Review Article

Factors affecting the quality of lectures at the Hanoi College of Industrial Economics

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Abstract: Lecturer quality is always an issue that attracts a lot of attention from lecturers, school administrators, and managers at higher levels. In recent times, there have been many research articles on the quality of lecturers at higher education institutions; however, the number of studies on this issue at vocational colleges is very limited in developing countries, including Vietnam. The practical context shows that vocational training is gradually becoming an option on par with university study options because the demand for vocational workers, especially highly skilled workers, is increasing. To have a quality vocational workforce, one of the leading solutions is to improve the quality of lecturers at vocational training establishments, of which vocational colleges have the highest training level in the vocational education system. This article aims to identify a number of factors and the degree of impact of those factors on the quality of vocational college lecturers. The study conducted a survey of 127 lecturers at Hanoi College of Industrial Economics. The results show that lecturer quality is affected by seven factors: state policies, economic, social, and technological development practices; organizational apparatus and management structure; human resource management activities; working environment; college brand; and the perception of lecturers about work.
Keywords: lecturer quality, influencing factors, vocational college lecturers

INTRODUCTION

Human resource quality has many understandings and different approaches. In 1960, MC. Gregor (1960) identified the quality of human resources as a combination of attitude, consciousness, behavior, ability to work, and awareness of the value of human life. Ouchi (1981) supplemented the definition of human resource quality with elements of loyalty and trust of human resources in the organization, expressed through enthusiastic working spirit, team coordination, and the ability to self-improve knowledge during the work process. Besides, the quality of human resources, according to Harb (2014), is professional and skilled human resources at work. Author Nguyen (2021) mentioned in the 2021 article when researching the quality of human resources in Vietnam that human resources quality is a certain state of human resources as both a special material object and the subject of all economic activities and social relations. The quality of human resources is evaluated through the criteria of physical state, mental capacity, ethics, and qualities. Thus, author Nguyen (2021) is also one of the authors who mentions the concept of human resource quality in the context of specific socio-economic conditions in a country. In short, it can be seen that the concept of human resource quality has changed somewhat over time, which partly reflects the trends and developments of technology, economics, and society. Within the scope of research, the author agrees to understand the concept of human resource quality as follows: Human resource quality is a set of characteristics expressed in three aspects: physical strength, intellectual capacity, and mental force of human resources to meet job requirements in specific socio-economic contexts.

According to the Education Law (National Assembly, 2019), teachers who teach at the college level or higher are called lecturers. According to the Law on Vocational Education (National Assembly, 2014), lecturers at vocational colleges must meet the following standards: have good qualities and ethics; reach standard qualifications in expertise and professionalism; be in good health according to occupational requirements; and have a clear background. From the above concepts, it can be understood that the quality of vocational college lecturers is the totality of attributes and characteristics expressed in the three aspects of physical strength, intellectual capacity, and mental force of vocational college lecturers to meet job requirements in a specific socio-economic context.

Thus, factors affecting one or all of the three aspects mentioned above will be factors affecting the quality of lecturers at vocational colleges.

This article will evaluate the factors affecting the quality of lecturers at Hanoi College of Industrial Economics.

THEORETICAL BACKGROUND AND LITERATURE REVIEW

State legal policies will affect the quality of lecturers in general and vocational college lecturers in particular. Naylor and Sayed (2014) believe that the state

has created a basic legal framework on issues related to the recruitment and employment of lecturers at schools. Minimum qualification requirements for lecturers tend to change over time, so the state needs to invest in professional development to ensure that lecturers have the necessary, modern skills appropriate to each country's practical context.

Based on the research of authors Obwogi (2013) and Ngo (2020), lecturer quality is influenced by macro-environmental factors (in addition to the policy factors mentioned above), which are the development of science and technology, socio-economic characteristics, development trends, and competition in the industry. Specifically, the quality of lecturers at vocational colleges will be influenced by socio-economic and scientific-technological development practices, including: development trends in vocational education, competition for vocational colleges in the education system, Social and technological developments place higher demands on vocational workers.

In addition, the management apparatus and organizational structure of vocational colleges play an important role in shaping the quality of the college's lecturers. Industry specificities and training objectives need to be reflected in the organizational and management structure to ensure that lecturers can meet labor market requirements and contribute to the development of the training profession.

A factor affecting lecturer quality has been mentioned by many authors in previous research works (Opatha, 2002; Tzafrir & Gur, 2007; Brewster & Mayrhofer, 2012; Obwogi, 2013; Naylor & Sayed, 2014; Yang *et al.*, 2023), that is, human resource management activities that affect the quality of lecturers in colleges. This activity includes: faculty human resource planning; recruitment, placement, and use of lecturers; training, fostering, and remuneration. Implementing human resource management activities well will help colleges improve the quality of lecturers, and vice versa (Ngo, 2020).

The quality of human resources is largely influenced by the working environment and the necessary conditions to meet job requirements. For the field of education in general and vocational colleges in particular, the working environment can be understood as the pedagogical environment, the organizational culture in the college, and the main working conditions include the conditions of the college's facilities and teaching aids. To improve the quality of lecturers and teaching quality, colleges need to invest in a positive working environment, facilities, and resource support for lecturers. This will help them develop and promote teaching performance, thereby ensuring quality education for students.

The reputation and brand of the college are also factors affecting the quality of vocational college lecturers that need to be researched and evaluated. In fact, in Vietnam, there is currently only a ranking list of universities called VNUR (Viet Nam's University Rankings); for vocational colleges, there is no list of evaluations or rankings. A vocational college with a good reputation and brand is often able to attract better lecturers and create greater commitment to the college.

Finally, Subramaniam and Aziz (2023) pointed out that the issue of lecturers' perceptions of their work is an issue rarely addressed by researchers. Meanwhile, each person's perception is the decisive factor in their entire behavior. A lecturer who has a good awareness of actively applying technology in his work will take real action, thereby improving the quality of his work and his own capacity. The author can evaluate the impact of lecturers' cognitive factors in the following aspects: awareness of vocational colleges, awareness of the nature of work, and awareness of self-development.

METHODOLOGY

This study uses both qualitative research methods and quantitative research methods.
We based it on the results of previous studies and expert opinion and tailored it to the context of Hanoi College of Industrial Economics, Vietnam.

Quantitative research method through SPSS software with descriptive statistics, Cronbach's alpha analysis, EFA exploratory factor analysis, and model regression.

The study used a survey questionnaire to collect data from 135 lecturers at the Hanoi College of Industrial Economics. From 135 survey forms, 127 valid responses were collected (accounting for 94.1%). This result shows that the percentage of questionaires collected is acceptable to analyze the number of valid votes obtained after distribution from 30% to satisfy the condition (Malaney, 2002).

In this study, the results of factor analysis, extracted variance, and Cronbach's alpha coefficient were performed to assess the reliability of seven factors affecting the quality of lecturers. According to Hair *et al.* (2009), the selection criteria to satisfy the requirements include factor analysis values ≥ 0.5, extracted variance $\geq 60\%$, and Cronbach's alpha coefficient (Cronbach's α) ≥ 0.6 (Hair *et al.*, 2009).

Research models: Based on the research objectives, the author proposes a research model that inherits the model of previous studies and adjusts the scale to suit the characteristics of the research area. The factors included in the model have been explained above, including seven factors: state policies, economic, social, and technological development practices; organizational apparatus and management structure; human resource

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management activities; working environment; college brand; and awareness of lecturers about work.
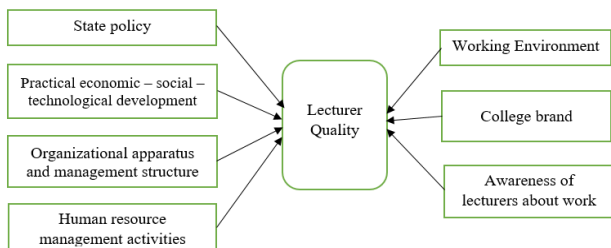

Diagram: Model of factors affecting lecturer quality
Source: Compiled from author's research

RESEARCH RESULTS

Lecturers' assessment of factors affecting the quality of lecturers at Hanoi College of Industrial Economics

Table 1 shows the results of descriptive statistics to answer the research question. This study uses a 5-level Likert scale, with a score of 3 being the middle level; if it ranges from 3 to 5 (3-5), it means the respondent agrees with the point of view of the given variable. On the contrary, if the answer is from 1 to 3 (1-3), the respondent does not agree with the opinion of the given variable.

Table 1: Results of factor analysis, mean value, and standard deviation of lecturer quality

	Factors	Mean	Standard deviation
1.	State policy	2.93	0.782
2.	Practical economic - social - technological development	3.56	0.877
3.	Organizational apparatus and management structure	3.05	0.821
4.	Human resource management activities	3.18	0.767
5.	Working environment	3.10	1,059
6.	College brand	3.13	0.966
7.	Awareness of lecturers about work	3.45	0.997

Source: Compiled from author's research

The results of the table above show that most of the variables have an average value in the range of 3–4, showing agreement with the opinion of the given variable. Only the variable "state policy" has the lowest rating, below average, showing that the majority of lecturers feel that current state policies do not really create conditions for lecturers to stick with the profession

or motivate lecturers to maintain and improve their quality. The results mean that all factors affect the quality of lecturers at Hanoi College of Industrial Economics.

Assessing the reliability of the scale and exploratory factor analysis (EFA)
Cronbach's Alpha reliability assessment
After collecting the necessary number of answers, the author cleaned the data from 127 answer sheets and analyzed them, determining the reliability of the scale using Cronbach's alpha coefficient.

Table 2: Assessing the reliability of the scale

	Describe	Total variable correlation	Cronbach's alpha coefficient
1.	State policy	0.873	
2.	Practical economic - social - technological development	0.708	
3.	Organizational apparatus and management structure	0.808	
4.	Human resource management activities	0.859	0.865
5.	Working environment	0.739	
6.	College brand	0.697	
7.	Awareness of lecturers about work	0.641	

Source: Compiled from the author's research

Table 2 shows that all observed variables have appropriate correlation coefficients ($\geq$ 0.3), and Cronbach's alpha coefficient is 0.865 > 0.6. Thus, the data meets the reliability requirements (Hair *et al.*, 2009).

EFA exploratory factor analysis
The purpose of exploratory factor analysis (EFA) is to test the degree of convergence of component variables on its concept by means of convergent validity while measuring discriminant validity to help ensure differences and no correlation between the factors used. During this process, observed variables that do not meet the loading factor requirements (< 0.5) will be eliminated. Analysis was used using SPSS software version 20, and the results are shown in tables 3 and 4 below:

Table 3: KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.756
Bartlett's Test of Sphericity	Approx. Chi-Square	9582.232
	DF	820
	Sig.	.000

Source: Compiled from the author's research

Table 4: Total variance explanation table

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	24.262	59.175	59.175	24.262	59.175	59.175	13.527	32.994	32.994
2	2.978	7.263	66.439	2.978	7.263	66.439	5.135	12.525	45.518
3	1.900	4.634	71.073	1.900	4.634	71.073	4.817	11.750	57.268
4	1.382	3.371	74.444	1.382	3.371	74.444	4.396	10.723	67.991
5	1.218	2.971	77.414	1.218	2.971	77.414	2.260	5.512	73.503
6	1.148	2.799	80.213	1.148	2.799	80.213	2.036	4.965	78.469
7	1.010	2.465	82.678	1.010	2.465	82.678	1.726	4.209	82.678
8	.872	2.460	85.138						
9	.737	2.457	87.595						
10	.332	2.453	90.048						
11	.266	2.448	92.496						
12	.011	2.427	94.923						
13	.162	2.274	97.197						
14	.003	2.157	99.354						
15	.000	.646	100.000						

Extraction Method: Principal Component Analysis.
Source: Compiled from the author's research

- The loading factors of all variables are greater than 0.5, meeting the requirements (Hair *et al.*, 2009).
- The KMO coefficient reaches 0.756 > 0.5, so EFA is appropriate for the data (Hair *et al.*, 2009).
- The Bartlett test has a significance level of Sig. 0.000, which shows that the observed variables are correlated with each other (Hair *et al.*, 2009).
- Eigenvalues are 1.010 bigger than 1, which represents the variation explained by each factor. The results of factor analysis are appropriate (Hair *et al.*, 2009).
- The result also shows that the cumulative variance is 82.678% (> 50%), which explains 82.678% of the variation of the data (Hair *et al.*, 2009).

Testing the influence of factors on the quality of lecturers at Hanoi College of Industrial Economics

The author uses multiple linear regression analysis in SPSS to evaluate the influence of factors on the quality of lecturers at Hanoi College of Industrial Economics.

Table 5: Standardized regression coefficients

	Describe	Normalized regression coefficient
1.	State policy	0.340
2.	Practical economic - social - technological development	0.068
3.	Organizational apparatus and management structure	0.372
4.	Human resource management activities	0.452
5.	Working environment	0.305
6.	College brand	0.363
7.	Awareness of lecturers about work	0.335

Source: Compiled from the author's research

From table 5, the normalized regression equation is shown as follows:

Quality of lecturers = 0.452 x Human resource management activities + 0.372 x Organizational apparatus and management structure + 0.363 x College brand + 0.340 State policy + 0.335 x Awareness of lecturers about work + 0.305 x Working environment + 0.068 x Practical economic - social - technological development + ε

Thus, the factor of human resource management is the factor that has the greatest impact on the quality of lecturers. The next factors are the organizational apparatus and management structure, college brand, state policies, awareness of lecturers about work, and working environment; practical economic, social, and technological development has the least impact on lecturer quality. Specifically, when the human resource management activities variable increases by 1 unit (under the condition that the remaining variables do not change), the lecturer quality variable increases by 0.452 units. Similarly, changes can be made to the remaining variables.

This result shows similarities with previous studies. Obwogi (2013) shows that human resource management (HRM) activities strongly influence the quality of teaching staff at universities in Kenya. State policies that create favorable conditions will impact the lives of lecturers and help the college operate stably, which is confirmed in the research results of Ngo (2020); an unhealthy working environment and limited facilities have a negative impact on the quality of lecturers, which the author also concluded from his research results.

DISCUSSION AND IMPLICATIONS

Identifying and evaluating factors that affect lecturer quality plays an important role in helping the college develop solutions and strategies to improve lecturer quality in the school. Thereby contributing to improving the training quality of the college and the quality of the vocational education system in general.

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The results show that there are many factors that affect the quality of lecturers, including factors inside and outside the college; each factor has a different level of influence on the quality of lecturers at Hanoi College of Industrial Economics. The factor of human resource management is the factor that has the strongest impact on the quality of lecturers; this means that Hanoi College of Industrial Economics needs to ensure clear and timely lecturer planning activities. During each school year, recruitment, placement, and use of lecturers must be public, transparent, reasonable, have a systematic process, and have policies to attract talented people to work at the college. At the same time, the college needs to promote business links in training and foster activities for lecturers to gain practical career experience at businesses to maintain and improve their skills. Besides, building the image and brand of the college in the community is also very important in creating pride and attachment among the teaching staff to the college.

The state and management agencies at all levels need to pay more attention to salary policies, bonuses, and other regimes to create conditions for vocational college lecturers to succeed in their work and have more opportunity to develop themselves. In addition, from a management perspective, colleges need to be more proactive in optimizing the organizational structure and management apparatus to minimize the current chaotic working process and difficulties for lecturers in interdepartmental tasks and work procedures.

Finally, lecturers themselves need to have a correct awareness of their work; that is, they need to correctly understand the role and position of colleges in the vocational education system, fully understand the meaning and importance of the job of a lecturer at a vocational college, and have a clear awareness of self-training and self-development to meet the increasing requirements of work in today's social context. This is a factor that has rarely been included in the overall research model in previous studies, but the author recognizes the special role of this factor in improving the quality of vocational college lecturers.

This study was conducted at only one college. In the next activity, the author will expand the research to colleges in Hanoi.

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