

A Research on the Basic Competency for Cultivating the Intelligent Persons Cognized by College Students and Personnel Managers in Enterprises

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Abstract

This study was carried out to investigate how college and junior college students' cognition of basic competency and the college curriculum itself affect the basic competency for cultivating the intelligent persons. Additionally, it examined the degree of the basic competency of college students that had been estimated by personnel managers in enterprises, and how much a college curriculum helps students to develop the basic competence. From October 2012 to July 2013, this research targeted 532 juniors and seniors in J University and 430 sophomores and juniors in S junior College. 30 business personnel managers completed the questionnaires of investigation, 12 from large enterprises and 18 from medium and small enterprises which were classified on a business scale. 14 of them were from manufacturing business and 16 from non-manufacturing businesses, which were classified by industry. There are two results. First, the research shows that J University and S Junior College students are mostly in the higher level of two factors in the basic competency, vocational ethics and communication skills. On the contrary, they are the poorest in mathematical skills. Second, as a result of the personnel managers examining the extent of the basic competency of college students, information capacity and communication skills were rated high; vocational ethics, the lowest.

Keywords: *Basic Competency, College Student, Intelligent Person, Personnel Manager in Enterprise*

1. Introduction

1.1. Necessity and Objective of Study

Basic competencies are common and basic skills required in professional life and those play a role in performing jobs successfully in most of occupational categories regardless of positions [1]. Such basic competencies that can be a force for all occupational categories are not only a social need, but also an important factor cognized in enterprises especially. It is expected that the basic competencies are specialized as a regular school education program.

Enterprises in Korea propose a globalized intelligent person that performs duties with specialized knowledge, right senses of values, and cooperation with creativity and challenge

spirit under global environments. In addition, they require different basic competencies including planning and documentations, presentations, problem solving methods, right senses of values, creative power of thought, leadership, personal relations, and communication abilities [2].

Moreover, in the case of the large enterprises, the enterprises develop and apply an aptitude test for abilities that evaluates the basic competencies of applicants in hiring new employees. Also, medium and small-sized enterprises stress personality, problem solving ability, and skills of personal relations including specialized knowledge and techniques. In considering the ways of hiring new employees in enterprises, an education system that cultivates basic competencies through combining liberal arts, specialized subjects, and educational training programs organically is desperately required in college education. In addition, it is recognized that college students have been focused on specifications to amass for getting their jobs but that is nowhere near the basic competencies. Thus, it is necessary to reflect the cognition of basic competencies in college students required by enterprises to the curriculum and teaching-learning activity.

In this study the cultivation of basic competencies for the intelligent person cognized by colleges students at the current situation of operating the applicant and evaluation plans including curriculums and programs related to basic competencies is investigated and also examined in terms of personal managers in enterprises. Based on the investigation, the degree of basic competencies in college students can be determined and it helps to elevate the possibility of youth employment through supplementing the curriculum and program for cultivating the intelligent persons with capabilities required by enterprises.

1.2. Objectives

For achieving the objective of this study, issues are configured as follows.

First, how senior and junior college students cognize the basic competencies for cultivating the intelligent persons?

Second, how personal managers in enterprises cognize the basic competencies for cultivating the intelligent persons?

2. Research Method

2.1. Subjects

Subjects in this study are 532 junior and senior students at J senior college and 430 sophomore and junior students at S junior college. Subjects are classified by their majors as four different departments, such as Humanities and Social sciences, Science and Engineering, Nursing and Health studies, and Arts, and the subjects are considered by following the characteristics and scales of the schools. Also, personal managers in enterprises are selected based on the scales of enterprises, 12 large enterprise personal managers and 18 medium and small-sized enterprise personal managers and 14 and 16 personal managers are selected based on the fields of industries, such as manufacturing and non-manufacturing industries, respectively. Table 1 shows the subjects and classifications in this study.

Table 1. Subjects

Classification			Frequency(%)	Total
J Senior College	Sex	Male	231(43.4)	532(100)
		Female	301(56.6)	
	Grade	Junior	257(48.3)	532(100)
		Senior	275(51.7)	
	Dept.	Humanities and Social sciences	118(22.2)	532(100)
		Science and Engineering	176(33.1)	
		Nursing and Health studies	198(37.2)	
		Arts	40(7.5)	
	S Junior College	Sex	Female	430(100)
Grade		Sophomore	296(68.8)	430(100)
		Junior	134(31.2)	
Dept.		Humanities and Social sciences	163(37.9)	430(100)
		Science and Engineering	79(18.4)	
		Nursing and Health studies	90(20.9)	
		Arts	98(22.8)	
Personal Manager	Scale	Large enterprise	12(40)	30(100)
		Medium and Small-sized enterprise	18(60)	
	Field	Manufacturing industry	14(46.7)	30(100)
		Non-manufacturing industry	16(53.3)	

2.2. Processes

This study was processed from October 2012-July 2013 and a questionnaire was developed centered on the experts of the teaching and learning center. The investigation was performed with subjects and the survey was implemented at the training of the personal managers in enterprises performed by HUREC.

2.3. Measurement Tools

The measurement tools used in this study were developed by the experts of the teaching and learning center by following the steps. The first step prepares a draft of the questionnaire based on the previous studies related to basic competencies and the validity of the questions is examined after due consultation with the experts.

The second step develops easy and simple questions for students based on the 10 basic competencies classified by the Human Resources Development Service of Korea (2010)[3].

The third step develops questions for investigating helps from the studies of a plan for creating jobs through strengthening hiring capabilities in enterprises published by Kim et al. (2009)[4] and a cultivation for basic competencies learned from the college education (specialized fields, other specialized fields, liberal arts/general education, and educational training programs) based on the comparative study on develops of basic competencies between the excellent job creation enterprises and the average enterprises performed by Kim et al. (2011)[5].

The fourth step establishes a classification system of enterprises by selecting the proper questions for personal managers designed by three steps based on the hiring tendency and characteristic investigation of new members performed by the Korea Business Federation (2011) and the movement and prospection of hiring new members in 2012[6].

2.4. Material Analysis

The data selected by this study was analyzed using a statistic program, SPSS 18.0. Also, the average and standard deviation of the data were performed using a frequency analysis in order to investigate the degree of cognizing basic competencies in students and of cultivating basic competencies for the intelligent person cognized by personal managers.

3. Result

The objective of this study is to investigate the basic competencies for the intelligent person cognized by students and personal managers in enterprises. The results are summarized as follows.

3.1. Results of the Cognition on Basic Competencies for the Intelligent Person in College Students

This study investigates the cognition on basic competencies, the degree of cultivating college education and basic competencies, the effects of the college education on cultivating majors, liberal arts, and basic competencies, and the degree of cultivating basic competencies after graduating from colleges for the subjects of J senior and S junior college students. The results of the investigation can be presented in Table 2.

Table 2. Results of the Cognition on Basic Competencies in College Students

		(person, %)						
Item		Never	No	Average	Yes	Very	<i>M</i>	<i>SD</i>
Communication ability	J college (n=532)	-	10 (1.9)	68 (12.8)	287 (53.9)	167 (31.4)	4.14	.70
	S college (n=430)	-	13 (3.0)	73 (17.0)	245 (57.0)	99 (23.0)	4.00	.72
Mathematical ability	J college (n=532)	3 (0.6)	33 (6.2)	138 (25.9)	239 (44.9)	119 (22.4)	3.82	.86
	S college (n=430)	3 (0.7)	50 (11.6)	168 (39.1)	154 (35.8)	55 (12.8)	2.48	.88
Problem solving ability	J college (n=532)	1 (0.2)	20 (3.8)	153 (28.8)	256 (48.1)	102 (19.2)	3.82	.78
	S college (n=430)	-	18(4.2)	161 (37.4)	200 (46.5)	51 (11.9)	3.66	.73
Self-development ability	J college (n=532)	1 (0.2)	11 (2.1)	124 (23.3)	246 (46.2)	150 (28.2)	4.00	.78
	S college (n=430)	1 (0.2)	11(2.6)	137 (31.9)	211 (49.1)	70 (16.3)	3.78	.74
Resource management ability	J college (n=532)	2 (0.4)	19 (3.6)	127 (23.9)	258 (48.5)	126 (23.7)	3.91	.80
	S college (n=430)	1 (0.2)	20(4.7)	143 (33.3)	217 (50.5)	49 (11.4)	3.68	.74
Personal Relations	J college (n=532)	1 (0.2)	10 (1.9)	82 (15.4)	260 (48.9)	179 (33.6)	4.13	.75

	S college (n=430)	2 (0.5)	12(2.8)	82(19.1)	226 (52.6)	107 (24.9)	3.99	.78
Information ability	J college (n=532)	-	11 (2.1)	113 (21.2)	262 (49.2)	146 (27.4)	4.02	.75
	S college (n=430)	-	13(3.0)	121 (28.1)	223 (51.9)	73 (17.0)	3.82	.73
Organization understand- ability	J college (n=532)	1 (0.2)	19 (3.6)	119 (22.4)	272 (51.1)	121 (22.7)	3.92	.77
	S college (n=430)	1 (0.2)	14 (3.3)	160 (37.2)	208 (48.4)	47 (10.9)	3.66	.72
Technical capability	J college (n=532)	1 (0.2)	30 (5.6)	128 (24.1)	265 (49.8)	108 (20.3)	3.84	.81
	S college (n=430)	1 (0.2)	21 (4.9)	157 (36.5)	203 (47.2)	48 (11.2)	3.64	.75
Vocational ethics	J college (n=532)	-	9 (1.7)	61 (11.5)	254 (47.7)	208 (39.1)	4.24	.71
	S college (n=430)	1 (0.2)	13 (3.0)	74 (17.2)	237 (55.1)	105 (24.4)	4.00	.74

As shown in Table 2, in the case of the cognition on basic competencies in J senior college students, the results of the averages in each item are presented by the order of Vocational ethics (4.24), Communication ability (4.14), Personal relations (4.13), Information ability (4.02), Self-development ability (4.00), Organization understandability (3.92), Resource management ability (3.91), Technical capability (3.84), and Problem solving ability and Mathematical ability (3.82). Thus, the vocational ethics and communication ability in basic competencies for J senior college students are highly cognized but the problem solving ability and mathematical ability are cognized as low levels.

In the case of the cognition on basic competencies in S junior college students, the averages are presented by the order of Communication ability and Vocational ethics (4.00), Personal relations (3.99), Information ability (3.82), Resource management ability (3.68), Problem solving ability and Organization understandability (3.66), Technical capability (3.64), and Mathematical ability (2.48). Thus, the Communication ability and Vocational ethics in basic competencies for S junior college students are highly cognized but Mathematical ability is cognized as a low level.

3.2. Results of the Cognition on Basic Competencies for the Intelligent Person in College Students

Table 3. Results of the Cognition about Education Fields Helping in the Cultivation of Basic Competencies after Graduation

		(person, %)						
Division		Not formed at all	Poor not formed	Formed slightly larger	Formed a very large	<i>M</i>	<i>SD</i>	
Major fields	J college (n=532)	3 (0.6)	51 (9.6)	189 (35.5)	289 (54.3)	3.41	.68	
	S college (n=430)	3 (0.7)	27 (6.3)	148 (34.4)	252 (58.6)	3.50	.64	
Other major fields	J college (n=532)	20 (3.8)	149 (28.0)	283 (53.2)	80 (15.0)	2.79	.73	

	S college (n=430)	13 (3.0)	101 (23.5)	265 (61.6)	51 (11.9)	2.82	.66
Liberal arts/General education	J college (n=532)	18 (3.4)	113 (21.2)	281 (52.8)	120 (22.6)	2.94	.75
	S college (n=430)	5 (1.2)	88 (20.5)	247 (57.4)	90 (20.9)	2.98	.67
Education and training program	J college (n=532)	20 (3.8)	107 (20.1)	283 (53.2)	122 (22.9)	2.95	.76
	S college (n=430)	14 (3.3)	85 (19.8)	238 (55.3)	93 (21.6)	2.95	.73

As shown in Table 4, in the case of education fields helping in the cultivation of basic competencies after graduation in J senior college students, the results of the averages in each division are presented by the order of Major fields (3.41), Education and training program (2.95), Liberal arts/General education (2.94), and Other major field (2.79). Thus, education of major fields in the cultivation of basic competencies for J senior college students are cognized that the most help. And Liberal arts/General education, Education and training program, and Other major fields are cognized as some help but largely not formed.

In the case of education fields helping in the cultivation of basic competencies after graduation in S senior college students, the results of the averages in each division are presented by the order of Major fields (3.50), Liberal arts/General education (2.98), Education and training program (2.95), and Other major fields (2.82). Thus, education of major fields in the cultivation of basic competencies for S senior college students are cognized that the most help. And Liberal arts/General education, Education and training program, and Other Major fields are cognized as some help but largely not formed.

3.3. Results of the Cognition on Basic Competencies for the Intelligent Person in Personal Managers

The cognition on basic competencies in college students for personal managers in enterprises is also investigated. The investigation is focused on the level of basic competencies and the educational fields affecting the cultivation of basic competencies after graduating from colleges and the analysis is performed using a cross-tabulation analysis according scales of enterprises and types of industries. The results are summarized in Table 3.

Table 4. Results of the Cognition on Basic Competencies in Personal Managers

(person, %)								
	Item	Never	No	Average	Yes	Very	M	SD
Basic Competencies (n=30)	Communication ability	0 (0.0)	2 (6.7)	14 (46.7)	14 (46.7)	0 (0.0)	3.40	.62
	Mathematical ability	0 (0.0)	6 (20.0)	12 (40.0)	12 (40.0)	0 (0.0)	3.20	.76
	Problem solving ability	0 (0.0)	6 (20.0)	14 (46.7)	10 (33.3)	0 (0.0)	3.13	.73
	Self- development ability	0 (0.0)	6 (20.0)	14 (46.7)	12 (40.0)	0 (0.0)	3.13	.73
	Resource	0	4	14	12	0	3.26	.69

management ability	(0.0)	(13.3)	(46.7)	(40.0)	(0.0)		
Personal relations	0 (0.0)	4 (13.3)	18 (60.0)	8 (26.7)	0 (0.0)	3.13	.62
Information ability	0 (0.0)	0	14 (46.7)	16 (53.3)	0 (0.0)	3.53	.50
Organization understand- ability	0 (0.0)	4 (13.3)	18 (60.0)	8 (26.7)	0 (0.0)	3.13	.62
Technical capability	0 (0.0)	2 (6.7)	22 (73.3)	4 (13.3)	2 (6.7)	3.20	.66
Vocational ethics	0 (0.0)	8 (26.7)	14 (46.7)	8 (26.7)	0(0.0)	3.00	.74

As shown in Table 3, in the cognition on basic competencies in college students for personal managers in enterprises the averages are presented by the order of Information ability (3.53), Communication ability (3.40), Resource management ability (3.26), Technical ability and Mathematical ability (3.20), Problem solving ability and Self-development ability and Personal relations and Organization understandability (3.13), and vocational ethics (3.00). Therefore, the personal managers in enterprises highly cognize Information ability and Communication ability in basic competencies and Vocational ethics is cognized as a low level.

3.4. Results of the Cognition on Basic Competencies for the Intelligent Person in Personal Managers in Enterprises

Table 5. Results of the Cognition about Education Fields Helping in the Cultivation of Basic Competencies after Graduation

		(person, %)						
Division		Not formed at all	Not formed poorly	Formed slightly large	Formed very large	M	SD	
the cultivation of basic competencies after graduation (n=30)	Major fields	0 (0.0)	10 (33.3)	10 (33.3)	10 (33.3)	3.00	.83	
	Other major fields	0 (0.0)	20 (66.7)	10 (33.3)	0 (0.0)	2.33	.47	
	Liberal arts/General education	0 (0.0)	6 (20.0)	24 (80.0)	0 (0.0)	2.80	.40	
	Education and training program	0 (0.0)	22 (73.3)	4 (13.3)	4 (13.3)	2.40	.72	

As shown in Table 5, in the case of education fields helping in the cultivation of basic competencies after graduation in personal managers in enterprises, the results of the averages in each division are presented by the order of Major fields (3.00), Liberal arts/General education (2.80), Education and training program (2.40), and Other major fields (2.33). Thus, education of Major fields in the cultivation of basic competencies for personal managers in enterprises are cognized that the most help.

In the cognition on education fields helping in the cultivation of basic competencies after graduation for personal managers in enterprises and senior college students, the results of the

averages in each division commonly are presented by the order of Major fields>Liberal arts/General education>Education and training program>Other major fields (2.82).

However, in the averages between personal managers in enterprises and senior college students, the averages of personal managers in enterprises are lower. This means that college education is not meet to expectation for the intelligent persons required from enterprises in the cultivation of basic competencies.

4. Conclusion and Suggestion

4.1. Conclusion

This study investigates the cognition on basic competencies in senior and junior college students in order to examine the cognition on basic competencies including the effects of the college education on the basic competencies for the intelligent persons. In addition, the cognition on basic competencies in personal managers is also investigated.

The conclusions of this study can be summarized as follows.

First, the vocational ethics and communication ability are highly cognized by J and S college students but the mathematical ability is most lowly cognized. It agrees with the study performed by Lee et al. (2012)[7] in which the investigation on basic competencies represents better-than-average and the problem solving ability shows the lowest level compared to the highest level of the vocational ethics. Thus, college students who are for graduating college senior cognize the vocational ethics and communication ability as the most important issues.

Second, in the investigation of the cognition on basic competencies for the intelligent person in college students for personal managers, the information ability (3.53) and communication ability (3.40) are highly cognized but the vocational ethics (3.00) is most lowly cognized.

4.2. Suggestion

This study presents the following suggestions based on the results.

First, because this study is performed without considering the differences in locality, scales, sexes, and scores in J and S colleges the differences in averages between these two colleges are not investigated. However, a further study on the difference between the senior and junior colleges is required.

Second, it is difficult to generalize the cognition on the issue by personal managers as a common cognition level in the entire personal managers because the subjects in this study are only 30 personal managers. Therefore, it is necessary to consider the subjects of personal managers according to scales and types of enterprises nationwide.

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