
RECOMMENDATIONS IMPROVING TRAINING QUALITY TO MEET ENTERPRISES' NEED AT DONG NAI UNIVERSITY IN VIETNAM

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ABSTRACT

Vietnam officially became a member of the WTO and TPP. So training high-quality human resources for Vietnam is the key to economic development. This is a very big task for the education sector at Dong Nai University. The problem of high quality human resources in the current period have become key elements in the implementation of the industrialization and modernization of the country.

The objectives of this paper were not only to look into the relevant literature but also to find common ground regarding the training quality to enterprises' need and reports the results of a survey of 550 enterprises who to be interviewed and answered 25 questions. In this paper, the researcher used analytical method of explore factor analysis to determining that are components of the training quality to enterprises' need in Dong Nai province, Vietnam. This paper conducted during the time from July 2013 to December, 2015.

The researcher had analyzed KMO test, the result of KMO analysis used for multiple regression analysis. Enterprises' responses were measured through an adapted questionnaire on a 5-point Likert scale. Hard copy and online questionnaire were distributed among Students of Dong Nai University.

In addition, The regression analysis result of Enterprises' need showed that there were four factors: Soft skills; trained knowledge; Information Skills and English skills actually affected enterprises' need with 5 % significance level. The research results were processed from SPSS 20.0 software. The parameters of the model estimated by Least - Squares Method tested for the model assumption with 5% significance level.

Keywords: Enterprises' need, skills, training quality and Dong Nai University.

Introduction

In recent years, the government of Vietnam has had many policies and measures to improve the quality of training to meet the practical needs of society. In addition, elements of science and technology development as well as rushing the process of globalization and international economic integration of each country are more and more extensive.

For this reason, the researching of the quality of education and training quality is a matter that is crucial to promote economic development, society and DNU.

The Vietnam economic growth is still at a low level of development, quality human resources are limited. Therefore, DNU improving the quality of training to promote the economic development is especially important. Also for this reason that it can be said that the quality of training and human resource development must be put at the forefront.

There are many viewpoints and many different interpretations. However, according to the author, the definition most broadly understood is as follows: Quality of education is the demand or demand satisfaction of users with different purposes.

In the field of training, training quality means that graduates have to not only meet the demands of the knowledge, skills and working methodology but also apply for the appropriate work that is dynamic and creative in their field of expertise.

Combined with the practical requirements of the teaching career, the author has boldly chosen the theme: "*Recommendations improving training quality to meet enterprises' need at Dong Nai University in Vietnam*" as a paper in improving the quality of education.

Literature review

Quality has been defined as the ability of a service to satisfy customers (ISO, 9004-2) (ISO, 1991). Asthiyaman (1997) defined service quality as "Perceived service quality is defined as an overall evaluation of the goodness or badness of a product or service". Studies have confirmed that service quality is antecedent of satisfaction (Cronin and Taylor, 1992; Shemwell et al., 1998).

Prabha et al. (2010) further explored that studies on measuring the service quality of educational institutions had also been the focus of increased attentions during the last couple of years due the tough competition among the educational institutions and the demand for excellence in education.

Due to the abstract nature of services as compared to products, measurement of service quality and to its characteristics was also difficult and complicated task for the academicians and practitioners (Parasuraman et al., 1988; Carman, 1990).

However, service quality had been frequently studied in the service marketing literature and measuring the service quality and development of an instrument had been an issue of discussion (Parasuraman et al., 1985; 1988). Service quality was also considered as to what extent a service is adequate to meet the customer's need and wants (Lewis & Mitchell, 1990; Dotchin & Oakland, 1994).

Service quality may be conceptualized as customers or consumers overall feeling about the

superiority or inferiority of the services they received from the service providers (Zeithaml et al., 1990). Most commonly referred definition of service quality is the difference between customer expectations which a customer will receive from a service provider and the perceptions about the services being received by customer from the service provider (Parasuraman et al., 1988; Grönroos, 2001).

Quality, performance and satisfaction are considered to be the key factors and these factors are interrelated in a causal relationship or some time these three factors are used as synonymously due to the similarity in meaning (Cronin et al., 2000; Bitner and Hubert, 1994).

Still there is no precise definition of service quality in educational point of view however, according to O'Neill and Palmer (2004, p: 42), service quality in educational setup had been defined as the difference between what a student expects to receive and his/her perceptions of actual delivery (cited in A. Ijaz, S.M. Irfan, S. Shahbaz, M. Awan, M. Sabir, 2011).

The relationship between students and institutions is two folds, schools rely on students for financial needs and students depend on institutes to impart knowledge and help to forge meaningful employment. Educational institutes are conducting student satisfaction survey with the aim to improve quality of service offered to students (Low, 2000).

Service quality is considered by various researchers to be used in educational sector because of its importance and outcomes. Various researchers have investigated service quality in various dimensions of educational set-up, like Hill (1995) investigated the use of service quality in higher education; Banwet and Datta (2002) studied impact of service quality in library.

Methods of research

This study used of quantitative research methods to survey the enterprises' need in Dong Nai province. The results obtained from quantitative research processed by SPSS statistical software version 20.0.

Quantitative research methods describe and measure the level of occurrences based on numbers and calculations. Quantitative research is the collection of numerical data and exhibiting the view of relationship between theory and research as deductive, a predilection for natural science approach, and as having an objectivist conception of social reality. Therefore, this specific form of research uses the quantitative data to analysis.

After preliminary investigations, formal research is done by using quantitative methods questionnaire survey of 550 enterprises who to be interviewed and answered 25 questions. The reason tested measurement models, model and test research hypotheses.

Data collected were tested by the reliability index (excluding variables with correlation coefficients lower < 0.30 and variable coefficient Cronbach's alpha < 0.60), factor analysis explored (remove the variable low load factor < 0.50). The hypothesis was tested through multiple regression analysis with linear Enter method.

This is research model to further improve the quality of training to satisfy the needs of enterprises are urgent issues that need attention.

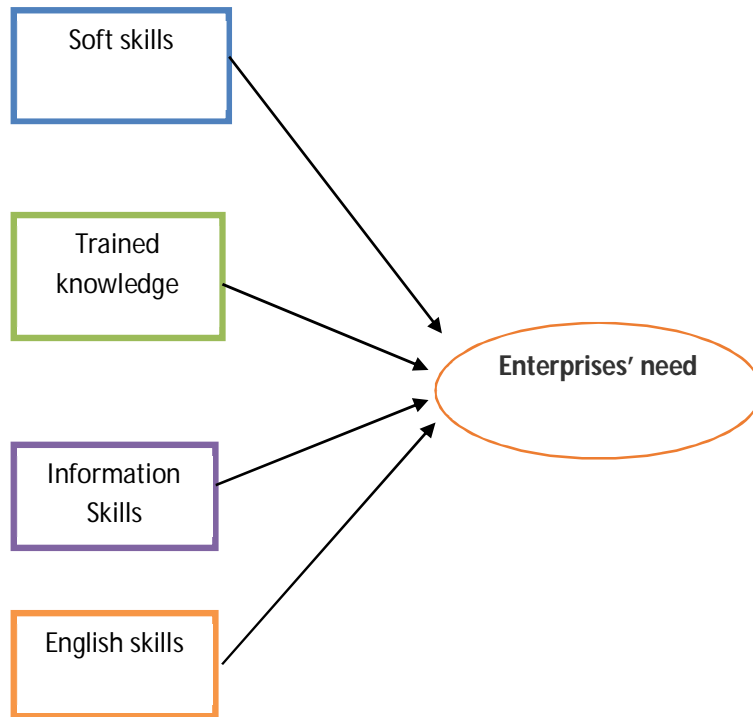


Figure 01: Proposed research model for enterprises' need in Dong Nai province

Hypothesis	Description
H₁	There is a positive relationship between Soft skills and enterprise need with training quality.
H₂	There is a positive relationship between Trained knowledge level and enterprise need with training quality.
H₃	There is a positive relationship between Information Skills and enterprise need with training quality.
H₄	There is a positive relationship between English skills and enterprises need with training quality.

This study is conducted in Dong Nai University. Researched subjects are enterprises in Dong Nai province. The period is from years 7/2012 until 12/2015.

The process of research consists of two steps: first, a preliminary study, the second is formal research. The study used qualitative methods through in-depth interviews with and 30 enterprises to examine the content and meaning of the sentences used in the scale. Formal research used quantitative methods through surveying nearly 550 enterprises in Dong Nai province.

After data are collected, reliable scale will be tested with Cronbach's alpha index, and EFA (Exploratory Factor Analysis), which draws from the official scale.

Based on analyzed results, the author offers solutions to help improve the quality of training to meet enterprises' need and development of Dong Nai University in the future.

Research results

Table 01: Cronbach's Alpha of questions for Soft skills, trained knowledge, Information Skills, English skills and General assessment

code	Questions	Cronbach's Alpha
Soft skills		
SS1	You are completely satisfied about time management of Students in BA	0.928
SS2	You are completely satisfied about the hard - working behavior of Students in BA	
SS3	You are completely satisfied about the personality of Students in BA	
SS4	You are completely satisfied about the group - working skill of Students in BA	
SS5	You are completely satisfied about the Major software use skill of Students in BA	
SS6	You are completely satisfied about the strategic plan making skill of Students in BA	
SS7	You are completely satisfied about the problem solving skill of Students in BA	
Trained knowledge		Cronbach's Alpha
TK1	You are completely satisfied about the social knowledge of Students in BA	0.917
TK2	You are completely satisfied about the economic knowledge of Students in BA	
TK3	You are completely satisfied about the Practicum knowledge of Students in BA	
TK4	You are completely satisfied about the trained major knowledge of Students in BA	
Information Skills		Cronbach's Alpha
IS1	You are completely satisfied about the Internet skill of Students in BA	0.916
IS2	You are completely satisfied about the information process skill of Students in BA	
IS3	You are completely satisfied about the PowerPoint presentation skill of Students in BA	
IS4	You are completely satisfied about the Word skill of Students in BA	
IS5	You are completely satisfied about the Excel skill of Students in BA	
English skills		Cronbach's Alpha
ES1	You are completely satisfied about the English presentation skill of Students in BA	0.942
ES2	You are completely satisfied about the English translation skill of Students in BA	
ES3	You are completely satisfied about the English writing skill of Students in BA	
ES4	You are completely satisfied about the English reading skill of Students in BA	
ES5	You are completely satisfied about the English listening skill of Students in BA	
ES6	You are completely satisfied about the English speaking skill of Students in BA	
General assessment		Cronbach's Alpha
GA1	You are completely satisfied with soft skills of students in BA	0.906
GA2	You completely satisfied about the trained major knowledge of students in BA	
GA3	You completely satisfied about the working behavior of students in BA	

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

Table 01 showed that showed that there were 550 enterprises to be interviewed in Dong Nai province and total of 25 variables that surveyed Corrected Item-Total Correlation greater than 0.3 and Cronbach's Alpha if Item Deleted greater than 0.6 and. Such observations make it eligible for the survey variables after testing scale.

Exploratory Factor Analysis

Cronbach's alpha is 0.8 or above 0.8, while Nunnally (1978) stated that it is still acceptable with the value of 0.6, especially for initial investigation like in this research. Therefore, in this research, the value is confirmed when it is greater than 0.7.

KMO and Bartlett's Test for Enterprises' need in Dong Nai province

Table 02: KMO and Bartlett's Test for Enterprises' need in Dong Nai province

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.868	
Bartlett's Test of Sphericity	Approx. Chi-Square	1.255E4
	df	231
	Sig.	.000

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

Table 02 showed that Kaiser-Meyer-Olkin Measure of Sampling Adequacy was statistically significant and high data reliability (KMO = 0.868 > 0.6). Significance level was 0.000 (<0.05). This showed that data was very suitable for Explored Factor Analysis and regression analysis.

Table 03: Total Variance Explained for Enterprises' need

Com.	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Var.	Cumul. %	Total	% of Var.	Cumul. %	Total	% of Var.	Cumu. %
1	10.662	48.463	48.463	10.662	48.463	48.463	4.889	22.222	22.222
2	3.120	14.181	62.645	3.120	14.181	62.645	4.801	21.824	44.046
3	1.795	8.160	70.804	1.795	8.160	70.804	4.068	18.492	62.538
4	1.155	5.251	76.056	1.155	5.251	76.056	2.974	13.518	76.056
5	.642	2.917	78.972						
6	.637	2.894	81.867						
7	.518	2.353	84.219						
8	.488	2.216	86.436						
9	.451	2.051	88.486						
10	.333	1.515	90.002						
11	.322	1.462	91.464						
12	.301	1.367	92.831						
13	.285	1.294	94.125						
14	.241	1.095	95.220						
15	.231	1.048	96.269						
16	.183	.833	97.101						
17	.175	.796	97.897						
18	.152	.691	98.588						
19	.143	.650	99.238						
20	.116	.527	99.765						
21	.032	.145	99.910						
22	.020	.090	100.000						

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

Table 03 showed that Cumulative % was statistically significant and high data reliability, Extraction Sums of Squared Loadings = 76.056 (> 60 %). This was very significant for regression analysis. There was Initial Eigenvalues value 1.155 (>1).

Common variance: Variance in a variable shared with common factors. Factor analysis assumes that a variable's variance is composed of three components: common, specific and error.

Communality: The proportion of a variable's variance explained by a factor structure. Final communality estimates are the sum of squared loadings for a variable in an orthogonal factor matrix.

Complex variable: A variable which loads on two or more factors.

Principal components analysis and Factor analysis are used to identify underlying constructs or factors that explain the correlations among a set of items.

They are often used to summarize a large number of items with a smaller number of derived items, called factors.

Principal components refer to the principal components model, in which items are assumed to be exact linear combinations of factors. The Principal components method assumes that components (“factors”) are uncorrelated. It also assumes that the communality of each item sums to 1 over all components (factors), implying that each item has 0 unique variance.

Rotated Component Matrix

Table 04: Rotated Component Matrix for Enterprises’ need in Dong Nai province

Code	Component			
	1	2	3	4
SS5	.849			
SS6	.797			
SS7	.786			
SS4	.763			
SS3	.754			
SS2	.673			
SS1	.631			
ES4		.868		
ES2		.867		
ES5		.863		
ES1		.861		
ES3		.815		
ES6		.813		
IS2			.831	
IS3			.824	
IS1			.762	
IS5			.760	
IS4			.749	
TK2				.797
TK3				.785
TK4				.748
TK1				.692

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

Table 04 showed that Rotated Component Matrix was statistically significant and high data reliability. In addition, there were 4 components of Rotated Component Matrix from above questions (> 60%). We had 04 Components following:

Component 1: Soft skills for enterprises’ need (X1).

Component 2: English skills for enterprises’ need (X2).

Component 3: Information skills for enterprises’ need (X3).

Component 4: Trained knowledge at DNU for enterprises’ need (X4).

The remaining factor extraction methods allow the variance of each item to be composed to be a function of both item communality and nonzero unique item variance. The following are methods of Common Factor Analysis:

Principal axis factoring uses squared multiple correlations as initial estimates of the communalities. These communalities are entered into the diagonals of the correlation matrix, before factors are extracted from this matrix.

Model summary analysis for Enterprises’ need in Dong Nai province

Regression model summary analysis for Enterprises’ need in Dong Nai province

Table 05: Model Summary analysis about R Square

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.927 ^a	.859	.858	.37637248	1.986

a. Predictors: (Constant), X4, X3, X2, X1

b. Dependent Variable: Y

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

Table 05 showed that **R Square** was statistically significant and high data reliability. In addition, **Adjusted R Square** reached **85.8 %**. **And Durbin-Watson value was 1.986 (1 < Durbin-Watson < 3)**. This showed that research result was very good for explaining about Enterprises’ need in Dong Nai province.

ANOVA for Enterprises’ need in Dong Nai province

Table 06: Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	471.797	4	117.949	832.645	.000 ^a
Residual	77.203	545	.142		
Total	549.000	549			

a. Predictors: (Constant), X4, X3, X2, X1

b. Dependent Variable: Y

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

Table 06 showed that **F = 832.645** was statistically significant and high data reliability. In addition, Significance value was **0.000**. It had statistically significant. This showed that the research model was very suitable for explaining about Enterprises’ need.

Regression summary analysis for Enterprises' need in Dong Nai province

Table 07: Analysis of regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tol.	VIF
(Con.)	-7.525E-19	.016		.000	1.000		
X1	.292	.016	.292	18.201	.000	1.000	1.000
X2	.194	.016	.194	12.073	.000	1.000	1.000
X3	.277	.016	.277	17.220	.000	1.000	1.000
X4	.812	.016	.812	50.567	.000	1.000	1.000

a. Dependent Variable: Y

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

Table 07 showed that all $t > 2$ was statistically significant and high data reliability. In addition, the regression coefficients were positive. This means that the effects of independent variables in the same direction with the level of Enterprises' need in Dong Nai province. VIF value was 1 ($VIF < 10$).

Conclusions and recommendations

Conclusions

The regression analysis result of enterprises' need showed that there were four factors, which included of factors following: Soft skills; trained knowledge; Information Skills and English skills actually affected enterprises' need with 5 % significance level. The research results were processed from SPSS 20.0 software. The parameters of the model estimated by Least - Squares Method tested for the model assumption with 5% significance level. At the same time, the result was also a scientific evidence and important for researchers, and policy makers.

Recommendations for enterprises' need

- English skills for enterprises' need

Dong Nai University should continue to improve English skills training for student in order to help them secure good jobs more easily. Besides, students should study English more and more.

It is a big concerned for teenagers nowadays as they are unaware of the importance of English language as they tend to ignore to learn the language. English is the most important and the most useful language in the world today.

- Computer skills for enterprises' need

Dong Nai University should continue to train students in relevant computer skills in order to help student secure good jobs more easily. Besides, Dong Nai University should continue to invest information technology in order to help students practice computer easier. Especially, each student has a computer to study and to research science.

- Soft skills for enterprises' need

Dong Nai University should continue to train Soft skills for students in order to help student secure good jobs more easily. Besides, Dong Nai University should organize the conference that helps students have a good opportunity to relate with enterprises. This is a good chance for students to understand enterprises' operation.

Dong Nai University of Students should study the skills following: group – working; time management; decision make; strategic plan; presentation; dialogue; problem solving; public art and other skills.

- Trained knowledge for enterprises' need

Dong Nai University should continue to improve the training program of BA major for enterprises' need.

Dong Nai University continues to restructure the Education System and the Certificates System. Dong Nai University continues to restructure to diversify forms of education like full-time, part-time, regular and irregular as well as remote education and supply enterprises' need.

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