#### **Research Article**

# The analysis of collaboration in educational quality assurance policy: A case study of Walailak University

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#### **Abstract**

Collaboration is a contemporary management concept that is considered essential for achieving development policy outcomes. However, research on collaboration and quality assurance policies in higher education in Thailand has been challenging. The aim of this study was to investigate how collaboration contributes to the successful implementation of the educational quality assurance policy at Walailak University. To address this research question, a mixed-method approach was used which combined qualitative and quantitative research methods. This approach was chosen to provide a more comprehensive understanding of the subject and was based on the collaborative governance theory and resource-based framework. In-depth interviews were conducted with 13 key informants who are important actors in the quality assurance process at the university. These interviews were supplemented by a questionnaire survey of 400 respondents from various stakeholders at the university.

The findings of this study showed that facilitative leadership, incentive to collaborate, repetition of effort to collaborate and resource-knowledge sharing are among the key determinants contributing to collaboration processes in educational quality assurance. The results also indicated that these factors are interrelated and can contribute to the successful implementation of the university's quality assurance policy. Based on these findings, models of collaboration in enhancing quality assurance outcomes were demonstrated that resource-knowledge sharing, negotiation, trust-building, commitment to the process and shared-understanding have statistically significant positive impact on educational quality assurance outcomes including producing graduate outcomes, research outcomes, academic services outcomes and preserving arts and cultures. The practical benefits were proposed and discussed.

**Keywords:** Collaboration, Educational Quality Assurance policy, Walailak University, Producing Graduate Outcomes, Research Outcomes, Academic Services Outcomes, Preserving Arts and Cultures, Thailand

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#### Introduction

Education has become an increasingly significant factor in determining a nation's competitiveness. In the 2017-2018 Global Competitiveness Index, Thailand ranked 34th out of 138 economies, with a score of 4.72 out of 7, indicating a comparatively low level of advantage in the world (Schwab, 2017). Additionally, the quality of Thailand's educational system was ranked 65th out of 137 countries, with a score of 3.7 out of 7 (Schwab, 2017). These rankings highlight the critical need for a focus on high-quality education to sustain long-term economic growth. As a result, quality assurance policies are crucial tools in achieving educational excellence and require the active involvement of the government and higher education institutions in transforming national education. Reforms have been aimed at enhancing academic excellence and strengthening universities' long-term competitiveness. Quality assurance measures are implemented at universities to ensure that educational standards meet the expectations of stakeholders. Educational quality assurance has thus been identified as the primary approach to monitoring educational standards at every educational institution (Office of the Higher Education Commission, 2017). However, numerous issues regarding educational quality have been extensively debated, including the widening inequality among graduates and the assumption that academic institutions offer them an advantage. As society ages, achieving higher levels of education will become increasingly challenging. Therefore, universities must enhance their quality systems to attract students and improve educational quality (Office of the Higher Education Commission, 2017).

Collaborative governance demand grows as knowledge and institutional capacity expand, with institutional infrastructure becoming more sophisticated and interconnected. It is often associated with earlier implementation failures, high investment, and political regulation (Ansell & Gash, 2008). As referenced by Ansell and Gash (2008), Stoker (2004) defines governance as the rules and forms for guiding decision-making that center on collective or organizational decision-making rather than individual decision-making. In this study, collective decision-making is significant in terms of stakeholder engagement, which includes both individual and organized groups. While most research focuses on quality assurance systems in institutions, less attention has been given to factors that influence collaboration in policy implementation and how collaboration can improve educational quality and productivity in universities. Devolution, rapid technologies, scarce resources, and increased organizational interdependence can all modify the driving force of collaboration (Thomson & Perry, 2006). Implementing educational quality assurance at a university requires a collaborative approach to managing strategic plans and enhancing educational quality, involving various university stakeholders responsible for the implementation process. Collaboration is a type of group action associated with processes involving high levels of integration, complexity, and commitment (Thomson & Perry, 2006), and can lead to an increase in educational quality assurance. This study will investigate the perspectives of executives, instructors, and staff on the implementation of educational quality assurance policy, as well as the educational quality assurance productivity obtained through collaboration. Additionally, the causal factors influencing collaboration in implementing educational quality assurance policies will be examined to understand collaboration in educational quality assurance.

As a case study, Walailak University has shown visible improvements in educational quality in various dimensions, particularly in the increasing quality assurance evaluation scores each academic year from 4.11 in the academic year 2014 to 4.75 out of a total score of 5.00 in the academic year 2018 (Walailak University, 2019b). The outstanding level is indicated by a score of 5.00 in the dimensions of conducting research, providing academic services to society, preserving arts and culture, and management. The good level receives a score of 4.43 in producing graduates. Professor Tawadchai Suppadit, vice president of Walailak University's planning and development strategy, has revealed that the achievement of the quality assurance assessment in Walailak University is the result of collaboration from all elements of Walailak University (Komchadluek, 2020). Additionally, evidence has demonstrated that educational quality assurance has advanced in several aspects. Thus, Walailak University's internal collaboration is assumed to be one of the contributing factors to such improvements. This study primarily focuses on the internal collaboration in quality assurance at Walailak University, which has led to a higher score in the institutional level of quality assurance. To comprehend collaboration in the educational quality assurance policy, it is essential to examine the collaboration in improving educational quality assurance at Walailak University, as well as the factors that influence collaboration in educational quality assurance at Walailak University. Ultimately, the findings of this

investigation will provide a collaboration model for educational quality assurance, particularly at Walailak University, which can benefit similar institutions.

In terms of overall statistics, Walailak University has shown impressive performance in various areas. The institution ranked second in Thailand for physical sciences according to the nature index output ranking from July 2018 to June 2019. To ensure high teaching standards, the university developed the UK Professional Standard Framework (UKPSF) as an international standard for teaching and provides UKPSF-based training to all lecturers. The majority of lecturers hold UKPSF/HEA Fellowships, and every subject is taught by UKPSF-trained lecturers. Additionally, more than 200 publications in international journals have contributed to the university's research quality. Walailak University is recognized as the 7th most innovative university in Thailand by Scimago Institutions, and in the academic year of 2017, 97.4% of graduates were employed. Furthermore, the university's productivity has seen explicit improvement in educational quality assurance from 2017 to 2019, and continued to increase from 2000 to 2022. Despite these achievements, this study focuses on addressing the lack of understanding regarding how collaboration can improve educational quality assurance in universities. The aim is to identify and analyze the determinants that influence successful collaboration in educational quality assurance at Walailak University and propose a collaboration model that can be implemented in other universities in Thailand. By doing so, this research intends to provide practical insights for universities seeking to enhance their quality assurance processes and increase stakeholders' and the public's confidence in the quality of education.

#### **Objective**

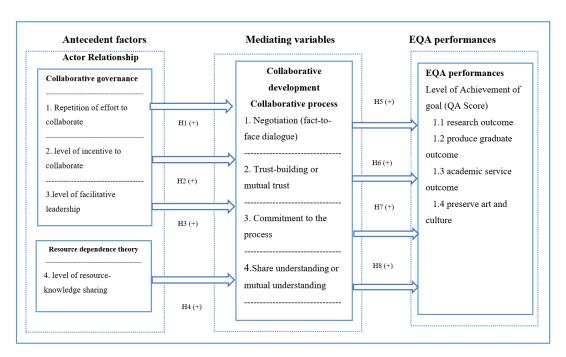
- 1. To analyze how collaboration can increase educational quality assurance in Walailak University
- 2. To identify and analyze the determinants affecting successful collaboration in educational quality assurance in Walailak University
  - 3. To propose the model of collaboration in educational quality assurance in university.

#### Method

The study employed a mixed-method approach to investigate the research questions and hypotheses. For quantitative research, a survey was used to explore the determinants that influence collaboration in educational quality assurance at Walailak University. Additionally, qualitative research was conducted to gain a deeper understanding of the collaboration and productivity of collaboration in educational quality assurance. To ensure an effective collaboration model in educational quality assurance at Walailak University, in-depth interviews were conducted with the university's top executives, executives of relevant faculties, instructors, and colleagues. The study focused on individual units to examine the interactions between individuals at the university, faculty, and program levels regarding collaboration in educational quality assurance.

#### **Conceptual Framework**

This research is based on collaboration concepts and theories which including collaborative governance theory, resource dependency theory, and policy implementation theory to assure the productivity of collaboration in educational quality assurance at Walailak University. This research is structured as follows:



**Figure 1** Conceptual Framework Source: the author's provided framework

#### Result/Finding

This research aimed to investigate the role of collaboration in improving educational quality assurance at Walailak University. Through a mix-methods research design, the study aimed to identify and analyze the determinants that influence successful collaboration in this context and to propose a model of collaboration in educational quality assurance in the university. The findings of this research have provided important insights into the key factors that contribute to effective collaboration in educational quality assurance and have highlighted the importance of collaboration in driving improvements in the quality of education at Walailak University. The proposed model of collaboration in educational quality assurance provides a framework for future research and practical implementations in the university.

#### Sample characteristics

The study revealed 400 respondents divided into three categories of schools: Social and Humanities Science, Technological Science, and Health and Science. According to the survey, a substantial majority of respondents (186 respondents, or 46.5%) were in Health and Science school. The second highest proportion of respondents (115 respondents, or 28.7%) was a Social and Humanities Science school. The Technological Science school had the least proportion of respondents (99 respondents, or 24.8%).

In general, the results showed that the greatest proportion of respondents (44.3%) had worked as employees at Walailak University for more than one year. There were 135 respondents who have worked as staff at Walailak University for more than 5 years (33.8%). There were 50 respondents (12.5%) who have worked as staff at Walailak University for less than 6 months. This survey underlined the fact that the least number of respondents who had worked as staff at Walailak University for more than ten years was 38 (9.5%).

Furthermore, the survey indicated that 99 respondents (9.3%) had training experience in educational quality assurance in three training sessions. The second greatest number of 98 respondents (24.5%) attended only two training sessions. The third greatest proportion was 93 (23.3%), which was shaded into the number of training sessions more than four times. The lower fraction was defined as 62 respondents (15.5%) who had had four training sessions in educational quality assurance. There were 37 respondents (9.3%) who had only trained once. The final proportion revealed that 11 respondents (2.8%) had never had training in educational quality assurance previously.

#### Analysis of how collaboration can increase educational quality assurance at Walailak University.

The study investigated Walailak University's level of collaboration in educational quality assurance. The internal collaboration process of educational quality assurance at Walailak University is a crucial approach for determining how well they collaborate to achieve educational quality assurance success. The results of the research were as follows:

Negotiation and trust-building constituted the highest level of the overall average (Mean=4.47) when all four criteria were compared. Commitment to the process and shared-understanding of the process demonstrated the same of the overall average mean, which revealed the mostly true (Mean=4.45).

In terms of negotiation, the sum of average means is demonstrated to be completely true (Mean = 4.47, S.D. = 0.691). Respondents scored the highest (Mean = 4.58, S.D. = 0.660) on the statement that they always have the opportunity to provide relevant perspectives on educational quality assurance. It was completely true that they could participate by speaking at a high level (Mean = 4.53, S.D. = 0.629). The subsequent phase is to rely on flexibility to make an educational quality assurance decision (Mean = 4.46, S.D. = 0.710). The respondents stated that they had the opportunity to engage in informal conversation (Mean = 4.41, S.D. = 0.761). They can propose several approaches, the lowest level of which is completely true (Mean = 4.40, S.D. = 0.697).

The sum of the average mean is discovered to be mostly true in the collaboration on trust-building (Mean = 4.47, S.D. = 0.660). The greatest level is based on respecting others who contribute to the development of quality assurance (Mean = 4.54, S.D. = 0.636). It is recognized that the difficulty of quality assurance cannot be accomplished by oneself, which is proved to be completely true at the second level (Mean = 4.51, S.D. = 0.629). It displays the mostly true level in terms of they always believe in improving quality by trusting others (Mean = 4.43, S.D. = 0.672) and shared goals to be achieved (Mean = 4.40, S.D. = 0.704).

The overall average mean for the factors of process commitment is demonstrated to be mostly true (Mean = 4.45, S.D. = 0.681). The highest level, at the mostly true, depicts the understanding of the roles and responsibilities (Mean = 4.49, S.D. = 0.664), the need to succeed in quality assurance both at the program and university level (Mean = 4.46, S.D. = 0.690), the perception of being one of the group members (Mean = 4.46, S.D. = 0.644), understanding as one of the actors to accomplish quality assurance goals (Mean = 4.45, S.D. = 0.673), and most of the participants have a high commitment to achieve the quality assurance of the university (Mean = 0.444, S.D. = 0.684) and invest sufficient time to accomplish the quality (Mean = 0.41, S.D. = 0.734) respectively.

The overall average mean is proven to be mostly true for shared-understanding (Mean = 4.45, S.D. = 0.681). The highest level of the mostly true depicts that they usually communicate openly at different levels to pursue their own program (Mean = 4.49, S.D. = 0.675), found that increasing higher quality assurance can be generated by both formal and informal communication (Mean = 4.47, S.D. = 0.671), often informed the progressive of quality assurance in their own program (Mean = 4.42, S.D. = 0.714), and regularly have a chance to improve joint working of collaboration in quality assurance at different levels (Mean=4.40, S.D. = 0.715) respectively.

### An examination of the antecedent factors influencing the collaboration process of educational quality assurance at Walailak University.

The first analysis is the repetition of effort to collaboration, which demonstrates that the overall average mean (Mean = 4.46, S.D. = 0.684) is mostly true. The highest level of mostly true is depicted by the statement that respondents have to coordinate with many people from different levels (Mean = 4.51, S.D. = 0.649), work hard to improve quality assurance (Mean = 4.49), S.D. = 0.694), appropriately take an amount of time to work with other people (Mean = 4.44), S.D. = 0.709), and commonly have special times to solve problems together (Mean = 4.43, S.D. = 0.678).

Regarding the incentive to collaborate variable, the overall average mean is cited as mostly true (Mean = 4.47, S.D. = 0.66). The highest level at the completely true reports on the statements that the program will benefit from collaboration (Mean = 4.50, S.D. = 0.657), try to find information from other agencies to fulfill their own program (Mean = 4.47, S.D. = 0.675) and intend to gain more knowledge to improve quality assurance of their own program (Mean = 4.45, S.D. = 0.670) respectively.

When it concerns facilitative leadership, the overall average mean is regarded as mostly true (Mean = 4.47, S.D. = 0.671). The highest level reaches at the same level of completely true exhibited key leaders directly participating in quality assurance with effective communication to other members and considered leaders to be the hopefulness to achieve quality assurance. (Mean=4.50, S.D.=0.641, 0.672). Meanwhile, the same levels of mostly true reliance on leaders were engaged in monitoring each element of quality assurance in each program, and leaders were willing to handle issues in each program on a continuous basis (Mean = 4.45, S.D. = 0.659, 0.713).

According to the resource-knowledge sharing variable, the overall average mean is cited as mostly true (Mean = 4.45, S.D. = 0.692). The highest-level, completely true emphasis on the statement is that we typically share ideas and methods to improve quality assurance (Mean = 4.51, S.D. = 0.653), have multiple connections to collaborate with people to share information (Mean = 4.46, S.D. = 0.678), adapt ourselves based on our resources (Mean = 4.44, S.D. = 0.661), and our program has adequate funds for quality assurance (Mean = 4.39, S.D. = 0.777) respectively.

In conclusion, this can be summarized the ranking of the antecedent factors influencing the collaborative process of educational quality assurance at Walailak University. The first ranking is based on Fleader avg, which stands for facilitative leadership average (Mean=4.475, S.D.= 0.404), followed by Incent avg, which represents for incentive to collaborate average (Mean=4.472, S.D.= 0.431), Nego\_avg or negotiation average (Mean=4.474, S.D.= 0.422), Trust\_avg or trust-building average (Mean=4.469, S.D.= 0.390), Repeat\_avg or repetition of effort average (Mean=4.467, S.D.= 0.400), Commit\_avg or commitment average to the process (Mean=4.454, S.D.= 0.365), Resource\_avg or resource-knowledge sharing average (Mean=4.447, S.D.= 0.440) and Share\_avg or shared understanding average (Mean=4.441, S.D.= 0.391)

### The determinants affecting successful collaboration in educational quality assurance in Walailak University

Multiple regression was used to determine how collaboration at Walailak University can improve educational quality assurance. According to the hypotheses, the following results were discovered.

- H1: level of the antecedent factors has the positive impact significantly to successful process of collaboration in educational quality assurance (negotiation)
- H2: level of the antecedent factors has the positive impact significantly to successful process of collaboration in educational quality assurance (trust-building)
- H3: level of the antecedent factors has the positive impact significantly to successful process of collaboration in educational quality assurance (commitment to the process)
- H4: level of the antecedent factors has the positive impact significantly to successful process of collaboration in educational quality assurance (shared understanding of collaboration)
- H5: Level of collaboration processes has the positive impact significantly to successful collaboration in educational quality assurance (research outcomes)
- H6: level of collaboration processes has the positive impact significantly to successful collaboration in educational quality assurance (produce graduate outcomes)
- H7: level of collaboration processes has the positive impact significantly to successful collaboration in educational quality assurance (academic services outcomes)
- H8: level of collaboration processes has the positive impact significantly to successful collaboration in educational quality assurance (preserving arts and cultures)

Table 1 Empirical Results of hypotheses testing using Linear Multiple Regression

Independent Variables	Unstandardize d Coefficients B Std.Error		Dependent Variable: successful process of collaboration in educational quality assurance		
			Standardized Coefficients	t	Sig.
			(Beta)		
Model 1	0.150	0.150	(Negotiation)	1.002	0.0004
(Constant)	0.170	0.170	0.205	1.002	0.000*
Repeat_avg (x1)	0.300	0.046	0.285	6.515	0.000*
Incent_avg (x2)	0.240	0.038	0.245	6.237	0.000*
Fleader_avg (x3)	0.186	0.045	0.178	4.105	0.000*
Resource_avg (x4)	0.238	0.042	0.249 $R^2 = .624$ ; Adjusted $R^2 = .621$ ; $P$	5.666 < .05; F =	<b>0.000</b> * = 164.167
Model 2			(Trust building)		
(Constant)	1.224	0.197	(Trust building)	6.206	0.000*
Repeat_avg (x5)	0.255	0.157	0.262	4.768	0.000*
Incent_avg (x6)	0.202	0.033	0.202	4.708	0.000*
Fleader_avg (x7)	0.202	0.043	0.223	3.682	0.000*
<u> </u>	0.193	0.033	0.200	1.557	0.120
Resource_avg (x8)	0.049	0.049	$R^2 = .408$ ; Adjusted $R^2 = .402$ ; $P$		
Model 3			(Commitment to the process)		
(Constant)	0.905	0.159	()	5.690	0.000*
Repeat_avg (x9)	0.296	0.043	0.325	6.867	0.000*
Incent_avg (x10)	0.232	0.036	0.274	6.444	0.000*
Fleader_avg (x11)	0.178	0.042	0.197	4.203	0.000*
Resource_avg (x12)	0.088	0.039	0.107	2.244	0.025*
	$R^2 = .560$ ; Adjusted $R^2 = .555$ ; $P < .05$ ; $F = 125.592$				
Model 4			(Shared-understanding of		
(Constant)	1.224	0.197	collaboration)	6.206	0.000*
(Constant)			0.262		0.000*
Repeat_avg (x13)	0.255 0.202	0.053 0.045	0.262 0.223	4.768 4.529	0.000*
Incent_avg (x14)				4.329 3.682	
Fleader_avg (x15)	0.193	0.053	0.200 0.086		0.000*
Resource_avg (x16)	0.049	0.049	$R^2 = .408$ ; Adjusted $R^2 = .402$ ; $P$	1.557 $< .05; F =$	<b>0.120</b> 68.110
Model 5			(Research outcomes)		
(Constant)	4.623	0.072	(21000000000)		0.000*
Nego_avg (x17)	0.064	0.020	0.243	63.980	0.002*
Trust _avg (x18)	-0.019	0.019	-0.066	3.185	0.321
Commit _avg (x19)	0.012	0.023	0.040	-0.994	0.594
Share_avg (x20)	0.012	0.023	0.041	0.534	0.594
	0.011 0.021 0.041 0.334 0.394 $R^2 = .071$ ; Adjusted $R^2 = .610$ ; $P < .05$ ; $F = 7.525$				
Model 6			(Trust building)		
(Constant)	4.053	0.111		36.550	0.000*
Nego_avg (x21)	0.099	0.031	0.249	3.229	0.001*

Independent Variables	Unstandardize d Coefficients B Std.Error		Dependent Variable: successful process of collaboration in educational quality assurance			
			Standardized Coefficients	t	Sig.	
			(Beta)			
Trust _avg (x22)	-0.082	0.029	-0.190	-2.851	0.005*	
Commit _avg (x23)	0.041	0.035	0.090	1.195	0.233	
Share_avg (x24)	-0.005	0.033	-0.013	-0.164	0.869	
	$R^2 = .056$ ; Adjusted $R^2 = .460$ ; $P < .05$ ; $F = 5.811$					
Model 7			(Academic services outcome)			
(Constant)	4.590	0.117	, , , , , , , , , , , , , , , , , , ,	39.218	0.000*	
Nego_avg (x25)	0.101	0.032	0.238	3.132	0.002*	
Trust_avg (x26)	-0.099	0.030	-0.215	-3.267	0.001*	
Commit_avg (x27)	0.043	0.037	0.088	1.187	0.236	
Share_avg (x28)	0.042	0.035	0.092	1.219	0.224	
/			$R^2 = .082$ ; Adjusted $R^2 = .730$ ; $P < .05$ ; $F = 8.798$			

### H1: The antecedent factors have a significant positive impact on a successful collaborative process in educational quality assurance (negotiation).

The antecedent factors (Repeat avg, Incent avg, Fleader avg, and Resource avg) have a positive impact on negotiation (Nego avg) and this relationship is statistically significant (p-value 0.000. In other words, the antecedent factors are related to negotiation in a positive way and this relationship is statistically significant.

### H2: The antecedent factors have a significant positive impact on a successful collaborative process in educational quality assurance (trust building).

The antecedent factors Repeat avg, Incent avg, and Fleader avg have a positive impact on trust-building (Trust avg) and this relationship is statistically significant (p-value 0.000). However, resource-knowledge sharing (Resource avg) does not have a significantly positive impact on trust-building (Trust avg) at a p-value of 0.120. In other words, Repeat avg, Incent avg, and Fleader avg are related to trust-building in a positive way and this relationship is statistically significant However, the relationship between resource-knowledge sharing and trust-building is not statistically significant.

## H3: The antecedent factors have a significant positive impact on a successful collaborative process in educational quality assurance (process commitment).

The antecedent factors Repeat avg, Incent avg, and Fleader avg have a positive impact on commitment to the process (Commit avg) and this relationship is statistically significant (p-value 0.000). Additionally, resource-knowledge sharing (Resource avg) also has a positive impact on commitment to the process (Commit avg) and this relationship is statistically significant (p-value 0.025). In other words, Repeat avg, Incent avg, Fleader avg, and Resource avg are all related to commitment to the process in a positive way and these relationships are statistically significant.

### H4: The antecedent factors have a significant positive impact on the successful collaboration in educational quality assurance (collaboration shared understanding).

The antecedent factors (Repeat avg, Incent avg, Fleader avg, and Resource avg) have a positive impact on shared-understanding (Share avg) and this relationship is statistically significant (p-value 0.000). In other words, the antecedent factors are related to shared-understanding in a positive way and this relationship is statistically significant.

## H5: The collaboration processes have a significant positive impact on successful collaboration in educational quality assurance (research outcomes).

The results show that negotiation (Nego avg) has a statistically significant positive impact on research outcomes (p-value 0.002). This means that higher levels of negotiation are likely to be associated with better research outcomes. The results also show that trust-building (Trust avg) and shared-understanding (Share avg) have a positive impact on research outcomes, but these relationships are not statistically significant (p-values

0.321 and 0.594, respectively). This means that it is uncertain whether there is a relationship among trust-building, shared-understanding, and research outcomes. The results also show that commitment to the process (Commit avg) has a positive impact on research outcomes, but this relationship is not statistically significant (p-value 0.534). This means that it is uncertain whether there is a relationship between commitment to the process and research outcomes.

### H6: The collaboration processes have a significant positive impact on successful collaboration in educational quality assurance (produce graduate outcomes).

The results show that negotiation (Nego avg) has a statistically significant positive impact on graduate outcomes (p-value 0.001). This means that higher levels of negotiation are likely to be associated with better graduate outcomes. The results also show that trust-building (Trust avg) has a statistically significant negative impact on graduate outcomes (p-value 0.005). This means that higher levels of trust-building are likely to be associated with worse graduate outcomes. Moreover, the results also show that commitment to the process (Commit avg) and shared-understanding (Share avg) have a positive impact on graduate outcomes, but these relationships are not statistically significant (p-values 0.233 and 0.869, respectively). This means that it is uncertain whether there is a relationship among commitment to the process, shared-understanding, and graduate outcomes.

### H7: The collaboration processes have a significant positive impact on successful collaboration in educational quality assurance (academic service outcomes).

The results show that negotiation (Nego avg) has a statistically significant positive impact on academic services outcomes (p-value 0.002). This means that higher levels of negotiation are likely to be associated with better academic services outcomes. The results also show that trust-building (Trust avg) has a statistically significant negative impact on academic services outcomes (p-value 0.001). This means that higher levels of trust-building are likely to be associated with worse academic services outcomes. Furthermore, commitment to the process (Commit avg) and shared-understanding (Share avg) have a positive impact on academic services outcomes, but these relationships are not statistically significant (p-values 0.224 and 0.236, respectively). This means that it is uncertain whether there is a relationship among commitment to the process, shared-understanding, and academic services outcomes.

## H8: The collaboration processes have a significant positive impact on successful collaboration in educational quality assurance (preserve arts and cultures).

There was no significant impact of the collaboration processes which influence successful collaboration in educational quality assurance (preserving arts and cultures) significantly at a p-value of 0.05, which means that negotiation (Nego\_avg), trust-building (Trust\_avg), commitment to process (Commit\_avg), and shared-understanding (Share\_avg) do not have a significant impact on the outcome (Outcome\_Preserve arts and cultures).

#### Propose models of collaboration in educational quality assurance in university.

The study showed the results of the proposed model testing of collaboration in educational quality assurance in university were certified as three models of testing as follows;

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Hypotheses were set as follows;
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Model 1 : OUTC = a+ b1 Repeat_avg + b2 Incent_avg +b3 Fleader_avg

(To prove collaborative governance theory)

Model 2 : OUTC = a+ b1 Resource_avg

(To prove resource dependent theory)

Model 3 : OUTC = a+ b1 Nego+ b2 Trust_avg +Commit_avg +Sharun_avg

(To prove collaboration theory)
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<b>Table 2</b> Empirical	Results of Regression	on educational qual	ty assurance outcomes

Independent Variables	Unstandardize d Coefficients B Std.Error		Dependent Variable: educational quality assurance outcomes		
			Standardized Coefficients (Beta)	t	Sig.
Model 1			(Negotiation)		
(Constant)	4.466	0.054	,	82.990	0.000*
Repeat_avg (x1)	0.003	0.014	0.015	0.238	0.812
Incent_avg (x2)	0.044	0.012	0.217	3.685	0.000*
Fleader_avg (x3)	0.028	0.014	0.129	1.996	0.047*
			$R^2 = .100$ ; adjusted $R^2$ .930; $P = .000$ ; $F = 14.631$		
Model 2				107.075	0.000*
(Constant)	4.589	0.043			
Resource (x4)	0.047	0.010	0.241	4.945	0.000*
,			$R^2 = .058$ ; adjusted $R^2$ .560; $P = .000$ ; $F = 24.449$		
Model 3					
(Constant)	4.557	0.055		82.230	0.000*
Nego_avg (x5)	0.068	0.015	0.330	4.439	0.000*
Trust_avg (x6)	-0.050	0.014	-0.223	-3.464	0.001*
Commit_avg (x7)	0.025	0.017	0.103	1.425	0.155
Sharun_avg (x8)	0.012	0.016	0.052	0.703	0.483
			$R2 = .120$ ; adjusted $R^2$ .610; $P < .05$ ; $F = 13.146$		

 $<sup>\</sup>overline{*} P < .05$ 

#### **Model testing**

The model of collaboration in educational quality assurance in university were certified as follows.

Model 1: This model analyzes the relationship among the antecedent factors repetition of effort to collaborate (Repeat), incentive to collaborate (Incent), facilitative leadership (Fleader), and educational quality assurance outcomes (dependent variable). The results show that incentive to collaborate (Incent) has a statistically significant positive impact on educational quality assurance outcomes (p-value of 0.000). This means that higher levels of incentive to collaborate are likely to be associated with better educational quality assurance outcomes. The results also show that facilitative leadership (Fleader) has a positive impact on educational quality assurance outcomes, but this relationship is not statistically significant (p-value of 0.047). This means that it is uncertain whether there is a relationship between facilitative leadership and educational quality assurance outcomes. The results also depict that repetition of effort to collaborate (Repeat) does not have a statistically significant impact on educational quality assurance outcomes (p-value of 0.812). This means that it is uncertain whether there is a relationship between repetition of effort to collaborate and educational quality assurance outcomes.

Model 2: This model analyzes the relationship between the antecedent factor resource-knowledge sharing (Resource) and educational quality assurance outcomes (dependent variable). The results show that resource-knowledge sharing (Resource) has a statistically significant positive impact on educational quality assurance outcomes (p-value of 0.000). This means that higher levels of resource-knowledge sharing are likely to be associated with better educational quality assurance outcomes.

Model 3: This model analyzes the relationship among the antecedent factors negotiation (Nego), trust-building (Trust), commitment to the process (Commit), shared-understanding (Sharun), and educational quality assurance outcomes (dependent variable). The results show that negotiation (Nego) has a statistically significant positive impact on educational quality assurance outcomes (p-value of 0.000). This means that

higher levels of negotiation are likely to be associated with better educational quality assurance outcomes. The results also show that trust-building (Trust) has a statistically significant negative impact on educational quality assurance outcomes (p-value of 0.001). This means that higher levels of trust-building are likely to be associated with worse educational quality assurance outcomes. The results also show that commitment to the process (Commit) and shared-understanding (Sharun) have positive impacts on educational quality assurance outcomes, but these relationships are not statistically significant (p-values of 0.155 and 0.483, respectively). This means that it is uncertain whether there is a relationship among commitment to the process, shared-understanding, and educational quality assurance outcomes.

#### Discussion

#### Analyzing how collaboration can increase educational quality assurance in Walailak University

The study on the antecedent factors affecting collaboration process of educational quality assurance in Walailak University found that facilitative leadership, incentive to collaborate, negotiation, trust-building, repetition of effort, commitment, resource-knowledge sharing, and shared understanding are the crucial factors that enhance effective relationships in the collaborative process. Facilitative leadership, as the highest-ranked factor, plays a crucial role in involving stakeholders to move collaboration forward. Incentive to collaborate is also significant, influencing the willingness to participate in the collaborative process. Negotiation, the third-highest factor, is a critical process for building trust and mutual respect among stakeholders. These findings are relevant to the studies by Ansell and Gash (2008), Chandarasorn (2013), Gray (1989), and Vangen and Huxham (2003a). The study provides insights into the key factors that facilitate successful collaboration in the educational quality assurance process.

Facilitative leadership reached the highest score, which is relevant to Vangen and Huxham (Vangen and Huxham: 2003a, cited in Ansell and Gash, 2008: 554), who explained that leadership is crucial for embracing and involving stakeholders to move collaboration forward. The executive roles at Walailak University were the principal factor which helped stakeholders to be involved in the process of quality assurance at every level of administration-from the president of Walailak University to the head of each program. This outcome is significantly related to Ansell and Gash's explanation that facilitative leadership is a factor that can enhance future effective relationships in the collaborative process. According to Ansell and Gash (2008: 550), facilitative leadership is critical for attracting participants and effectively steering them toward a collaborative partnership.

The incentive to collaborate received the second highest score, indicating the importance of collaboration in quality assurance. This discovery is relevant to the work of Gray (1989), who indicated that incentive to participate can influence the willingness to participate. Negotiation also received the third highest score and this is relevant to the work of Ansell and Gash (2008), who proposed that negotiation in face-to-face dialogue is the core process to build trust, mutual respect, and commitment to the collaboration process. According to Chandarason's organizational model, one of the most important aspects impacting successful policy implementation is incentive (Chandarasorn, 2013), and according Ansell and Gash (2008), incentive participation can occur when participants see their goals being met as a result of the collaborative process.

Negotiation is a type of collaborative processes that is rated third. This finding is relevant to work of Ansell and Gash (2008: 550), which indicated that negotiation is the collaborative process that serves as the focal point for developing trust and mutual understanding, resulting in successful execution in an institution. In addition, policy negotiations occur regularly throughout the policy cycle, from policy formation to policy implementation and policy assessment; participants are eligible to join and provide recommendations or comments to the institution in order to improve quality assurance (Vice president for planning and strategic development. 4 March, 2021, Interview). Moreover, negotiation typically gives individuals high benefits for asking for assistance from the center of research and innovation, as one of the university's agencies, to supply necessary information such as research subsidies, publication strategies, and other information related to research improvements (Vice-President for academic and international affairs. 17 March, 2021, Interview).

### Identifying and analyzing the determinants affecting successful collaboration in educational quality assurance in Walailak University

The study found that antecedent factors such as negotiation, trust-building, commitment to the process, and shared understanding of collaboration had a positive impact on the successful process of collaboration in educational quality assurance. Additionally, collaboration processes had a positive impact on successful collaboration in areas such as research outcome, graduate outcome, and academic service outcome, but not on preserving arts and cultures. These results support the concepts and theory of collaboration and collaborative governance.

### H1: The antecedent factors have a significant positive impact on a successful collaborative process in educational quality assurance (negotiation)

The antecedent factors, which are a repetition of effort to collaborate (Repeat avg), incentive to collaborate (Incent avg), facilitative leadership (Fleader avg), and resource-knowledge sharing (Resource avg), have a significantly positive impact on negotiation (Nego avg) at p-value 0.000. These findings are supported by research on teamwork and collaboration in organizations. For example, Guzzo and Dickson (1996) found that repeated interactions among team members can improve team performance, and Titus and Hester (2003) found that incentives can improve teamwork and coordination among team members. Moreover, these findings are consistent with collaborative governance theory, which suggests that repeated interactions and shared goals can foster trust and cooperation among stakeholders (Brewer and deLeon, 1983). Additionally, resource dependence theory posits that organizations will seek to build relationships and share resources with other organizations when they have an incentive to do so (Pfeffer and Salancik, 1978). The finding that facilitative leadership had a positive impact on negotiation is also supported by research on the role of leaders in fostering teamwork and coordination among team members (Kozlowski and Bell, 2003). Additionally, the finding that resource-knowledge sharing had a positive impact on negotiation aligns with research on the benefits of knowledge sharing for collaboration and innovation (Bock et al., 2005).

As a result of this discovery, individuals are able to participate and make recommendations or comments to the institution in order to enhance quality assurance (Vice-President for planning and strategic development. 4 March, 2021, Interview). In the collaboration process, collaborative effort is the first stage in creating future effective collaborations. According to Ansell and Gash (2008), incentive participation is required for inclusion in the collaborative process, and according to Thomson and Perry (2006), a past history of collaborative efforts is an antecedent that may be incorporated into the collaboration process and is a significant aspect in achieving goals Furthermore, Ansell and Gash (2008) stated that incentive participation might arise when participants view the attainment of their goals as a result of the collaborative process. As a result, one of the most important effects will be their commitment to participating in collaborative procedures. Facilitative leadership is the first step in building a more successful cooperation relationship. According to Ansell and Gash (2008: 550), facilitative leadership is critical for attracting participants and for effectively steering them toward a collaborative partnership. Moreover, negotiation typically provides individuals with significant benefits for requesting assistance from the center for research and innovation, as one of the university's agencies, to provide necessary information such as research subsidies, publication strategies, and other research-related improvements (Vice-President for academic and international affairs. 17 March, 2021, Interview).

### H2:Antecedent factors have a significant positive impact on the successful collaborative process in educational quality assurance (trust building).

The antecedent factors, which are repetition of effort to collaborate (Repeat avg), incentive to collaborate (Incent avg), and facilitative leadership (Fleader avg), have a significantly positive impact on trust-building (Trust avg) at a p-value of 0.000, whereas at a p-value of 0.120, resource-knowledge sharing (Resource avg) does not have a significantly positive impact on trust-building (Trust avg). The results of the study suggest that repetition of effort to collaborate, the incentive to collaborate, and facilitative leadership have a significant positive impact on trust-building in the collaborative process of educational quality assurance. This aligns with the findings of previous research, such as the work of Guzzo and Dickson (1996) and Titus and Hester (2003), which have shown that teams that engage in repeated efforts to collaborate and that are motivated by incentives tend to be more effective and have higher levels of trust. Kozlowski and Bell (2003) also found that facilitative leadership is an important factor in the effectiveness of work groups and

teams, and it is likely that it plays a similar role in trust-building in collaborative education contexts. However, the present study did not find a significant positive impact of resource-knowledge sharing on trust-building. This may be due to the complex nature of trust-building, which can be influenced by a range of factors in addition to resource-knowledge sharing. For example, Bock et al. (2005) found that social-psychological forces and organizational climate can also impact the formation of behavioral intention to collaborate, and these factors may be more important in shaping trust in some contexts. It is also possible that other factors, such as external control of organizations (Pfeffer & Salancik, 1978) or leadership (Emerson, Nabatchi and Balogh, 2012), may be more relevant to trust-building in educational quality assurance. Trust is built through participating in activities together, sharing common goals and understanding on what they are attempting to accomplish (Vice-President for planning and strategic development. 4 March, 2021, Interview). The incentive to collaborate is the antecedent factor that increases further successful relationships in the collaboration process. According to the organization model proposed by Chandarason, incentives are the significant factors influencing successful policy implementation (Chandarasorn, 2013). Trust can be discovered in policy commitments to raise the university's standards. As regards conducting research, trust is crucial in terms of joint research with various partners (Vice-Dean of school of Public Health. 24 March, 2021, Interview). Again according to the organization model proposed by Chandarason, leadership is one of the significant factors influencing successful policy implementation (Chandarasorn, 2013).

### H3: Antecedent factors have a significant positive impact on the successful collaborative process in educational quality assurance (process commitment).

The antecedent factors of repetition of collaborative effort (Repeat avg), incentive to collaborate (Incent avg), and facilitative leadership (Fleader avg) have a significantly positive impact on commitment to the process (Commit avg) at a p-value of 0.000. Furthermore, resource-knowledge sharing (Resource avg) has a significantly positive impact on commitment to the process (Commit avg). The results of this study suggest that repetition of effort to collaborate, the incentive to collaborate, and facilitative leadership are important antecedent factors in promoting commitment to the process in the collaborative context of educational quality assurance. These findings align with previous research on the role of repetition in developing collaboration skills (Guzzo and Dickson, 1996) and the impact of incentives on motivating collaborative behavior (Titus and Hester, 2003). The study also found that resource-knowledge sharing has a significant positive impact on commitment to the process, supporting the findings of Bock et al. (2005) on the benefits of resource-knowledge sharing for collaboration and innovation. These antecedent factors may be particularly important in the context of educational quality assurance, where stakeholders may have diverse goals and motivations and may be hesitant to commit to a collaborative process. By promoting repetition of effort to collaborate, providing incentives to collaborate, and facilitating the collaboration process through leadership, stakeholders may be more likely to commit to the process and work together effectively to achieve shared goals. It is generally accepted that commitment to the process is included because the 20-year strategy in Thailand was developed by groups of administrators from throughout the institution that are more involved in monitoring the university's success (President of Walailkak University. 25 March, 2021, Interview). It is crucial to highlight that facilitative leadership is the first step in establishing a more successful cooperation relationship. According to Ansell and Gash (2008:550), this was included to verify that facilitative leadership is essential for enticing people and successfully guiding them into a collaborative relationship. Leadership was identified as a driving force by Emerson, Nabatchi and Balogh (2012:7), with the leader committing to collaborative problem solving and associated with a collaborative effort. According to Chandarason's organizational model, one of the major variables impacting successful policy implementation is leadership (Chandarasorn, 2013). Furthermore, Emerson, Nabatchi and Balogh (2012: 7) underlined resource dependence as a primary driver of collaborative dynamics in an uncertain situation.

### H4: Antecedent factors have a significant positive impact on the successful collaboration in educational quality assurance (collaboration shared-understanding).

According to the hypothesis, the antecedent factors, repetition of effort to collaborate (Repeat avg), incentive to collaborate (Incent avg), facilitative leadership (Fleader avg), and resource-knowledge sharing (Resource avg), have a significantly positive impact on shared-understanding (Share avg) at a p-value of 0.000. The research hypothesis suggests that the antecedent factors of repetition of effort to collaborate, the incentive to collaborate, facilitative leadership, and resource-knowledge sharing have a significant positive

impact on the successful collaborative process of negotiation in educational quality assurance. This means that if these factors are present and strong, it is more likely that the negotiation process will be successful in improving educational quality assurance. According to Guzzo and Dickson (1996), repetition of effort can increase the effectiveness of collaborative processes by promoting coordination and cooperation among stakeholders. This is because repeated collaboration allows stakeholders to build trust and establish relationships that facilitate the resolution of conflicts and the achievement of shared goals. In the context of educational quality assurance, repetition of effort to collaborate may be particularly important in helping stakeholders to build the necessary skills and expertise to work effectively together.

Another important antecedent factor is the presence of incentives to collaborate. Research by Titus and Hester (2003) revealed that rewards and incentives can significantly improve team performance in collaborative settings. This is likely to be true in the context of educational quality assurance as well, as stakeholders may be motivated to work together more effectively if they see the potential for personal or organizational benefits. Facilitative leadership is also essential for successful collaboration in educational quality assurance. Kozlowski and Bell (2003) found that effective leadership is crucial for the success of teamwork in organizations, and this is likely to be true in the context of educational quality assurance as well. When leaders are able to facilitate the collaboration process by providing resources, support, and guidance, stakeholders are more likely to work effectively together and to achieve shared goals. This is supported by the work of Ansell and Gash (2008), who found that facilitative leadership is vital for bringing participants together and for directing them toward a collaborative relationship successfully. It is worth considering that resource-knowledge sharing is not just about sharing physical resources but is also about sharing information and expertise. When stakeholders are able to share their knowledge and skills with one another, they are able to leverage their collective expertise to solve problems and achieve shared goals more effectively. This is supported by the work of Brewer and deLeon (1983), who found that the repetition of collaborative efforts can increase the effectiveness of such efforts by promoting coordination and cooperation among stakeholders. It is relevant to mention that shared-understanding regarding collaboration can increase higher collaboration process. Research has shown that repetition of effort to collaborate, incentive to collaborate, and facilitative leadership have been verified to influence collaborative processes successfully (Ansell and Gash (2008); Thomson and Perry (2006); Emerson, Nabatchi and Balogh (2012: 7). Moreover, Thomson and Perry (2006) mentioned that resource requirements and risk sharing are key components of a successful collaborative approach. According to Emerson, Nabatchi and Balogh (2012: 7), resource dependence is a significant determinant of collaborative dynamics in an uncertain situation.

### H5: Collaboration processes have a significant positive impact on successful collaboration in educational quality assurance (research outcomes).

Negotiation (Nego avg) has a significantly positive impact on research outcomes (Outcome Research Outcomes) at a p-value of 0.002, trust-building (Trust avg) has an insignificant positive impact on research outcomes (Outcome\_Research Outcomes) at a p-value of 0.321, and commitment to process (Commit avg) has an insignificant positive impact on research outcomes. Based on the data presented, it appears that negotiation (Nego avg) has a significantly positive impact on research outcomes (Outcome Research Outcomes) at a p-value of 0.002. This is supported by the findings of Fisher and Ury (1981), who emphasize the role of negotiation in resolving conflicting interests and developing mutually beneficial solutions. However, the impact of trust-building (Trust avg) on research outcomes (Outcome\_Research Outcomes) was found to be insignificant at a p-value of 0.321. This result is not in line with the findings of Johnson and Johnson (1994), who suggest that mutual trust and respect among team members are necessary for successful collaboration. Similarly, both commitment to the process (Commit avg) and shared understanding had an insignificant positive impact on research outcomes. These results contradict the findings of Deutsch (1949) and Follett (1924), who highlight the importance of shared-understanding and commitment to the process in effective collaboration, as well as the findings of Gibbons (2013), who emphasizes the importance of sharedunderstanding and commitment to working toward a common goal in successful collaboration. It is notable that negotiation is an important aspect in ensuring future success in educational quality assurance partnership. Negotiation, according to Ansell and Gash (2008:550), is a collaborative process that acts as the focal point for creating trust and mutual understanding, leading in successful implementation in an institution. Collaboration, according to Thomson and Perry (2006), is a dynamic process that requires recurrent debate to

create a common understanding that leads to effective cooperation. The aspect of negotiation is explored to assess the validity of collaboration theory. In accordance with Ansell and Gash (2008:550), trust is a crucial aspect in the early phases of the collaborative processes in an organization. Based on Emerson, Nabatchi and Balogh (2012:7), engagement is a collaborative dynamic that leads to policy implementation, which impacts institutional adaptability. Ansell and Gash (2008:550) defined commitment as a collaborative process that can result in shared recognition of independence, resulting in effective solutions, and Thomson and Perry (2006) highlighted commitment as a process that can lead to subsequent activities, such as engagement that leads to issue solutions; and implementation is to execute commitment inside an institution. Ansell and Gash (2008:550) stated that shared-understanding can be characterized as a collaborative process that can result in common issue classification, explicit missions, and mutual interests that can lead to effective consequences.

### H6: Collaboration processes have a significant positive impact on successful collaboration in educational quality assurance (produce graduate outcomes).

Negotiation (Nego\_avg) has a significantly positive impact on producing graduate outcomes (Outcome Produce graduate outcome) at a p-value of 0.001, while trust-building (Trust avg) has a significantly negative impact on producing graduate outcomes (Outcome\_Produce graduate outcome) at a pvalue of 0.005. Simultaneously, commitment to the process (Commit\_avg) has an insignificant impact on producing graduate outcomes (Outcome\_Produce graduate outcome) at a p-value of 0.233, and sharedunderstanding (Share\_avg) has an insignificant impact on producing graduate outcomes (Outcome\_Produce graduate outcome) at p-value 0.869. According to this analysis, negotiation (Nego avg) had a significantly positive impact on producing graduate outcomes (Outcome Produce graduate outcome) at a p-value of 0.001. This finding is consistent with the work of Deutsch (1973), who argued that negotiation is essential for resolving conflicts and achieving mutual gains in collaborative endeavors. In the context of educational quality assurance, it seems that the ability to effectively negotiate and resolve disputes among stakeholders may be crucial for ensuring that the process results in improved graduate outcomes. On the other hand, trust-building (Trust\_avg) had a significantly negative impact on producing graduate outcomes (Outcome\_Produce graduate outcome) at a p-value of 0.005. This finding may seem counterintuitive at first, but it is possible that high levels of trust among stakeholders could lead to complacency and a lack of critical examination of the quality assurance process. In other words, trust may be necessary for effective collaboration, but too much trust may undermine the process by preventing stakeholders from fully engaging in the critical analysis and problemsolving that is necessary for continuous improvement.

This analysis also found that commitment to the process (Commit\_avg) had an insignificant impact on producing graduate outcomes (Outcome Produce graduate outcome) at a p-value of 0.233. This finding suggests that while commitment may be important for successful collaboration, it may not be the most crucial factor in determining the impact of the quality assurance process on graduate outcomes. Similarly, sharedunderstanding (Share\_avg) had an insignificant impact on producing graduate outcomes (Outcome\_Produce graduate outcome) at a p-value of 0.869. This result may be due to the fact that shared-understanding is a foundational element of successful collaboration, and as such, its absence may be a deal-breaker for the success of the process. However, once it is present, other factors may become more important in determining the impact on graduate outcomes. A popular explanation of negotiation is that it is a factor to increase further successful collaboration in educational quality assurance. Ansell and Gash (2008:550) stated that negotiation is the collaborative process that serves as the focal point for developing trust and mutual understanding, resulting in successful execution in an institution. The aspect of negotiation was explored in order to assess the validity of collaboration theory. Thomson and Perry (2006) defined collaboration as a dynamic process that involves repeated discussion to reach a common consensus that leads to effective cooperation. In accordance with Ansell and Gash (2008:550), trust is a crucial aspect in the early phases of the collaborative processes in an organization. Engagement, according to Emerson, Nabatchi and Balogh (2012: 7), is a collaborative dynamic that leads to policy implementation, which influences institutional flexibility. Thomson and Perry (2006) defined commitment as a process that may lead to future actions such as engagement, which leads to problem solving, and implementation, which is to put commitment into action within an institution. According to Ansell and Gash (2008:550), shared-understanding is defined as a collaborative process that can result in common issue classification, specified missions, and reciprocal interests, all of which can contribute

to effective outcomes. Commitment, according to Ansell and Gash (2008:550), is a collaborative process that can result in common acknowledgement of independence, leading to successful solutions.

### H7: Collaboration processes have a significant positive impact on successful collaboration in educational quality assurance (academic service outcomes).

Negotiation (Nego\_avg) has a significantly positive impact on academic service outcomes (Outcome Academic service outcome) at a p-value of 0.002, while trust-building (Trust avg) has a significantly positive impact on academic service outcomes (Outcome\_Academic service outcome\_avg) at a p-value of 0.001. In contrast, commitment to process (Commit avg) has an insignificant impact on academic service outcomes (Outcome\_Academic service outcome) at a p-value of 0.236 and shared-understanding (Share avg) has an insignificant impact on academic service outcomes (Outcome Academic service outcome) at a p-value of 0.224. According to this analysis, negotiation (Nego\_avg) had a significantly positive impact on academic service outcomes (Outcome\_Academic service outcome) at a p-value of 0.002. This finding is consistent with the work of Deutsch (1973), who argued that negotiation is essential for resolving conflicts and achieving mutual gains in collaborative endeavors. In the context of educational quality assurance, it seems that the ability to effectively negotiate and resolve disputes among stakeholders may be crucial for ensuring that the process leads to improved academic service outcomes. The analysis also found that trustbuilding (Trust\_avg) had a significantly positive impact on academic service outcomes (Outcome\_Academic service outcome) at a p-value of 0.001. This finding is supported by the work of Johnson and Johnson (2009), who argue that a shared-understanding is necessary for promoting cooperation and coordination among team members. In the context of educational quality assurance, it seems that trust-building may be an important factor in creating a collaborative environment that is conducive to achieving academic service outcomes. However, this analysis showed that commitment to the process (Commit\_avg) had an insignificant impact on academic service outcomes (Outcome\_Academic service outcome) at a p-value of 0.236. This finding suggests that while commitment may be important for successful collaboration, it may not be the most crucial factor in determining the impact of the quality assurance process on academic service outcomes. Similarly, sharedunderstanding (Share avg) had an insignificant impact on academic service outcomes (Outcome Academic service outcome) at a p-value of 0.224. This result may be due to the fact that shared-understanding is a foundational element of successful collaboration, and as such, its absence may be a deal-breaker for the success of the process. However, once it is present, other factors may become more important in determining the impact on academic service outcomes. Thus, according to Ansell and Gash (2008:550), negotiation is the collaborative process that acts as the focal point for creating trust and mutual understanding in an organization, culminating in effective implementation. Collaboration, according to Thomson and Perry (2006), is a dynamic process that requires recurrent debate in order to create a common understanding that leads to effective cooperation. To test the validity of collaboration theory, the element of bargaining was investigated. In accordance with Ansell and Gash (2008:550), trust is a crucial aspect in the early phases of collaborative processes in an organization. Based on Emerson, Nabatchi and Balogh (2012: 7), engagement is a collaborative dynamic that leads to policy execution, which influences institutional adaptation. Ansell and Gash (2008:550) defined commitment as a collaborative process that can result in shared recognition of independence, resulting in effective solutions; and Thomson and Perry (2006) defined commitment as a process that may lead to subsequent actions such as engagement, which leads to problem solving, and implementation, which is to carry out commitment within an institution.

### H8: Collaboration processes have a significant positive impact on successful collaboration in educational quality assurance (preserve arts and cultures).

There was no significant impact of the collaboration processes which influence successful collaboration in educational quality assurance (Preserving arts and cultures) at a p-value of 0.05, which means that negotiation (Nego\_avg), trust-building (Trust\_avg), commitment to process (Commit\_avg), and shared-understanding (Share\_avg) do not have a significant impact on the outcomes (Outcome\_Preserve arts and cultures). According to this analysis, there was no significant impact of the collaboration processes on successful collaboration in educational quality assurance or the preservation of arts and cultures at a p-value of 0.05. This finding suggests that factors such as negotiation (Nego\_avg), trust-building (Trust\_avg), commitment to the process (Commit\_avg), and shared-understanding (Share\_avg) may not have a significant impact on this outcome. This result was unexpected, given that the previous research has highlighted the

importance of these factors in achieving successful collaboration and resolving conflicts (Deutsch, 1973), promoting cooperation and coordination (Johnson and Johnson, 2009), fostering innovation (Hargreaves and Fullan, 2012), and creating a culture of continuous improvement (Fullan, 2001). It is possible that other factors not included in this analysis may be more influential in determining the impact of collaboration on the preservation of arts and cultures.

In terms of preserving arts and cultures, negotiation, trust-building, commitment to the process, and shared-understanding cannot predict successful collaboration in educational quality assurance. It is important to note that Ansell and Gash (2008:550) stated that shared-understanding is characterized as a collaborative process that can result in common issue classification, explicit missions, and mutual interests that can lead to effective consequences. However, the present evidence relies on shared-understanding does not have an impact on the outcome (Outcome\_Preserve arts and cultures). Alternatively, it may simply indicate that in order to conserve arts and cultures that have been designated as important in general, people do not need to have any additional understanding. It appears that some aspects were not required for the participants to obtain a better understanding. The findings indicate that such characteristics have no effect on the preservation of arts and cultures, despite the fact that Ansell and Gash (2008:550) confirmed that trust is critical in the early stages of the collaborative processes in an organization. From this perspective, this might be seen as preserving arts and cultures, regardless of how much participation is drawn. It is dependent on the outcomes that may be considered successful in terms of collaborative governance.

#### The models of collaboration in educational quality assurance in the university

The models of collaboration in educational quality assurance in the university was certified as follows. **Model 1:** As model 1 demonstrated the validity of collaborative governance theory, the entire result was significant at a p-value of 0.000. Concerning the incentive to collaborate, it has a considerable favorable influence on educational quality assurance achievements at the 0.000 level. At the significance level of 0.047, facilitative leadership has a positive significant influence on educational quality assurance outcomes. Meanwhile, at the significance level of 0.812, repeated collaborative efforts had no positive significant influence on educational quality assurance outcomes. Model 1 of the analysis examines the relationship among repetition of effort to collaborate (Repeat), incentive to collaborate (Incent), facilitative leadership (Fleader), and educational quality assurance outcomes (Dependent Variable). The results show that incentive to collaborate (Incent) has a statistically significant positive impact on educational quality assurance outcomes (p-value of 0.000). This finding is consistent with previous research that has shown that incentives can encourage collaboration and lead to better outcomes (Gao et al., 2016). Facilitative leadership, on the other hand, has a positive but not statistically significant impact on educational quality assurance outcomes (p-value of 0.047). This suggests that while facilitative leadership may be related to better outcomes, further research is needed to confirm this relationship. These results suggest that Incent\_avg (X2), which refers to incentive to collaborate and Fleader\_avg (X3), which refer to facilitative leadership, is an important factor to consider when examining the dependent variable in this study. Incent\_avg (X2) had a particularly strong impact, as indicated by its p-value of .000. This suggests that incentives provided to employees may be a significant factor in the dependent variable. The variable Fleader\_avg (X3) also had a significant impact, with a p-value of .047. This suggests that the leadership style of the manager may be an important factor in the dependent variable. It is worth noting that while the R-squared value for this model was .100, indicating that these variables explain about 10.0% of the variance in the dependent variable, the adjusted R-squared value was . 930. This suggests that there may be other variables that are not included in the model that are contributing to the variance in the dependent variable. It would be worth considering these variables in future research. The variable Repeat avg (X1) did not have a significant impact on the dependent variable, as indicated by its pvalue of .812. This suggests that repetition may not be an important factor in the dependent variable.

According to most of the research, the antecedent aspect that enhances subsequent effective collaboration in the collaboration process is the incentive to collaborate. According to Chandarason's organizational model, one of the most important aspects impacting successful policy implementation is incentive (Chandarasorn, 2013), and according to Ansell and Gash (2008), incentive participation can occur when participants see their goals being met as a result of the collaborative process. As a result, one of the most significant outcomes will be the determination to collaborate. procedures. Facilitative leadership is the

preliminary step in building a more successful collaboration relationship, and facilitative leadership, according to Ansell and Gash (2008:550), is crucial for attracting participants and for effectively leading them toward a collaborative relationship. This is especially significant when looking at repeated collaborative efforts that cannot forecast the impact on educational quality assurance outcomes. This may be demonstrated by the fact that collaboration is based on how committed they are rather than the regularity with which they participate.

**Model 2:** examines the relationship between resource-knowledge sharing (Resource) and educational quality assurance outcomes (dependent variable). The results show that resource-knowledge sharing (Resource) has a statistically significant positive impact on educational quality assurance outcomes (p-value of 0.000). This finding is consistent with previous research that has shown that sharing resources and knowledge can lead to better outcomes in education (Liu & Li, 2015). Model 2 proved the validity of resource-dependent theory, where resource-knowledge sharing found that the overall results showed the significance at a p-value of 0.000. Emerson, Nabatchi and Balogh (2012: 7) highlighted resource dependence as a main driver of collaborative dynamics in an uncertain context. Pfeffer and Salancik (2003: 35) critiqued the fact that the importance of the environment was always highlighted, but most theories have focused on the internal processes of resource consumption rather than analyzing mechanisms of resource acquisition. Pfeffer and Gerald (1978: 26-27) present the core argument of the resource dependency viewpoint, as well as interorganizational relationships as important units for understanding intercorporate connections. Corporations profit from their board members in the following ways: through knowledge and expertise, access to resources, and credibility.

**Model 3:** examines the relationship among negotiation (Nego), trust-building (Trust), commitment to the process (Commit), shared-understanding (Sharun), and educational quality assurance outcomes (dependent variable). The results show that negotiation (Nego) has a statistically significant positive impact on educational quality assurance outcomes (p-value of 0.000). This finding is consistent with previous research that has shown that effective negotiation can lead to better outcomes in education (Gao et al., 2016). Trust-building (Trust) has a statistically significant negative impact on educational quality assurance outcomes (p-value of 0.001). This finding may be surprising, as trust is typically thought to be a positive factor in collaboration. However, it is possible that high levels of trust may lead to complacency and a lack of vigilance in monitoring and maintaining the quality of education. Further research is needed in order to understand this relationship. Commitment to the process (Commit) and shared-understanding (Sharun) have positive impacts on educational quality assurance outcomes, but these relationships are not statistically significant (p-values of 0.155 and 0.483, respectively). This suggests that it is uncertain whether there is a relationship among commitment to the process, shared-understanding, and educational quality assurance outcomes.

Model 3 proved the validity of collaboration theory, which demonstrates that the overall results showed significance at a p-value of 0.000. Negotiation has a positive significant impact on educational quality assurance outcomes at the significance level of 0.000. Trust has also a positive significant impact on educational quality assurance outcomes at the significance level of 0.001. Commitment to the process did not have a positive significant impact on educational quality assurance outcomes at the significance level of 0.155, and shared-understanding did not have a positive significant impact on educational quality assurance outcomes at the significance level of 0.485. Negotiation, according to Ansell and Gash (2008:550), is a collaborative process that acts as the focal point for creating trust and mutual understanding, leading to successful implementation in an institution. Collaboration, according to Thomson and Perry (2006), is a dynamic process that requires recurrent debate to create a common understanding that leads to effective cooperation. According to Ansell and Gash (2008:550), trust is critical in the early stages of collaborative processes in organizations. It is remarkable to comprehend why process commitment and shared-understanding have no positive substantial effect on educational quality assurance outcomes. This indicates that commitment to the process may not be crucial because participants may have had no other options, implying that certain responsibilities are policies that must be performed, while shared-understanding may not be necessary if participants successfully comprehend such policies. In conclusion, the results of this analysis suggest that collaboration and effective communication can have a positive impact on the quality of education. Incentives, resourceknowledge sharing, and negotiation appear to be particularly important factors in this regard. Further research is needed in order to understand the relationship between trust-building and educational quality assurance outcomes, as well as the relationship among commitment to the process, shared-understanding, and educational quality assurance outcomes. One of the main objectives of this study was to analyze how collaboration can increase educational quality assurance at Walailak University. The results of the analysis suggest that collaboration and effective communication can have a positive impact on the quality of education. In particular, incentives, resource-knowledge sharing, and negotiation appear to be important factors in this regard. Incentives have a statistically significant positive impact on educational quality assurance outcomes, as shown in Model 1 and Model 3. This finding is consistent with previous research that has shown that incentives can encourage collaboration and lead to better outcomes (Gao et al., 2016). By providing incentives for collaboration, Walailak University may be able to improve the quality of education and achieve better outcomes. Resource-knowledge sharing also has a statistically significant positive impact on educational quality assurance outcomes, as shown in Model 2. This finding is consistent with previous research that has shown that sharing resources and knowledge can lead to better outcomes in education (Liu & Li, 2015). By encouraging resource-knowledge sharing among faculty and staff, Walailak University may be able to improve the quality of education and achieve better outcomes. Negotiation has a statistically significant positive impact on educational quality assurance outcomes, as shown in Model 3. This finding is consistent with previous research that has shown that effective negotiation can lead to better outcomes in education (Gao et al., 2016). By fostering an environment of collaboration and negotiation, Walailak University may be able to improve the quality of education and achieve better outcomes.

#### Practical benefits and policy recommendations from the proposed model 1-3

Model 1: Repetition to collaborate: Higher levels of repetition may lead to improved educational quality assurance outcomes, although the relationship between repetition and outcomes is weak. Given the moderate positive relationship between incentives and educational quality assurance outcomes, administrators and deans may want to consider implementing or increasing incentives for instructors and staff in order to improve outcomes. They should be mindful, however, that the relationship between repetition and outcomes is not very strong, and other factors may be more important in determining outcomes. Incentive to collaborate: Higher levels of incentives may be associated with better educational quality assurance outcomes. This may be because incentives provide additional motivation or rewards for good performance. Facilitative leadership: Higher levels of leadership by faculty may be related to better educational quality assurance outcomes. This may be because faculty leaders are able to provide guidance and support to instructors and staff, which can help to improve outcomes. In order to implement incentives for instructors and staff, university administrators and deans could consider developing a policy that outlines the types of incentives that will be offered and the criteria for earning them. This could include things such as bonuses for meeting certain performance goals, additional paid time off, or professional development opportunities. It may also be helpful to consult with instructors and staff to get their input and to ensure that the incentives are aligned with their needs and motivations. For instructors and staff: A policy on incentives for instructors and staff could outline the types of incentives that will be offered, the criteria for earning them, and the process for applying for and receiving incentives. The policy could also specify any limitations or exclusions that apply to the incentives. For example, the policy might specify that incentives are only available to full-time faculty or staff, or that they are limited to certain types of work or performance goals. For administrators and deans: A policy on incentives for instructors and staff could outline the types of incentives that will be offered (such as bonuses, paid time off, or professional development opportunities), the criteria for earning them (such as meeting certain performance goals or completing certain tasks or projects), and the process for applying for and receiving incentives (such as submitting a request or application form). The policy could also specify any limitations or exclusions that apply to the incentives, such as only being available to full-time faculty or staff, or only being applicable to certain types of work or performance goals. For instructors and staff: If a policy on incentives is implemented, instructors and staff may be able to earn additional rewards or recognition for their work by meeting certain performance goals or completing certain tasks or projects. It may be helpful to familiarize oneself with the details of the policy and the criteria for earning incentives, and to consider how one might be able to participate in the program.

**Model 2:** Resource- knowledge sharing: Investing in additional resources (such as funding, technology, or training) may be related to better educational quality assurance outcomes. This may be because these resources provide instructors and staff with the tools and support that they need to do their jobs

effectively. The significant relationship between resources and outcomes suggests that investing in additional resources (such as funding, technology, or training) may be a worthwhile strategy for improving educational quality assurance outcomes at the university. Investing in additional resources may help to improve educational quality assurance outcomes by providing instructors and staff with the tools and support they need to do their jobs effectively. This could include things such as funding for new equipment or training programs, or technology that will help to streamline processes or improve communication. A policy on investing in additional resources could outline the process for identifying and prioritizing resource needs, as well as the process for allocating funds or resources to address those needs. The policy could also specify any limitations or exclusions that apply to the allocation of resources. For example, the policy might specify that certain types of resources are not eligible for funding, or that funding is only available for certain types of projects or initiatives. For administrators and deans: A policy on investing in additional resources could outline the process for identifying and prioritizing resource needs (such as soliciting input from instructors and staff or conducting assessments of current resources and needs), as well as the process for allocating funds or resources to address those needs (such as through a competitive grant process or by prioritizing certain types of projects or initiatives). The policy could also specify any limitations or exclusions that apply to the allocation of resources, such as certain types of resources being ineligible for funding, or funding only being available for certain types of projects or initiatives. For instructors and staff: If a policy on investing in additional resources is implemented, instructors and staff may have the opportunity to access new or improved resources that can support their work. It may be helpful to familiarize oneself with the details of the policy and the process for requesting or applying for resources, and to consider how one might be able to take advantage of the resources that are available.

Model 3: Negotiation: Encouraging instructors and staff to engage in more negotiation may be related to better educational quality assurance outcomes. This may be because negotiation allows individuals to advocate for their needs and work collaboratively to find solutions that meet everyone's needs. Trust: Lower levels of trust may be related to better educational quality assurance outcomes, although the relationship between trust and outcomes is only moderate. This may be because lower levels of trust may lead to more negotiation and collaboration, which can help to improve outcomes. The strong positive relationship between negotiation and outcomes suggests that encouraging instructors and staff to engage in more negotiation may be a helpful strategy for improving outcomes. On the other hand, the moderate negative relationship between trust and outcomes suggests that building trust within the university community may not be as important for improving outcomes. In order to encourage more negotiation, university administrators and deans could consider developing policies or guidelines that support and encourage collaboration and problem-solving between instructors and staff. This could include things such as promoting communication and transparency, establishing a process for resolving conflicts, or providing training on negotiation skills. It may also be helpful to create a culture that values and rewards collaboration and problem-solving. A policy on encouraging more negotiation could outline the principles and values that guide collaboration and problem-solving within the university community, as well as the processes and procedures for resolving conflicts and working together to find solutions. The policy could also specify any resources or support that are available to instructors and staff to help them engage in more effective negotiation, such as training programs or support from mediation or conflict resolution experts. For administrators and deans: A policy on encouraging more negotiation could outline the principles and values that guide collaboration and problem-solving within the university community (such as transparency, respect, and inclusivity), as well as the processes and procedures for resolving conflicts and working together to find solutions (for example through mediation or other forms of alternative dispute resolution). The policy could also specify any resources or support that are available to instructors and staff to help them engage in more effective negotiation, such as training programs or support from mediation or conflict resolution experts. For instructors and staff: If a policy on encouraging more negotiation is implemented, instructors and staff may have the opportunity to participate in initiatives or programs that support collaboration and problem-solving within the university community. It may be helpful to familiarize oneself with the details of the policy and the resources or support that are available, and to consider how one might be able to contribute to a more collaborative and problem-solving culture within the university.

#### Suggestions

The article suggests that educational institutions should focus on collaboration as a key factor in improving the success of quality assurance. The study conducted on internal quality assurance at the institutional level found that negotiation, trust building, commitment to the process, and shared understanding are important variables related to successful collaboration. The article recommends further research on external contextual aspects that foster collaboration, as well as external collaboration in research and teaching across institutions. The study found that successful collaboration in educational quality assurance is related to variables such as negotiation, trust building, commitment to the process, and shared understanding. The article suggests that further research should focus on exploring the relationship between these variables and collaboration success and provides some suggestions for researchers to consider in their investigations. Researchers could consider the following suggestions:

- 1. Replicate the study in different cultural and educational contexts to determine if the results are specific to the original context or can be generalized. Additionally, the article recommends encouraging replication studies with different departments and faculties in Walailak University to improve the understanding of unique curriculum characteristics in educational quality assurance.
- 2. Conduct a deeper qualitative analysis of the data to better understand how the independent variables influence the dependent variable. This can be achieved through the use of qualitative data such as interviews or focus groups, which can provide more in-depth insights.
- 3. Expand the sample size to increase the generalizability of the results. By increasing the sample size, researchers can obtain a more representative sample of the population, which can improve the reliability and validity of the findings and minimize the impact of sampling bias.
- 4. Conduct a longitudinal study to understand how the relationship between the variables may change over time. Longitudinal studies track participants over a period of time, allowing researchers to identify trends and changes in the variables of interest. This can provide a more comprehensive understanding of the relationship between the independent variables and the dependent variable.
- 5. Consider additional independent variables that may be related to the successful process of collaboration, such as leadership style, communication skills, and teamwork. By considering a wider range of variables, researchers can gain a more comprehensive understanding of the factors that contribute to the successful process of collaboration in educational quality assurance.

#### Conclusion

This study provided a framework for collaboration in educational quality assurance in Walailak University related to the theory of collaboration, collaborative governance, and resource dependence. The findings have shown that these theories have significantly influenced the success of collaboration in educational quality assurance. In addition, collaboration was highlighted as the key appliance to enhance the success of collaboration in educational quality assurance in Walailak University.

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#### **Interview**

President of Walailkak University. (25 March 2021). Interview. Walailak University. Vice-Dean of school of Public Health. (24 March 2021). Interview. Walailak University. Vice-President for academic and international affairs. (17 March 2021). Interview. Walailak University. Vice-President for planning and strategic development. (4 March 2021). Interview. Walailak University.