

ASSESSING LECTURER COMPETENCE: A CASE STUDY OF PUBLIC UNIVERSITIES IN HO CHI MINH CITY

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ABSTRACT

Industrial Revolution 4.0 promotes smart manufacturing, robotics, artificial intelligence, and the Internet of Things. However, people still play a crucial role in managing and controlling work, innovating. Therefore, education and training still play an essential fundamental role in developing knowledge and creating society's sustainable values. In particular, lecturer competence is facing challenges of change. In this article's goal, the author researches the key factors affecting public universities' lecturer competencies in Ho Chi Minh City (HCMC). The author applied a simple random sampling technique, tested Cronbach's Alpha and Confirmatory Factor Analysis (CFA), and model testing with Structural Equation Modeling (SEM). Besides, the study surveyed 500 lecturers and answered 16 questions, but 465 samples were processed. The study's findings had three key factors affecting the lecturer competencies in HCMC with a significance level of 0.01. Based on the mentioned above, the authors had recommendations for improved lecturer competence.

Keywords: Lecturer, Competence, Public, University, HCMC, SGU

INTRODUCTION

In Vietnam, after many years of reform and renovation efforts, the contingent of officials and employees in general and lecturers in the university have experienced substantial growth in both quantity and quality. However, besides, certain limitations make the achieved results not match the set objectives and tasks. Lecturer competence is still a big question mark when many lecturers have no research topic, no articles published in domestic and foreign scientific journals, and their language skills are limited by Allexander (2013).

Aliasghar, Seyed & Kamran (2017) studied that the capacities of lecturers are not commensurate with the country's development requirements and international integration trends. On the other hand, the scientific research achievements of lecturers in universities are still limited. The number of articles published in international specialized journals or inventions and inventions is not much. University is a place to train human resources for society in all fields, different professions. Each university performs the main functions of training and scientific research to create prestige, image, and branding by Alam & Faid (2011). Besides, society's development requires teachers to have qualifications, professional capacity, knowledge, and skills to meet universities' increasing requirements. Self-improvement of the university's training quality, the faculty's teaching quality, significantly improved teachers' ability to do scientific research, and applying scientific research results in the teaching process are essential. In this era of intense development of science and technology today, it has impacted and has a great influence on universities' operation and is also a motivator push for ever-growing universities by Boonghee, Naveen & Sungho (2000). From the above analytical issues, the

author boldly assesses the lecturing's competence to do research articles and contributes to enhancing lecturer competence in public universities in HCMC in the coming time.

LITERATURE REVIEW

Lecturer Competency (LC)

Abrantes, Seabra & Lages (2007) showed that lecturer competency is a combination of knowledge, skills, and attitudes that a lecturer needs to perform professional activities according to standards and skilled tasks in higher education institutions". To accomplish their primary job like teaching, scientific research, technology transfer, and performing civic obligations as teachers, teachers must have shared knowledge, skills, and attitudes as role models for students to learn and follow.

Another study on the faculty capacity of author Alexander & Sununta (2013) showed that faculty competencies in military universities in Vietnam need to achieve four groups of teaching skills are (1) Students research skills and learning; (2) Student leadership and management skills, learning; (3) Teaching design and educational performance skills; (4) Direct teaching skills. Higher education quality depends on many factors, but it depends on the faculty's professional qualifications by Burbules & Callister (2000). Lecturers in modern higher education need to constantly self-study, foster and update their knowledge to meet the job requirements.

According to Chapleo (2010), universities' faculty capacity belongs to professional competencies, the university lecturers' extraordinary capacity characteristic. This competency structure is integrated by the types of component competencies such as Technical and technical competencies, technical competencies, social capacities, and personal capacities to carry out professional activities; teaching activities; scientific research; consulting; and deploying science applications. Teaching faculty at universities include knowledge, skills, and attitudes by Eda Atilgan & Serkan (2005).

Lecturer' Knowledge (LK)

A comprehensive university instructor is equipped with the following groups of knowledge:

Firstly, Fabian (2002) showed that the depth knowledge of the majors and subjects they teach: Unlike general knowledge learned through life, specialized knowledge and expertise require teachers—the process of self-study, scientific research, and accumulated experience over time by Greenberg (1990). Usually, in universities, the older instructors will be pillars of professional knowledge to perform the university's tasks and mentor young adult instructors by Habes (2016). A qualified instructor must be someone with proficiency with their specialized knowledge and expertise by Xiao & Wilkins (2015) and Virgil (2012).

Second, Vikram & Sandeep (2014) studied that the training program's knowledge: In each university, although each lecturer is assigned the task of a specific major, to ensure consistency and cohesion between the subjects, the lecturers must know the entire curriculum by Sangra & Gonzalez (2010) and Muhammad & Roziah (2017). This knowledge is critical

because it shows each module's position and each instructor's role in the picture. Curriculum knowledge provides information about the interactions between disciplines and other disciplines in the same field and even between majors in different disciplines by Morgan & Hunt (1994) and Marmah (2014). Today, universities tend to provide in-depth training combined with providing interdisciplinary, multi-disciplinary, and multi-disciplinary thinking by Jesus & Lens (2005) and Hyun, Ediger & Lee (2017).

Third, Heding, et al., (2009) showed that the knowledge of the public profession: This knowledge block requires teachers to have a methodology, teaching, and learning techniques in each specific discipline's general and education practices. Each primary (even each subject or the same topic but different subjects) requires teachers to have their characteristics and approaches by Islam, Haidoub & Tarique (2019) and Earl & Stephanie (1993). A lecturer with good knowledge of pedagogy will teach better, attract more interested students and make the process of transferring knowledge between lecturers and students becomes light and simple by Ceridwyn & Debra (2009).

Fourthly, Appleton-Knapp & Krentler (2006) studied that the knowledge of foreign languages, informatics, educational environment, education system, political system, national law, and understanding of culture, society, people can be considered a basic supplementary knowledge block as a foundation for lecturers' teaching scientific research. Besides, lecturers are also responsible for advising students, so this additional basic knowledge is essential for that job by Adewale & Anthonia (2013).

H1: Lecturer' knowledge (LK) positively affects the Lecturer Competency (LC) at public universities in HCMC

Lecturer' Skill (LS)

Butcher, Sparkes & O'Callaghan (2001) showed that the trainers' skills, this is the ability to perform tasks and turn knowledge into action. The instructors' skills demonstrate each person's proficiency when applying the actual activities' functions to achieve the set goals. A university instructor must acquire skills related to teaching activities, scientific research and technology transfer, the responsibility of performing civic duties towards society.

Firstly, Chernatony & Cottam (2006) studied that skills related to teaching include skills to organize educational and training activities, guiding practice and fostering knowledge; skills to test and evaluate students' learning results; teaching design and innovation skills; skills in building a positive learning environment.

Second, Kapferer (1992) and Long, Ibrahim & Kowang (2014) studied that skills related to scientific research and technology transfer. The lecturer performs the role of a scientist with the function of explaining and forecasting the problems of nature-society that humans have not yet solved; seek to apply the results of scientific research on practical life to improve life, bring human society more and more civilized and modern. The scientific research activities of lecturers are accompanied by the publication of research results to the community.

Thirdly, Mohammed, Huda & Maslinda (2015) showed that the skills to perform civic obligations as a teacher include participating in political and social organizations, gifts for joining professional associations and relations with the professional world, social work skills. This factor is a role that society values and expects from faculty members. In this role, the

lecturer provides his/her services to the university, students, social organizations, unions, the community, and society in general by Muhammad & Roziah (2017) and Québec-Ministère de l'Éducation (2004). Specifically, the lecturer will advise students to learn, contact internships, and recommend jobs for students for the university and students.

H2: Lecturer' Skill (LS) positively affects the Lecturer Competency (LC) at public universities in HCMC

Lecturer' Attitude (LA)

Wilkins & Balakrishnan (2013) showed that teacher attitudes or qualities often include factors of the worldview that receptive and react to realities of work and life. In general, the attitudes of lecturers required to serve teaching and scientific research include: Attitude to the profession; have a sense of respect for discipline; Have a sense of responsibility at work; preserve the quality and honor and prestige of teachers; have the spirit of curious; have innovative and creative thinking; have a professional, ethical responsibility by Wilkins & Epps (2011). Specifically, the attitude of the teacher is divided into groups as follows.

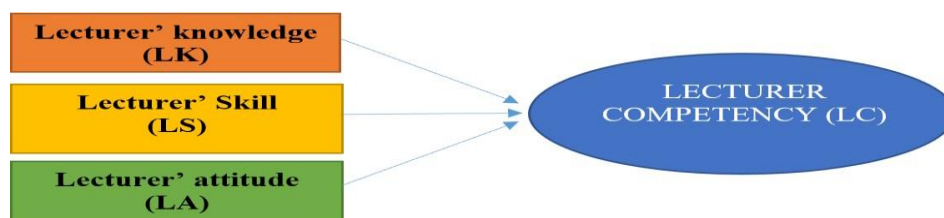
Firstly, the political attitude: (1) Strictly abide by the laws of the State and regulations of the working units; (2) Regularly study to raise political awareness; (3) Have a sense of discipline; living in collectives must be ensured for the common good; resolutely fight, prevent violations of the law as well as breaches in professional ethics of the faculty; (4) Exemplary performing civic obligations, actively participating in charity activities for society by Meyer & Herscovitch (2001).

Second, professional attitude including: (1) Love the job, enthusiasm for the job; consciously preserve the teacher's quality, honor, and conscience; solidarity and cooperation with colleagues at work; have a sense of building a solid team to realize the university's training goals jointly by Market (2000). (2) Always dedicated to the assigned work; help students overcome difficulties to study and practice; protect the interests and legitimate interests of students; love and respect students. (3) Justice in teaching and scientific research; objectively and honestly in assessing the capacity of students; (4) Practice thrift, fight corruption, waste, and fight against achievement diseases in education; Criticism and self-criticism are made seriously and regularly.

Third, attitude in life (lifestyle and behavior): (1) Have a purpose and the will to rise in work, have a spirit of continuous employment with pure motivation and creative thinking; (2) Scientific working style, costumes when performing polite and straightforward tasks; have a civilized and proper attitude in social relations and in communicating with colleagues, with learners, with students' parents; (3) Having a healthy lifestyle, humility, closeness and harmony with colleagues by King, Ceridwyn, Grace & Debra (2010) and Armstrong & Sperry (1994).

Therefore, the authors pose a hypothesis.

H3: Lecturer' Attitude (LA) positively affects the lecturer competency (LC) at public universities in HCMC



(Source: Authors proposed)

FIGURE 1

MODEL FOR FACTORS AFFECTING THE LECTURER COMPETENCY (LC) AT

PUBLIC UNIVERSITIES IN HCMC RESEARCH METHOD

It is to do the research; the author follows a specific step-by-step process.

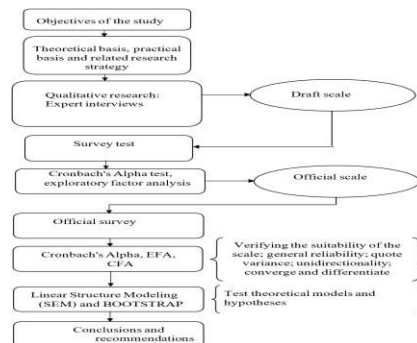


FIGURE 2
**THE RESEARCH PROCESS FOR FACTORS AFFECTING THE LECTURER
COMPETENCY (LC) AT PUBLIC UNIVERSITIES IN HCMC**

Step 1: From the research issue, the author synthesizes lecturer-related theories; faculty capacity at public universities in Ho Chi Minh City. The author summarizes the studies related to previous research topics in Vietnam and the world by Hair et al., (2010) and Bloom (2006).

Step 2: Based on synthesizing the theory and review of related previous studies, the author builds the factors affecting faculty capacity at five public universities in Ho Chi Minh City to Do data discussed in interviews with experts in step 3.

Step 3: The author uses qualitative methods through interviews with experts in education, namely, 11 university administrators of universities in Ho Chi Minh City. Price is capable, knowledgeable, and experienced in the education sector for many years to exchange, interview, discuss to build a preliminary scale by Hair et al., (2010) and Bagozzi & Yi (1988).

Step 4: The author uses the preliminary scale to randomly survey the lecturers of public universities in Ho Chi Minh City with a sample number of 100 to test the scale's reliability to build an official scale for official surveys for quantitative research. The official survey is done by sending survey questionnaires with 500 lecturers working for five public universities in Ho Chi Minh City and collected 465 valid votes and included in official data analysis.

Step 5: Data collected by the author using SPSS 20.0 software to test the scale, specifically test the preliminary scale Cronbach's Alpha to remove variables with total variable correlation coefficients <0.3 and analyze factor discovery EFA to eliminate variables with low factor load (<0.4) by Hair et al., (2010) and Bagozzi & Yi (1988).

Step 6: From the official scale, the author designed the official survey questionnaire and surveyed 465 subjects who are lecturers of public universities in Ho Chi Minh City. Survey results were screened by the author and Confirmed Factor Analysis (CFA) to test the scale's appropriateness, general reliability, quote variance; unidirectionality; Convergence and differentiation, and linear structure modeling (SEM) test. Analysis of linear structural model—SEM: Chi-square adjusted for degrees of freedom (CMIN)/df, GFI (Goodness-of-Fit Index),

CFI (Comparative Fit Index), TLI (Tucker and Lewis Index), and RMSEA (Root Mean Square Error Approximation) index. A model is said to be consistent (compatible) with market data when: Chi-square test has $p > 0.5$, Chi-square/df ≤ 2 by Hair et al., (2010), in some cases, CMIN/df can be ≤ 3 by Hair et al., (2010).

Step 7: From step 6, the author had conclusions and recommendations.

RESEARCH RESULTS

Testing of Cronbach's Alpha

Code	Lecturer Competency (LC)	Cronbach's Alpha if Item Deleted
LC1	Lecturers have deep knowledge of the subject of teaching and scientific research	0.895
LC2	Lecturers with skills in foreign languages and informatics	0.826
LC3	Lecturers have a good attitude in career development and social relations	0.907
Cronbach's alpha: 0.915		

(Source: Data processed by SPSS 20.0)

Table 1 showed that Cronbach's alpha for Lecturer Competency (LC) meets this technique's requirements. Specifically, all of Cronbach's Alpha values are 0.915 (> 0.6).

Code	Lecturer' knowledge (LK)	Cronbach's Alpha if Item Deleted
LK1	Lecturers with specialized knowledge of training programs	0.821
LK2	Lecturers know teaching and research methodology	0.822
LK3	Lecturers know politics, law related to the field of teaching	0.845
LK4	Lecturers have knowledge and understanding about society, culture...	0.816
Cronbach's alpha: 0.863		

(Source: Data processed by SPSS 20.0)

Table 2 showed that Cronbach's alpha for lecturer' knowledge (LK) meets this technique's requirements. Specifically, all of Cronbach's Alpha values are 0.863 (> 0.6).

Code	Lecturer' Skill (LS)	Cronbach's Alpha if Item Deleted
LS1	Lecturers have the skills to organize educational and training activities	0.873
LS2	Lecturers have skills to guide practice and foster knowledge	0.835
LS3	Lecturers have skills related to scientific research and technology transfer	0.875
LS4	Lecturers have skills related to guide students to conduct scientific research and evaluate scientific research results	0.815
LS5	Lecturers have skills participated in political, social, and political organizations	0.836

Cronbach's alpha: 0.875

(Source: Data processed by SPSS 20.0)

Table 3 showed that Cronbach's alpha for lecturer's skill (LS) meets this technique's requirements. Specifically, all of Cronbach's Alpha values are 0.875 (> 0.6).

Table 4		
TESTING OF CRONBACH'S ALPHA FOR LECTURER' ATTITUDE (LA)		
Code	Lecturer' Attitude (LA)	Cronbach's Alpha if Item Deleted
LA1	Lecturers have a dedicated, loving, helping attitude	0.931
LA2	Lecturers have a healthy, humble, close, and harmonious lifestyle	0.950
LA3	Lecturers have a scientific working style, civilized and proper attitude in social relations	0.938
LA4	Lecturers abide by the laws and regulations of their work units well and regularly study to improve their qualifications	0.922
Cronbach's alpha: 0.951		

(Source: Data processed by SPSS 20.0)

Table 4 showed that Cronbach's alpha for lecturer' attitude (LA) meets this technique's requirements. Specifically, all of Cronbach's Alpha values are 0.951 (> 0.6).

Table 5		
KMO AND BARTLETT'S TEST FOR FACTORS AFFECTING THE LECTURER COMPETENCY (LC)		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.803
Bartlett's Test of Sphericity	Approx. Chi-Square	5784.519
	df	120
	Sig.	0
Extraction Sums of Squared Loadings: Cumulative is 76.994 %		

(Source: Data processed by SPSS 20.0)

Table 5 showed that the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) is 0.803 (> 0.5). This result is consistent with the actual data investigated by 500 lecturers at five public universities in Ho Chi Minh City.

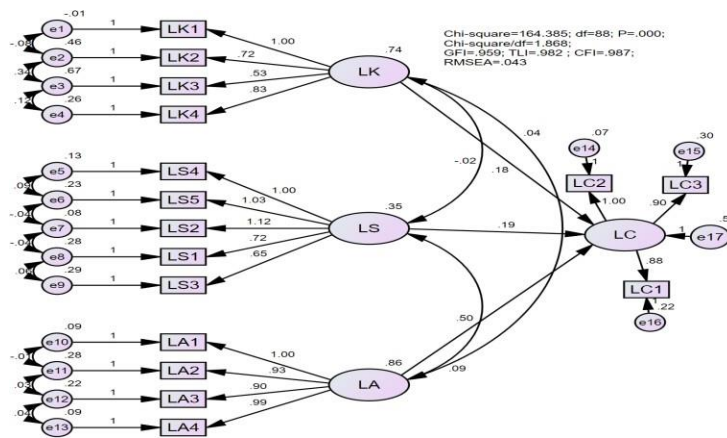
Testing Coefficients for Factors Affecting the Lecturer Competency (LC) at Public Universities in HCMC

Table 6						
TESTING COEFFICIENTS FOR FACTORS AFFECTING THE LECTURER COMPETENCY (LC) AT PUBLIC UNIVERSITIES IN HCMC						
Relationships		Estimate	S.E.	C.R.	P	Results
LC	<--- LK	0.179	0.052	3.421	***	Accepted

LC	<---	LS	0.193	0.066	2.916	0.004	Accepted
LC	<---	LA	0.498	0.043	11.517	***	Accepted

(Source: Data processed by SPSS 20.0 and Amos)

Table 6 showed three factors affecting the Lecturer Competency (LC) at public universities in HCMC with a significance level of 0.01. These results are critical information for managerial implications to enhance the Lecturer Competency (LC) at public universities in Vietnam. Besides, the results showed that the research model is consistent with market data. The model had three out of three accepted hypotheses.



(Source: Data processed by SPSS 20.0 and Amos)

FIGURE 2
TESTING SEM FOR FACTORS AFFECTING THE LECTURER COMPETENCY (LC) AT PUBLIC UNIVERSITIES IN HCMC

Figure 2 showed that the SEM assessment had three factors affecting the Lecturer Competency (LC) at public universities in HCMC with a significance level of 0.01. Figure 2 showed that the assessment of the scale of the Lecturer Competency (LC) at public universities in HCMC including: CMIN/DF=1.868 (<5.0), GFI=0.959 (>0.8), TLI=0.982 (>0.9), CFI=0.987 (> 0.9) and RMSE=0.043 (<0.08). All model indicators showed that they are perfect and consistent with both theory and practice in Vietnam. This result is significant proof for educational managers to refer and recommend.

Parameter			SE	SE-SE	Mean	Bias	SE-Bias
LC	<---	LK	0.054	0.001	0.180	0.002	0.001
LC	<---	LS	0.063	0.001	0.189	-0.004	0.001
LC	<---	LA	0.052	0.001	0.496	-0.002	0.001

(Source: Data processed by SPSS 20.0 and Amos)

Table 7 showed that the bootstrap test results are very good with a sample of 20.000 lecturers at

five public universities in Ho Chi Minh City. These results indicated three factors affecting the Lecturer Competency (LC) at public universities in HCMC with a significance level of 0.01.

CONCLUSION

The research systematizes and clarifies faculty competency's fundamental issues, including faculty competency in public universities in HCMC. The research has surveyed and investigated the current status of faculty capacity and faculty capacity building at public universities in HCMC. Thereby, the study evaluates the results achieved, the limitations, and the regulations' causes in enhancing faculty capacity. Besides, the research had gained the most fundamental goal of making recommendations to improve faculty capacity in public universities in HCMC according to 3 groups of recommendations: enhancing the university's autonomy and self-responsibility; perfecting the work of planning, recruiting, and employing lecturers; developing motivational policies to improve capacity for lecturers. Strengthening the testing and evaluation of trainers; Organizing training and retraining for trainers; strengthening cooperation domestically and internationally; the group recommends soft skills that including applying science and technology to management activities in functional departments; Strengthening facilities for teaching; Strengthening the role of mass organizations.

MANAGERIAL IMPLICATIONS

(1) Training to raise qualifications for public university teachers: Select and send qualified lecturers to train at the doctoral level, giving priority to sending lecturers to train in advanced countries in the world. In admissions work, public universities need to be autonomous and proactively coordinated with functional units under the Ministry of Education and Training in the entire enrollment process. Funding for training abroad was made according to the sharing between the state budget, expenses spent by public universities for learners, and other learners' expenses. On the other hand, it is necessary to select and train good general students who love their jobs to create teachers' human resources for public universities. Besides, Public universities should return lecturers after returning to the country, promote high professional qualifications, and improve the university's overall training quality, which is an important factor in promoting cooperation. Public universities should cooperate with foreign universities in all university professional activities (in exchange and training of teachers, exchange of students; receiving, transferring technology, training methods, operating management methods new. Besides, cooperate in scientific research and publish research; organize international scientific conferences; exchange at home and abroad; participate in specialized scientific meetings at home and overseas); creating a dynamic and new academic environment in the university; promote innovation and development of domestic universities. Finally, public universities should attract people with doctoral degrees and scientists to work in public universities. Public universities need to be autonomous in formulating projects, proposing specific solutions to draw individuals with Doctors working in foreign universities or working outside public universities to come to work at our unit. Public universities should be incentives and favorable conditions for Doctors working at the grassroots in many aspects, such as increasing income, prioritizing project topics, facilitating research groups, and scientific research. Besides, public universities create favorable

conditions for doctors to participate in international seminars/conferences and, at times, study abroad; There is priority consideration in teacher titles (professor, associate professor...), honoring the doctors' contributions.

(2) Public universities should strengthen the training of trainers' limited competencies: Build a contingent of core trainers, leading experts to act as the core for regular on-the-spot training for lecturers. Public universities need to conduct research and coordinate with competent agencies to issue a public faculty competency framework as a basis for team assessment, building programs, and capacity-building materials to teach staff. Public universities need to organize training to improve their professional qualifications and skills, focusing on training program development capabilities and training according to modern methods. Scientific research and foreign language and information technology capabilities. Besides enhancing the fostering of scientific research capacity for the faculty, it is necessary to create a research environment to develop their research capacity. Create many forums for lecturers and administrators to participate, such as organizing research groups, organizing scientific seminars for lecturers and administrators to have the opportunity to present themselves. Create mechanisms and encourage lecturers to come up with their research directions. Link research with teaching, coordinate research with domestic and foreign colleagues, help students, create opportunities for them to participate in the study. They are using research results to evaluate faculty competencies. Finally, it is necessary to combine lecturers' teaching and scientific research activities with high universities' reality to implement educational science research and universities applications. Participate in professional activities in high universities (guide students to practice pedagogy, participate in program development, compile textbooks, topic...), according to plans and requests of the Ministry of Education and Training and under contract with localities.

(3) Public universities should review, amend, supplement or issue new regimes and policies for teacher training and retraining; to recover training and retraining funds according to regulations and commitments for those who violate the provisions of law. We need to increase the investment level, support graduate students, have solutions, and support them in improving their foreign language capacity, publishing international articles and necessary funding, and meeting the requirements. Study to become a doctor. They are promulgating new policies on remuneration, prioritizing material and mental conditions, working conditions, appointing teachers' titles, and honoring contributions. Doctors are working abroad or are working outside of the public universities to work in public universities in Vietnam. Besides, each job position has a corresponding competency framework. A competency framework is a scientific basis for defining standards, tasks, and requirements of the job position to recruit, use, manage, train, retrain, evaluate, and develop staff. Therefore, it is necessary to define each faculty position's competency framework to meet the current needs and educational innovation mission in the future. Finally, public universities should expand relationships with agencies, units, and businesses where the university's students are used after graduation. Public universities need to understand the needs of the market, associate training with reality; to identify the number of training needs of each industry, each profession, of the market, through these activities to complete the objectives and contents of the training program and significantly to improve practical knowledge for lecturers and students. After graduation, students can quickly access work and use them without wasting additional training time.

Limitations

This paper still has many limitations: (1) the author has limited data collected within the framework of public universities in HCMC. Therefore, the results have not reflected the appropriateness of the model for factors affecting lecturer competence. (2), the model only tests with data of five public universities in Ho Chi Minh City. Therefore, it is necessary to further try in other provinces/cities with many public universities such as Hai Phong City, Ha Noi City, and Da Nang City to increase the research results.

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