Service Quality Assessment of Education and Training at High Schools in Vietnam

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Abstract

Education and training are becoming a decisive factor in the rapid and sustainable development of each country. Improving the quality service of education and training will contribute to improving the quality of the country's human resources in the future. The satisfaction of the learner about the quality of service provided is one of the determinants of the existence and development of the educational unit. The research summarizes the relevant theoretical and empirical research on the factors affecting the training service quality at high schools in Vietnam. By using the methods of analysis - synthesis and econometrics, the authors conclude that 5 groups of factors provided objective assessments of students on the quality of training based on the: "curriculum", "teaching staff", "facilities", "school services", "association and cooperation for development". The author proposes solutions to improve the training quality of high schools.

Index Terms - Education, training service quality, highschool, curriculum, teaching staff, school services, facilities.

1. Introduction

Development of education and training together with the development of science and technology are the top national policy; investment in education and training is investment for development. For high-school education, the scale of education and training has been expanding in terms of the number of students enrolled to various types of training over the years. The level and professionalism of teachers has been improved. High school graduates meet the training needs of universities and meet human resources for the economy and contribute to affirming the position of prestigious high schools in Vietnam. However, there are still some shortcomings that need to be overcome in order to perfect and improve the quality of training to meet the requirements of regional and global education integration towards the sustainable development of the university. Research on service quality in general and research on training quality in particular is not a new issue in the world as well as in Vietnam. But research on the quality of training service from the perspective of students is a completely new and highly applied research. Therefore, the topic "SERVICE QUALITY ASSESSMENT OF EDUCATION AND TRANING AT HIGH SCHOOLS IN VIETNAM" was selected to provide objective assessments of learners on the quality of training, to propose measures to improve the quality of training in high schools.

2. Literature Review

A. *Definitions of quality of services – Quality in high-school education*

Some quality specialists have defined the quality of service as "the totality of features and characteristics of a product or service that bears its ability to satisfy stated or implied needs" - conceptually defined in the ISO 8402 – 1986 standard. As such, service quality is customer satisfaction measured by the difference between expected quality and perceived quality. If the expected quality is lower than the perceived quality, the quality of service is excellent; if the expected quality is higher than the perceived one, the service quality is not guaranteed; if expected quality is equal to perceived quality the quality of service is guaranteed.

Training is actually a type of service activities so the quality of training is classified as service quality. Therefore, the quality of upper secondary education is the satisfaction of students as measured by the difference between the quality of expectation and the quality the student perceives.

B. *Customer satisfaction - Student's satisfaction*

Research on the satisfaction of the student can be looked in the concept that was already found, when student is considered as a customer of educational training service. According to Kotler (2001), the satisfaction is the level of status derived from the comparison of the results of the commodity from the product of the service and their expectation. It derives from personal needs, previous experiences and external information such as advertising, word of mouth information of friends, family...

Thus, the level of satisfaction is the difference between the results received and expectations. Therefore, when assessing the student's satisfaction with the quality of the training services they receive, they may feel one of three levels of satisfaction: Students will not be satisfied if the performance is worse than expected; if performance is commensurate with expectations, the students will be satisfied; if the actual results exceed expectations, students are very satisfied and interested.

C. *Quality of training and student's satisfaction*

When students of high schools are considered to be the target of the schools and training activities provided by the school, the interaction between training quality and student satisfaction can be seen. From the viewpoint of economics: Customer satisfaction becomes an important asset to an organization in an effort to improve service quality, maintain loyalty, and enhance organization's competitiveness. Student's satisfaction with the products and services provided by the school is important and is regularly measured and evaluated by standard set of indicators. The barometer measures the satisfaction level was first created in Sweden (The Swedish Customer Satisfaction Barometer (SCSB)) in 1989.

D. *Measurement of Education and training quality*

In assessing student satisfaction, the factors that influence this satisfaction must first be determined. According to G.V. Diamantis and V. Kenosides together with Siskos et al. (2005) found that overall student satisfaction included the following criteria:

+ Curriculum: The structure of the program, the diversity of the subject, the document, the orientation

+ Teachers: level, knowledge, skills, teaching methods, enthusiasm, evaluation methods

+ Facilities: Classroom system, equipment, system room functions

+ Training support services: cantalas, gymnasiums, soccer fields, clubs

3. Research Methodology And Study Model

A. Sampling method

Research in the first phase (to October), concentrated in three high schools in the list of 66 public and private high schools in Vietnam. The information collected through the questionnaire was investigated directly and online (via google drive) to students who are studying at Chu Van An High School, Viet Duc High School and Cau Giay High School. The author conducted 300 questionnaires, after conducting the data entry and screening questionnaire, the results were 224 valid votes for the purpose of the survey. Votes are rejected because the respondent does not provide sufficient information or the information is rejected because the respondents hit the same type of choice.

B. Research methods

Qualitative research methodology for Ground Theory to explore factors affecting student satisfaction; combined with existing models to develop a model for assessing the factors that influence student satisfaction in the quality of higher education

Quantitative research methods used to assess the influence of factors through the use of questionnaires were developed to investigate students' information about factors related to student satisfaction.

Methods of document study: Studying documents related to the research topic, Analyzing and synthesizing related materials.

Expert consultation: Consulting with experts in general education and training quality in particular.

Mathematical Statistics: Data collection and processing during the study. Verification of the scale by the Cronbach Alpha reliability coefficient and EFA, correlation analysis, regression analysis... based on the results of statistical data processing through SPSS version 20.0 and Microsoft Office Excel 2016. The purpose of formal research is to measure the scale and test the physical model. theory and hypotheses.

C. Questionnaire design

Based on the hierarchical structure of the satisfaction criteria of G.V. Diamantis and V.K. Benos, together with Siskos et al. (2005), combined with the guidelines for using quality assessment criteria, publishes a questionnaire survey of student satisfaction on high school education. A total of 45 questions focused on factors influencing academic satisfaction. These questions are designed on a 5-level Likert scale to measure student satisfaction. Level of interpretation of the scale: 1- Absolutely disagree; 2 - Disagree; 3 - No comments; 4 - Agree; 5 - Absolutely agree.
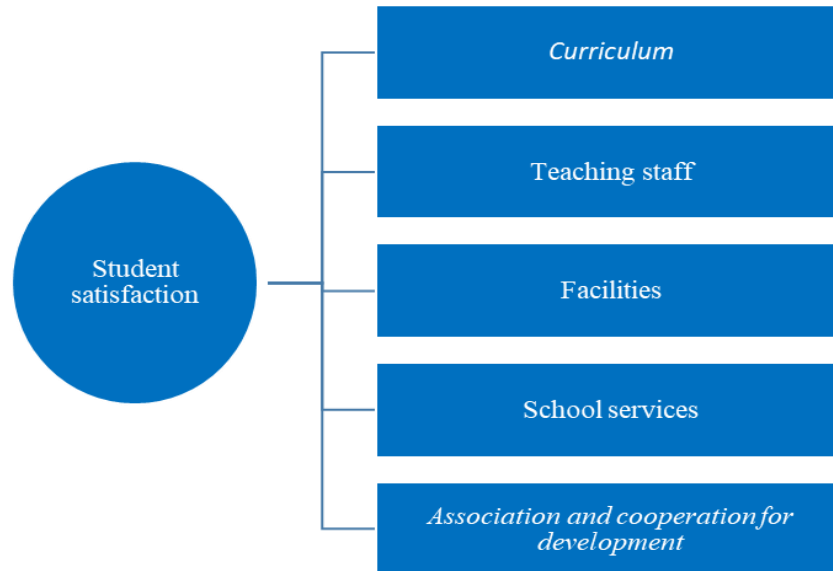
D. Proposal research model

Figure 1: Research model on high school education quality

- *Curriculum:* The quality of the curriculum depends on the variety of curricula, teaching hours, curriculum, and career orientation.

- *Teaching staff:* This involves the quality of teachers including teacher knowledge, teaching methods, teacher communication skills, assessment methods.

- *Facilities:* Physical and material facilities related to the facilities and technical equipment of the school including school equipment, laboratory equipment, laboratory opening hours, library facilities, letters electronic library, library space.

- *School services:* includes employee knowledge, reliability, processing speed, and level of service.

- *Association and cooperation for development*: involves the credibility, credibility and recognition of the university including expected factors, college entrance, promotion and relationships with prestigious universities as well as outside institutions.

  E. Hypothesis

- *Hypothesis H01:* Student satisfaction can be measured by factors such as: facilities, teaching staff, curriculum, school services, the association and cooperation for development.

- *Hypothesis H02:* The better the facilities, the higher the level of student satisfaction.

- *Hypothesis H03:* The better the quality of curriculum, the higher the level of student satisfaction.

- *Hypothesis H04:* The higher the level of teaching staff, the higher the level of student satisfaction

- *Hypothesis H05:* The higher the level of school services, the higher the level of student satisfaction

- *Hypothesis H06:* The higher the student's ability to connect and cooperate in school development, the higher the level of student satisfaction.

4. Data Analysis

A. Descriptive Statistics

According to the plan presented in Chapter 3, the author released and collected 300 survey questionnaires. Of the 224 samples collected (corresponding to 74.67% response rate), all of them is valid then 224 valid samples are used for research, achieving the target when construction methods. In particular, Chu Van An High school accounted for 31.3% of sample size with 70/224 students, Viet Duc High school accounted for 30.8% with 69 students, and 37.9% of students is currently studying at Cau Giay High School with 85/224. According to the grade classification, the 12th grade students accounted for 41.1%; the 11th graders included 58 students in the survey accounting for 25.9% and 33% of the sample were 10th graders. According to learning ability, the percentage of students with good, very good and excellent is roughly the same about 30%. Only 5.4% of the students surveyed had average strength and no students had poor academic performance.

B. Test the Reliability of the Scale Component by Cronbach Alpha

The purpose of this test is to find correlations between variables and variables correlations with total variation for a set of observed variables. We will retain only variables are correlated strongly with total and eliminate the variables which does not guarantee the reliability of the scale. The variable correlation coefficient is smaller than 0.3 will be removed, the scale will be accepted when Cronbach alpha coefficients greater than or equal to 0.6. (Hoang Trong and Nguyen Mong Ngoc, 2005)

Based on the results of Cronbach's Alpha analysis, the scales were satisfactory because they had a Cronbach alpha coefficient higher than 0.8. The most reliable measure was the Teaher (0.917), followed by curriculum (0.915), services (0.915), facilities (0.895), association and cooperation for development (0.838). Variables in the scales have a total variable value greater than 0.3 and are less than the reliability of the scale so they are accepted and not eliminated.

C. Analysis of Factors

As described in Chapter 2, the author used KMO and Barllet's test to assess the appropriateness of the methodology factors in this case. Factor analysis would be appropriate if the KMO value is from 0.5 to 1. If this value is less than 0.5, analysis of factors potentially incompatible with the data. Only those factors which have values less than 1 is retained in the model with minimum loading factor is 0.5 (this is considered to be a practical sense).

The correlation matrix for all variables tested was correlated by KMO (to test the appropriateness of factor analysis) resulting in 0.739 (> 0.5), which demonstrates that factor analysis is relevant to research data. In addition, Barlett's test result is sig = 0.000 <0.5 and results from the EFA analysis extracted four factors "curriculum", "teacher", "facilities", "services" and these four factors explain 46,70% the variability of the student satisfaction.

Eigenvalue stops at greater than 1, the total variance reached 74,799% (> 50%), which is satisfactory.

D. Regression Analysis

TABLE 1: RESULT OF REGRESSION MODEL

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.691ª	.477	.467	.72985072	.477	49.909	4	219	.000

Based on the results of regression analysis, we have model:

$$P = 0.317 \ S + 0.286 \ C + 0.425 \ T + 0.337 \ F \ + \varepsilon$$

The above model explains that 46.70% of variation in P is due to independent variables in the model, while the remaining 53.30% is explained by other variables outside the model. In the regression equation, we see that if the remaining independent variables remain unchanged, when the scores for the School services (S) increase by 1, the student satisfaction increases by 0.317 point. Similarly, when the evaluation score for the Curriculum (C) increased by one point, the student satisfaction with the quality of training increased by an average of 0.286; when the score of Teaching staff (T) increased by 1 point, the satisfaction of students on training quality increased by an average of 0.425 points; when scores on Facilities (F) increased by one point, the satisfaction increased by an average of 0.337 points.

5. Conclusions and Recommendations

A. Conclusion

The research "Quality assessment of education and training at high schools in Hanoi" was to determine the components that affect student satisfaction on the quality of education and training, to develop and evaluate the measurement scales. Theoretical models are constructed on the basis of the theory of service quality, student satisfaction and the components that impact on satisfaction. The research method consists of two main steps: preliminary research and formal research.

The results of the theoretical modeling show that all four of the above factors affect the student satisfaction with the quality of the training. The component that has the greatest impact on student satisfaction is Teaching staff (Beta = 0.425); The second most important component is the Facilities (Beta = 0.337); The third major factor is the School Services (Beta = 0.317); The last key component is the Curriculum (Beta = 0.286).

Research shows that the role of "Teaching staff" is very important, this is the most influential factor for students because of at this age, and teachers are big role model of the students. All the words, directions, all the encouragement of the teacher prompt will affect the change of thinking of the students. The second and third important factor affecting student satisfaction is the school's "Facilities" and "School services". Research results show that "Curriculum" is the least impact factor for student satisfaction, this is a big question, and the author will study further in the next phase.

B. Recommendations

According to the teaching staff

Improve the quality of teaching staff by creating favorable conditions for teachers to have the opportunity to study and research professionally at school and abroad. The school also encourages and supports teachers to attend specialized scientific seminars as presenters or participants so that teachers can interact and exchange new knowledge. It organizes soft skills courses for teachers, especially on how to motivate students by high school teachers who have a great influence on the orientation of the student's future. The teaching staff are applied the contribution of Professor Thaler (who recently won the Nobel Prize in Behavioral Economics) in explaining the impact of "decision-making" on other people's decisions on teacher motivation. to produce positive results.

According to facilities

Facilities are the second most influential factor in the study of student satisfaction in the high school education. Nowadays, apart from the mainstream education, students have great demand in extracurricular activities to develop life skills. Therefore, the school should take measures to improve and develop the facilities to achieve greater satisfaction from students as equipped with functional rooms for physical activity, outdoor play: playgrounds, swimming pools, football, group meetings and events, practice rooms, libraries with updated reference and study materials.

According to school services

Improving the quality of staff's service is essential for the school to improve student satisfaction. A number of measures are being developed such as: establishing a regular board to solicit student feedback regarding the staff's ability to serve in the school to evaluate and overcome staff shortages; seting up rules and requirements for working attitude so that staff can serve students in the fastest and most effective way. In addition, "school services" includes the ability to link and cooperate with leading universities and colleges in the country and internationally as well as organizations and agencies outside the school to support the development and renewal of the school's curriculum and learning activities.

According to curriculum

The curriculum is the fourth most influential factor for student satisfaction in the survey. Therefore, to improve the quality, the training program must meet the requirements of learners, meet the requirements of society. In addition, the school needs to build relationships with outside companies enabling students to visit, study, and interact with the real world. This relationship also helps the school to capture and update the changing needs of the society, which design the curriculum to meet the real needs of society. In this way, the new curriculum is constantly renewed in line with the needs of the human resources of the society and meets the learning needs and extracurricular activities of the students.

References

1) Armand V. Feigenbaum (1991), Total quality control, fourth audition.

2) G.V. Diamantis và V.K. Benos, University of Piraeus, Greece (2007), Measuring student satisfaction with their studies in an International and European Studies Departerment, Operational Research, An International Journal. Vol.7. No 1, pp 47 – 59. 90

3) Hoàng Trọng & Chu Nguyễn Mộng Ngọc (2005), Phân tích dữ liệu nghiên cứu với SPSS, Nxb Thống Kê.

4) Lewis & Mitchell (1990), Marketing Intelligence & Planning: Defining and Measuring the Quality of Customer Service.

5) Nguyễn Xuân Thao (2009), "Một quan điểm của Hoa Kỳ về vấn đề giáo dục đại học như một dịch vụ trong giáo dục xuyên biên giới" – Phạm Thị Ly dịch, Kỷ yếu Hội thảo khoa học Quốc tế Giáo dục so sánh lần 3: Hợp tác quốc tế trong giáo dục và đào tạo đại học ở Việt Nam: Cơ hội và thách thức.

6) Oliver, R. L. & W. O. Bearden. (1985). Disconfirmation Processes and Consumer Evaluations in Product Usage, Journal of Business Research. 13:235-246.

7) Trần Xuân Kiên – 2006 - Đánh giá sự hài lòng của sinh viên về chất lượng đào tạo tại Trường Đại học Kinh tế và Quản trị kinh doanh Thái Nguyên.

8) Vũ Trí Toàn (2007), Nghiên cứu về chất lượng đào tạo của khoa Kinh tế và Quản lý theo mô hình chất lượng dịch vụ SERVQUAL, Báo cáo nghiên cứu khoa học, trường ĐH Bách Khoa Hà Nội.

9) Wisniewski & Donnelly (1996), Total Quality Managemen: Measuring service quality in the public sector: the potential for SERVQUAL.