

Training System – A Perspective

Sumit Prasad, Anupa Chaudhary and Subodh Prasad, *Member, IEDRC*

Abstract—Need for this paper arises because of the changing dimensions in the competency required by the organizations from their employees, and need to identify a tool which can serve a basis for change management and enhance the ability of unlearning so that a better learning can be imparted in them more easily and effectively. Gradual change is taking place inside and outside work culture of organizations, which is resulting in a need to maintain internal and external equity of competency of the employees with the change in job requirement, for performing job task keeping the efficiency constant. This paper is having a prime focus on redesigning a training system which can perform the task of Analysis of Training Need (AOTN) and Training Evaluation. For any training process AOTN and Evaluation are the prime components, where AOTN helps in appropriately identifying the areas where training can serve as a best tool for problem solving and generate a priority list. AOTN also strengthens the proposal for funding training from the investors. On the other hand Effective Evaluation projects and presents, in front of the investors, the extent to which the training program is able to achieve its objective by external and internal validation in the form of quantitative and qualitative reports. Internal Validation is the process of deciding what you are getting and External Validation is establishing whether it is what you want. Authors have redesigned the stages of Evaluation and overlapped it with the process of Analysis of Training Need (AOTN). This overlapping continuously tracks the different stages, and warns for taking a correction measure immediately whenever there is an anomaly. With its help, investment (in terms of money and time) made on training can be saved, by formulating and executing new solutions for enhancing the effectiveness of this self-improving mechanism. This process continues until the desired level of competency is attained.

Index Terms—Analysis of Training Need (AOTN), Competency, Evaluation, Standard of Performance (SOP).

I. INTRODUCTION

Competence, or lack of it, is at the root of success and failure of individuals as well as organizations. Competence is created by Education while its enhancement requires Training. Education is an approach for broadening the horizon of an individual to increase his thinking and reasoning ability; while Training is an instructor-led, content-based intervention that leads to desired change in the behavior of an individual to perform a repetitive task effectively and efficiently. It has been realized that the

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Sumit Prasad is with the Amrapali Institute of Technology and Sciences, Haldwani, Uttarakhand 263139 India (phone: +919410579673; fax: None; e-mail: sumitprasad_coer85@yahoo.co.in).

Anupa Chaudhary is with the Amrapali Institute of Technology and Sciences, Haldwani, Uttarakhand 263139 India. (e-mail: anupa.chaudhary@gmail.com).

Subodh Prasad is with Information Technology Department, Amrapali Institute of Technology and Sciences, Haldwani, Uttarakhand 263139 India, (e-mail: subodhprasadgbpuat@gmail.com).

primary reasons for failure in attaining the required level of job performance are regularly changing nature of jobs and acceptance of change by employees due to skill-obsolence. This skill-obsolence can be safely taken care of by imparting suitable Training to the concerned employees.

The importance of Competence has progressively increased in the modern era. Organizations have realized that despite continuous increase in technical and other inputs, returns reach a plateau. To enhance their return beyond this plateau, organizations have progressively resorted to improvement in employee competence. This has made organizations realize that investing in various Human Resource initiatives, such as Career Advancement Opportunities pays itself back with a dividend by way of increased employee productivity. As a complementary tool to Career Advancement Opportunities, Training has become a potent means of keeping employees updated with the required competence level for performing a specified job and also helps in change management.

II. TRAINING SYSTEM

Please refer Figure I.

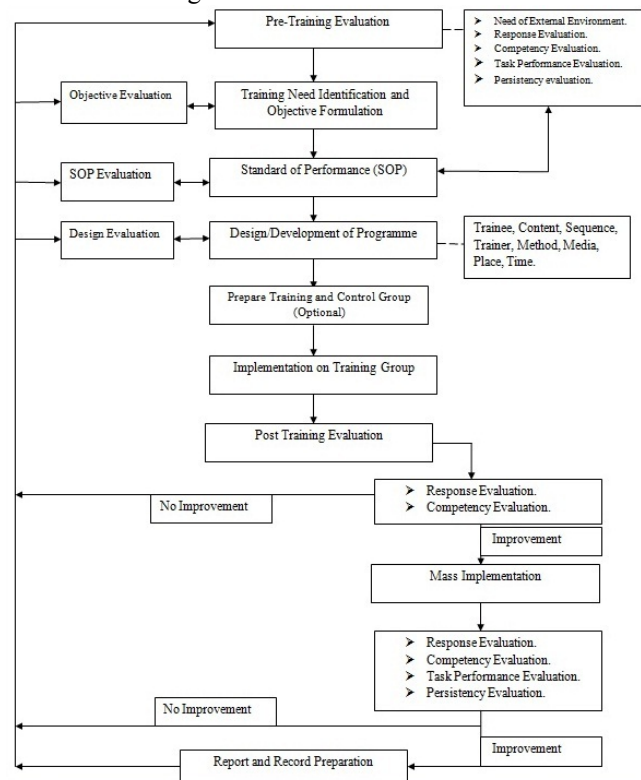


Figure I- Training System Flowchart

1- Pre Training Evaluation:

In traditional approach evaluation is considered as an end phase of any process to measure the effectiveness of the

process and to measure deviation from expected path. It also serve as a feedback mechanism for further improvement, but it also have a shortcoming, that the time when we are provided with the feedback it is too late to make any change for improvement because the investment (in terms of money and time) has already been done. To cope up with this problem it would be a better solution to go for evaluation on every stage and consider it as a feedback so that time and money invested can be saved.

Pre-training evaluation is an approach of performing evaluation before starting actual training program. But the question arises here is Why do we need to do this? Answer to this is to measure the change in pre and post training behavior of the trainee.

In today's world where the concept of responsibility and accountability has increased so much, than how we can neglect that, if training has taken a responsibility of developing the competency of any individual than it is the one which is accountable for it.

Why to measure?

What to measure?

How to measure?

For these questions pre-training evaluation is quite a satisfactory answer. To begin with:

Why to measure? It will provide detailed information of the present level of competency of an individual so that after training program any change in the behavior can be measured.

What to measure? To answer this first we have to identify the Key result areas (KRA's) of the job. KRA's are the factors of any job for which an employee is paid in any organization, they serve as a basis of measuring worth of an individual for the organization. (Please refer Table. 1)

TABLE I- TABLE FOR EVALUATION (ON SCALE 0 TO 10)

Name of Employee	KRA's	Before Training Evaluation					Standard of Performance					After Training Evaluation					Anomaly	Comment	ACTION PLAN		
		R	C	T	P	RBT	R	C	T	P	R	C	T	P	RAT	R				C	T
ABC	Technical	3	2	5	6	4	4	6	7	5	4	7	7	5.8	1	0	1	0	no need	Retrain	
	Behavioral	2	NA	2	4	2.7	3	NA	2	5	3	NA	2	5	3.3	0	NA	0	0		no need
	Soft Skills	4	NA	5	3	4	5	NA	7	4	5	NA	6	4	5.0	0	NA	-1	0		retraining
DEF	Technical	3	2	5	6	0	4	4	6	7	4	4	7	5.8	0	1	0	0	no need	Proceed Further for New Need Identification	
	Behavioral	3	NA	2	4	0	3	NA	2	5	4	NA	2	5	3.3	1	NA	0	0		no need
	Soft Skills	4	NA	5	3	0	5	NA	7	4	5	NA	7	4	5.0	0	NA	0	0		no need

R= Response Evaluation C= Competency Evaluation T= Task Performance Evaluation P= Persistency Evaluation

RBT= Rating Before Training RBT/RAT= (R-C-T-P)/4

RAT= Rating After Training RBT/RAT= (R-T-P)/3 (If C is NA)

KRA's= Key Result Areas Deviation = (After training evaluation)-(Standard of performance)

How to measure? A detailed system is required to measure them on their KRA's based on:

- 1) Expectancy of the external environment.
- 2) Response Evaluation.
- 3) Competency Evaluation.
- 4) Task Performance Evaluation.
- 5) Persistency evaluation.

Measurement of the expectancy of the external environment:

While introducing any change, an organization has to keep in mind the changes that external stakeholders are likely to consider important. For this purpose, the concerned

organization needs to identify and measure the expectations of the external environment for maintaining balance between the internal and external environments. This helps the organization in initiating changes that are likely to work.

Measurement of Response Evaluation:

If any organization is already performing this training need identification process than it is not having any need of doing this, because it can refer to the pervious year data of the training program for forecasting the requirement of next level of competency for future, by assuming the training outcome of the previous year as the present level of competency for forecasting year. And if it is not having any previous or past record of the trainees' competency, than there is a need to conduct response evaluation. Response evaluation is a study of the attitude of the trainees toward the training program, trainer and other aspects related to training. It is required measure his responses on various grounds, it also serves as basis for studying his inclination toward training, as more positive behavior toward training is an indication of developing sense of self-development and getting aware of the benefits of training in day to day decision making.

Measurement of Competency Evaluation:

Competency measurement is the measure of the knowledge required to perform a given task effectively and efficiently. It is the measure of the effectiveness of training resulting in an increment in the knowledge of the trainee. Knowledge is the concept of broadening the horizon of an individual to enable him to increase his mental ability of comprehending the environment and also increases his adaptive capacity.

For a better performance on any job, it requires a level of competency to be possessed by the performer. At the time of recruitment, peoples are recruited as per their competency compared with the desired level of competency required for the performance of the task. But with the change in the expectation of the job by the organization, the level of competency required to perform the same task is also changes, and to cope up with this change it became necessary to update the level of competency of the performer on a particular job. For beginning the tests conducted at the time of recruitment can serve as a basis for measuring present level competency and if these records are not prepared previously than it is required to conduct some test to measure it.

Task Performance Evaluation:

After ensuring that the trainee has developed enough competency to perform a given task, time comes to measure that is he able to implement it on his job or able to enhance his on the job performance. It is the evaluation of the effectiveness of the training provided to the trainee and its implementation on the job by the trainee. Does the trainee is able to perform the same task more efficiently and effectively after the training? Is he able to link the training provided and his job work? Is there any improvement in his on the job performance? These are some question which has to be answered here. This can be done effectively by the immediate superior of the trainee.

Persistency Evaluation:

Training is not provided only to improve his on-the-job performance; actually it is an honest effort for the

development of the trainee so that he can implement his learning in his day to day life and can improve his decision making power. It also helps an individual in self exploration and to provide him ample opportunity for his career development leading to organizational and self betterment. It is a measure of the persistent change in the behavior of the trainee, that how effectively training has positively influenced the learning's of an individual. Is he able to improve his ability to think and to comprehend the surrounding, has he got confirmed that this training program is a sincere effort for his development and the organization is working for his betterment also. This evaluation is the ultimate measure of the effectiveness of the training; it is long time horizon evaluation process as well as sophisticated to measure accurately. This can be measured or observed by the group or the surrounding to which he belongs and for a formal confirmation his colleagues and immediate superior. Also his response to the training program is an indication of his desire of learning to learn for self nourishment.

2- Training Need Identification, Objective Formulation and Objective Evaluation:

Training Need Identification:

It is the process of identifying the training need for the organization and its employees, and providing them training on the topics identified for them. This is the phase of locating the key areas which are problem prone or can become problem for the organization in future. As it is always better to be proactive than reactive, the training needs which are identified in advanced are considered as the best effort and be a basis to handle the expected fear of the future with prior preparations. But it is very necessary to locate the cause of the problem appropriately as not to get confused with cause and effect, because if effected is get confused with cause then the training program which we are going to design in future is going to get collapse in future and all the investment (in terms of time and money) will be wasted, and this arises a need of objective evaluation.

Objective Evaluation:

As said above there are chances to get confused with cause and effect of the problem, so it is necessary to separate cause form effect and then analyzing that, can training be an appropriate solution to the cause of the problem identified here. If the answer is yes then the process proceeds further and if the answer is no than all the aspects are measured that, can training any how help to get out of that problem and if the answer is still no then the problem is communicated to the concerned authority/department. And if the answer is yes then the areas for which training can be the best solution, have to be set in priority so that the most important need must be given priority and based on which objective for training is formulated. Sometimes it may also happen that training program is conducted and is not able to provide satisfactory results, than also there is a need of objective evaluation.

Objective Formulation:

Getting a confirmation that problem identified here has training as a best solution, next step is to formulate a one line objective, to which the trainer has to stick to for getting the desired level of change in the behavior of the trainee after the training. The objectives must have to be defined clearly so

that its purpose can be clearly interpreted and must highlight the direction of command, to which the training has to be proceed further.

3- Standard of Performance (SOP) and SOP Evaluation:

Standard of Performance (SOP):

As the name indicates, this is the step of setting standard of performance which is required by the job, for performing the task assigned effectively and efficiently. But the question arises:

Why do we need to set SOP?

Who will set SOP?

How much SOP?

Answer to these questions is the base of the training system. We are very much aware of the changing internal and external demand of the organization, and this is resulting in the requirement of higher performance day to day, as we can say that that if a person got appointed for a post it is not compulsory that for his whole life he will remain competent for that post even if he is not going for training and development. It means that, it is not the performer who is losing his ability, but it is the job which is changing its dimension as per the internal and external requirement and resulting in higher level of job performance by the performer to perform the same task with same efficiency and effectiveness with time.

Who will set SOP? To set SOP it is necessary to prepare cordial relationship with the internal and external changes. For that the training committee which is already consists of internal personals must have a member who is very much aware of the change in external requirement helps in setting SOP.

How much SOP? For setting SOP the pre-training evaluation can serve as basis to forecast the required level of competency for the expected behavior on various grounds or KRA's (Key Result Areas). By analyzing present KRA's and comparing them with the increase in the requirement of job SOP's are formed. They are based on present level of competency and a reflection of forecasted level competency for future. (Refer to Table. I)

SOP Evaluation:

It is the evaluation of SOP set by the committee, that are they appropriate as per the requirement of the job because setting of higher SOP will leads to under desired of level performance of the trainee and lower SOP results in exaggerated level of performance of the trainee, and as a result of which actual desired level of training outcome of the trainee cannot be depicted and measured accurately. Sometimes after the training program the performance level is not up to the expected level, than it is also an indicator for the need of SOP evaluation and if desired resetting of SOP.

4- Design/Development of Program:

After the successful completion of training need identification and setting of SOP, now the time has come to design a complete training program, which would be followed by the organization for the achievement of goals. Design of a program is based on some prior preparations like:

who are the identified trainees?

categorizing them under common identified training need?

Who should be the trainer?

What would the best place for providing training?
Which training should be given priority?
Which method should be used for training?
What should be the content of the training program?
What should be the training techniques?
What should be the duration of the training?
Frequency of training program?

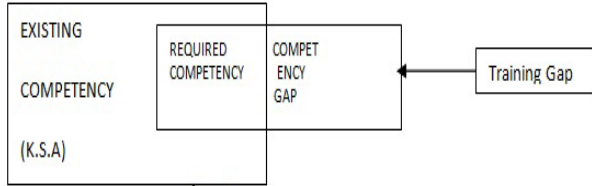


Figure 2- Identifying the Training Gap

These are some questions, answer to which results in a complete training program. To begin with first it is very important to identify individual training need based on organizational training need. Training need so identify is an indication of training gap between the present competency and desired competency level (refer to Fig. II), and all those employees who will be found deficient in required competencies in different aspects must be selected, so that a training program can be designed as per there necessity.

Depending upon the training gap total number of trainees on a particular topic must be identified, so that it will became easier to decide the duration and frequency of the training program.

After that it is necessary to decide who will be the trainer and what training method should be used for training the employee. It can be done according to the nature of the training topic and availability of the trainer i.e. if a trainer is available internally and is able to train, than it would be most cost-effective to select him and if not an external trainer must be selected. Similarly selection of training method is also done in the same manner. While selecting the training method it also has to be considered that the method must be in synchronization with the previous mode of learning of the trainees.

5- Preparation of Training and Controlled group:

It is the nature of the behavior of any individual, that if he is undergone a series of common test again and again then he automatically shows an improvement in the results. Also sometimes there are so many other factors which cause improvement in the human behavior. So to segregate the effect of training from this, it will be better to prepare a training group and controlled group to measure the effectiveness of the training program. As this training group consists of small number of people so it would be easy to measure the effectiveness of the training program by conducting Response evaluation and Competency evaluation. And if it was found that there is an improvement in the performance of the training group by comparing it with the performance of the controlled group, training program is implemented in mass group. And if there found any deviation from expected than result is conveyed as feedback and re-evaluation of the pervious steps to this.

6- Mass Implementation:

Success of the result of the effectiveness of training program in training group, results in mass implementation of

it. In this stage the program designed above is implemented to all the trainees identified for a particular topic.

7- Evaluation:

This is the stage of the measurement of the effectiveness of the training program and the benefit it causes to the organization and the employee based upon different time horizon. This can be done by measuring the human worth for the organization based upon the RAT (Rating After Training) (Refer to Table- II) and RBT (Rating Before Training) (Refer to Table- I).

8- Report and Record Preparation:

The result so obtained is conveyed to the top management and recorded for future reference, for designing and identifying training need for future.

III. RESULT AND CONCLUSION

TABLE II- MEASUREMENT OF HUMAN WORTH

	ABC			Net Worth	DEF			Net Worth
	X	Y	Z		X	Y	Z	
RBT (a)	4	2.7	4	10.7	0	0	0	0.0
Worth of KRA for the organization (b)	4000	3500.0	6000	13500.0	4000	3500	6000	13500.0
WBT (v = a*b)	16000	9333.3	24000	49333.3	0	0	0	0.0
RAT (c)	5.75	3.3	5	14.1	0	0	0	0.0
Worth of KRA for the organization (d)	4000	3500.0	6000	13500.0	4000	3500	6000	13500.0
WAT (w = c*d)	23000	11666.7	30000	64666.7	0	0	0	0.0
Increase in Worth (w - v)	7000	2333.3	6000	15333.3	0	0	0	0.0

WBT = Worth Before Training.
WAT = Worth After Training.
RBT = Rating Before Training.
RAT = Rating After Training.
KRA's = Key Result Areas.

X, Y, Z are the KRA's for any job.

Referring to the Table-I and Table-II, Worth Before Training (WBT) & Worth After Training (WAT) are measured. For measuring the effectiveness of the training program Increase in worth is to be calculated which is the difference of Worth After Training and Worth Before Training, if the difference is positive than it projects that the training program has successfully completed its objective, vice-versa. In the above said case the difference is “+15333.3”, means it is an improvement of Rs. 15333.3/-. The worth of the employees has been increased with a magnitude of 15333.3, and hence it can be concluded that the system works efficiently.

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