

# Quality Competency of Teachers in the Developing Quality Culture in Public Secondary Schools in a Developing Country

Dinh-Thai Do<sup>1,\*</sup>, Chi-Lan Le<sup>2</sup> & Thi-Tu Nguyen<sup>3</sup>

<sup>1</sup>Postgraduate Department, Sai Gon University, Ho Chi Minh City, Vietnam

<sup>2</sup>Vice Principal, Sai Gon University, Ho Chi Minh City, Vietnam

<sup>3</sup>Experimental High School, Ho Chi Minh City University of Education, Ho Chi Minh City, Vietnam

\*Correspondence: Postgraduate Department, Sai Gon University, Ho Chi Minh City, 700000, Vietnam. Tel: 84-28-383-0310. E-mail: thaidd@sgu.edu.vn

Received: April 29, 2024

Accepted: August 27, 2024

Online Published: October 18, 2024

doi:10.5430/jct.v13n5p111

URL: <https://doi.org/10.5430/jct.v13n5p111>

## Abstract

Quality culture has been mentioned as a tool to help improve quality standards and promote the development of educational institutions. Recently, quality culture has begun to be recognized as an interesting research trend in Vietnam, mainly focusing on higher education. Several studies have applied models/types of building and developing quality culture to educational activities and institutions, but not in the national school system. The purpose of this study is to understand the quality capacity of administrators and teachers of public secondary schools in the Southeast region, of Vietnam through the aspect of quality awareness during education. General education implements educational quality accreditation activities. The research uses quantitative research methods combined with qualitative research methods. The survey sample was conveniently selected randomly, information was collected by questionnaire with 749 managers and 3831 teachers, and by interviews with 22 managers and 40 teachers. Quantitative data were calculated by Cronbach's Alpha to eliminate inappropriate variables. Descriptive statistics calculate percentages, mean values, and standard deviations, and inferential statistics test differences using ANOVA and t-test with 2 independent samples. Data analysis results show differences in quality awareness between the three provinces and between managers and teachers, and the results also show that managers and teachers do not have positive views. teacher on educational quality accreditation activities in secondary schools through two contents "Education quality accreditation takes time and resources" and "Education quality accreditation increases achievement problems in education". Therefore, the study recommends that leaders at all levels research and promulgate quality policies and create conditions for secondary schools to develop quality; Secondary schools build a set of tools and principles for forming and developing a quality culture to improve quality capacity and develop internal quality resources.

**Keywords:** quality competencies, quality culture, secondary school, developing country

## 1. Introduction

Quality is transformation, transformation from one state to another (Stalmeijer et al., 2023). For humans, transformation does not only refer to physical change but also cognitive and social change, which is a process of developmental change (Jidamva, 2012). Quality of education is the level of education that meets national and international requirements in terms of standards of learning materials, infrastructure, and learning environment (Mapogo, 2024); including input, process, and output (Bîrzea et al., 2005; Carlson, 2000; Chandra, 2021); focus on ensuring input and process quality (Kousainow, 2016); Students' achievements (outputs) must be taken as the basis (Aladejana, 2011; Jidamva, 2012; Chonjo, 2018). Output results are considered the standard to help measure and evaluate the current state of educational quality in the system through student learning outcomes and as a consequence of input and process quality levels (Kelkay, 2023). Although the authors have different views on the quality of education, it implies all three factors: input, process, and output of the educational process, the difference is the level of importance of which factor in the educational process. Quality is measured based on input, process, and output and is closely related to the quality perception of stakeholders involved in education. Kelkay's (2023) research is to determine how principals, teachers, and students perceive the quality of education in middle schools.

Therefore, quality awareness plays an important role as a core factor affecting input, process, and output so that educational results can achieve the desired quality. When there is no quality culture, the first thing is to raise quality awareness of stakeholders in all school activities.

Quality culture is mentioned as a tool to help improve quality standards in the organization and is a cultural element that promotes the development of the organization in terms of quality in all aspects of operations and relationships closely and systematically with other cultural elements in the organization. According to Crosby (1986), quality culture is everyone in an educational institution taking responsibility for quality. The Association of European Universities believes that quality culture is based on two elements: (1) A set of shared values, beliefs, expectations, and commitment to quality (referring to the understanding, perception, involvement, expectations, and emotions); (2) Structural and management elements with defined processes to improve quality and coordinated implementation efforts (addressing individual and collective tasks and responsibilities) (European University Association, 2006). Quality culture is a system of organizational values to create a favourable environment for establishing and continuously improving quality (Ahmed, 2008), including all members (from learners to managers), every organization (from departments to mass organizations) knows what the quality of their work is and follows that quality requirement (Ramírez-Hurtado et al., 2021), which is an activity that ensures quality. Quality is embedded in the daily life of the university and is considered a shared responsibility of all members of the academic community, officers, staff (both professional and administrative), and students. (Lewis, 2012). Kinesti (2019) proposed quality culture indicators formed in the school environment including school services, support for the quality of school services, and quality of education provided by the school.

Thus, quality culture is a subculture within organizational culture, or in other words, quality culture adds some quality values to organizational culture to create more strength and support organizational culture accomplishing the mission and goals of the organization (Do, 2018). In this study, quality culture is the awareness and responsibility for the quality of everyone in middle school by the school's strategies and goals when carrying out any activities, especially internal quality assurance activities. Ultimately, developing or changing a culture within an organization must always be based on the existing culture within the organization.

### *1.1 Literature Review*

Most authors give the view that quality assurance and quality culture are linked and support each other to develop quality in schools. This connection depends on the socio-economic development and socio-cultural awareness of each country and region. Quality assurance and quality accreditation activities have a close relationship with the development of quality culture as quality accreditation is just an impact tool to build a quality culture (Shwairef et al., 2021). Quality assurance is a matter of awareness and commitment which is called quality culture (Vlăsceanu et al., 2007). The role of the quality assurance unit is to consult, implement and supervise in building quality culture (Ramírez-Hurtado et al., 2021). Quality culture is an important factor in ensuring the quality of higher education (Farcas & Moica, 2009), quality culture is the development and compliance with internal quality assurance processes (Harvey, 2009), forming the quality culture and quality system of educational institutions through the internal assessment process (Mounier & Tangchuang, 2018), deploying simultaneously the building of a TQM system and quality culture will achieve the desired results (Bui, 2009), quality assurance processes must build a quality culture to improve quality. improving the quality of activities in educational institutions (Batool & Qureshi, 2007), ensuring quality as a component of quality culture (Loukkola & Zhang, 2010), investing in quality culture will limit costs for quality assurance activities (Wagenaar, 2011), quality assurance activities and building a plan to form a quality culture are very important and associated with a clear and transparent chain of responsibility at all levels (Sursock, 2002), quality culture as a practice reflects the application of a quality assurance framework to educational institutions (Vettori, 2012), to form a quality culture, the results of implementing the quality assurance activities must have a positive meaning, then quality cultural values will be formed (Do, 2013). Quality culture in education is the presence of a quality assurance system (Spruit & Adriana, 2015). Ehlers (2009) distinguished two concepts of quality assurance and quality culture: quality assurance processes are something tangible and can be managed by the decisions of the educational institution, while quality culture is about shared values, beliefs, expectations, and commitments – very difficult to change. In the author's opinion, when an organization's level of quality awareness is large enough, they are interested in the results of implementing quality assurance activities and activities in the organization. On the contrary, they focus on enhancing responsibility awareness and quality awareness in operational aspects.

Currently, research projects on quality culture and quality culture development are invested and developed mainly in higher education. Through studying research projects on quality culture and quality culture development, it can be

seen that quality culture and quality culture development at all levels in educational institutions have a several characteristics and activities that schools always pay attention to improve quality such as teaching activities, learning activities, educational environment, facilities, etc. This is valuable and practical experience that schools have. Vietnamese educational institutions need to learn and apply to build and develop a culture of quality at all levels and levels of education towards improving the quality of education for learners. In Vietnam, some studies mainly focus on quality culture and quality culture development in higher education (Le et al., 2012; Do, 2014; Tran, 2017; Le, 2018; Nguyen & Bui, 2019). Research and articles on general education mainly focus on improving the quality of management (Nguyen, 2016; Nguyen, 2019) and teaching (Vu, 2015; Hoang, 2016; Pham, 2016; Nguyen, 2018; Ho & Le, 2019), learning (Dang & Phan, 2018; Pham et al., 2018; Nguyen & Bui, 2019), assessment (Nguyen, 2015; Dang & Tran, 2019), quality spirit (Nguyen, 2011a; Nguyen, 2017; Hoang, 2017; Vu, 2018), school culture (Nguyen, 2011b), the direction of research on quality culture is unclear. However, these studies also show that researchers and educators have long been interested in improving quality and show that awareness of educational quality exists among them. Therefore, developing a culture of quality in educational institutions in Vietnam, specifically public secondary schools in the Southeast region, is a significant challenge in the era of the Industrial Revolution. The 4th time, implementing Resolution No. 29-NQ/TW, dated November 4, 2013, on fundamental and comprehensive innovation of education and training, meeting the requirements of industrialization and modernization in the socialist-oriented market economy and international integration and the implementation process of Decision No. 2161/QĐ-BGDĐT dated June 26, 2017, on promulgating the Plan to implement the goal of sustainable development in the field of education and training until 2025 and orientation to 2030, of which, 88% of students completing the secondary school program by 2025 and 93% by 2030.

Most authors emphasized the relationship and dependence between quality assurance and quality culture to improve quality appropriate to the context and level of quality awareness in educational institutions. Therefore, before building a quality assurance system, or quality culture, or implementing any activities, educational institutions must consider and review the current context of the problem that needed to be implemented to find solutions, making the most effective and optimal decisions. In addition, some educational institutions are subjective in implementing some quality assurance activities without surveying the current situation, leading to it taking a long time to fix, even having to do it again from scratch. At first, it was a waste of time and money, others applied implementation processes from other educational institutions to their educational institutions due to similarities in many aspects, but some places succeeded and some places failed. Although the outlook and thinking are similar on the outside the members' consciousness and awareness are not similar or different in terms of organizational culture.

From the analysis of domestic and foreign research projects mentioned above, the following comments can be drawn: quality culture has been of interest for a long time in countries around the world and has only recently begun to be recognized of interest in Vietnam for more than two decades, mainly focusing on higher education. Several studies have applied models/types of building and developing quality culture to educational activities and institutions, achieving certain successes, and opening up new research directions on quality culture. promising quality in developing the quality of education when our country is applying for the 2018 general education program. In addition, improving quality awareness for managers, teachers and members of the school is extremely necessary to serve the development of the quality of education in Vietnam in general, and in general education establishments in particular.

### *1.2 Purpose of the study*

The main objective of this study is to evaluate the quality capacity of administrators and teachers of public secondary schools in the Southeast region, Vietnam (including 3 provinces: Ho Chi Minh City, Binh Duong Province, and Tay Ninh Province) through the aspect of quality awareness and evaluate the difference in quality awareness of managers and teachers between the three provinces.

## **2. Method**

### *2.1 Study Design*

To achieve our research goals, we use a combination of quantitative and qualitative research methods to obtain enough convincing evidence to explore the quality capabilities of survey subjects and detect problems. Issues arising from survey contents related to the development of quality culture as well as the relationship between public secondary schools in the Southeast region, of Vietnam (Green, 2007; Kellie, 2008). Research design is carried out as a detailed plan to carry out research. Research is designed and organized in the form of a survey, collecting information in the form of a survey of subjects using questionnaires and interviews. Analyze documents and

scientific research works as a basis for analyzing and synthesizing issues related to quality capacity through quality awareness of managers and teachers in building culture quality in public secondary schools in the Southeast region, Vietnam (Ary et al., 2010; McMillan & Schumacher, 2013).

## 2.2 Participant

The convenience sampling method was used to select 3 provinces and cities including Ho Chi Minh City, Binh Duong Province, and Tay Ninh Province (Southeast region, Vietnam includes 1 city and 5 provinces). The study collected information by questionnaire from 749 managers and 3831 teachers in public secondary schools in Ho Chi Minh City, Binh Duong Province, and Tay Ninh Province according to Table 1.

**Table 1.** Number of Administrators and Teachers Participating in Answering the Questionnaire

	Male		Female		Sum	
	Manager	Teacher	Manager	Teacher	Manager	Teacher
Ho Chi Minh City (HCMC)	185	839	429	2378	614	3217
Binh Duong province (BD)	20	66	54	241	74	307
Tay Ninh province (TN)	21	95	40	212	61	307
Sum	226	1000	523	2831	749	3831

## 2.3 Questionnaire

The questionnaire was designed concerning Loukkola & Zhang (2010) and Do (2018). The questionnaire is designed to include 5 questions with 44 contents: (1) Information about educational quality accreditation activities: sources of information about educational quality accreditation activities in secondary schools (10 items); (2) Subjects participating in educational quality accreditation activities: subjects inside and outside secondary schools participating in educational quality accreditation activities (10 items); (3) Knowledge and experience related to educational quality accreditation activities: forms of receiving knowledge and experience related to educational quality accreditation activities of school administrators and teachers middle school (8 items); Post-accreditation of educational quality: assessment of administrators and teachers after the middle school participates in educational quality accreditation activities (8 items); Educational quality accreditation activities: views of administrators and teachers on educational quality accreditation activities in secondary schools (8 items). After completing the construction of the questionnaire, it was sent to 2 experts on quality culture in educational institutions and 30 middle school teachers to get opinions on the contents of the questionnaire. The author synthesized the comments and adjusts the entries as most appropriate. Next, the author conducted a pilot survey with 60 teachers. The Cronbach's Alpha reliability coefficient results from 0.963. The questionnaire ensures reliability in collecting information in research. The answers were scored and analyzed by the Likert-5 scale.

## 2.4 Data Analysis

Statistical analysis was performed using SPSS 26.0 software. Descriptive analysis was used to analyze data collected in questions 1, 2, and 3. T-test analysis of 2 independent samples and ANOVA for questions 4 and 5 were performed to understand quality management staff and teachers on activities related to educational quality accreditation and the impact of educational quality accreditation on management staff and teachers in the development of the quality culture in middle schools.

## 3. Results

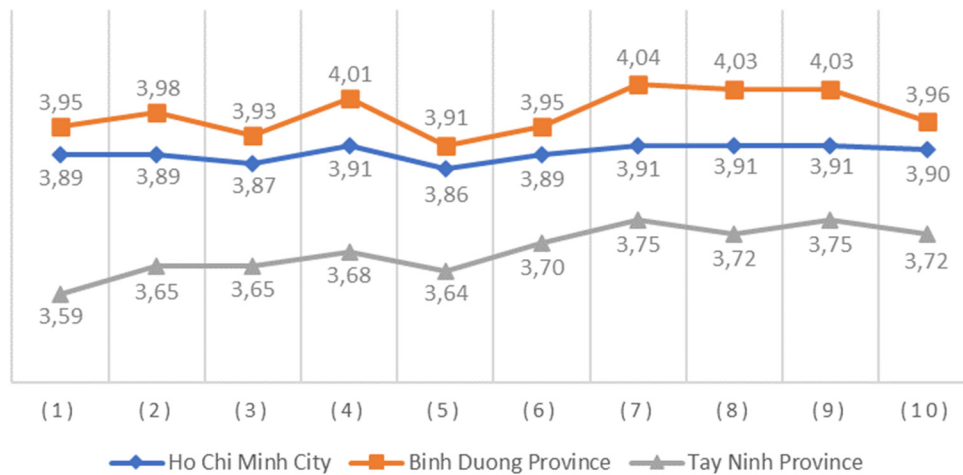
### 3.1 Regarding the Views of Administrators and Teachers after the School Participates in Educational Quality Accreditation

The results of a survey of 749 managers and 3831 teachers of public secondary schools in Ho Chi Minh City, Binh Duong Province, and Tay Ninh Province related to quality competency are shown below.

**Table 2.** The Results on the Views of Administrators and Teachers after the School Participated in Educational Quality Accreditation by the Province

Item	Province	Mean	SD	Sig. Levene Statistic	Sig. Welch
(1) Contributing to achieving the strategic goals of the school	HCMC	3.89	1.172	0.000	0.000
	BD	3.95	1,071		
	TN	3.59	1,390		
(2) Yielding positive educational outcomes	HCMC	3.89	1,150	0.000	0.001
	BD	3.98	1,055		
	TN	3.65	1,322		
(3) Promoting the integration of education accreditation activities with social needs	HCMC	3.87	1.147	0.000	0.004
	BD	3.93	1,052		
	TN	3.65	1,326		
(4) Enhancing quality management activities	HCMC	3.91	1.141	0.000	0.001
	BD	4.01	1,065		
	TN	3.68	1,347		
(5) Promoting accountability	HCMC	3.86	1.145	0.000	0.004
	BD	3.91	1,021		
	TN	3.64	1,307		
(6) Developing school quality culture	HCMC	3.89	1.147	0.000	0.014
	BD	3.95	1,061		
	TN	3.70	1,313		
(7) Promoting school development	HCMC	3.91	1.152	0.000	0.003
	BD	4.04	1,044		
	TN	3.75	1,307		
(8) Enhancing quality awareness	HCMC	3.91	1.149	0.000	0.002
	BD	4.03	1,028		
	TN	3.72	1,302		
(9) Promoting the staff's spirit for the development of the school	HCMC	3.91	1.147	0.000	0.005
	BD	4.03	1,068		
	TN	3.75	1,299		
(10) Perceiving improved education quality after each academic year	HCMC	3.90	1.146	0.000	0.020
	BD	3.96	1,078		
	TN	3.72	1,306		

ANOVA test of differences between 3 independent samples assessing the perceptions of managers and teachers after the school participated in educational quality accreditation (including self-assessment and assessment outside the educational institution) between 3 provinces: Ho Chi Minh City, Binh Duong province and Tay Ninh province shows the significance level Sig. Levene of 10 survey items are all  $< 0.05$  and Sig. Welch of the 10 survey contents is also  $< 0.05$ , so the 10 survey contents have a statistically significant difference in evaluation opinions between the 3 provinces. Figure 1. shows that the average value of 10 survey contents of 3 provinces has a difference, in which Binh Duong province is the highest and Tay Ninh province is the lowest. The survey contents were rated by administrators and teachers at the level of "Agree" (ranging from  $> 3.4$  to  $4.2$ ).



**Figure 1.** The Average Value of the Views of Administrators and Teachers after the School Participated in Educational Quality Accreditation by Province

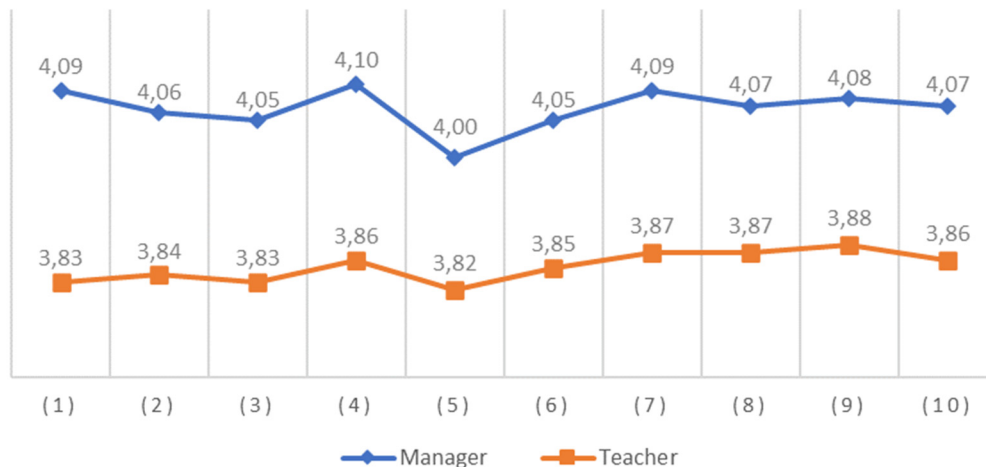
**Table 3.** The Results on the Views of Administrators and Teachers after the School Participated in Educational Quality Accreditation

Item	Participant	Mean	SD	Sig. Levene's Test	Sig. (2-tailed)	Mean Difference																																																																																						
(1) Contributing to achieving the strategic goals of the school	Manager	4.09	1,130	0.009	0.000	0.266																																																																																						
	Teacher	3.83	1.192				(2) Yielding positive educational outcomes	Manager	4.06	1.116	0.012	0.000	0.219	Teacher	3.84	1.164	(3) Promoting the integration of education accreditation activities with social needs	Manager	4.05	1.109	0.003	0.000	0.226	Teacher	3.83	1.162	(4) Enhancing quality management activities	Manager	4.10	1,097	0.012	0.000	0.239	Teacher	3.86	1.162	(5) Promoting accountability	Manager	4.00	1.112	0.000	0.000	0.179	Teacher	3.82	1.156	(6) Developing school quality culture	Manager	4.05	1.110	0.016	0.000	0.197	Teacher	3.85	1.162	(7) Promoting school development	Manager	4.09	1.114	0.084	0.000	0.222	Teacher	3.87	1.163	(8) Enhancing quality awareness	Manager	4.07	1.107	0.024	0.000	0.207	Teacher	3.87	1.161	(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203	Teacher	3.88	1.157	(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000
(2) Yielding positive educational outcomes	Manager	4.06	1.116	0.012	0.000	0.219																																																																																						
	Teacher	3.84	1.164				(3) Promoting the integration of education accreditation activities with social needs	Manager	4.05	1.109	0.003	0.000	0.226	Teacher	3.83	1.162	(4) Enhancing quality management activities	Manager	4.10	1,097	0.012	0.000	0.239	Teacher	3.86	1.162	(5) Promoting accountability	Manager	4.00	1.112	0.000	0.000	0.179	Teacher	3.82	1.156	(6) Developing school quality culture	Manager	4.05	1.110	0.016	0.000	0.197	Teacher	3.85	1.162	(7) Promoting school development	Manager	4.09	1.114	0.084	0.000	0.222	Teacher	3.87	1.163	(8) Enhancing quality awareness	Manager	4.07	1.107	0.024	0.000	0.207	Teacher	3.87	1.161	(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203	Teacher	3.88	1.157	(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213	Teacher	3.86	1.161						
(3) Promoting the integration of education accreditation activities with social needs	Manager	4.05	1.109	0.003	0.000	0.226																																																																																						
	Teacher	3.83	1.162				(4) Enhancing quality management activities	Manager	4.10	1,097	0.012	0.000	0.239	Teacher	3.86	1.162	(5) Promoting accountability	Manager	4.00	1.112	0.000	0.000	0.179	Teacher	3.82	1.156	(6) Developing school quality culture	Manager	4.05	1.110	0.016	0.000	0.197	Teacher	3.85	1.162	(7) Promoting school development	Manager	4.09	1.114	0.084	0.000	0.222	Teacher	3.87	1.163	(8) Enhancing quality awareness	Manager	4.07	1.107	0.024	0.000	0.207	Teacher	3.87	1.161	(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203	Teacher	3.88	1.157	(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213	Teacher	3.86	1.161																
(4) Enhancing quality management activities	Manager	4.10	1,097	0.012	0.000	0.239																																																																																						
	Teacher	3.86	1.162				(5) Promoting accountability	Manager	4.00	1.112	0.000	0.000	0.179	Teacher	3.82	1.156	(6) Developing school quality culture	Manager	4.05	1.110	0.016	0.000	0.197	Teacher	3.85	1.162	(7) Promoting school development	Manager	4.09	1.114	0.084	0.000	0.222	Teacher	3.87	1.163	(8) Enhancing quality awareness	Manager	4.07	1.107	0.024	0.000	0.207	Teacher	3.87	1.161	(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203	Teacher	3.88	1.157	(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213	Teacher	3.86	1.161																										
(5) Promoting accountability	Manager	4.00	1.112	0.000	0.000	0.179																																																																																						
	Teacher	3.82	1.156				(6) Developing school quality culture	Manager	4.05	1.110	0.016	0.000	0.197	Teacher	3.85	1.162	(7) Promoting school development	Manager	4.09	1.114	0.084	0.000	0.222	Teacher	3.87	1.163	(8) Enhancing quality awareness	Manager	4.07	1.107	0.024	0.000	0.207	Teacher	3.87	1.161	(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203	Teacher	3.88	1.157	(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213	Teacher	3.86	1.161																																				
(6) Developing school quality culture	Manager	4.05	1.110	0.016	0.000	0.197																																																																																						
	Teacher	3.85	1.162				(7) Promoting school development	Manager	4.09	1.114	0.084	0.000	0.222	Teacher	3.87	1.163	(8) Enhancing quality awareness	Manager	4.07	1.107	0.024	0.000	0.207	Teacher	3.87	1.161	(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203	Teacher	3.88	1.157	(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213	Teacher	3.86	1.161																																														
(7) Promoting school development	Manager	4.09	1.114	0.084	0.000	0.222																																																																																						
	Teacher	3.87	1.163				(8) Enhancing quality awareness	Manager	4.07	1.107	0.024	0.000	0.207	Teacher	3.87	1.161	(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203	Teacher	3.88	1.157	(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213	Teacher	3.86	1.161																																																								
(8) Enhancing quality awareness	Manager	4.07	1.107	0.024	0.000	0.207																																																																																						
	Teacher	3.87	1.161				(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203	Teacher	3.88	1.157	(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213	Teacher	3.86	1.161																																																																		
(9) Promoting the staff's spirit for the development of the school	Manager	4.08	1.126	0.176	0.000	0.203																																																																																						
	Teacher	3.88	1.157				(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213	Teacher	3.86	1.161																																																																												
(10) Perceiving improved education quality after each academic year	Manager	4.07	1.109	0.030	0.000	0.213																																																																																						
	Teacher	3.86	1.161																																																																																									

In addition, the T-test tests the difference between 2 independent samples to assess the perceptions of managers and teachers themselves after the school participates in educational quality accreditation (including self-assessment and external educational institutions) between administrators and teachers shows the significance level of Sig. Levene's Test of the two survey contents includes content (7) (p=0.084) and content (9) (p= 0.176), in which, both contents have significance level Sig. T-test (2-tailed) < 0.05, therefore, content (7) and content (9) have a statistically significant

difference in evaluation opinions between managers and teachers. The remaining 8 contents have a Sig level of significance. Levene's Test < 0.05 (significance level from 0.000 to 0.030) and Sig. T-test (2-tailed) < 0.05 (significance level 0.000), therefore, opinions on the remaining 8 contents have a statistically significant difference between managers and teachers. Survey results of administrators' and teachers' perceptions after the school participated in educational quality accreditation showed a statistically significant difference between administrators and teachers in the content survey. Thus, the ANOVA test of the difference between the 3 provinces and the T-test of the difference between managers and teachers show that there is a statistically significant difference.

In general, the difference in average values shows that the assessment of administrators is higher than that of teachers, indicating that administrators have a more subjective view in implementing educational quality accreditation activities. The survey contents were rated by administrators and teachers at the level of "Agree" (ranging from > 3.4 to 4.2).



**Figure 2.** Average Value of Views of Administrators and Teachers after the School Participated in Educational Quality Accreditation

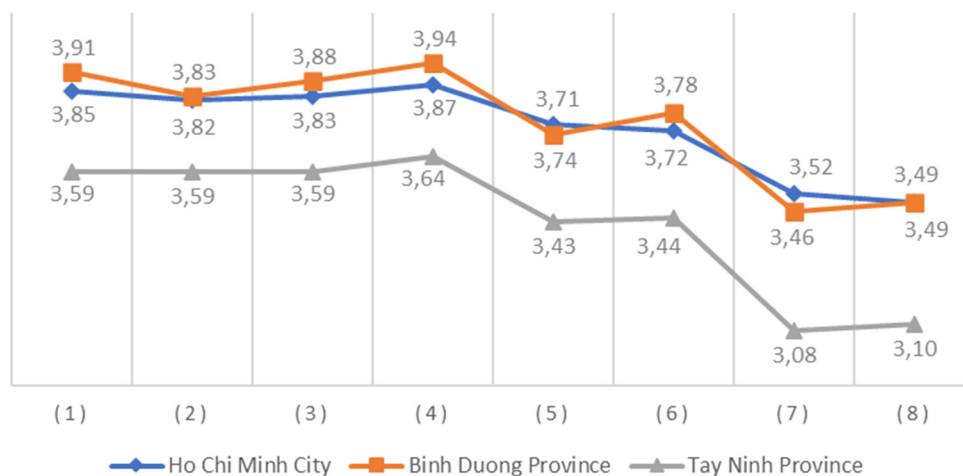
3.2 Regarding the Opinions of Administrators and Teachers on Educational Quality Accreditation Activities in Secondary Schools

Analysis of data and the reporting of the results of those analyses are fundamental aspects of the conduct of research. Accurate, unbiased, complete, and insightful reporting of the analytic treatment of data (be it quantitative or qualitative) must be a component of all research reports. Researchers in the field of psychology use numerous approaches to the analysis of data, and no one approach is uniformly preferred as long as the method is appropriate to the research questions being asked and the nature of the data collected. The methods used must support their analytic burdens, including robustness to violations of the assumptions that underlie them, and they must provide clear, unequivocal insights into the data.

ANOVA tests the difference between 3 independent samples on the opinions of administrators and teachers about educational quality accreditation activities in high schools between 3 provinces: Ho Chi Minh City, Binh Duong Province, and Tay Ninh Province. Tay Ninh province shows a significance level of Sig. Levene of 8 survey contents are all < 0.05 and Sig. Welch of the 8 survey contents was also < 0.05, so the 8 survey contents had a statistically significant difference in assessment opinions between the 3 provinces.

**Table 4.** Survey Results on the Opinions of Administrators and Teachers about Educational Quality Accreditation Activities in Secondary Schools by Province

Item	Province	Mean	SD	Sig. Levene Statistic	Sig. Welch
(1) Support the education accreditation activities	HCMC	3.85	1.132	0.000	0.001
	BD	3.91	1,011		
	TN	3.59	1,344		
(2) The education accreditation activities have been true, not formal	HCMC	3.82	1.124	0.000	0.004
	BD	3.83	1,032		
	TN	3.59	1,286		
(3) The education accreditation activities have been indispensable for the secondary schools	HCMC	3.83	1,130	0.000	0.001
	BD	3.88	1,039		
	TN	3.59	1,305		
(4) Education accreditation is a way to improve education quality	HCMC	3.87	1.123	0.000	0.002
	BD	3.94	1,001		
	TN	3.64	1,320		
(5) Wish to participate in the education accreditation activities	HCMC	3.74	1.158	0.000	0.000
	BD	3.71	1.112		
	TN	3.43	1,371		
(6) Wish to attend the training courses in education accreditation	HCMC	3.72	1.169	0.000	0.000
	BD	3.78	1,092		
	TN	3.44	1,368		
(7) The education accreditation activities consume time and resources	HCMC	3.52	1.282	0.000	0.000
	BD	3.46	1,253		
	TN	3.08	1,465		
(8) Education accreditation causes achievement obsession	HCMC	3.49	1,304	0.000	0.000
	BD	3.49	1,237		
	TN	3.10	1,476		



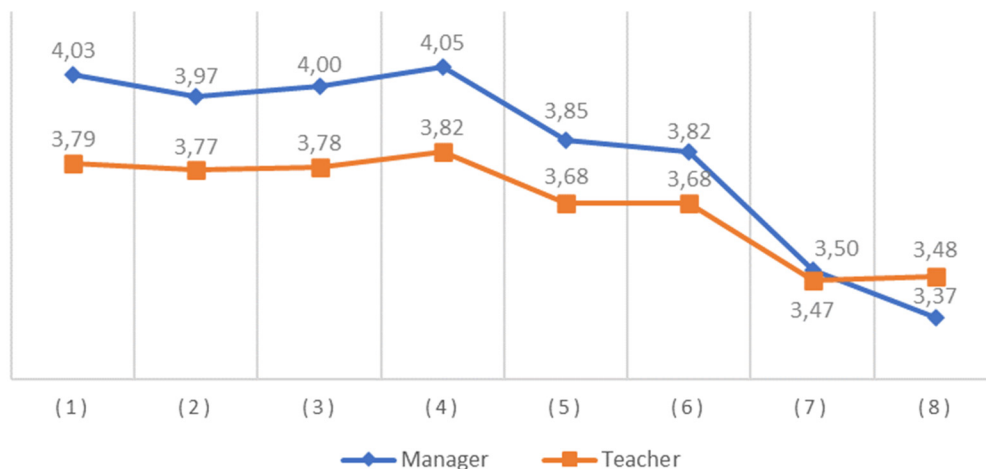
**Figure 3.** Average Value of Opinions of Administrators and Teachers on Educational Quality Accreditation Activities in Secondary Schools by Province



Figure 3 shows that the average value of 8 survey contents of 3 provinces has a difference, in which Ho Chi Minh City and Binh Duong province are quite similar, Tay Ninh province is the lowest and different. In general, most of the survey content was rated by administrators and teachers at the "Agree" level (ranging from > 3.4 to 4.2), in which, survey content (7) and (8) in Tay Ninh province, there is a level of "Decided" (ranging from > 2.6 to 3.4).

**Table 5.** Survey Results on the Opinions of Administrators and Teachers about Educational Quality Accreditation Activities in Secondary Schools

Item	Participant	Mean	SD	Sig. Levene's Test	Sig. (2-tailed)	Mean Difference
(1) Support the education accreditation activities	Manager	4.03	1,092	0.002	0.000	0.236
	Teacher	3.79	1.149			
(2) The education accreditation activities have been true, not formal	Manager	3.97	1,068	0.000	0.000	0.204
	Teacher	3.77	1.141			
(3) The education accreditation activities have been indispensable for the secondary schools	Manager	4.00	1,082	0.000	0.000	0.220
	Teacher	3.78	1.147			
(4) Education accreditation is a way to improve education quality	Manager	4.05	1,075	0.002	0.000	0.227
	Teacher	3.82	1,140			
(5) Wish to participate in the education accreditation activities	Manager	3.85	1.162	0.163	0.001	0.163
	Teacher	3.68	1.177			
(6) Wish to attend the training courses in education accreditation	Manager	3.82	1.172	0.378	0.003	0.138
	Teacher	3.68	1.183			
(7) The education accreditation activities consume time and resources	Manager	3.50	1,347	0.025	0.594	0.028
	Teacher	3.47	1,291			
(8) Education accreditation causes achievement obsession	Manager	3.37	1,398	0.000	0.052	-0.108
	Teacher	3.48	1,301			



**Figure 4.** Average Value of Opinions of administrators and Teachers about Educational Quality Accreditation Activities in Middle Schools

In addition, the results of the 2-sample T-test independently show the difference in the opinions of managers and teachers about the quality accreditation of general school education between managers and teachers shows the Sig level of significance. Levene's Test of 6 survey contents < 0.05 (p = from 0.000 to 0.025), in which, the significance level Sig.

T-test (2-tailed) of content (7) ( $p= 0.594$ ) and content (8) ( $p= 0.052$ )  $> 0.05$ . Therefore, the evaluation opinions of 2 contents (7) and content (8) between managers and teachers do not have a statistically significant difference, the remaining 4 contents have a significant difference statistical meaning. Significance level Sig. Levene's Test of 2 contents (5) ( $p=0.163$ ) and content (6) ( $p=0.378$ )  $> 0.05$ , in which, the significance level Sig. T-test (2-tailed) of content (5) ( $p=0.001$ ) and content (6) ( $p=0.003$ )  $< 0.05$  so there is a statistically significant difference between managers and teachers. As for the content "Educational quality accreditation increases achievement in education" (8), the average value of teachers rated it higher than that of administrators, showing that teachers have an objective view of quality accreditation. Therefore, this is one of the reasons it is necessary to form and develop a quality culture.

The difference in the average value shows that the assessment of administrators is higher than that of teachers, indicating that administrators have a more subjective view in implementing educational quality accreditation activities (see Figure 4). Most of the survey content was rated by managers and teachers at the "Agree" level (ranging from  $> 3.4$  to  $4.2$ ), while, the survey content (8) was rated by managers at the "Decided" degree (range from  $> 2.6$  to  $3.4$ ).

#### 4. Discussion

Regarding the source of information related to educational quality accreditation activities, our study's results using questionnaires for administrators and teachers reported that the source of information about educational quality accreditation activities comes from the Board of Directors (86.9%) and professional team leader/deputy team leader (58.6%) are the main factors. Tran's (2017) research on quality awareness in Vietnamese private universities shows that up to 94.8% of managers, teachers and staff think that the role of quality is important, while only 63.3% of managers, teachers and staff think that the role of quality culture is important. This shows that quality culture is not fully recognized among managers, teachers and staff. This contrasts with findings from some educational systems in Southeast Asian countries such as Singapore and Thailand, where a culture of quality in schools is seen as an important criterion for developing national educational systems (Rahnuma, 2020; Shwairef et al., 2021; Tarat, S., & Sindedcharak, 2020). Many schools in Thailand even include this content in the undergraduate curriculum for pre-service teachers and in the country's teacher licensing examinations (Buasuwan, 2018; Mounier & Tangchuang, 2018).

Regarding the subjects involved in educational quality accreditation activities, the majority of administrators and teachers reported that the Board of Directors (87.6%), professional team leader/deputy team leader (76.7%) and teachers (74.6%) must participate in educational quality accreditation activities as obvious participants from the questionnaire results. In addition, managers and teachers also believe that they need to participate in educational quality accreditation activities such as staff (36.3%), students (32.7%), students' parent (18.2%) and stakeholders (40.6%). Similarly, Kinesti (2019) reported that 89.0% of principals, 87.0% of teachers and staff participated in internal educational quality assurance activities, and 82.0% of parent boards/associations participate in educational quality assurance activities because they believe that the participation of parents and boards as customers and objective objects contributes ideas to the development of school quality. Regarding stakeholders, Kinesti (2019) also confirmed that external stakeholder support was low with 32.0%, 24.0% and 36% support from society, industrial actors and government permission. Research by Tran (2017) reported that 85.2% of principals and board chairs at private universities hold leadership roles in building quality culture.

Regarding the method of receiving knowledge/experience of administrators and teachers related to educational quality accreditation activities, the form of receiving knowledge/experience of administrators and teachers are mainly from seminars, training (56.1%), educational quality accreditation activities at schools (53.5%), and participation in educational quality accreditation activities (55.5%). Kinesti (2019) researched the capacity index of schools in implementing the internal educational quality assurance system and shows that 78.0% of schools (177/228 schools) have fully implemented quality assurance activities, 81.0% to 100% of school members participating in quality assurance planning include teachers, supervisors, staffs and school committees, 75.0% of schools carry out quality assurance activities, 88.0% of schools establish an educational quality assurance system group. This result reflected the need to organize more training and continuous education courses related to quality culture, as well as organize seminars or scientific research projects on this topic. These are also proposals nominated by quality culture research groups in developed countries such as Bendermacher et al. (2017) and Stalmeijer et al. (2023).

Results of testing the difference in the average value of assessments and perceptions of managers and teachers themselves after the school participated in educational quality accreditation (including self-assessment and assessment outside the educational institution) between 3 provinces and testing the differences in 2 independent samples between administrators and teachers showed that 10 survey contents had statistically significant differences. Testing the difference in the average

value of the opinions of administrators and teachers about the quality accreditation of high school education between the 3 provinces shows that 8 survey contents have meaningful differences. Statistics and results of testing the difference between 2 independent samples between managers and teachers show that 6 survey contents have statistically significant differences and 2 survey contents have no significant differences. In general, the average price from the survey results is mainly at the "Agree" level, with two contents "Education quality accreditation takes time and resources" and "Education quality accreditation increases disease". "Achievement in education" was assessed by administrators and teachers as having a lower average value than the remaining contents. In the content "Education quality accreditation takes time and resources", managers and teachers rated the same average value (3.50 and 3.47), showing that in addition to some managers and teachers, While teachers are aware of the positive nature of educational quality accreditation activities in secondary schools, some administrators and teachers still believe that educational quality accreditation is a waste of time and resources, accounting for over 50% of managers and teachers "Agree" and "Strongly agree"; The average values in the three provinces of Ho Chi Minh City, Binh Duong, and Tay Ninh are 3.52, 3.46 and 3.08 respectively, showing that managers and teachers in Tay Ninh province perceive the positivity of quality accreditation activities. Education in secondary schools is higher than in the other 2 provinces. In the content "Education quality accreditation increases achievement problems in education", administrators (3.37) rated the average value lower than teachers (3.48) and information from the interview showed that the management staff's perception of educational quality accreditation activities is subjective because they approach, proactively and take responsibility for implementing educational quality accreditation activities at secondary schools, teachers' perceptions of educational quality accreditation activities are objective from their participation in educational quality accreditation activities at middle schools, giving them confidence in quality accreditation activities. The survey results also show that some managers and teachers are correctly aware of educational quality accreditation activities in secondary schools, but some managers and teachers still think that Educational quality accreditation is a disease of educational achievement. The average values in the three provinces of Ho Chi Minh City, Binh Duong and Tay Ninh are 3.49, 3.49 and 3.10 respectively, showing that managers and teachers in Tay Ninh province perceive the positivity of quality accreditation activities. Tran (2017) reported that in private universities quality organizations showed that managers, teachers and staff evaluate the process system at the average level, in the range of 30.2% - to 43.9%. This result also shows that the general perception of the quality results of managers, teachers and staff is quite good in the range of 57.7% - 84.9%. However, the content of authority delegation has not been approved by managers and teachers. and high employee appreciation leads to individual creativity and autonomy not being fully utilized.

This result reflects firstly, that the educational quality accreditation activities in secondary schools carried out over the past decade are not enough for administrators and teachers to understand the nature and characteristics of quality. This result was also recorded similarly in Ramirez-Hurtado et al. (2021) studies in the context of pandemics, war and limitations in educational development policies. In middle school, secondly, besides being aware of quality, they do not see the benefits for the school and themselves after the school participates in educational quality accreditation activities. Meanwhile, according to Markowitsch's (2018) report, quality culture was an element that almost all school administrators and teachers were well aware of and supported the process of building a quality culture as a strategy to build a school of well-being and develop the school brand. Therefore, in a developing country like Vietnam, the school administrations and educators at all levels continue to have policies and guidelines to increase resources for quality development within the school, especially raising quality awareness among managers teachers staff and stakeholders, a fundamental input for developing a culture of quality in schools.

## 5. Conclusion

Basic research has shown the quality capacity in terms of quality awareness of administrators and teachers in developing a quality culture in public secondary schools in the Southeast region, of Vietnam through receiving information about educational quality accreditation activities, receiving knowledge/experience about educational quality accreditation activities, identifying subjects participating in educational quality accreditation activities, assessment after the school participated in educational quality accreditation activities, and views on educational quality accreditation activities in secondary schools. Research results have shown differences in survey content in 3 provinces of Ho Chi Minh City, Binh Duong, and Tay Ninh, in 2 group of participants: managers and teachers. Although this difference is not too big, it is information for managers at all levels to have more effective policies and solutions to develop a quality culture in middle schools in the future. The results also show that administrators and teachers have no positive views on educational quality accreditation activities in secondary schools through two contents: Educational quality accreditation takes time and resources, and educational quality accreditation increases achievement problems in education.

## 6. Recommendations and Policy Implications

From the research results, public secondary schools in the process of implementing educational quality accreditation activities need to have a plan to systematically develop quality culture to form and raise awareness. The quality of administrators and teachers right from the implementation of educational quality accreditation activities according to the philosophy of "doing the right thing, doing it right from the beginning and doing it right at all times" is appropriate with the conditions and circumstances of each individual, each job, and each organization; Governing agencies and superior agencies research and promulgate quality policies and create conditions for secondary schools to develop quality. Therefore, secondary schools must build a set of tools and principles for forming and developing a quality culture to improve quality capacity, develop quality resources, and create self-esteem ownership, and self-responsibility for individuals and groups. In addition, schools need to widely publicize educational quality accreditation activities to society so that relevant parties can monitor, supervise, and evaluate educational quality, this is an activity that promotes the spirit of quality, strengthening the commitment to the quality of administrators, teachers, and stakeholders in educational activities in middle schools. From this study, subsequent studies can expand research in public secondary schools, non-public secondary schools, and other educational institutions to analyze and compare different schools. school type, region, and country.

## References

- Ahmed, S. M. (2008). *Quality Culture*. College of Engineering and Computing, Florida International University.
- Aladejana, F. O. (2011). Secondary Education in Ekiti State: The Functional Perspective. In *Proceedings of the 2-Day Ekiti State Education Summit*. Abiodun Adetiloye Hall, Fountain Hotel, Iyin Road, Ado-Ekiti. Retrieved from: <https://www.ekitistate.gov.ng/wp-content/uploads/downloads/2012/02/Secondary-Education-in-Ekiti-State-The-Functional-Perspective-2011-Ekiti-State-Education-Summit.pdf>
- Ary, D., Jacobs, L. C., & Sorensen, C. (2010). *Introduction to research in education (8th ed.)*. Cengage Learning.
- Batool, Z., & Qureshi, R. H. (2007). *Quality assurance manual for higher education in Pakistan*. Higher Education Commission, Pakistan.
- Bendermacher, G. W. G., oude Egbrink, M. G., Wolfhagen, I. H. A. P., & Dolmans, D. H. (2017). Unravelling quality culture in higher education: a realist review. *Higher education*, 73, 39-60. <https://doi.org/10.1007/s10734-015-9979-2>
- Birzea, C., Cecchini, M., Harrison, C., Krek, J., & Spajic-Vrkaš, V. (2005). *Tool for quality assurance of education for democratic citizenship in schools*. Unesco.
- Buasuan, P. (2018). Rethinking Thai higher education for Thailand 4.0. *Asian Education and Development Studies*, 7(2), 157-173. <https://doi.org/10.1108/AEDS-07-2017-0072>
- Carlson, B. A. (2000). *Achieving educational quality: What schools teach us: Learning from Chile's P900 primary schools*. ECLAC. <https://doi.org/10.18356/8c48f78b-en>
- Chandra, R. (2021). *Quality Indicators in Secondary Education*. Shri Ramswaroop Memorial University, Lucknow, India.
- Chonjo, P. N. (2018). The quality of education in Tanzanian primary schools: An assessment of physical facilities and teaching-learning materials. *Utafiti Journal*, 1(1), 36-46.
- Crosby, P. B. (1986). *Running is The art of making things happen*. McGraw Hill.
- Dang, A. D. T., & Tran, L. T. T. (2019). Propose contents to foster testing and assessment capacity for middle school Literature teachers based on the general education program in Literature. *Vietnam Journal of Education*, 3(S), 23-25.
- Dang, T. T. D., & Phan, L. T. H. (2018). Designing learning activities oriented towards developing self-study capacity in teaching Biology 6. *Vietnam Journal of Education*, 423(1), 48-51.
- Do, D. T. (2013). Forming Quality Institutions in Higher Education Establishment. In *Proceedings of the AQAN Seminar and Roundtable meeting: Building Quality Culture and National Qualifications Framework* (p.177-184). Vietnam.
- Do, D. T. (2014). Model for developing quality culture in universities. *Vietnam Journal of Education*, 345(1), 1-3.

- Do, D. T. (2018). *The relationships between quality assurance activities and the formation of the quality culture in universities: comparison between public universities and private universities*. Vietnam National University Press.
- Ehlers, U. D. (2009). Understanding quality culture. *Quality in Higher Education*, 17, 343-363. <https://doi.org/10.1108/09684880910992322>
- European University Association. (2006). *Quality Culture in European Universities: A Bottom-up Approach, Report on the three rounds of the quality culture project 2002-2006*. EUA Publications.
- Farcas, R., & Moica, S. (2009). Quality Culture Important Factor in Quality Assurance in Higher Education. *Scientific Bulletin of the Petru Maior University of Tirgu Mures*, 5, 151-156.
- Green, J. (2007). *Mixed options on social inquiry*. Jossey-Bass.
- Harvey, L. (2009). *Deconstructing quality culture*. EAIR Vilnius.
- Ho, L. T. & Le, M. T. C. (2019). Innovating professional activities based on lesson research - A solution to improve the quality of teaching according to the new general education program in middle schools. *Vietnam Journal of Education*, 3(S), 283-286.
- Hoang, M. T. H. (2017). Educating life skills for students at Nam Trung Yen Secondary School, Cau Giay district, Hanoi city. *Vietnam Journal of Education*, 416(2), 21-24.
- Hoang, T. T. (2016). Improving the quality of teaching local history content in secondary schools in Lang Son province. *Vietnam Journal of Education*, 382(2), 51-54.
- Jidamva, G. B. (2012). *Understanding and improving the quality of secondary school education: conceptions among teachers in Tanzania, Finland*. Abo Akademi University Press.
- Kelkay, A. D. (2023). Quality secondary education: Principals, teachers and students' understanding in Ethiopia. *Cogent Education*, 10(1), 1-17. <https://doi.org/10.1080/2331186X.2023.2188978>
- Kellie, U. (2008). Combining qualitative and quantitative methods in research practice: Purposes and advantages. *Qualitative Research in Psychology*, 3(4), 293-311.
- Kinesti, H. K. (2019). The Implementation of Primary and Secondary Education Quality Assurance Systems. In *Proceedings of the 3rd International Conference on Education Innovation* (p.193-197). Universitas Negeri Surabaya, Indonesia. <https://doi.org/10.2991/icei-19.2019.45>
- Kousainow, A. K. (2016). The ways of improving the quality of secondary education in the Republic of Kazakhstan. In *Proceedings of the SHS Web of Conferences* (p.1-4). Republic of Kazakhstan. <https://doi.org/10.1051/shsconf/20162901036>
- Le, N. D., Trinh, L. T. V., & Nguyen, X. T. N. (2012). Discussing the quality culture model of higher education institutions. *Journal of Educational Administration*, 34, 52-55.
- Le, P. T. (2018). Building and developing quality culture at the University of Information Technology - Ho Chi Minh City National University. *Vietnam Journal of Education*, 8(S), 77-81.
- Lewis, R. (2012). *Quality Culture in Institutions of Higher Education*. Vinh University Publisher.
- Loukkola, T., & Zhang, T. (2010). *Examining quality culture: Part I-Quality assurance processes in higher education institutions*. European University Association Publications.
- Mapogo, T. K. (2024). The Hegemony of South Africa and the Free Movement of Persons in SADC: Challenges and Perspectives. *African Journal of Empirical Research*, 5(1), 45-58. <https://doi.org/10.51867/ajernet.5.1.5>
- Markowitsch, J. (2018). Is there such a thing as school quality culture? In search of conceptual clarity and empirical evidence. *Quality Assurance in Education*, 26(1), 25-43. <https://doi.org/10.1108/QAE-07-2015-0026>
- McMillan, J. H., & Schumacher, S. (2013). *Education research: Evidence-based inquiry (7th ed.)*. Pearson.
- Mounier, A., & Tangchuang, P. (2018). Quality issues of education in Thailand. *Education in Thailand: An old elephant in search of a new mahout*, 477-499. [https://doi.org/10.1007/978-981-10-7857-6\\_19](https://doi.org/10.1007/978-981-10-7857-6_19)
- Nguyen, H. T. (2011a). Factors affecting life skills of middle school students. *Vietnam Journal of Education*, 269(1), 14-16.
- Nguyen, H. T. (2016). Managing innovation in teaching methods towards developing capacity for students in middle

- schools. *Vietnam Journal of Education*, 4(S), 10-12.
- Nguyen, H. T. T. (2017). Educating life skills for students through experiential activities in middle school. *Vietnam Journal of Education*, 10(S), 9-12.
- Nguyen, H. V. (2019). Some measures to manage teaching activities towards developing student capacity in Ho Chi Minh City secondary schools. *Vietnam Journal of Education*, 450(2), 9-19.
- Nguyen, K. M. (2011b). Building school culture - An urgent requirement to improve the quality of education. *Vietnam Journal of Education*, 258(2), 14-15.
- Nguyen, M. D. (2015). Innovative solutions to evaluate the educational results of high school students in the direction of assessing qualities and abilities. *Vietnam Journal of Education*, 356(2), 1-3. <https://doi.org/10.52296/vje.2019.35>
- Nguyen, N. T., & Bui, N. V. (2019). Proposing the content of teaching local geography in secondary schools in Thai Binh province in the new general education program. *Vietnam Journal of Education*, 7(S), 2-7.
- Nguyen, N. V. (2018). Physics teaching is based on the scientific research process to develop scientific capacity for middle school students. *Vietnam Journal of Education*, 425(2), 179-182.
- Nguyen, X. T. N. (2019). Proposing framework standards for assessing university quality culture. *Vietnam Journal of Education*, 4(S), 107-110.
- Pham, H. T. T., Nguyen, K. D., & Doan, L. N. (2018). Applying lesson research to develop learning communities and school research at Nguyen Truc Secondary School, Hanoi. *Vietnam Journal of Education*, 430(2), 42-46.
- Pham, L. T. M. (2016). Some solutions to improve the quality of teaching middle school Literature in Hai Phong City according to the approach of developing learner capacity. *Vietnam Journal of Education*, 380(4), 168-172.
- Rahnuma, N. (2020). Evolution of quality culture in an HEI: critical insights from university staff in Bangladesh. *Educational Assessment, Evaluation and Accountability*, 32(1), 53-81. <https://doi.org/10.1007/s11092-019-09313-8>
- Ramírez-Hurtado, J. M., Hernández-Díaz, A. G., López-Sánchez, A. D., & Pérez-León, V. E. (2021). Measuring online teaching service quality in higher education in the COVID-19 environment. *International Journal of Environmental Research and Public Health*, 18(5), 2403. <https://doi.org/10.3390/ijerph18052403>
- Shwairif, A. M., Abdulrahim, M. O., & Sukoharsono, E. G. (2021). Organizational Culture, Governance Structure and Sustainability Disclosure Quality: Evidence from Indonesia, Malaysia, Singapore, and Thailand. *Accounting Analysis Journal*, 10(2), 108-115.
- Spruit, M., & Adriana, T. (2015). Quantifying Education Quality in Secondary Schools. *International Journal of Knowledge Society Research*, 6(1), 55-86. <https://doi.org/10.4018/IJKSR.2015010104>
- Stalmeijer, R. E., Whittingham, J. R., Bendermacher, G. W., Wolfhagen, I. H., Dolmans, D. H., & Sehlbach, C. (2023). Continuous enhancement of educational quality—fostering a quality culture: AMEE Guide No. 147. *Medical Teacher*, 45(1), 6-16. <https://doi.org/10.1080/0142159X.2022.2057285>
- Sursock, A. (2002). Reflection from the higher education institutions' point of view: Accreditation and quality culture. In *Proceedings of the Working on the European Dimension of Quality: International conference on accreditation and quality assurance* (p.12-16). Amsterdam.
- Tarat, S., & Sindecharak, T. (2020). The vocational education system in Thailand and Singapore: A sociological perspective. *Thammasat Review*, 23(2), 192-211.
- Tran, D. K. (2009). *Education and human resource development in the 21st century*. Vietnam Education Publishing House.
- Tran, H. V. (2017). *Building a culture of quality in Vietnamese private universities*. Vinh University Publisher.
- Vettori, O. (2012). *Examining quality culture: Part From self-reflection to enhancement*. European University Association Publications.
- Vlăsceanu, L., Grunberg, L. & Pârlea, D. (2007). *Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions*. UNESCO-CEPES.
- Vu, H. T. T. (2015). Using several teaching techniques to improve the quality of learning Literature for students in general and students in mountainous areas in particular. *Vietnam Journal of Education*, 363(1), 39-41.

Vu, T. T. N. (2018). Propose criteria to evaluate some life values of high school students. *Vietnam Journal of Education*, 425(1), 61-64.

Wagenaar, R. (2011). *Creating a culture of quality*. University of Groningen.

### **Acknowledgments**

We greatly appreciate the valuable contributions of our community advisory committee members. We would also like to thank the Vietnam National Foundation for Science and Technology Development (NAFOSTED) and every team member who took the time to participate in this study.

### **Authors contributions**

Dr. Dinh-Thai Do and Dr. Chi-Lan Le were responsible for study design and revising. Mrs. Thi-Tu Nguyen was responsible for data collection. Dr. Dinh-Thai Do drafted the manuscript and revised it. All authors read and approved the final manuscript.

### **Funding**

This research is funded by Vietnam National Foundation for Science and Technology Development (NAFOSTED), under grant number 503.01-2021.04.

### **Competing interests**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### **Informed consent**

Obtained.

### **Ethics approval**

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

### **Provenance and peer review**

Not commissioned; externally double-blind peer reviewed.

### **Data availability statement**

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

### **Data sharing statement**

No additional data are available.

### **Open access**

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

### **Copyrights**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.