Quality Assurance Research Synthesis in Thai Higher Education: Towards Enhanced Educational Development

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Abstract

Research synthesis is a methodological approach that facilitates the summarization of existing knowledge and the generation of actionable proposals that promote more effective development. This research aimed to synthesize research in the field of quality assurance in higher education and proposed guidelines for driving educational development in Thailand. The research employed a two-phase methodology: synthesis and proposal development. Synthesis Phase: This phase involved document research using research synthesis techniques. Proposal Development Phase: This phase employed focus group discussion techniques. The research instruments included: Research quality assessment forms, Research data recording forms and Focus group discussion topic guides. Data analysis involved quantitative analysis using descriptive statistics and qualitative analysis using content analysis.

Research Findings:

1. Content Analysis of Synthesized Research: The research synthesis identified four main categories of research: 1) Quality Assurance System Development 2) Information System Development 3) Quality Assurance Implementation and 4) Quality Assurance Performance Evaluation.

2. Proposed Educational Development Model: The research proposed an educational development model that utilizes the Deming Cycle (Plan-Do-Check-Act) as its underlying framework. This cyclical and interconnected model comprises seven sub-steps, each equipped with components and strategies to effectively drive goal attainment.

Keywords: Quality Assurance, Research Synthesis, Higher Education, Educational Development

1. Introduction

Higher education plays a crucial role in developing a nation's workforce, equipping individuals with the knowledge and expertise necessary to excel in various professions. As Sanjaya Mishra (2006) noted, higher education systems are instrumental in developing human resources that drive technological and economic progress. Moreover, higher education offers opportunities for learners to develop knowledge and skills aligned with their individual interests and needs, thereby supporting the nation's diverse requirements.

Quality assurance serves as a vital tool for overseeing and enhancing the quality of higher education in every country. It is a critical process that drives institutions to continually improve and produce high-quality graduates (Mihaela Kelemen, 2003). Consistent with Liviu Matei and Julia Iwinska (2016), quality assurance encompasses all activities and mechanisms related to quality, both at the systemic level (external quality assurance) and at the institutional level of teaching and learning (internal quality assurance).

The National Education Act of Thailand mandates a quality assurance system for higher education to enhance the quality and standards of education. This system comprises internal and external quality assurance mechanisms (Ministry of Education, 2013). Internal quality assurance involves establishing systems and mechanisms to develop, monitor, evaluate, and ensure that higher education institutions operate in accordance with established policies, goals, and quality standards. External quality assurance is conducted by the Office of the Higher Education Commission (OHEC), which assesses the quality of education programs. All institutions must undergo an external quality assessment at least once every five years (Office of the Higher Education Commission, 2016).

Research is vital for advancing knowledge in all fields. Research in higher education quality assurance is no exception. Research findings can provide information or innovations to enhance the quality of quality assurance practices in universities. However, if research results are not synthesized, their application remains limited to specific and isolated contexts. By conducting research synthesis, which involves examining and synthesizing related research findings, it is possible to obtain valuable information for broader application at both policy and academic levels. As Rebecca R. Steingut, Erika A. Patall, and Carlton J. Fong (2022) note, 'Research synthesis is a set of related methods that integrate the findings of separate empirical studies. It is a tool for

understanding a body of literature and characteristics that enhance or diminish relationships of interest.

Over the past decade, quality assurance practices in Thai higher education have undergone significant changes and development. A synthesis of research on quality assurance in Thai higher education and the subsequent formulation of recommendations for educational improvement would be beneficial to stakeholders in higher education institutions. These findings could be applied to enhance the effectiveness of quality assurance practices and expand the body of knowledge in the field of quality assurance.

2. RESEARCH OBJECTIVE

The objectives of this research are as follows:

1) To synthesize research on quality assurance in Thai higher education.
2) To analyze and propose recommendations for improving the quality of Thai higher education.

3. RESEARCH METHOD

This research was conducted in two phases: Phase 1 involved synthesizing research on quality assurance in higher education, and Phase 2 focused on analyzing the findings and proposing recommendations for improving the quality of Thai higher education.

Phase 1: Synthesis of Research on Quality Assurance in Higher Education

The operations in this phase are as follows.

Target Population: The target population for this research comprised full-text research reports on quality assurance in Thai higher education, including master's and doctoral theses, as well as research conducted by faculty and academics. These reports were published between 2007 and 2021 and were sourced from the ThaiLIS database and university libraries.

Research Instruments: A research quality assessment instrument and a data recording form were used to collect data on the characteristics and findings of the studies.

Research Procedures:

1) **Literature Search:** A comprehensive search was conducted to identify research studies on quality assurance in Thai higher education.

2) **Quality Assessment:** The quality of each selected study was evaluated by three independent raters using the research quality assessment instrument. Studies were included if they received an average rating of 3.5 or higher on a 5-point scale, indicating a quality rating of "good" or better.

3) **Data Recording:** The characteristics and findings of each included study were recorded using a standardized data recording form.

4) **Synthesis of research:** The Synthesis of research on higher education quality assurance.

Data Analysis: Quantitative data were analyzed using descriptive statistics such as frequency, percentage, mean, and standard deviation. Qualitative data were analyzed using content analysis to synthesize the findings of the studies.

Phase 2: Analysis and Recommendations for Improving Thai Higher Education

The operations in this phase are as follows.

Participants: Participants in the focus group discussions included experts in quality assurance, higher education, and university administrators. These individuals were purposefully selected based on their expertise in the field. A total of seven experts participated.

Research Instrument: A focus group discussion guide was used as the primary research instrument.

Research Procedures:

1) **Literature Review and Proposal Development:** The findings from Phase 1 (synthesis of research) were analyzed, and relevant theoretical frameworks were reviewed. A preliminary set of recommendations for improving Thai higher education was developed.

2) **Focus Group Discussions:** A focus group was conducted with the selected experts to discuss, refine, and finalize the proposed recommendations.

3) **Synthesis of Recommendations:** The final recommendations for improving Thai higher education were synthesized based on the focus group discussions.

Data Analysis: Quantitative data from the focus group discussions, such as frequency counts and percentages, were analyzed. Qualitative data were analyzed using content analysis to identify key themes and patterns.

4. Research Findings

The research findings were divided into two parts: a synthesis of research and a recommendations for improving education.

Part 1: Synthesis of Research on Higher Education Quality Assurance in Thailand

A significant finding in the analysis of research characteristics was that most research was conducted by researchers in the field of educational administration (53.13%). This was followed by research and evaluation in education (12.50%). In terms of research type, the majority of studies were descriptive research (53.13%), followed by research and development (37.50%), and evaluative research (9.38%). Details can be found in Table 1.

Table 1: Characteristics of Research

Characteristic	Frequency	Percentage
Field of Study		
Educational Administration/Educational Leadership/Strategic Management and Development	17	53.13%
Research and Evaluation in Education/Measurement and Evaluation/Educational Research and Statistics	4	12.50%
Higher Education	2	6.25%
Computer Science and Information Technology/Computer Studies	2	6.25%
Public and Private Sector Management	2	6.25%
Curriculum and Instruction	2	6.25%
Industrial and Organizational Psychology	1	3.13%
Nursing	1	3.13%
Not Specified	1	3.13%
Total	32	100.00%
Type of Research		
Descriptive Research	17	53.13%
Research and Development	12	37.50%
Evaluative Research	3	9.38%
Total	32	100.00%

A synthesis of research on higher education quality assurance

A synthesis of research on higher education quality assurance, conducted through content analysis, revealed four main themes: Quality Assurance System Development, Information System

Development, Quality Assurance Implementation, and Quality Assurance Performance Evaluation.

1) Quality Assurance System Development

The synthesis of research on this issue revealed findings regarding strategies for successful development of internal quality assurance systems and principles for quality assurance development.

Strategies for Successful Development of Internal Quality Assurance Systems. The research identified nine strategies: 1) **Enhance staff competencies** to align with higher education standards and support quality assurance. 2) **Promote awareness** of changes in quality assurance. 3) **Improve information technology systems** for quality assurance. 4) **Strengthen management** to support quality assurance. 5) **Increase the efficiency of internal quality assurance processes. 6) Integrate internal quality assurance systems** with staff duties and responsibilities. 7) **Accelerate the evaluation of the university's internal quality assurance system. 8) Promote the evaluation of factors, processes, outputs, and feedback** in quality assurance. 9) **Continuously improve the quality of all university functions** to establish an organizational culture of quality.

Principles of Quality Assurance Development The research indicated that quality assurance development should be based on a systems approach, using the IPO model (inputs, processes, outputs). The specific components should be tailored to the context of each institution. Additionally, to develop a knowledge management-based quality assurance system, the following components should be considered: Inputs: Resources and information, Processes: Quality control and monitoring and Outputs: Quality in various aspects. The research emphasized the importance of leadership, personnel, and continuous learning cycles, knowledge management strategies linked to goals, monitoring, and motivation.

2) Information System Development

The synthesis of research in this category revealed three primary types of information systems:

(1) **Data warehousing systems for quality assurance:** These systems were designed to serve as repositories for documents supporting quality assurance efforts.
(2) **Course management systems for quality assurance:** These systems were developed to facilitate course management and communication among various stakeholders, including instructors, students, employers, mentors, and to provide modules for course details and outcomes.
(3) **Educational quality surveillance systems:** These systems were designed for monitoring and tracking performance, with a focus on risk management. Surveillance dimensions included faculty quality, student and graduate quality, research-conducive infrastructure, and research output.

3) Quality Assurance Implementation

A synthesis of research on quality assurance practices revealed two key findings:

(1) **Factors influencing successful quality assurance implementation:** Significant factors included leadership, organizational management systems, staff knowledge and attitudes, a culture of organizational engagement, monitoring and evaluation of organizational progress, and organizational knowledge management.

(2) **Challenges in quality assurance implementation:** Many universities faced challenges related to the clarity of their quality assurance systems, the lack of supporting information systems, insufficient staff involvement, and negative attitudes towards quality assurance.

4) Quality Assurance Performance Evaluation

A synthesis of research within this group revealed two primary approaches to quality assessment and monitoring:

(1) **Internal quality assessment and monitoring using the Balanced Scorecard:** This approach involved developing an assessment system with four perspectives: internal processes, learning and growth, customer, and financial.

(2) **Quality assessment based on internal and external quality assurance indicators:** This approach consisted of three components: 1) principles for developing external quality assessment systems, including sub-components related to evaluation; 2) the external quality assessment process, following the Deming Cycle (PDCA); and 3) the preparation of assessment reports. Results indicated that most universities achieved a good to very good rating in their assessments.

Part 2: Recommendations for Improving Thai Higher Education

Recommendations for Improving Thai Higher Education presented in The Proposed Educational Development Model that utilizes the Deming Cycle (Plan-Do-Check-Act) as its underlying framework. This cyclical and interconnected model comprises seven sub-steps, each equipped with components and strategies to effectively drive goal attainment as depicted in Figure 1.

Plan

1. Define Organizational Vision and Goals: Define the organization's vision and goals by analyzing external opportunities and challenges, as well as internal strengths and weaknesses. This will ensure the organization can sustainably pursue excellence aligned with its mission, goals, and identity.

2. Analyze the Organization and Plan Operations: Review the previous year's performance and evaluation feedback to establish strategic and operational plans, including clear performance expectations. Additionally, develop employees' understanding of quality assurance and the organization's development direction.

3. Design/Improve Systems for Efficient Goal Achievement: Design or improve work systems by integrating quality assurance systems and improvement tools into normal operations. Consider using information systems to support operations, involving relevant personnel in the design and planning of their respective tasks.

Do

4. Implement Plans and Operating Systems: Implement plans and operating systems, clearly communicating policies and procedures to employees. Empower employees and encourage their involvement in process improvement.

5. Continuously Monitor Progress of Performance and Operating Systems: Continuously monitor the progress of performance and operating systems. The organization should track the progress of outputs to improve and drive work towards achieving goals. Additionally, review operating systems to improve their effectiveness.

Check

6. Evaluate and Summarize Performance Based on Quality Assurance and Other Relevant Systems: Evaluate and summarize performance based on quality assurance and other relevant systems. Assess operating systems to analyze success factors and obstacles hindering goal achievement. Evaluate overall success, analyze feedback for improvement, and enhance both outputs and processes.

Act

7. Utilize Evaluation Feedback to Improve Future Work: Continuously utilize feedback from performance and system evaluations to improve future work. This includes defining the organization's vision and goals, as well as improving operating systems to support the organization in achieving its objectives. This will foster a culture of continuous improvement.
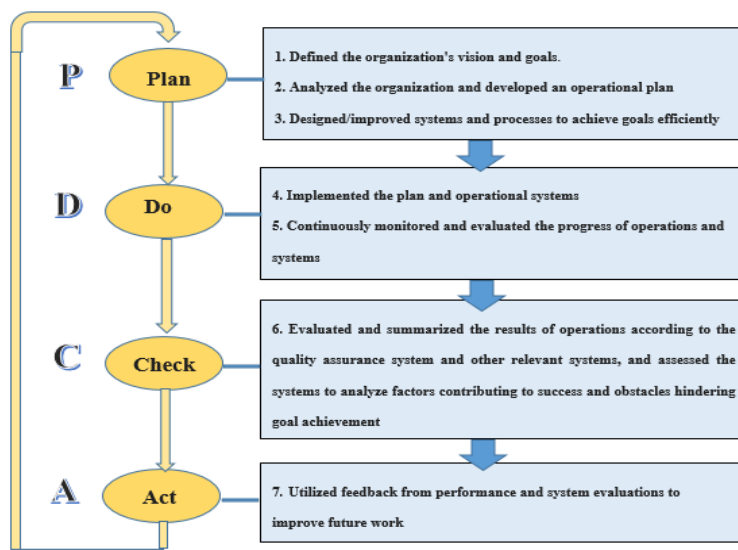
Figure 1. The Proposed Educational Development Model

5. Conclusion

Research synthesis proved to be a valuable tool for synthesizing knowledge and informing proposals for enhancing higher education quality assurance in Thailand. The findings and recommendations from this study can guide Thai institutions and policymakers in developing effective quality assurance systems that promote continuous improvement and contribute to the overall quality of higher education in Thailand.

Research Findings Consisting of Content analysis of research findings revealed four clusters of research themes: a) Development of quality assurance systems b) Development of information systems c) Quality assurance implementation d) Evaluation of quality assurance outcomes. A proposed educational development model based on the Deming Cycle (P-D-C-A) was developed. The cyclical model with interconnected phases comprises seven sub-steps with strategies to drive effective goal achievement.

6. Recommendations

Recommendations for the Application of Research Findings

Universities can utilize the proposed model from this research as a reference in developing strategies, quality assurance systems, and appropriate quality assessment systems tailored to their specific contexts. This proactive approach will enable them to achieve their desired goals.

Additionally, universities should develop information systems to support quality assurance efforts, thereby enhancing operational efficiency. Furthermore, institutions should encourage staff involvement in quality assurance activities. Continuous monitoring, evaluation, improvement, and development of these activities should be implemented to foster a culture of quality within the organization

Recommendations for Future Research

To further drive effective improvements in the quality of education, future research should focus on the following areas: **Context-specific factors:** Studies should delve into the factors influencing the quality of higher education within specific contexts, such as different types of universities. **Innovative quality management systems:** Research should be conducted to develop innovative quality management system models that can serve as best practices in various contexts. **Comparative evaluation:** Longitudinal studies should be conducted to compare the quality improvements of higher education institutions across different contexts, such as affiliations, regions, and disciplines.

7. References

Announcement of the Ministry of Higher Education, Science, Research and Innovation. (2023). Determination of Higher Education Institutions Affiliated with the Group of Higher Education Institutions for the Fiscal Year 2566. Bangkok: Ministry of Higher Education, Science, Research and Innovation.

Liviu Matei and Julia Iwinska. (2016). **Quality Assurance in Higher Education. A Practical Handbook.** Central European University.

Mihaela Kelemen. (2003). **Managing Quality: Managerial and Critical Perspectives**. London: Sage publication ltd.

Ministry of Education. (2013). **The National Education Act B.E. 1999, as amended (No. 2) B.E. 2002 and as amended (No.3) B.E. 2010**. Bangkok: The Printing House of the Organization for the Transportation of Goods and Parcels.

Rebecca R. Steingut, Erika A. Patall, and Carlton J. Fong. (2022). **Research synthesis methods**. London: Taylor and Francis Group.

Sanjaya Mishra. (2006). **Quality assurance in Higher Education: An Introduction**. National Assessment and Accreditation Council (NAAC): India.

The Office of the Higher Education Commission (OHEC). (2016). **Internal Quality Assurance Manual for Higher Education B.E. 2557, 3rd.** Bangkok: Phaphim Printing.

8. Acknowledgments