

Test Training Tools: Performance Promotion

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Performance Management is being used to understand the competencies of employees in terms of their knowledge or skills, with respect to a project/work. This leads to designing suitable training programs in order to rectify the deficiencies of employees. Since training program is one of the powerful activities of the organization, it has to be properly evaluated by employing appropriate evaluation tools and methodologies (Training Measurement Tools) to determine its actual effectiveness at the end of the programme / after the intervention. Today the training programme has phenomenal growth rate and it is being viewed as one of the support activities of HR department. Evaluation objectives may include measuring the programmes in terms of (a) the factors directly associated with the programme - course content, coverage of topics, trainers' skill sets, facilities etc., (b) the participants' level of learning, transfer of knowledge, attitudinal development etc., and (c) impact of the training.

Training Programme is the most powerful activity for employee empowerment. A report stated that the total dollars spent for training programmes alone by US organizations was about \$59.8 billion. It shows that it has phenomenal growth rate during last 20 years. Training programmes are specifically used to support human resources for the purposes of improving overall effectiveness of the organization and creating professional relations among individuals and groups within the organization. There is a wide-ranging and largely unresolved debate regarding the precise contribution of formal and informal

training activities to the overall performance of the organization (Campbell, 1999; Johnson, et al, 2000).



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In recent years, companies have very clear thought that HRD has to be aligned with processes, strategies and overall organizational system. And, the entire system has been aimed towards organization development (OD), which can happen only through people development. As a performance technology, it serves many purposes in the organization. Some of the purposes are: promoting change, increasing job performance, building teams, developing skills and knowledge,

disseminating information etc. The ultimate aim of any training program is to fulfill its objectives after intervention. The success of the programme can be judged only through evaluation on the training by employing certain methodologies. The methodologies can be used to evaluate a training course or training department or a certain set of instructional materials or trainers' competencies or trainees' competencies, or training mechanisms or physical environment etc. Training evaluation makes the best judgment about value of the training program. This paper has been aimed at formulating a framework by referring some reviews and cases, with regard to training measurement.

A Brief Historical Perspective

Kirkpatrick prepared the most influential framework in 1959. This framework includes four levels of evaluation such as reaction, learning, behaviour, and results. Building upon this foundation, J.Philip has added one more level with four levels of Kirkpatrick model and that being the ROI (Return on Investment) produced by the training program. ASTD's survey reports state that almost 67 percent of organizations (out of 300 HRD executives and managers surveyed) prefer Kirkpatrick model for evaluation. On the other hand, under the systems approach, the most influential models include: Context, Input, Process, and Product (CIPP) model (Worthen and Sanders, 1987); Training Validation System (TVS) approach (Fitz-Eng, 1994); and Input, Process, Output, Outcome (IPO) model (Burshnell, 1990). Goal based and systems-based approaches are predominantly used in the evaluation of training (Philips, 1991). The other approaches such as performance based evaluation and task based evaluation are quite common approaches for training evaluation. Performance based evaluation is being used to assess the performance of the project and task based evaluation is being used to assess the tasks undertaken for the project.

Literature Survey

Today the hottest issues in the HRD are evaluation; results based training, and ROI analysis (J Philip, 2004). National HRD Executive Survey was conducted by the American Society for Training and Development (ASTD) in 1997.

The result from the survey indicated that determining the impact of training on financial performance is the top most challenge for HR professionals. Philip McGee E.D., in his paper, has stated that the training program has to pay more attention on two distinct measures in order to improve the productivity of the training systems. They are: Quality of instruction and Quality of resources needed to deliver the instruction. The author has collected some of necessary aspects from the reviews of Gorden (1991) and Rossi, et al (1979) with respect to evaluation on instructional materials. The aspects are: Coverage, Sequence, Common Knowledge, Reliability, Simplicity, Practicability, Timeliness, Guidance, Readability, and Pictorial representations. An efficient training mechanism is essential to produce a better result. It is applied to help the trainees to acquire their knowledge suitably. A certain set of training mechanism tools identified by Biswajeet Pattanayak (2001) is: Audio-Visuals, Brainstorming, Case Study, Computer Based Training Communication games, Creativity games, Delegation, Doubling games, Ice-Breakers, In basket exercises, Induction program, Leadership games, Lectures, etc. All these mechanisms are used for the purpose of problem-solving, awareness on using software, building bias-free listening and talking, evolving multitude of solutions to problems, learning the importance of decentralization, learning selling techniques, teaching different types of leadership styles, insight into a given interaction, developing bargaining skills, developing analytical abilities, testing ability to plan ahead and exercises requiring collaborative efforts.

Training facility is one of the important pre-requisites for the successful implementation of any training program. Many training facilities are identified from the views of Warr et al (1999) and Wagner and Roland (1992). In all, sixteen training facilities are identified for analysis on training facilities. They are: Classroom, Library, Television, Audio System, Chamber, Transport, Water, Ventilation, Computer Laboratory, OHP, Power Point, Black Board and Chalks, Dining Room etc. The training staff must possess required qualification and experience in subject matter to handle the subject in the training. Developmental and instructional qualification of instructors include theory, practical knowledge and work experience in analyzing, designing, developing, conducting, and evaluating

training, as appropriate to their job requirements (Ross and Morrison (1997). Subject matter experts should be involved periodically in the training. The instructional skills training program is conducted using approved instructional materials that are based on learning objectives derived from job performance requirements and which provide for effective and consistent presentations (Hamblin 1974). The competencies of the trainers are identified with the help of some reviews of Roy and Dolke (1971) and Cote (1969). There are seventeen competencies for trainers, which are identified from reviews. They are: Coverage of topics, Clarity in presentation, Involvement in the training, Commitment level, Flexibility, Assistance to learn, Interaction, Practical orientation Sequence of lecture, Clarifying doubts, Usage of training facilities, Summarization, Friendliness, Illustrating, and Entrepreneurial orientation.

Some Cases

Case 1: Magnavox Electronics Systems Company in Torrance

Magnavox Electronics Systems Company in Torrance had conducted 18-week literacy programme covering verbal and math skills for their employees. The five-level approach was adopted to evaluate the programme and also to calculate ROI (level 5). The approaches followed in the study were: Level 1: Reaction was measured by post-course surveys, Level 2: Learning was measured through testing of Adult Basic Education, Level 3: Changes in behaviour were measured by daily efficiency ratings, Level 4: Business results were measured through improvements in productivity and reductions in scrap and rework, and Level 5: ROI was calculated by converting productivity and quality improvements to monetary values. The resulting ROI was 74 percent.

Case 2: An Integrated Model of Training Evaluation and Effectiveness

The model had been constructed to investigate the relationships between the evaluation and effectiveness with regard to post training attitudes. Evaluation measures related to post training attitudes were: cognitive learning, training performance and transfer performance. Training

effectiveness variables related to post training attitudes were: pre-training self-efficacy, experience, post training mastery orientation, learning principles, and post-training interventions. Results from the study stated that are two areas i.e. reaction measures and training motivation needing further development and research.

Case 3: City of Phoenix, AZ-Training Evaluation

The City of Phoenix had approximately 1.2 million residents and 12,000 employees. It had conducted three different types of training to its employees. They were: 1. Catalogue classes: Employees receive a class catalogue every six months and approximate numbers of classes were 150. The topics covered in the training were: pre-supervisory and supervisory development, career enhancement, computers, safety, financial management, office professional development, quality and productivity, and wellness. 2. City-wide classes: Classes were managed by the City Manager's Office and sessions were customized for all city employees 3. Department-specific classes: Classes were customized for a particular department and offered to work group. The city conducted evaluations of training sessions by using the rating Scale 1) Poor 2) Fair 3) Good, and 4) Excellent.

Evaluation was done on the basis of information provided in the classes, opportunity for class participation, content and format of handout materials and overall presentation. Some of the results from the evaluation were presented. (1), 97 percent of employees believed that the City of Phoenix was a good place to work, (2), 81 percent indicated they received the training that they need for their jobs, (3), 77 percent felt that they had been given a fair opportunity to attend training program and (4) 71 percent of employees agreed they received adequate computer training.

Case 4: Question Mark Case Study

In 2003, training evaluation on an information technology skills training programme of Regence Information Technology Services (RITS) was done using online assessments. This training was administered by the Oregon Department of Community Colleges and Workforce Department (CCWD). The CCWD requested training

participants and their supervisors to assess the training both immediately after training intervention and following several weeks. The evaluation tool was developed by ASTD. Immediately after each class, participants answered the questions of Part A through online. Part A questions consisted of a one to five scale to measure reactions to statements about administration and logistics; content; design; instruction; perceived impact; and overall satisfaction from the class. Several weeks after each class, participants took a "Part B" assessment answering questions about their use of skills, confidence level, barriers and enablers of transfer and impact. The results from the study are presented here. Employees and supervisors evaluated the training for RITS very positively during the assessments.

Case 5: Evaluation of a Novel Case-Based Training Programme (D3web. Train) In Hematology

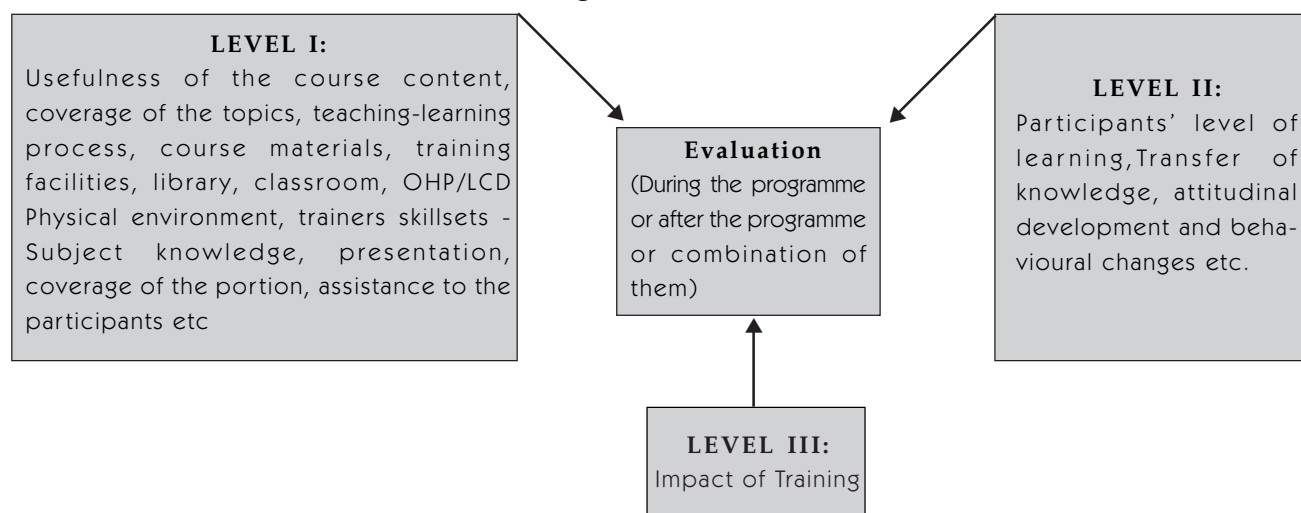
A case-based simulation-training programme of 17 hematology cases was offered for the students of medical

profession using the novel training system (d3web. Train). The measurement on the Internet course was done after the training intervention. The result after analyses was: out of 150 students, 47 students worked through at least one case and solved 435 cases in total. In average, the students had solved 9.5 cases. The main results were: the students found the cases very helpful (1.5 ± 0.6 on a scale from 1 = very helpful to 5 = not at all), the training system very good (1.4 ± 0.5 on a scale from 1 to 6) and want to work with it further (1.2 ± 0.4 on a scale from 1 to 5). During the final examination, students were able to solve more than 5 from the 17 cases, scored significantly better in the hematological part of the exam.

Training Measurement Tool

Evaluation traditionally represented as the final stage, is a systematic approach for the purpose of improving intervention or making a judgment about the worth and effectiveness – Goldstein (1993) and Bushnell (1990).

Training Measurement Tool



Evaluation involves in collecting data from trainees with regard to worthiness of the program. It is basically done with the aim of improving intervention or making a judgment about value of the training. Any training program should have proper justification for the reason why it has been constructed. It should run with programmed instruction and proper arrangements. The Evaluation could be started before or during or after and through

combination of them. Evaluation objectives can have multiple purposes at various levels in order to compare the results at the end of the programme. They are: Level I: Evaluating factors associated with the training programme such as course content, usage of the contents, instructional materials, trainers' skill sets, teaching aids, facilities at training program etc. Level II: Measuring the programme in terms of the participants' level of learning,

transfer of knowledge, attitudinal development etc., And, Level III: Analysing impact of training in terms of innovativeness, human relation, knowledge sharing, competitiveness, level of confidence, number of projects done, number of projects in progress, productivity. These variables help the researchers to find out the impact of the training. The impact of training can also be measured after few months of the training intervention. For which, the delayed questionnaire method could be adopted to collect the feedback from the participants. All these various aspects may be rated on the basis of five-point rating scale method to find out significant difference among aspects. Some of statistical techniques such as factor analysis, ANOVA, SERQUAL and discriminated method may be used to check the validity of the programme.

Conclusion

Different approaches to training evaluation have been discussed and it shows that approaches are not well structured and it could be altered according to the needs of evaluators. Many organizations have experienced problems with respect to training evaluation approaches (Deniz Eseryel, 2002). But, the success of the training program is based on the appropriate use of key factors such as training manuals, physical environment, trainers' skill-sets, etc. These resources can be appropriately combined and used on the basis of training objectives. Monitoring the programme should be done at frequent intervals to maintain its core competencies. Immediate action may be taken wherever the change is needed. Experience in training evaluation always helps to frame approach and make consistent evaluation.

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