A Study on the Effectiveness of Enterprise and Training for HRD in Small and Medium Enterprise

Ji-Chul Yoo* · Kwang-Soo Kim* · Sang-Jin Hong**

*Dept. Of Industrial Management Engineering, ChungJu National University

**Dept. Of Management Information, KyungKi University

Human Resources Development를 위한 기업교육의 효율성에 관한 연구

류 지 철*·김 광 수*·홍 상 진**
*충주대학교 산업경영공학과·**경기대학교 경영정보학과

Abstract

지식기반 경제 사회의 진입과 더불어 조직에서 가장 중요한 요소는 인적자원이며 인적자원의 효율적인 활용이야 말로 기업 경영에 있어서 핵심이라고 할 수 있다. 이러한 인적자원의 역량을 향상 시킬 수 있는 방법으로 대부분의 기업들은 교육훈련을 실시하고 있다. 교육훈련의 효율적인 활용이야 말로 인적자원의 개발이고, 인적자원의 개발이기업의 지속가능한 경영에 가장 중요한 부분이라고 할 수 있다. 인적자원 개발을 위한 교육훈련이 조직의 발전에 최우선이 되어야 함은 아무리 강조해도 지나침이 없다. 기업에 있어서 사람이 자산인데 자산을 키우기 위한 최선의 방법으로도 기업들은 효율적인 교육 훈련에 많은 연구를 실시하고 있다. 인적자원이 기업의 성패를 좌우할 만큼 중요한 핵심요소이고 기업의 핵심인 인적자원을 개발하기 위해선 교육 훈련이 핵심이고 핵심인 교육훈련은 기업의 인적자원개발에 대부분을 차지하고 있다고 해도 과언이 아닐 것이다.

따라서 본 연구의 목적은 기업교육의 효율성을 제고하기 위하여 HRD 요소들에 있어서 조직원 직무항상을 위한 교육효과에 초점을 맞추었다. 교육훈련에 관한 요인분석 결과 교육의 중요성인지, 교육 참가횟수, 교육내용 등의 사전인지가 교육의 효과를 높이는 요인으로 나와 있고, 이러한 결과를 토대로 회귀모형 분석을 제시하였다.

Keywords: education, training, human resource development

1. Introduction

Human resources is the most important element in an organization in the knowledge base economy. Efficient use of the human resources is indeed the core of business management. To enhance this human resource capacity, most enterprise conduct education and training. Efficient use of education and training is indeed development of human resources. And it is

human resources that are the most important part in the enterprise sustaining management. So the best way to enhance the people property through education and training. The most of Korea enterprise perceive that education and training has been making enterprise growth rapidly and global competition along with Korea economic development. It was proven by the past 40 years in Korea.

Human resources is a core element as much as to

M · P: 017-433-0729, E-mail: kskim@cjnu.ac.kr

2010년 10월 20일 접수; 2010년 11월 18일 수정본 접수; 2010년 11월 20일 게재확정

[♥] 이 논문은 충주대학교 학술연구조성비에 의해 쓰여 진 논문임

ᄬ 교신저자: 김광수, 충청북도 충주시 충주대학교 공과대학 산업경영공학과

influence a success of the enterprise. And to develop the human resources which is the core of business, education and training is essential. And it is not too much to say that education and training holds the most part of human resources development.

There are in various ways of approaching human resources development. But especially, this study approach education and training for human resource development in small and medium enterprise.

2. Theoretical approach on education and training for HRD

2.1 Concept of enterprise education

Business education is one of the process of developing human resources in enterprise. There are some view that enterprise education is one branch of human resources development. Most of scholars define enterprise education itself is the human resources development Definition of the human

resources development is enterprise action or self-leading activity for enhancement of knowledge, technology and activity. HRD is need to learn the skills and knowledge for the enterprise wanted at present and occur in the future should acquire the necessary skills and knowledge(Weinberger, 1988).

Improve enterprise performance and growth potential of the runs within a certain period in order to enhance the learning experience plan claimed (Nadler, 1989). Most of this human resources development is consist of enterprise education. Definition of enterprise education is shown in <Table 1>.

2.2 Elements of HRD

Elements of HRD is little different according to each scholar. By classifying with Mclagan's study, elements of HRD is divided into three parts.

Education and Training(E&T), Career Development (CD), and Organization Development(OD).

< Table 1> definitions of enterprise education

Classification	Contents
Education and Training	Process of deliberated effort which makes a place to effectively experience the improvements for some capacity within a certain period of time to expected degree.
Industrial Education	To contribute to the advancement of industrial activities enterprise members of the organization of the development of skills improve.
Education In-company	As one activity of business management, all the systematic activity that is determined by companies which has directive purpose to develop ability of employed workers' work duty for achievement of business purpose.
Training	Learning which is related to present task. Learning activities which is related to work. Improvement of technical repeated skill that contributes to business
Education	Learning to prepare work which will be entrusted in close future. Learning activities which is related to individual. Improvement of theory knowledge which is theoretical and special.
Development	Study for overall growth regardless of specific function.

<Table 2> elements of HRD

Classification	Contents	Advantage	Disadvantage
Education and Training (E&T)	Education and training is employee's effort for improving knowledge, capability, skill and attitude which is suitable in current job. It includes, online learning activities, computer-based education. Education and training in company has its propose on making members to aware themselves part of the organization through many learning and to achieve organization goal.	 learning in controlled circumstances. Efficiency improvement in short period. Raising loyalty. 	-expense -vacancy of work - Taken as hostage (forced elements).
Career Development (CD)	Career development is a order of individual's position in one's life. Organization should help individuals to develop their career inside the organization.	Raising the productivityand efficiency by CDPprogram.Increase in satisfaction.	- Difficulty in program formation and participation of employee.
Organization Development (OD)	For satisfaction along with the organization and for happiness of both, organization goal and individual goal should be combined.	- Organization response in environmental changes.	- Difficulty in program development.

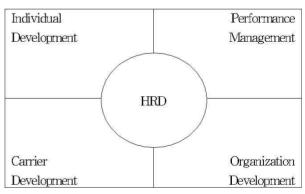
2.3 Elements of education

<Figure 1> display elements of enterprise education which is ID(Individual Development), CD(Career Development), OD(Organization Development), and PM(Performance Management) in diagram form. This is called 'Enterprise Education Principle Models'.

2.4 Activity of enterprise education

Nadler(1979) has classified enterprise education activity into tree parts. Training, Education, and Development. Training can make individuals' instant changes on their performance in work by using their skill which they already have. Education is one that leads changes in middle steps between training and development. And education is for individuals to

change their field where they are currently performing their work. Development can make individuals improve in a long-term for the improvement of individuals' value in the future.



<Figure 1> enterprise education principle model
Eggland & Gallig(2002), Principle of Human Resources
Development(2nd. ed.) MA: Perseus Books. p.14.

Method	Area				
Metriod	Education	Education Training	Development		
Focus	basic Job knowledge	present Job skill	present and Future Ability		
Target	arget individual employee individual employee, g	individual amployoo group	individual employee, group,		
raiget		marviduai empioyee, group	manager		
Contents	theoretical, conceptual	practical, functional	theoretical, practical		
Time	directly, short-term	directly, short-term	indirectly, long-term		
Character	11 1	security in fault as well as	develop future work		
Character	develop basic work knowledge	improvement in present work skill	performance ability		

<Table 3> difference between education, training and development

3. Present Condition of Enterprise Education

3.1 Trend in enterprise education

From 1970s to 1980s, quality control education was the main focus in vitalizations on organization training trends in domestic development of human resources. And in 1990s learner focus improvement in management ability and individual technique in business were the center in diversifying education. In the mid 1990s, from introduction of organization study in level of business strategy such as customer satisfaction, benchmarking, downsizing, restructuring and so on, importance in development of human resources became bigger for achieving goal of knowledge management. Recently, because company needs creative talents who have ideas and creativities, learning is changing into focus of problem-solving process. Members themselves should read rapid change and be self-leading learner who finds knowledges and information which they need.

3.2 Type of education and training

Standardizing in place where the education and training is being held, education and training divided into two parts. on-the-job-training and 'off-the-job-training OJT and Off-JT are basic type of enterprise education together with self-development. OJT is job field which focuses on training and education. And it is an training method that

company appoint specific duty about making subordinates and one's immediate superiors to guide and train individually. Off-JT is entire education and training that is done outside the work place but has responsibility on special group which take charge of education and training. <Table 4> is based on OJT and Off-JT.

3.3 Difference between training, education and development

1) Training

Training is a methodical process that promotes achievement of concept, regulation, attitude, and function. And it is an improved harmony between employee's character and requirement for employment. Company train new employee to perform their duties. Therefore training can be a primary duty for administrator. Whereas for new employee, training is benefit offer. New employee can promote socialization by training through learning value, ability, expected behavior, social knowledge which are needed when participating a organization.

2) Education

New learning needs to be applied to an individual's current job to expand the scope of the technology allows. Changes that influence on duty should be continuously remain. For responsibility on new duties, individuals should prepare or individuals should achieve the purpose of the course.

Standard of Classification	Forms of Education	Educational Contents	Character
	1	training in the work place	OJT
	education at work place	training in education steps	
Place	work place	training in experts and outside instructor	Off IT
	education not at	education and training for dispatch	Off-JT
	work place	outside educational institutions training	
	education for new employee	basic work training, working-level training	
Target	education for employee	hierarchical education (education for new employee, education for general employee, training for intendant and manager)	
	education for self-development	man-power development accompany with guidance (language teaching, computer-education)	use OJT mixed with Off-JT
Contents	education in function	production, marketing, human resources finance, business sales	
Comens	education in developing mind	self-development training, refinement education, boot camp.	

< Table 4> type of education and training

3) Development

Development is a long-term process that makes future employees to be more valuable by improving employees' ability and motivation.

Organization development is a long-run effort and it is plan to change culture of organization or group. Organization development takes long-period and to change the state, mutual relationship and cultural adaptation should be emphasized.

4. Changes in enterprise education

Paradigm of enterprise education is changing from training to learning. In the past, individuals and organizations which is main agents of learning has got training and education other-directed. But nowadays it has changed into process that individuals and organizations could react independent and active. Also, education is going to be composed of individual and field focused.

Target of the education has changed. In previous enterprise education, customary compulsory education was done to entire employee. However, recently, concentrated education is being held on selected core employee. Target of the education is being selected and concentrated. Considering this condition and environment of education target, efficient education is to make learner to learn voluntary. Lately, vitalizing on-line education and e-learning is a good example of this.

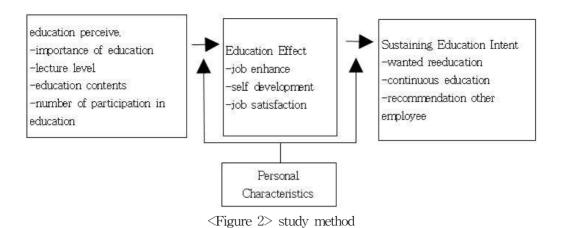
4.1 A study methodology

This study model is showing <Figure 2>.

4.2 Collection of Data

The subjects for questionnaires of this study were small and medium sized enterprise. Each items of the questionnaires was evaluated by 5 point scales.

The test of the research hypotheses was performed through factorial analysis, reliability analysis of variance, using SPSS 13.0. The survey was conducted during 30days(8/20/2010⁹/20/2010). The 330 questionnaires were collected from 283.



As basic data in the study, demographic characteristics of the users is shown in <Table 5>. Respondents who are used in the study were total 283 people and there was 245 males which amounted 86.6 percent and 128 female which amounted 13.4 percent. In the age of the respondents, people who were in their thirties was total 115, which amounted 58.7 percent.

In the part of educational attainments, high school graduators was 128 people, total of 45.2 percent which amounted the most. In the part of respondents' job, production position amounted 58.7 percent and administrative position amounted 33.8 percent.

4.3 Factor Analysis

In the result of factor analysis, factor loading, which is the coefficient that shows the relation between the factor and variable, doesn't have an accurate standard to know the amount of degree to be attended. However, generally, over 0.5 is decided as attended. eigenvalue of factor is the amount of dispersion that explains the factor. This is the factor extract standard and it means that it is the extracted factor which has been already decided in eigenvalue over 1. Because this factor explains the amount of dispersion, it is important if the figure is high.

<Table 6> is the result of factor analysis in this study.

4.4 Reliability Analysis

In general, credibility is regarded relatively high, if Cronbach's Alpha coefficient is over 0.6. <Table 7> is result of the reliability analysis based on this study.

4.5 Regression Analysis

 Result of multi-regression analysis in education awareness and education effects

Result of analysis in education effects of education awareness variable by multi-regression analysis is shown in <Table 8>. In this analysis result, R2 which shows the total explanation 44.3 percent of explanation are shown as 44.3. In the Regression Models, which were made by this analysis, value of F is 106.089 and value of p is 0.001. In other words, the higher the education awareness is, the higher the improvement of duty, self-developing, and education effects of duty satisfaction are.

 Result of multi-regression analysis in education effects and continuous in education intention (details in education course)

Result of multi-regression analysis in education effects and continuous in education intention(details in education course) is shown in <Table 9>. In analysis result, R2 which shows the total explanation 53.8 percent of explanation are shown as .538. In the Regression Models, which were made by this analysis, value of F is 63.601 and value of p is 0.000.

After taking education course, people who finished the course in a high important of duty and selfcontentment had intention of having continuous education. In more detailed education course was surveyed as personality education, quality education, production education and etc. On the other hand, business as well as economy, general process as well as data processing education, and leadership course was shown that no one wants to participate.

This is because that 50 percent of the people who

surveyed was engaged in production and 80 percent of the people who had answered had few experience in education course. So it is shown that courses which are not directively related to their work are answered low.

<Table 5> demographic characteristics

classify		frequency	percentage(%)
COM	male	245	86.6
sex	female	38	13.4
1	total	283	100.0
	under 25	2	.7
	between 26–29	29	10.2
age	between 30–39	115	40.6
	between 40–49	100	35.3
	above 50	245 38 283 2 29 115 100 37 283 8 128 66 81 2283 165 95 12 9 2283 128 36 40 41 5 10 15 283 85 65 39 94 283 123 100 36 23	13.1
†	total	283	100.0
	under middle school	8	2.8
	graduate from high school	female 283 under 25 2 between 26-29 29 between 30-39 115 between 40-49 100 above 50 37 283 under middle school 8 aduate from high school 128 graduate junior college 66 graduate university 81 worker 165 manger 95 sales 12 boarder 9 283 employee 128 first employee 36 a section chief 40 section chief 41 ice head of department 5 head of department 10 executive 15 between 4-8 years 65 between 9-11 years 39 above 12 49 29 29 29 29 29 29 29 29 2	45.2
academic ability	graduate junior college	66	23.3
,	graduate university	245 38 283 2 29 115 100 37 283 8 128 66 81 283 165 95 12 9 283 128 36 40 41 5 10 15 283 85 65 39 94 283 123 100 36	28.6
1	total	283	100.0
	worker	165	58.7
:.1.	manger	95	33.8
job	sales	38 283 29 115 100 37 283 8 128 66 81 283 165 95 112 9 283 128 36 40 41 5 10 15 283 85 65 39 94 283 123 100 36 23	4.3
,	boarder	38 283 29 115 100 37 283 8 128 66 81 283 165 95 12 9 283 128 36 40 41 5 10 15 283 85 65 39 94 283 123 100 36 23	3.2
1	total	283	100.0
	employee	128	46.5
	first employee	36	13.1
	a section chief	40	14.5
position	section chief	41	14.9
	vice head of department	5	1.8
	head of department	10	3.6
	executive	245 38 283 2 29 115 100 37 283 8 128 66 81 283 165 95 112 9 283 128 36 40 41 5 100 15 283 85 65 39 94 283 123 100 36 23	5.5
1	total	283	100.0
	under 3 years	85	30.0
duration of voors	between 4-8 years	65	23.0
duration of years	between 9-11 years	39	13.8
			33.2
	total	283	100.0
	first	123	43.6
number of participation in	2	100	35.5
lectures	3	36	12.8
	above 4	29 115 100 37 283 8 8 128 66 81 283 165 95 12 9 283 128 36 40 41 5 10 15 283 85 65 39 94 283 123 100 36 23	8.2
	total	283	100.0

<Table 6> result of factor analysis

	loads factor	eigen value	accumu late variance	
	recognition of education importance	.845		69.907
education	recognition of lecture level	.814	2.124	
perceive	before recognition lecture contents	.793	2.124	09.907
	number of education	.781		
education	job improvement	.812		
	self development	.788	1.049	78.141
effect	job satisfaction .720			
austoining advantion	reeducation wanted	.891		
sustaining education intent	sustaining education wanted	.881	3.640	60.664
mient	recommendation to others	.867		

<Table 7> result of analysis

variables	constant	definition	Cronbach's Alpha
education intent	general item relation to education	 recognition of education important recognition of lecture level before recognition lecture contents number of education 	0.7680
education effect	the influence of job in education	 job improvement self development job satisfaction	0.8494
sustaining education intent	sustaining education intent	reeducation wantedsustaining education wantedrecommendation to others	0.8766

<Table 8> result of multi-regression analysis in education awareness and education effects

口刻	non standard index		standard index	£1	significancy
모형	В	standard error	Beta	t value	probability
education effect	.669	.054	.720	12.413	.001
R2:.443 F value: 106.089 significancy probability: .000					

4.6 Adjusted Regression Analysis

As shown in <Table 10>.

5. Conclusion

1) Results in multi-regression analysis of education awareness and its effects show that education awareness are directly proportional to education effects. This means that higher the importance in education is, and higher the pre-recognition of education content, also higher the number of education are, the higher the education effects are.

For this reason, in the corporation, to improve the effects of education, it is important to pre-open the information of the education target. And also, making company atmosphere into knowing the benefits and importance of the education is most important.

	모형	non stan	dard index	standard index	t value	significancy
	7.8	В	표준오차	Beta	t value	probability
	personal	.195	.063	.195	3.091	.000
	education	.130	.005	.130	3.031	.000
	computer	.157	.069	.157	2.258	.162
	education	.137	.009	.137	2,200	.102
sustainin	general	.125	.067	.125	1.871	.095
g	management	.120	.007	.120	1.071	.030
educatio	quality	.330	.063	.330	5.221	.000
n	education	.000	.005	.550	0,221	.000
intent	production	.215	.067	.215	3.231	.000
	management	.210	.007	.210	5.251	.000
	ledership	.299	.065	.299	4.596	.358
	general	.461	.061	.167	3.674	.603
	economics	.401	.001	.107	5.074	.000
	R2:.538 F value: 63.601 significancy probability:.000					

< Table 9> result of multi-regression analysis in education effects and continuous

< Table 10> result of adjusted regression between education intent and education effect

step	dependent variable	\mathbb{R}^2	F	significancy probability	
step 1	education perceive	.310	38.591	.000	
	education perceive				
step 2	personal characters	.325	18.257	.000	
	(job position)				
	education perceive				
	personal characters				
2	(job position)	220	7.550	000	
step 3	education perceive, personal	.332	7.556	.000	
	characters				
	(job position)				

- 2) Also, result of multi-regression analysis in variables of education effects and continuous in education intent are shown as this. The higher the education effects are, the higher the purpose of participating the education and reeducation are.
- 3) While inquiring the result about that personal characteristic (which is the work position) turns up to be controlling effects in the influencing relationship between education awareness and education effects, it was founded that there are difference position.

This means that when implementing education, education effects and purpose of participating reeducation will be higher, if the education course

are carried out by dividing into position rather than into process.

6. References

- [1] Yoo Il Han, A Study on the Development and Situation in Korea Enterpriser HRD, Han Yang Univ., Master Thesis, 1998.
- [2] Kim Jin mo, Based on competence education curriculum for enterprise education., Job Education Study., 20(2),
- [3] Bernthal, 2004 ASTD Competency Model, Mapping the future, ASTD press.
- [4] Desimon, Werner. Harris, Human Resource Development (4th), Orlando, Harcourt College Publisher.
- [5] Gilley, J. W., & Eggland, S.A. & Gilley, A. M.

(2002). Principles of Human Resource Developmen t_J, 2nd Edition

- [6] McLagan, P. A.(1989). Models for HRD practice (4th ed.). Alexandria, VA: ASTD.
- [7] Kirkpatrick, D. L(1984), Effective supervisory training and development: responsibility, needs and objectives.
- [8] Noe. Employee Training and Development(3rd.ed.), NewYork, McGraw-Hill.

저 자 소 개

류 지 철



동국대학교 신업공학과 및 동 대학원을 졸업하고 Adamson University에서 박사를 수료한 후, University of Windsor에서 1년 6개월 간연구원으로 재직. 한국산업개발연구원에서 연구원을 거친 후 현재 충주대학교 산업경영공학과에교수로 재직 중.

관심분야는 Ergonomics와 기업에서의 인적자원에 관한 분야이다. 현재 사단법인 경영기술연구원 이사, (주)입소 경영자문위원, 한국산업인력공단 HRD 전문위원, 노동 부 충북고용포럼위원장, 국가품질상 심사위원(지경부) 주소: 충청북도 충주시 이류면 검단리 123번지 충주대학교 산업경영공학과

김 광 수



국립충주대학교 산업경영 공학과에서 근무하고 있으며, 동국대학교 산업 공학과에서 학사, 석사, 박사를 취득하였다. 한국표준협회 지도실 에서 전문위원으로 재직하였고, 한국품질경영학회 운영이사를 역임하였다.

현재 한국품질경영학회 이사와

충청지회 부회장, 국가품질심사위원(지경부), 서비스 품질 심사위원 등을 맡고 있으며 주요관심분야는 품질경영, 가치공학 등 이다.

주소: 충청북도 충주시 이류면 검단리 123번지 충주대학교 산업경영공학과

홍 상 진



경기대학교 산업재산권학과를 졸업하고 동대학원에서 경영학 박사학위(e-비즈니스)를 취득하였다. 현재 경기대학교 경영정보학과겸임교수로 재직 중이며, 주요 관심분야는 인터넷 마케팅, 전자상거래이며 연구 분야로는 서비스품질, 웹 컨텐츠 등이다.

주소: 경기도 수원시 경기대학교 경상대학 경영정보학과