

Effect on the Education Needs and Education Transition and Practical Results of Logistics NCS

Soo-Ho, Choi¹ and Jeong-Il, Choi²

¹Primary author, Ph.D. Research Scholar, Division of Business, Sogang University

²Corresponding author, Professor, Division of Business, Sungkyul University

ABSTRACT

Background/Objectives: The reason for conducting NCS training at the University improves students' skills through education of practical center and job skills while strengthening the competitiveness of the work in practice because we expect it to have a positive effect.

Methods/Statistical analysis: The purpose of this study is to analyze and look for the practical achievements in the industry and education transition look at the role and necessity of NCS. To do this, I create a model to study 'NCS training ⇒ Education Transition ⇒ Practice result' conducted a survey of 300 university students in the metropolitan area. If NCS training helps employment and practices, educational institutions including the University should be able to present the plan to be operating effectively NCS education/training.

Findings: Analysis result the internal consistency was obtained and both convergent validity and discriminant validity were examined to ensure. Results using structural equation modeling showed that the model for this study. Hypothesis Testing Results, standardized coefficients of hypotheses appear over the appropriate level was analyzed that the high correlation. The results show that NCS training affects the Education Transition and that Education Transition affects Practice result in the significance level.

Improvements/Applications: Therefore NCS education in University are expected to have a positive impact on the education transition and practical performance of companies in the industry.

Keywords: National Competency Standards, Education needs, Transition training, Logistics, Practical performance.

1. INTRODUCTION

Market Data National Competency Standards (NCS) is organized industry/level including technical, knowledge, knowledge required in the practice of the industry by country. NCS made by the country is a

country that systematically standardizing the ability of such knowledge/skills/attitudes needed to perform the job successfully in industry. NCS has developed education/training courses of practical center and types of qualifications required in the country which was new and redesigned.

NCS is currently performed in over 130 countries and typically successful country may have more than 60 years of history in the UK. The European Union, including Spain, France and Germany have introduced an EQF since 2000 in order to maintain the compatibility of national qualifications between learners and workers. In the Asia-Pacific region, Australia (NCS) and Hong Kong (SCS), Malaysia (NOSS), Japan (VAAS) operates the NCS. South Africa (NQF) educates in vocational basic skills based on the NCS.

The reason for conducting NCS training at the University improves students' skills through education of practical center and job skills while strengthening the competitiveness of the work in practice because we expect it to have a positive effect. The purpose of this study is to analyze and look for the practical achievements in the industry and education transition look at the role and necessity of NCS.

To do this, I create a model to study 'NCS training \Rightarrow Education Transition \Rightarrow Practice result' conducted a survey of 300 university students in the metropolitan area. If NCS training helps employment and practices, educational institutions including the University should be able to present the plan to be operating effectively NCS education/training.

Analysis result the internal consistency was obtained and both convergent validity and discriminant validity were examined to ensure. Results using structural equation modeling showed that the model for this study. Hypothesis Testing Results, standardized coefficients of hypotheses appear over the appropriate level was analyzed that the high correlation.

2. HYPOTHESES

To determine the awareness and practice result of logistics NCS education at the university, it was created the research model separate "NCS training \Rightarrow Education transition \Rightarrow Practice result". The reason for conducting NCS training at the University improves students' skills through education of practical center and job skills while strengthening the competitiveness of the work in practice because we expect it to have a positive effect. NCS transition training is to expect students to improve learning, such as knowledge, attitudes and skills through NCS education and NCS show a positive impact on satisfaction increased to the curriculum (E. Y. Lee, etc., 2011).

NCS Education and Education Transition

Research on NCS education and education transition looks forward to progress more diverse in the future. For the effects of the education transition by NCS education characteristic, (H. D. Kim, 2015) examined a positive impact investigating the structural equation modeling using the AMOS graph, (J. S. Jung2015) analyzed that import and export management training courses apply the NCS, and showed positive(+) relationship to perform the exploratory study for education transition on education outcomes. (M. K. Kim, I. G. Na2012) analyzed that education training transfer contributing to the knowledge, skills, attitudes, etc. work is improved if it introduced a variety of training methods and increase investment in training for this reason, education and training exert a positive(+) effect on training transfer. (E. J. Yeo etc., 2015) examined that the learning outcomes and student satisfaction is improved depending on the applied teaching

methods in the college of business education. Therefore this study was set up following hypothesis about the relationship between NCS education and training transition with reference to previous research.

Hypothesis 1: NCS training will seem a positive impact on education transition.

Education Transition and Practical Business Results

Various publications that give meaning to the training transition have been published since education is expected to practice and perform. In this regard NCS training transition, (J. H. Lee etc, 2015) investigated that directly affect the education transition of communicate ability and technical skills etc among the NCS job basic skills sub-factors to job performance satisfaction. J.Y. Joo, S.Y. Han(2015) investigated that the satisfaction of lectures/classes and self-efficacy at the university could lead to the satisfaction of working on the job. (M.K. Kim, I.G. Na, 2012) presented that the transition training such as duty ability and motivation grants, etc. gives a positive(+) effect on labor productivity in corporate performance. (J. H. Bae etc, 2015) analyzed the education transition such as the education environment and education satisfaction of college student has a positive impact on career decision level and practice. Therefore this study established a relationship between education transition and practice results with reference to previous research to the following hypothesis

Hypothesis 2: NCS training transition will show a positive effect on the practical business results of the enterprise.

3. RESEARCH METHODS

Data Collection

This study is to determine for the need for education, education transition, practical result related to logistics NCS training. To do this, I create a model to study “NCS training \Rightarrow Education Transition \Rightarrow Practice result” conducted a survey of 300 university students in the metropolitan area from 19 September 2016 to 30 September for the 2 weeks. The questionnaire is composed of “First, NCS training, Second, transition training, third, practice result” divided into three factors. The survey was conducted mainly credibility and importance, feasibility, relevance analysis to be investigated by Likert 5-point scale by category. The SPSS WIN 18.0 was used for the survey in order to analyze the reliability analysis and exploratory factor analysis.

Operational Definition of Variables

In this study, the variables related to the transfer of education and the practical performance of the students through NCS education are used. The metrics for each variable with NCS training, training transition and practices result and the number of references associated with each variable summarized in Table 1.

Empirical Analysis

In this study, to determine the internal consistency, Cronbach’s Alpha coefficient was used for reliability testing methods typically used in social science research. In a preliminary study of Nunnally (1978) it was presented that if the coefficient value is more than 0.6, the reliability. And the actual research had suggested that reliability is ensured when more than 0.7.

Table 1
Measurement Variable

<i>Measurement concepts</i>	<i>Measure Item</i>	<i>References</i>
NCS Education	The NCS curriculum deemed necessary in university education.	K.I. Ko (2015), E.K. Park etc.
	I think the profession basic skills is reflected well to the NCS curriculum.	(2015), J.M. Baek, Y.G. Park (2012), E.J. Oh (2016), E.M. Na (2016), E.J. Kim, J.E. Yoon (2016), M.S. Kang (2016)
	NCS education is reflected well the common ability provided by the professional	
	NCS education is required at a university after high school & college.	
Education Transition	Learning content is expected to be easier to understand than traditional courses in the NCS curriculum.	J.J. Kim (2016), A.J. Boo (2015), G.D. Kim (2015), H.J. Shin (2015), E.J. Yeo (2015), M.K. Kim, I.G. Na (2012) ⁴ , Y.J. Shin, H.D. Song (2015), H.D. Kim (2015), J.S. Jung (2015)
	If I receive an NCS course, I am determined to cause confidence to apply to the employment and working.	
	NCS training is beneficial for sharing information who are learning.	
	NCS training is beneficial for employment-related qualifications.	
Practical Business Result	NCS training is suitable skills center personnel management in the employment of corporate and industrial.	B.W. Son (2016), W.G. Cho (2016), H.L. Yoon (2016), H.C. Lim ets (2015), J.G. Park (2015), J.H. Lee etc (2015), Y.J. Joo, etc (2015),
	NCS training is well organized industry job level.	
	NCS education is thought to be helpful for business growth.	

Cronbach's Alpha coefficients in Table 2 appears in the more than 0.7. Measurement tools used in the study are able to ensure that the internal consistency. To verify the validity of the measured variable, we conducted exploratory factor analysis using the Varimax rotation to the principal component analysis.

As you can see in Table 2, factor loading values has been determined that all tied well with each other same variables and are calculated by the reference value of 0.4 or more. The AVE and CR values of the metrics shown by the reference value of 0.5 and 0.7 in Table 3. This demonstrates the adequate convergent validity of the model.

Table 2
Reliability Analysis and Exploratory Factor Analysis Result

<i>Factor</i>	<i>NCS Education</i>	<i>Education Transition</i>	<i>Practical Business Result</i>	<i>Cronbach's a</i>
NCS Education	.838	.231	.065	0.763
	.825	.193	.138	
	.493	.247	.379	
	.402	.364	.358	
Education Transition	.093	.729	.290	0.743
	.026	.716	.357	
	.299	.681	-.082	
	.155	.584	.257	
Practical Business Result	.172	.213	.837	0.710
	.367	.052	.704	
	-.009	.539	.548	

Note: KMO = 0.813, Bartlett's $\chi^2 = 359.765$ ($p < 0.001$).

Table 3
Discriminant Validity Analysis

<i>Factor</i>	<i>Average</i>	<i>AVE</i>	<i>CR</i>	<i>NCS Education</i>	<i>Education Transition</i>	<i>Practical Business Result</i>
NCS Education	3.9670	0.581	0.803	0.762		
Education Transition	3.7445	0.523	0.821	0.517	0.723	
Practical Business Result	3.6850	0.534	0.808	0.555	0.503	0.731

Note: Bold number of diagonal is AVE square root of variables, Any other value is a correlation coefficient between the variable.

The correlation between the variables in order to determine the feasibility study was analyzed and we compared the correlation coefficient and the AVE square root value of each variable. Calculated results the AVE square root values of each variable were in 0.762, 0.723, 0.731. Since the AVE square root value is larger than the other coefficient values, discriminant validity between variables is assured.

The purpose of this study is to verify through empirical analysis affects the NCS training needs and practical achievements with NCS training on business administration and logistics. To validate the model, a study presented, we used structural equation modeling using AMOS 18.0. To test hypothesis, we are verified by the Maximum likelihood estimation of fitness for a research model.

Model fits are represented $\chi^2 = 62.360$ (df = 42, $p = 0.022^*$), CFI = 0.930(>0.9), TLI = 0.909(<0.9), RMR = 0.05(<0.05), RMSEA = 0.073 (accommodating up to 0.8), GFI = 0.891(acceptable level). Since the goodness of fit exceeds the recommended standard, this research model is appropriate and hypothesis testing is performed.

It conducted a causal relationship through structural equation modeling analysis of the education necessity and training transition, practical performance. The results are as Table 4. The results of the study hypothesis model is Shown as Figure 1. In research model, the standardized coefficients of “NCS training \Rightarrow transition training” and “education transition \Rightarrow practical result” was calculated to be 0.585($p < 0.001$) and 0.887($p < 0.001$) respectively.

Therefore It showed a very high affinity between each of the variables.

Table 4
Hypothesis Testing through structural equation

<i>Theory</i>	<i>Route</i>	<i>Standardized coefficients</i>	<i>P</i>	<i>Verification</i>
Theory 1	NCS Education \Rightarrow Education Transition	0.585	***	Selection
Theory 2	Education Transition \Rightarrow Practical Business Result	0.887	***	Selection

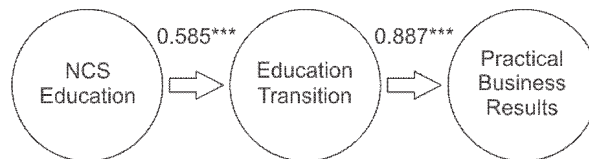


Figure 1: Research Model Analysis Result

4. CONCLUSION

To understand the necessity of Logistics NCS education and transition and practical business results, this study was conducted a survey of 300 college students majoring in Business Administration in the metropolitan area. Survey information is divided into three hypotheses, we were composed of “NCS training \Rightarrow Transition \Rightarrow Practice Result” and the SPSS WIN 18.0 was used for the reliability and importance, feasibility analysis.

To verify the validity of the measured variable, the results of exploratory factor analysis factor loadings of the study appear in both the reference value of 0.4 was determined that the variables are well-organized. Discriminant validity (AVE) and the concept of reliability (CR) values of the metrics are shown as the reference value of 0.5 and 0.7 and concentration feasibility of the variables used in this study, it was investigated by assured.

To determine the feasibility analysis, it analyzed the correlation between variables. Analysis result the AVE square root values of the variables showed a larger value than in other coefficients respectively 0.762, 0.723, 0.731. Therefore, the discriminant validity between variables was secured.

Analysis results the standardized coefficients of “NCS training \Rightarrow transition training” and “education transition \Rightarrow practical result” was calculated to be 0.585($p < 0.001$) and 0.887($p < 0.001$) respectively. It showed a very high affinity. Therefore NCS education in University are expected to have a positive impact on the education transition and practical performance of companies in the industry.

In this paper, we conducted a survey of college students attending the university. We should measure company’s performance targets workers working in the industry. But currently conducting NCS training in universities was only after several years. So still under NCS training, there are not workers employed by the company. Therefore, NCS training have limitation to identify how a direct effect on the working performance. This issue will continue to be analyzed affecting the NCS training to practice result and requires time.

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