

TRAINING SERVICE QUALITY AFFECTING STUDENTS' SATISFACTION: A CASE STUDY OF PUBLIC UNIVERSITIES IN HO CHI MINH CITY

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ABSTRACT

In the past, education was seen merely as a career activity to train people in nonprofit. Nowadays, the influence of external factors, especially the impact of the market economy, education has been considered an educational service in which the customers such as students. So, parents can invest and select a service provider such as university they deem most appropriate. Above mentioned reasons, the paper's objective is to find out the training service quality affecting students' satisfaction at public universities in Ho Chi Minh City (HCMC). The researcher surveyed 1.000 students are studying at ten public universities in HCMC. The data collected from March 2020 to June 2020, and each university has 100 students surveyed. The paper used a simple random sampling technique. Cronbach's Alpha and the exploratory factor analysis (EFA) analyzed and used for Structural Equation Modelling (SEM). Students' responses measured through an adapted questionnaire on a 5-point Likert scale. The paper's findings have five factors affecting training service quality, and training service quality affecting students' satisfaction with significance level 0.01.

Keywords: Training, Quality, Service, Student, Satisfaction, SGU.

INTRODUCTION

Training service quality and students' satisfaction are the foremost concern of university training services. The improvement of training service quality aims to attract and retain students row. In the higher education environment, the higher the quality of training services provided by the university, the more satisfied they will be at the university. Therefore, the quality of training is becoming more and more urgent for the existence and development of each university. That needs doing continuously. Besides, there are positives. They still some shortcomings: the percentage of students having a job in their major after graduation for a low rate, at the same time the number of students studying in the universities is decreasing to the level of quality. There are many causes because training quality is also an issue that needs to be considered and dissected. Therefore, this study makes some recommendations to contribute to improving the faculty's quality of training services. Currently, in a competitive higher education environment, students have many opportunities to choose a university. According to (F. Abdullah, 2006), in this competitive environment, satisfaction with service quality can make a difference. Therefore, the factors that attract and retain students need to be carefully studied by higher education institutions. Higher education institutions that want to survive in a competitive environment must seek flexible and practical solutions to attract learners, strengthen relationships with learners. Above mentioned things, the goal of this paper finds out the training service quality affecting

students' satisfaction at public universities. This study results help educational managers who apply the research results for improving the training quality of services better in the future.

LITERATURE REVIEW

The Quality of Training Services (QTC)

The quality of training services is a relative concept and understood in many different ways, depending on the problem approach. In each position, people perceive quality in various aspects. Students, employers, teacher or non-teaching staff, government and funding agencies, censorship, testing, and evaluation agencies all have their definitions for Quality training service concept that is different perspectives give the idea of varying training quality. Some commonly mentioned concepts include: Quality is the conformity between standards (specifications); Quality is the response to customer needs (trained students); and quality as a result of achieving university goals (Abdullah, 2006).

(Abdullah, 2006) mentioned five aspects of training service quality: quality is superior (or excellence); is perfection (perfect results, no mistakes); is the compliance with the objectives to meet the needs of students); is value for money from the evaluation aspect for investing; is the transition (the transition from one state to another. Among the definitions, the definition of quality is following the goal that is being used by many quality assurance organizations in countries like the United States, the United Kingdom, and Southeast Asia.

Students' Satisfaction (SS)

According to (Sultan, 2017), customer satisfaction is the degree to which a person's emotional state stems from a comparison of results obtained from the consumption of products/ services with periods. Satisfaction level depends on the difference between received and expected results; if actual results are lower than expected, customers will not be satisfied; if actual results are commensurate with expectations, customers will be satisfied. If actual results are higher than expected, the customer is delighted (Parves & Ho, 2010). Customer expectations formed from the shopping experience, from friends, colleagues, and the information of sellers and competitors. Students' satisfaction is the perceived state of a person by consuming the product/service on the benefits that a product offers compared to what that person expects (Cronin & Taylor, 1994). Student satisfaction with the quality of training services is a comprehensive assessment of educational activities provided by the university. The grade meets students' expectations (Finch, 2015).

Non-Academic (NA)

This non-academic aspect includes elements of university staff that assist students in fulfilling their research and academic obligations at the College. The university has a high level of support, always doing what the university has committed, all questions and complaints of students are concerned and resolved appropriately, the student's information is kept confidential (Cronin & Taylor, 1992). It will increase students' satisfaction with the quality of training services offered at public universities. Non-academic or determining element: this element is

related to the performance of the duties of administrative staff (Lee, J, 2018). Non-academic has a positive (+) impact on the quality of training services at public universities.

Hypothesis H1: Non-academic has a positive impact on the training service quality at public universities in Ho Chi Minh City.

Academic Factor (AF)

Academics include elements that describe a teacher's responsibility to students. Students want teachers to care about themselves, their families, and understand their particular needs and interests. Lecturers care about students (MacGregor, 2014). Lecturers understand the unique needs and benefits that students desire to meet the needs of students promptly. Besides, this factor is related to the performance of faculty duties, such as academic advisors. If lecturers' teaching is as good as possible, the student's satisfaction with the quality of training services at public universities (Mahi & Kalsom, 2018). Academic element: this factor is related to the performance of lecturers' duties such as scientific research, teaching methods, student assessment, career counseling for students, academic advisors. Academic factor has a positive (+) impact on the quality of training services at public universities.

Hypothesis H2: Academic factor has a positive impact on the training service quality at public universities in Ho Chi Minh City.

Access Factor (AC)

This access includes factors related to issues such as accessibility and the attitude of faculty and staff (Parasuraman et al., 1988). Does the university provide complete, timely, and accurate information to students, be able to solve problems quickly, handle complaints effectively, and meet the requirements of students or not? In the course of learning, when there is a change of information, the university promptly informs students (Zineldin, 2015). The university provides students complete and accurate information. University lecturers and staffs are available to answer students' questions. Officials guide documents and procedures in full and easy to understand. University staff is attentive to the peak hours, and administrative staff is attentive to all students. This factor increases the accessibility of the university to students (Umbach, 2016). Accessibility factor: this factor relates to issues such as the learner's accessibility, communication with faculty, and administrative staff. Access has a positive (+) impact on the quality of training services at public universities.

Hypothesis H3: Access factor has a positive impact on the training service quality at public universities in Ho Chi Minh City.

Reputation or Image (RE)

This factor relates to the image of a higher education institution. The reputation or image includes elements that describe the importance of showing the university its professional image through facilities, fully equipped and modern equipment, effectively serving the learning and research of students (ToyinSawyer, 2018). The university has reasonable and easily recognizable sections, departments, and faculties. Excellent service facilities such as parking, waiting for space for dormitories. The facilities for full study and meeting the requirements are

factors affecting student satisfaction about the quality of training services (Sohrabifard, N, 2015). Reputation factor: this factor relates to the image of a higher education institution. Reputation or image has a positive (+) impact on the quality of training services at public universities.

Hypothesis H4: Reputation or image has a positive impact on the training service quality at public universities in Ho Chi Minh City.

Program Factor (PF)

The elements of a training program include the diversity and flexibility of the curriculum and the quality of the curriculum (Abdullah, 2006). Besides, this element underscores the importance of providing a comprehensive and reputable program of study, majors with a flexible structure, and curriculum-related issues to fit the university's training goals and the student's learning goals. The training program has clear goals, meeting the requirements of standards of knowledge, skills, and attitudes (Petruzellis, 2016). The more quality the training program, the higher the student satisfaction. Program elements: this includes issues related to the diversity and flexibility of the training program and its condition (Raposo, 2018). The program factor has a positive (+) impact on the quality of training services at public universities.

Hypothesis H5: The program factor has a positive impact on the training service quality at public universities in Ho Chi Minh City.

Hypothesis H6: The training service quality has a positive impact on the students' satisfaction at public universities in Ho Chi Minh City.

A research model for factors affecting training service quality, and training service quality affecting students' satisfaction in HCMC following Figure 1:

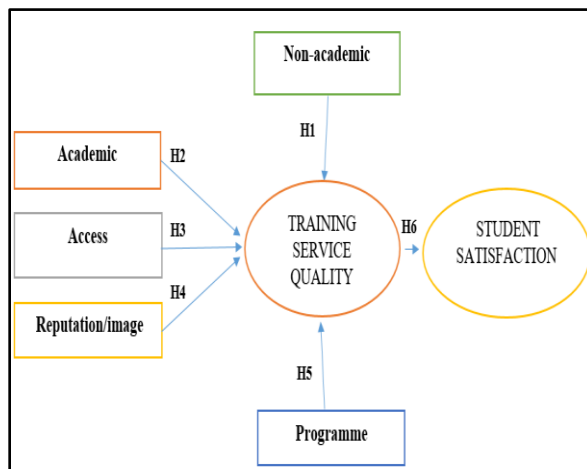


FIGURE 1
RESEARCH MODEL FOR FACTORS AFFECTING TRAINING SERVICE QUALITY,
AND TRAINING SERVICE QUALITY AFFECTING STUDENTS' SATISFACTION IN
HCMC

METHODS OF RESEARCH

The research process for factors affecting training service quality, and training service quality affecting students' satisfaction in HCMC following steps (Figure 2):

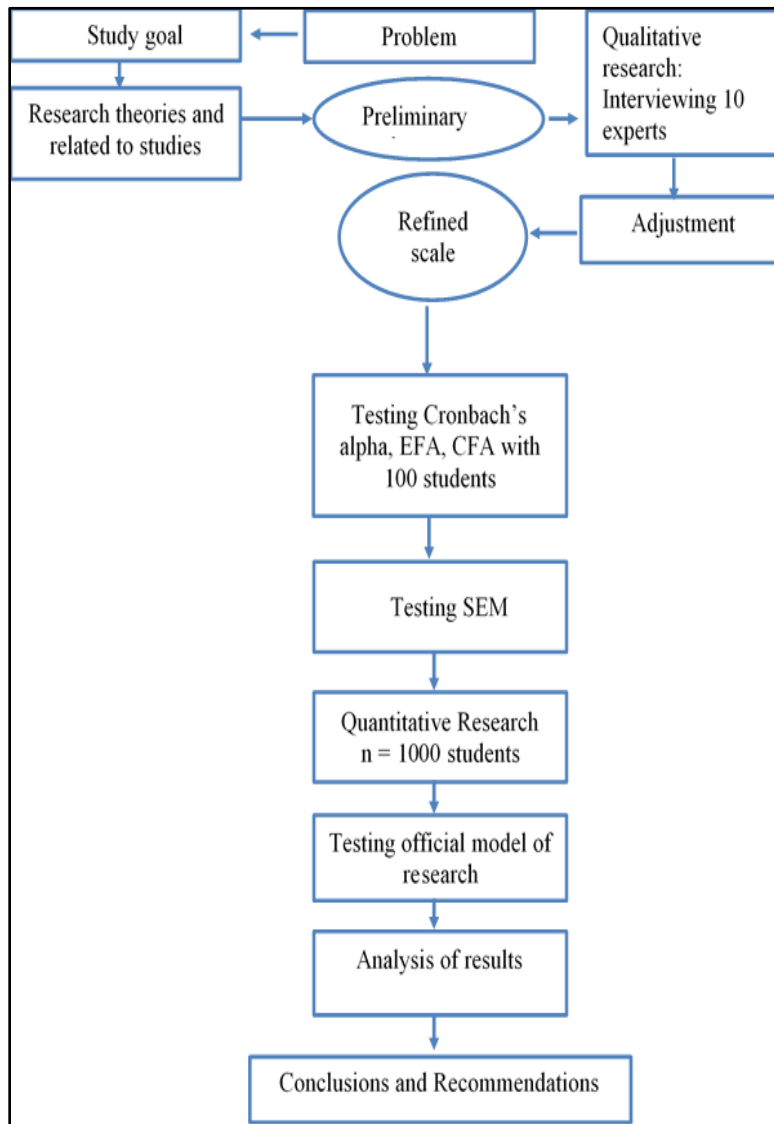


FIGURE 2
RESEARCH PROCESSING FOR FACTORS AFFECTING TRAINING SERVICE QUALITY, AND TRAINING SERVICE QUALITY AFFECTING STUDENTS' SATISFACTION IN HCMC

In this study, the study conducted by quantitative and qualitative methods. The sample was selected using a simple random sampling method. Data collected through a pre-designed questionnaire based on a survey developed by (Hair et al., 1998). Studies designed using Google forms and links sent to students via email. The number of emails sent was 1,000; the number of valid responses was 675 (reaching 67.5%). The data are processed by descriptive statistics and

deductive statistics to prove the research hypotheses. The research process for factors affecting training service quality, and training service quality affecting students' satisfaction in HCMC some steps following:

1. The author identifies the research problem.
2. The author determines the research objectives.
3. The author identifies theories and studies related to the research problem.
4. The author identifies the primary scale associated with the research problem.
5. The researchers applied the expert methodology and based on ten educational experts who have a consultation as group discussions are to improve the scale and design of the questionnaire. The results of surveying ten experts showed that factors affecting training service quality, and training service quality affecting students' satisfaction in HCMC. The researcher created a list of possible factors gathered from the literature reviews, as mentioned in the above studies.
6. The author adjusted the primary scale related to the research problem.
7. The researchers tested a reliability scale with Cronbach's Alpha coefficient and exploratory factor analysis. Completed questionnaires directly collected from the surveyed students related to the training service quality and students' satisfaction in HCMC. There are 100 students and answered 29 questions. The primary sources of data collected from March 2020 to June 2020. The researcher surveyed by email.
8. The author assesses the primary scale of the research problem with a sample size of 100 students with any observational variables with a total correlation coefficient higher than 0.3. Cronbach's Alpha coefficient greater than 0.7 would ensure the reliability of the scale. This method based on the Eigenvalue, the appropriate factorial analysis, and the observed variables in the whole, which are correlated when Average Variance Extracted is >50%. The KMO coefficient is within 0.5 to 1, the Sig coefficient $\leq 5\%$, the loading factors of all observed variables are >0.5. Besides, the researcher testing scale reliability with Cronbach's alpha coefficient and exploratory factor analyses (EFA) performed. Finally, the least square method and multiple linear regression used (Hair et al., 1998).
9. The author evaluates the official scale with a sample of 1,000 students related to the study, but 675 students answered by email. The researcher performed CFA and model testing with Structural Equation Modelling (SEM) analysis. The purpose of CFA helps to clarify: (1) Unilaterality, (2) Reliability of scale, (3) Convergence value, and (4) Difference value. A research model is considered relevant to market data if Chi-square testing is $P\text{-value} > 5\%$; $CMIN/df \leq 2$, some cases $CMIN/df$ maybe ≤ 3 or <5 ; GFI, TLI, CFI ≥ 0.9 . However, according to recent researchers' opinions, GFI is acceptable when it is greater than 0.8; $RMSEA \leq 0.08$. Apart from the above criteria, the test results must also ensure the synthetic reliability >0.6; Average Variance Extracted must be greater than 0.5 (Hair & Anderson, 2010).
10. The author evaluates the results of the research model based on the testing results.
11. The author analyzes the results of research models based on test results.
12. Finally, the author concludes and proposes recommendations.

RESEARCH RESULTS

The scale reliability tests for factors affecting training service quality, and training service quality affecting students' satisfaction in HCMC.

Table 1		
THE SCALE RELIABILITY TESTS FOR FACTORS AFFECTING TRAINING SERVICE QUALITY, AND TRAINING SERVICE QUALITY AFFECTING STUDENTS' SATISFACTION IN HCMC		
Items	Content	Cronbach's Alpha
NA1	The requests/reasonable feedback of the students are promptly dealt with by the university	0.894
NA2	Leaders and staffs of the university are ready to support students when required	0.931
NA3	Leaders and staffs are courteous when communicating with students	0.934
NA4	You feel secure and confident when dealing with administrative work with the university	0.910
Cronbach's Alpha for NON-ACADEMIC (NA)		0.937
AF1	Lecturers care and treat politely and politely with students	0.885
AF2	Lecturers are always available to answer students' questions	0.897
AF3	Lecturers of the university have a positive working attitude towards students	0.908
AF4	Lecturers have excellent pedagogical and teaching skills	0.884
AF5	Lecturers accurately assess student learning results	0.900
Cronbach's Alpha for academic factor (AF)		0.914
AC1	University staff respect the confidentiality of personal information when teams provide it to students	0.787
AC2	University staff respect the confidentiality of personal information when teams provide it to students	0.792
AC3	The university cares and encourages learners to participate in activities in social organizations	0.835
AC4	The university appreciates student recommendations to improve the quality of training services	0.789
Cronbach's Alpha for ACCESS factor (AC)		0.843
RE1	Students graduated to compete and meet the labor market and employment requirements	0.912
RE2	Classrooms ensure the requirements of area, lighting, and sound	0.922
RE3	The university has a sports ground, a hall to serve the needs of sports and arts of students	0.928
RE4	The facilities are full of learning and responsive, and The dormitory is fully equipped	0.905
Cronbach's Alpha for REPUTATION or image (RE)		0.937
PF1	The university's training programs are of good quality	0.906
PF2	The university's training programs are highly practical	0.921
PF3	The university's training programs are flexible and meet the training goals	0.915
PF4	The university's training programs meet the high demands of society and enterprises	0.894
Cronbach's Alpha for program factor (PF)		0.930
QTC1	Non-academic has a positive impact on the training service quality at public universities in HCMC	0.827
QTC2	Academic factor has a positive impact on the training service quality	0.799
QTC3	Access and program have a positive impact on the training service quality	0.839
QTA4	Reputation or image has a positive impact on the training service quality	0.786
Cronbach's Alpha for the quality of training services (QTC)		0.854
SS1	Students are satisfied with the quality of the training	0.927
SS2	Students will introduce their friends and relatives to study at the university	0.917
SS3	Students will continue to study a higher degree level at the university	0.924
SS4	The training service quality has a positive impact on the students' satisfaction	0.923
Cronbach's Alpha for students' satisfaction (SS)		0.941

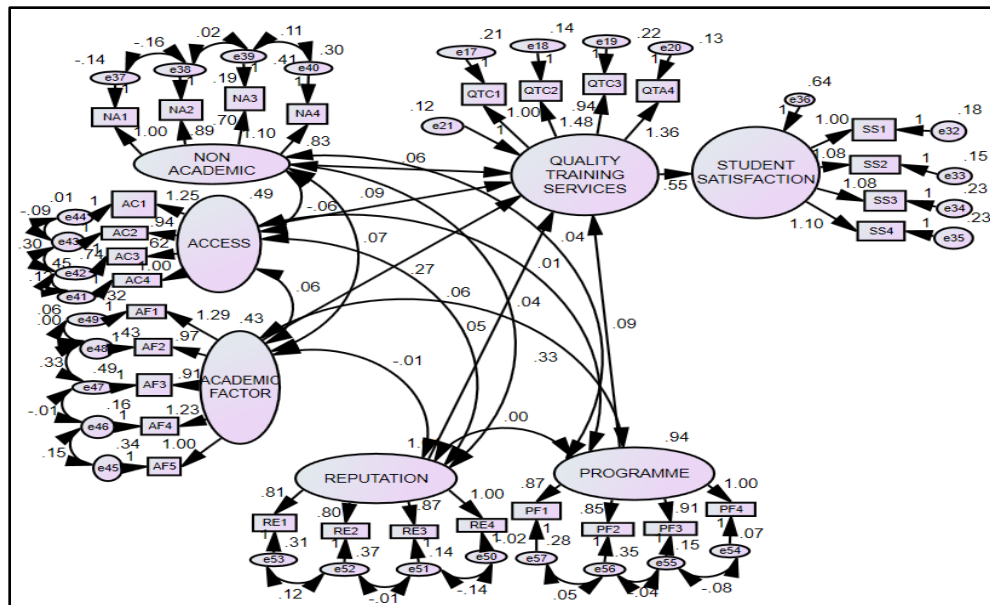
(Source: The researcher's collecting data and SPSS 20.0)

Table 1 showed that all of the 29 variables surveyed and seven components. Cronbach's Alpha of seven components has greater than 0.7. This factor showed that all of Cronbach's Alpha is very reliable. Such observations make it eligible for the survey variables after the testing scale. This data was suitable and reliable for researching.

Relationships of components			Unstandardized Coefficient	Standardized Coefficient	C.R.	P	Conclusion
Quality of training services	←	Non-academic	0.063	0.151	2.998	0.003	H1: Accepted
Quality of training services	←	Access	0.094	0.150	4.302	***	H3: Accepted
Quality of training services	←	Academic factor	0.271	0.405	8.352	***	H2: Accepted
Quality of training services	←	Reputation	0.053	0.123	3.002	.003	H4: Accepted
Quality of training services	←	Program	0.092	0.202	4.744	***	H5: Accepted
Student satisfaction	←	Quality of training services	0.546	0.287	6.686	***	H6: Accepted

Note: Significant at 1 percent (All t-tests are one-tailed)
(Source: The researcher's collecting data and SPSS 20.0, Amos)

Table 2 showed that column " P " < 0.01 with significance level 0.01 and column "*Conclusion*" H1: supported; H2: supported; H3: supported; H4: supported; H5: supported and H6: supported. This showed that five factors affecting training service quality, and training service quality affecting students' satisfaction in HCMC with significance level 0.01. Chi-square=1520.611; df=345; p=0.000; Chi-square/df=4.408; GFI=0.870; TLI=0.918; CFI=0.930; RMSEA=0.071 (Figure 3).



(Source: The researcher’s collecting data, SPSS 20.0 and Amos)

FIGURE 3
THE STRUCTURAL MODEL SHOWING THE STRUCTURAL LINKAGE BETWEEN COMPONENTS

CONCLUSIONS & MANAGERIAL IMPLICATIONS

Conclusions

Qualitative and quantitative research methods conducted in the study. Twice qualitative research to collect the opinions of educational experts and the opinions of students studying at Universities to supplement and adjust the observed variables of the HEDPERF scale to suit peculiarities of public universities. Besides, the researcher surveyed 1.000 students are studying at ten public universities in HCMC by Email. The data collected from March 2020 to June 2020, and each university has 100 students surveyed. The paper used a simple random sampling technique. Cronbach's Alpha and the exploratory factor analysis (EFA) analyzed and used for Structural Equation Modelling (SEM). Students' responses measured through an adapted questionnaire on a 5-point Likert scale. The findings of the paper have five factors affecting training service quality, and training service quality affecting students' satisfaction with significance level 0.01. The researcher had managerial implications for educational managers of public universities to continue to improve the training service quality following.

Managerial Implications

Managerial implications for academic factor (Standardized coefficient is 0.405):

The academic aspect has the most critical impact on the factors of training service quality. In which the role of the lecturer is the main force affecting this aspect. Lecturers are the ones who decide the quality of training, so it is necessary to focus efforts on training and fostering to improve the quality of lecturers continuously. Besides, Lecturers need to invest more in teaching methods and practical experience. Each lecturer must research and be active in raising the level of himself/herself, exceptionally professional qualifications related to the field of teaching to improve the theoretical and practical thinking ability of each lecturer by yourself. Only when the sense of responsibility and the lecturer's role promoted will help the teacher be creative, proactive, and confident in teaching. The public universities should establish a Science Council, which is responsible for updating advanced training programs, meeting the needs of society, diversifying training programs according to the needs of the community as well as forms of learning Rich internships for students. The faculty will nominate some faculty members to join this council to develop the faculty's training programs. In addition to referring to advanced training programs, this group of lecturers will coordinate together with the Center for Employment and enterprise relations, to conduct surveys on enterprises in the fields of training disciplines that are performing the construction, surveying the actual needs of these enterprises to have the adjusted to meet practical needs.

Managerial implications for the program (Standardized coefficient is 0.202):

The training program has the second most crucial impact on the quality of training services. The training program is considered to be of good condition when it meets social needs, has clear goals, the content of subjects is renewed and regularly updated, the distribution ratio between theory and practice reasonable luggage. Public universities need to revise the training curriculum and revise the training program in a way that is relevant to the practicum. Besides, Public universities should organize feedback from agencies and businesses. These ideas are often convenient, helping the university understand the needs of the labor market and equipping students with knowledge. Feedback can be obtained in many ways, such as organizing workshops, summarizing information through questionnaires, direct interviews. Public universities should organize soft skills classes, or in lesson design, lecturers should enhance these skills in the teaching module.

Managerial implications for non - academic (Standardized coefficient is 0.151):

Public universities should ensure adequate and clean sanitation for students. According to the students, the lecture halls have a toilet area, but the restroom's equipment is entirely damaged, and many lighting systems do not work. The number of toilets is an issue that is often discussed and transmitted by students, partly affecting the evaluation of the quality of the university's training services. The university should ensure clean, airy toilets both ensure student health and has a positive assessment for the quality of the university's function. Besides, public universities need the university to promote business relations activities further to increase the

university's relationship with businesses, who use the university's training force. Maintaining this relationship both helps students of the university have an opportunity to rub with the real working environment and is a feedback channel of the university's training quality. This factor is an opportunity for the university to update the information to improve, meet the recruitment needs and skills to run enterprises. Public universities should create many extracurricular opportunities, exchanges with businesses, and the chance to visit, study and work at the enterprise during the learning process, which helps students have a realistic view of future work.

Managerial implications for access (Standardized coefficient is 0.150):

Access is among the factors that affect the quality of training services, and the access factor has the lowest impact. However, increasing the quality of this aspect will improve the quality of training services. The object of the access factor is teachers, officials, and experts in the departments. University staff should have a courteous, courteous attitude, and support students to solve problems in a positive direction towards students, enthusiastically answering students' questions. Besides, the university should place "*Comments Box*" in the lecture halls so students can send suggestions to the Board of Directors.

Moreover, the university continues to organize annual dialogues between the Board of Leaders, Faculty Heads, Departments, Boards with students to capture the opinions and aspirations of students. Particularly at the Faculty, there will be twice a year dialogues between students and the Board of Directors. Inform fully and promptly to student's information such as curriculum, exam schedule, timetable. Limit to the maximum in changing the student's program.

Managerial implications for reputation (Standardized coefficient is 0.123):

The university library is an integral part of the cultural and scientific activities. The library contributes to improving the teaching quality of teachers, fostering knowledge, and building self-study and self-study habits for students, creating a basis for gradually changing teaching and learning methods. The library actively participates in promoting political thought and building new cultural lifestyles for members of the university. The university should have a plan to open the self-study room until 24 hours, to encourage students to have a habit of studying in the self-study room, and at the same time, the students have a study place - active exchange groups outside the classroom time. Besides, the university should aim to build an electronic library that allows students and faculty to quickly access valuable and diverse information resources at all times, anywhere, without delineation of space and time. Besides, the university should invest in upgrading dormitories, ensure the right living conditions for boarding students, and provide services to meet the learning and entertainment needs of students. The university's apartments are quite large and modern, but over time, according to students, many rooms have been severely degraded. Therefore, the Dormitory Management Board should monitor in time to repair and renovate to meet the needs of students.

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