



Analyzing components of educational process in efficacy of staff Training

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Abstract. Increase the efficiency of organizations depends on the efficiency of human resources and increase efficiency of human resources depends on developing knowledge and skills and creating optimal behavior in order to do successful careers. One of methods can aware from latest scientific and technical developments for staff is In-service training of staff. Therefore, aim of this research was identifying components of educational process in efficiency of in-service training of staff in institution of martyr and Veterans Affairs of grand Tehran. Current research is survey. Statistical samples included managers and experts. We used simple random sampling method and sample size in this study was included 100 managers and experts. We used a questionnaire in order to collect data and as well as we used Kolmogorov-Smirniw, t-test and Freedman test in order to analyze inferential statistics. Results of research indicated that components of need assessment, planning, providing for training and evaluation had not optimal condition and they were not effective on effectiveness of the educational process.

Keywords: Training process, Need assessment, Planning, Evaluation, Providing for training

1. INTRODUCTION

One of methods that staff can develop knowledge about latest technical and scientific and their skills is in-service training. Undoubtedly, training is one of the most important elements in human life. Since, it leads to improve life of human. High statue of human is originated from education and on the contrary prevent from poverty and various cultural, political and economical dependent (Fathi and Ajahah, 2005).

Increase efficiency of institutions depend on increase efficiency of human resources and increase efficiency of human resources depend on developing knowledge and skills of optimal behavior for creating successful behavior. Of course, Trainings which are purposeful, persistent, rich and teach by experts, teachers can create and increase efficiency. This training can an organization keep pace with advances in science and technology labor to go out and promote the quality and quantity of their work is effective. Therefore, experience remind us that change in the course of professional careers and working methods is inevitable as well as attention to the training and development of human resources in the course of these changes, the only bridge that can lead us from the rest of the world is changing and evolving. It is important to note that training costs should not take into account the costs of consumer organizations; of course, training should be considered as capital cost. Since, results of training will be obvious in long-term period (Abtahi, 2005).

Education in each institution is divided as following:

1. Pre service training
2. In-service training

Each type of education is considered for special situation and they have special features:

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Pre service training:

The pre-service training the kind of education that is offered to him before entering an organization in order to create competence and abilities and prepare him for the job. This type of training to meet specific organizational problems, but not the main objective of the training of human resources for the institution or organization is special. Pre-service training in the training period can be short term or long term.

Short-term: Short-term training is preparing individuals to enter the service. In such cases the person has chosen to certain jobs and expertise in a few months.

Long-term: Long-term and short-term training as well as training to prepare individuals for entry into service

In-service training: Although, most organizations have jobs before the violence classical training behind them, but usually due to the general nature of this type of training, the scenes are real people who need special education. In other words, along with the employees of the business characteristics and the problems it creates the need for the employee, detailed information on the training assignment receive.

Inability to respond to the special needs of classical training and rapid changes in the methods and techniques work shows the need for in-service training. In-service training is prepared for who employed in government or organizations; in other word, a person officially employed by the organization provides this type of training. The main objective of training employees to fill the vacuum of information and increased information, knowledge, expertise, and improve relations between the administrative staff.

Training labor is generally associated with high returns on the labor market in terms of earnings and employability, suggesting that obtaining a higher education degree can be a highly efficient investment. Over the last two decades of the twentieth century, there has been a strong shift in demand towards high-skilled workers in the majority of industrialized countries (Machin 2004). Mostly driven by technological changes that are biased in favor of high skilled tasks, employers seem to be increasingly demanding workers with graduate qualifications, which has increased their relative labor-market prospects in terms of employability and earnings. In countries close to the technological frontier, returns to higher education may even be the highest ones (Vandenbussche et al. 2004). The amount of private spending on higher education might be inefficiently low if a lot of families were truly credit constrained in the traditional sense, that is, their children would not enter higher education because their families do not have the financial means to pay for it at the time of decision-making. However, ample evidence from the United States suggests that true credit constraints are not a binding issue in the admission to higher education in the vast majority of cases (Carneiro and Heckman 2003; Cunha et al. 2006). Rather, the fact that students from disadvantaged family backgrounds have a much lower probability of entering university seems to be caused by a lack of early educational investments which deprive these students of the basic prerequisites to advance to university. If this is true in the United States, where colleges and universities charge substantial private fees, then it seems that it is even more relevant in Europe, where higher education is mostly publicly funded. For example, a major determinant of degree performance in UK universities is students' performance on Alevel scores at the school level (Smith and Naylor 2001), and academic preparedness is the major determinant of dropout of medical students in UK universities (Arulampalam 2004b).

Staff raining levels:

First level needs assessment:

Identifying, investigating and analysis efficiency of need training is one of prerequisite of educational system. Determine prerequisite of education is the first step of programming staff education and in fact the first factor of guarantying educational efficiency and if it be correct it will provide a more objective basis for planning and the possibility of adapting them to the needs of the organization, scope of work, employees and ultimately increase their effectiveness. "Education is expensive," and only when presented which firstly, A response to a need is recognized, and secondly, is the best way to problems which can be solved. Educational activities that are carried out regardless of the fact would be a waste of resources (Abbas Zadegan, 2002).

Needs assessment is processing to determine their educational needs and prioritizing the requirements. The results of this process cause the planners and executors of educational programs act with a clear understanding, at all stages of the planning. Educational needs assessment process to identify requirements and functional needs of organizations that need resources to the most important areas related to achieving the goals and objectives of the organization, improve productivity, quality of production and service (Khorasani and Hassan Zadeh Kord Barani, 2007).

Obviously, the effectiveness of the educational system largely depends on the accuracy and integrity of this process and if done well, it can be a more accurate basis for other phases of the training process.

Factors in determining the need for and the educational needs of the organization, including performance problems, new technologies, customer needs, job redesign, new regulatory developments, new products, or the lack of necessary skills and by analyzing each of them and taking into account the organization's goals and educational policies, the educational needs of people in different occupations can be determined (Rashtiani, 2012).

Second level educational planning:

It seems that reason of lack successful of many educational programming and human resources is no scheduled training mission and insufficient speculation. If educational planners will reduce, but the staff and the organization's goals will ensure the work will be easier for managers. Of course, there are problems in the way of educational programs, including incentives participants, the level of knowledge and degree of skill and their behavior, lack of knowledge and awareness of teachers and trainers which some of them may be somewhat predictable and prevention (Abtahi, 2004).

Educational planning in organizations and companies with the education system and higher education is much different and more practical aspects and its purpose is transferring knowledge, skills and attitudes determine the actual business environment, ultimately improve employee performance, and increase the productivity of organizations and companies (Rashtiani, 2012).

Third step: the implementation of educational programs

The educational program is designed to express what can not be performed until the judge about it; however, as soon as the need for care and programs designed to implement formative assessment, which is the main route out of the good results will not be good executed if the correct drawings. The design and development of training programs organized at this stage is

providing support. The implementation of training courses must provide all equipment necessary for their courses.

Some education experts, training and development of human resources have divided into two categories. They believe some of the methods to train people to train supervisors and managers, executive and others can be used. Using methods and techniques, training and development of human resources is based on three assumptions: Suppose First, we need to know any of the methods and techniques of teaching cannot be the best method of teaching. Amount of effectiveness's methods depends on variables like educational objectives, experiences, participants in the courses and the education and skills of teachers and instructional coaches.

Stage IV: Evaluation of educational programs:

Cifalino and Baraldi (2009) believed that oriented educational approach that is operational to the strategic approach of the outcomes of interest are the following items:

- The role of education as a stimulus to improve organizational performance through behavior change rather than mere attention should be taught.
- The role of director of education as an analyst, performance of solutions for the interference function offers multiple factors that can improve the transfer of learning and support the management in the analysis.
- The ability to plan and manage organizational change through integrated process and human resource management
- increase need to evaluate the effectiveness of training and organizational performance, rather than simply to quality

Objectives of research:

Aim Objective:

1. Identifying effect of educational process's components in efficiency of in-service training

Secondary objectives of the study:

1. Identifying effect of need assessment in efficiency of in-service training
2. Identifying effect of programming in efficiency of in-service training
3. Identifying effect of implementing in efficiency of in-service training
4. Identifying effect of evaluating in efficiency of in-service training

Methodology:

H1: Significant relationship exists between educational process's components and efficiency of in-service training

H2: Significant relationship exists between need assessment and efficiency of in-service training

H3: Significant relationship exists between programming and efficiency of in-service training

H4: Significant relationship exists between implementing and efficiency of in-service training

Current research is descriptive and investigates components of educational process in efficiency of in-service training of staff in institution of martyr and Veterans Affairs of grand Tehran. This research also is applicable and survey and data of research were collected by questionnaire and library. Statistical sample included 280 people of staff in institution of martyr and Veterans Affairs of grand Tehran. We used simple random and 77 selected as statistical sample.

$$n = \frac{N \times Z_{\alpha/2}^2 P(1 - P)}{\varepsilon^2(N - 1) + Z_{\alpha/2}^2 P(1 - P)} = \frac{380 \times 1/96^2 \times 0/25}{0/1^2 \times 379 + 1/96^2 \times 0/25} = 76/82 \cong 77$$

In this study, a questionnaire is used. The questionnaire is based on components of the learning process assessment, planning, implementation and evaluation of training was developed.

Likert five-degree range as the contract is divided into two parts, where all the desirable and undesirable responses greater than or equal frequently as desirable as the smaller of the three are considered undesirable. Therefore, when the test study concluded that In-service training is a concept that is sent in an ideal situation in the areas of needs assessment, instructional planning, implementation and evaluation of educational training does not affect and how the results show that in-training services in all dimensions have unfavorable situation , it shows that the institution has effect on need assessment programming, implementing and evaluating off education.

Experts test current research, validity of the research, reliability of test is done by alph-cronbach, and alpha-cronbach test was equal 0.72.

Analyzing data:

We used frequency tables, percentages, types of charts and inferential statistics (Kplmogorov-Smirinov, T-student and Freedman) in order to test the hypotheses.

Findings:

Following table show that significance level 0.05 in all of hypotheses are normal.

Table 1. KOLMOGOROV-SMIRINOV TEST

	Need Assessment	Programming	Implementing	Evaluating
Numbers	100	100	100	100
Average normal parameters	2.1883	3.1075	1.98	2.07
Sd	0.34464	0.59033	0.6701	0.0381
The absolute difference	0.124	0.098	0.094	0.103
Positive	0.124	0.098	0.094	0.097
Negative	-0.084	-0.097	0.088	-0.103
Z	1.237	0.982	0.943	1.031
Bilateral significant difference	0.094	0.290	0.336	0.239

Test of Hypotheses:

H1: H1: Significant relationship exists between educational process’s components and efficiency of in-service training

Due to the favorable situation, consider above hypothetical average and after the merger with T test each hypothesis questions they have, compared with the average criterion (3) and less than 3 shows effectiveness; whereas, equal or higher 3 means lack of effect.

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Table 2. Descriptive amount of need to assessment .

	Number	Mean	Sd	Mean of Sd
Need assessment	100	2.1883	0.34464	0.03446

Table 3. Hypothetical mean of first hypothesis.

Hypothetical mean						Need assessment of available information
95%		Mean	Bilateral significant	Df	T	
Higher bound	Lower bound					
-0.743	-0.88	0.81167	0.000	99	-23.551	

H2: Significant relationship exists between need assessment and efficiency of in-service training

Table 4. Descriptive value of programming.

Mean of Sd	Sd	Mean	Number	
0.059	0.5903	3.1075	100	AVAILABLE PROGRAMMING

Table 5. Hypothetical mean of second hypothesis.

Hypothetical mean						Need assessment of available information
95%		Mean	Bilateral significant	Df	T	
Higher bound	Lower bound					
-0.2246	-0.0096	0.10750	0.072	99	1.69	

In according to value of Z is (1.69 > -1.65) and therefore significant value is 0.05.

H3: Significant relationship exists between programming and efficiency of in-service training

Descriptive statistics: Following table show, that mean of hypothesis is equal with 1.98 and less than 3.

Table 6. Descriptive value of programming.

Mean of Sd	Sd	Mean	Number	
0.06701	0.67014	1.98	100	AVAILABLE IMPLEMENTING

Table 7. Hypothetical mean of second hypothesis.

Hypothetical mean						Implementing of available information
95%		Mean	Bilateral significant	Df	T	
Higher bound	Lower bound					
0.1130	-0.1530	-0.020	0.766	99	13.42	

In according to value of Z is (1.69 > -1.65) and significant value is 0.05; therefore, the hypothesis is not approved

H4: Significant relationship exists between implementing and efficiency of in-service training

Descriptive statistics: Following table show, that mean of hypothesis is equal with 1.98 and less than 3.

Table 8. Descriptive value of programming.

Mean of Sd	Sd	Mean	Number	
2.07	0.30812	2.07	100	AVAILABLE EVALUATING

Table 9. Hypothetical mean of second hypothesis.

Hypothetical mean						Evaluating of available information
95%		Mean	Bilateral significant	Df	T	
Higher bound	Lower bound					
-0.8689	-0.9911	-0.93	0.000	99	-30.183	

In according to value of Z is (-0.625>-1.65) and significant value is 0.05; therefore, the hypothesis is not approved

2. CONCLUSION AND DISCUSSION

We used Freedman test in order to prioritize factors. Table (10) shows that significant difference between factors and ranking is as following:

Table 10. Ranking factors.

100	NUMBER CHI-SQUARE DF P-VALUE
10.542	
3	
0.014	

Table 11. Compare ranking factor.

Factors	Mean	Ranks
Available implementing	1.98	1
Available Evaluating	2.07	2
Available Need Assessment	2.1883	3
Available Programming	3.1075	4

Effect descriptive statistics on factors:

In this section, the effect of explanatory variables on factors using T-test and analysis of variance is done.

Gender:

Following table shows gender is not effective on factors

Table 12. Gender

Components	Equality of means test		
	T	Df	Bilateral significant
Available Need Assessment	-0.971	98	0.334
Available Programming	-0.123	98	0.902
Available implementing	-0.972	98	0.334
Available Evaluating	-1.593	98	0.114

Table 13. EDUCATION.

P-VALUE	F	MEAN SQUARE	DF	R-SQURE		
0.477	0.837	0.364	3	1.091	Between groups	Available Need Assessment
		0.435	96	41.722	Within the group	
			99	42.812	Total	
0.552	0.703	0.247	3	0.742	Between groups	Available Programming
		0.352	96	33.759	Within the group	
			99	34.501	Total	
0.906	0.186	0.086	3	0.257	Between groups	Available implementing
		0.460	96	44.203	Within the group	
			99	44.460	Total	
0.586	0.648	0.426	3	1.279	Between groups	Available Evaluating
		0.658	96	63.170	Within the group	
			99	64.449	Total	

The table above-mentioned education in significance level (0.05) is not effective on the factors.

Table 14. Equality of means test.

Components	Equality of means test		
	T	Df	Bilateral significant
Available Need Assessment	-0.971	98	0.334
Available Programming	-0.123	98	0.902
Available implementing	-0.972	98	0.334
Available Evaluating	-1.593	98	0.114

Table 15. ORGANIZATIONAL POSTS.

Equality of means test			Components
T	T	T	
0.633	98	0.479	Available Need Assessment
0.409	98	0.829	Available Programming
0.476	98	-0.715	Available implementing
0.018	98	-2.143	Available Evaluating

Generally, results of research indicated that there is no significant difference between educational components of in-service training of staff in institution of martyr and Veterans Affairs of grand Tehran. Therefore, for the successful implementation of in-service training programs should be organized to consider all these factors and to identify and analyze their situation.

Based on analysis mean of ranking components of in-service training staff are as following: Implementing education (1.98), educational evaluating (2.07), need assessment of education (2.08) are far from optimal condition except of educational programming (3.10).

The first step in determining the educational needs planning, staff training and ensuring the effectiveness of the training function and if it is correct, it will provide a good base for programming and chance of adapting them to the needs of the organization, scope of work and staff and ultimately increase their effectiveness.

Educational needs assessment to be a key role in the educational process requires a lot of attention; because that any action should be taken at a later stage education. The ranking of this study showed that the present situation needs assessment has the most distance from desirable situation.

Programming is one of components of in-service training of staff in institution of martyr and Veterans Affairs of grand Tehran. Without planning, particularly in the fields of education and development of human resources, no organization can survive and work will be fruitful. In addition, this is why some analysts, management, planning introduce as survival factor of the organization. Result of research indicated that the institution programming did its duty about programming and current situation is not far from optimal distance.

One of other components of in-service training of in institution of martyr and Veterans Affairs of grand Tehran is educational implementing. In this stage, methods and techniques of education is used as a tool for participants in the training courses. When we are discussing about methods and techniques of education and we provided ways or improving knowledge and optimal changing behavior with objectives of educational programs. The research showed that the institution is far from desirable situation in educational programming.

The last component of in-service training of in institution of martyr and Veterans Affairs of grand Tehran was evaluating education. In according to analysis of the research the institution has not desirable situation.

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