance Excellence (EdPEX) at the Udon Thani Educational Center, Suan Sunandha Rajabhat University. Your responses will contribute to the study and help improve the system. Please answer the questions honestly and thoughtfully

## 3. Time Scope

Research Duration: October 1, 2024 – July 31, 2025 (Total of 10 months)

## Research Methodology

### 1. Research Methodology

In the research study titled "A Study on Readiness for Becoming a Digital University at the Udon Thani Educational Center, Suan Sunandha Rajabhat University," the researcher used a quantitative research method. Data were collected using a questionnaire tool from a sample group selected from the population, which included academic staff and support staff at the Udon Thani Educational Center, Suan Sunandha Rajabhat University. The sample group was selected using a purposive sampling method, with a total of 32 participants, consisting of:

- 4 administrators
- 14 faculty members
- 9 staff members
- 5 laborers

### 2. Research Steps

- 2.1 Sample population
- 2.2 Research instruments
- 2.3 Data collection
- 2.4 Instrument validation
- 2.5 Data analysis and processing
- 2.6 Research duration
- 2.7 Data presentation guidelines

### 3. Data Collection

3.1 Requested assistance from administrators, faculty members, staff, and laborers at the Udon Thani Educational Center to gather data.

3.2 Distributed the questionnaires to the sample population in person.

3.3 Checked the completeness of the questionnaires before proceeding with data analysis.

3.4 Analyzed the statistical values using computer software for social science research.

### 4. Data Analysis

The researcher performed data analysis as follows:

4.1 Analyzed the personal demographic information of the respondents regarding the factors influencing the implementation of the internal quality assurance system according to the Education Criteria for Performance Excellence (EdPEX) at the Udon Thani Educational Center, Suan Sunandha Rajabhat University, including gender, age, education level, marital status, and work experience, using frequency distribution and percentages.

4.2 Analyzed the data related to opinions on the factors influencing the implementation of the internal quality assurance system according to the EdPEX criteria using mean (average) and standard deviation (S.D.).

4.3 Analyzed and summarized the suggestions provided by the respondents.

## Research Results

Summary of the questionnaire results, research on “Factors affecting the operation of the internal education quality assurance system according to the criteria for developing educational quality towards excellence (EdPEX) Udon Thani Educational Center Suan Sunandha Rajabhat University” according to the summary table 1-3 as follows

Table 1: General information of the respondents

		(n = 32)	
<b>General information</b>		N	%
1. Sex			
1.1	man	15	46.9
1.2	female	17	53.1
2. Age			
2.1	25 – 35 years old	14	43.75
2.2	36 – 45 years old	12	37.50
2.3	46 years and over	6	18.75
3. Education level			
3.1	Below Bachelor's Degree	5	15.6
3.2	Bachelor's Degree	7	21.9
3.3	Master's Degree	17	53.1
3.4	Doctorate Degree	3	9.4
4. Status			
4.1	Single	21	65.6
4.2	Married	11	34.4
5. Working hours			
4.1	Working period 1 – 5 years	9	28.1
4.2	Working period 6 – 10 years	17	53.1
4.3	Working period More than 10 years	6	18.8

As shown in table 1, general information of the respondents. Of the 32sample population, 17 were female (53.1 percent) and 15 were male (46.9 percent). Most of the sample were in the age group of 25-35 years, 14 people (43.75 percent), followed by 36-45 years, 12 people (37.50 percent), and 46 years and above, 6 people (18.75 percent), respectively. Twenty-one (65.6 percent) of the sample were single and 11 people (34.4 percent) were married. Most had worked for 6-10 years, 17 people (53.1 percent), followed by 1-5 years, 9 people (28.1 percent), and more than 10 years, 6 people (18.8 percent), respectively.

Table 2: Standard Deviation, Percentage, and Level of Opinion on Factors Influencing the Implementation of the Internal Quality Assurance System According to the Education Criteria for Performance Excellence (EdPEX) at the Udon Thani Educational Center, Suan Sunandha Rajabhat University

List	%	$\bar{x}$	S.D.	Level
1. Executive support in managing and determining the direction of the EdPEX system is sufficient and effective.	86.06	4.30	0.82	High
2. Executives communicate and ensure understanding of the EdPEX process with personnel in the organization	85.63	4.28	0.70	High
3. Planning and goal-setting for the operation of the EdPEX system is clear	69.38	3.47	0.87	Moderate
4. Policies and plans related to the EdPEX system are regularly evaluated.	61.88	3.09	1.90	Moderate
5. Resources used in the implementation of the EdPEX system, such as budgets, personnel, and equipment, are sufficient and appropriate.	65.00	3.25	1.63	Moderate
6. Personnel responsible for the implementation of the EdPEX system have the knowledge, skills, and abilities appropriate for the task.	66.25	3.31	1.84	Moderate
7. Resources are allocated appropriately for each stage of the EdPEX system implementation.	48.75	2.44	1.68	Low
8. The EdPEX system's operational processes are standardized and transparent in terms of inspection.	91.88	4.59	0.43	Most
9. The methods used in implementing the EdPEX system are clear and appropriate for the characteristics of the organization.	72.50	3.63	1.80	High
10. The evaluation process according to the EdPEX criteria is carried out continuously and accurately.	79.38	3.97	1.34	High
11. Personnel at all levels in the organization are involved in planning and implementing the EdPEX system	88.75	4.44	0.68	High
12. The participation of students or stakeholders in the internal quality assurance process of the EdPEX system meets expectations.	90.63	4.53	0.62	Most
13. The EdPEX system contributes to the improvement of teaching and learning, as well as the development of students.	86.25	4.31	0.78	High
14. Monitoring and evaluating the implementation of the EdPEX system is consistent and continuously improved.	90.00	4.50	0.56	High
15. The processes and systems of EdPEX are developed to accommodate changes and sustainably improve the quality of education.	87.50	4.38	0.73	High
16. The use of data from the EdPEX evaluation helps in planning and improving the academic performance of the organization	86.88	4.34	0.91	High
<b>Total</b>	<b>78.54</b>	<b>3.93</b>	<b>1.08</b>	<b>High</b>

Table 2 showed that the respondents' overall opinion was at the highest level ( $\bar{x} = 4.57$ , S.D. = 0.52), representing 91.35%. When considering each item, it was found that: The EdPEX operational process was standardized and transparent in terms of inspection, at the most level ( $\bar{x} = 4.59$ , S.D. = 0.43), representing 91.88%. The participation of students or stakeholders in the internal quality assurance process of the EdPEX system met expectations, at the most level

( $\bar{x} = 4.53$ , S.D. = 0.62), representing 90.63%. Monitoring and evaluation of the EdPEX system were consistent and continuously improved, at a high level ( $\bar{x} = 4.50$ , S.D. = 0.56), representing 90.00%. Personnel at all levels in the organization were involved in planning and implementing the EdPEX system, at a high level ( $\bar{x} = 4.44$ , S.D. = 0.68), representing 88.75%. The EdPEX process and system have been developed to accommodate changes and improve the quality of education sustainably, at a high level ( $\bar{x} = 4.38$ , S.D. = 0.73), representing 87.50%. The use of data from the EdPEX evaluation helped in planning and improving academic performance in the organization, at a high level ( $\bar{x} = 4.34$ , S.D. = 0.91), representing 86.88%. The EdPEX system contributed to enhancing teaching and learning and the development of students, at a high level ( $\bar{x} = 4.31$ , S.D. = 0.78), representing 86.25%. Executive support in managing and determining the direction of the EdPEX system was sufficient and effective, at a high level ( $\bar{x} = 4.30$ , S.D. = 0.82), representing 86.06%. Executives communicated and ensured understanding of the EdPEX process with personnel in the organization, at a high level ( $\bar{x} = 4.28$ , S.D. = 0.70), representing 85.63%. The evaluation process according to the EdPEX criteria was carried out continuously and accurately, at a high level ( $\bar{x} = 3.97$ , S.D. = 1.34), representing 79.38%. The methods used to implement the EdPEX system were clear and appropriate for the organization's characteristics, at a high level ( $\bar{x} = 3.63$ , S.D. = 1.80), representing 72.50%. Planning and goal-setting for the EdPEX system operation were clear, at a moderate level ( $\bar{x} = 3.47$ , S.D. = 0.87), representing 69.38%. Personnel responsible for implementing the EdPEX system had appropriate knowledge, skills, and abilities, at a moderate level ( $\bar{x} = 3.31$ , S.D. = 1.84), representing 66.25%. Resources used in the implementation of the EdPEX system, such as budgets, personnel, and equipment, were sufficient and appropriate, at a moderate level ( $\bar{x} = 3.25$ , S.D. = 1.63), representing 65.00%. Policies and plans related to the EdPEX system were regularly evaluated, at a moderate level ( $\bar{x} = 3.09$ , S.D. = 1.90), representing 61.88%. Resources were allocated appropriately for each step of the EdPEX system implementation, at a low level ( $\bar{x} = 2.44$ , S.D. = 1.68), representing 48.75%.

## Discussion

From the data presented in Table 2, it can be observed that the respondents' overall opinion regarding the EdPEX system was at the highest level (mean = 4.57, S.D. = 0.52), indicating that there is a high level of satisfaction and positive perception towards the implementation of the system. This is further confirmed by the high percentage of respondents (91.35%) who rated the system highly.

When breaking down the responses by specific criteria, several key factors emerged that contribute to the successful implementation of the EdPEX system. For example, the standardization and transparency of the EdPEX operational process received the highest ratings (mean = 4.59, S.D. = 0.43, 91.88%), indicating that respondents believe the system is well-organized and open to scrutiny, which is crucial for ensuring accountability in the management of the system.

The active participation of students and stakeholders in the internal quality assurance process also received strong support (mean = 4.53, S.D. = 0.62, 90.63%). This highlights the importance of stakeholder engagement in enhancing the quality assurance system and ensuring that all relevant parties are involved in the decision-making process.

Furthermore, the continuous monitoring and evaluation of the EdPEX system received a high rating (mean = 4.50, S.D. = 0.56, 90.00%), emphasizing the importance of ongoing assessment and the willingness to make improvements. This suggests that the institution is committed to enhancing the system through iterative feedback and improvement cycles, which is critical for achieving long-term success.

The results also revealed a strong perception that all levels of personnel are involved in the planning and execution of the EdPEX system (mean = 4.44, S.D. = 0.68, 88.75%). This suggests that the institution recognizes the need for inclusive decision-making processes and values input from diverse stakeholders.

Moreover, the system's ability to adapt to change and continuously improve the quality of education was rated highly (mean = 4.38, S.D. = 0.73, 87.50%). This reflects a commitment to sustainable development, demonstrating that the institution is mindful of the need to evolve and adjust to meet the changing demands of the education sector.

While these high ratings suggest overall success, there were some areas where the responses were more moderate. For instance, the planning and goal-setting for EdPEX operations were rated at a moderate level (mean = 3.47, S.D. = 0.87, 69.38%), indicating that there may be room for further clarification and refinement of goals and strategies in the operational aspects of the system. Similarly, the knowledge, skills, and capabilities of personnel responsible for EdPEX operations were rated moderately (mean = 3.31, S.D. = 1.84, 66.25%), suggesting that more training and development might be needed to enhance the capacity of staff in implementing the system effectively.

Additionally, the allocation of resources for the EdPEX system, such as budgets, personnel, and equipment, was perceived as only moderately sufficient (mean = 3.25, S.D. = 1.63, 65.00%), indicating that resource constraints may be a barrier to fully supporting the system's operations. This points to the need for more strategic planning and resource allocation to ensure the system is adequately supported.

In conclusion, the overall implementation of the EdPEX system at the institution appears to be successful, with strong levels of engagement, transparency, and ongoing evaluation. However, there are areas, such as planning, resource allocation, and staff training, that could benefit from further attention and improvement. Addressing these issues will be key to ensuring the long-term success and sustainability of the EdPEX system at the institution.

The additional study aimed at investigating the factors that influence the implementation of the internal quality assurance system according to the EdPEX quality development criteria at the Udon Thani Study Center, Suan Sunandha Rajabhat University. It also aimed to analyze these factors affecting the internal quality assurance system. The study extends from the success of driving the internal quality assurance system according to the EdPEX criteria, starting with the analysis and establishment of clear goals that align with the image and mission of quality assurance. The planning process involves the participation of all levels of management and staff in driving the system forward.

By analyzing both weaknesses and strengths, the organization can identify its current situation and jointly determine the factors that affect its operational performance. According to Phetaeng et al. (2024), the study focuses on the factors impacting the internal quality assurance system across all processes within the department, with the aim of identifying factors that influence the overall operation of quality assurance. This will serve as a guideline for planning the development and improvement of management practices within the department and ensuring the appropriateness of the internal quality assurance system.

Furthermore, it aims to provide a deep understanding of the factors affecting internal quality assurance so that the knowledge can be applied effectively. In accordance with the principles of quality assurance, institutions are expected to: 1) prepare for setting education standards by appointing a committee annually to define these standards; 2) establish educational standards suitable for the context, identity, local needs, and national educational development plans; and 3) foster awareness and understanding of the importance of quality improvement in educational institutions (Patan, 2023).

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