The Proposal for Evaluation of Training and Development

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Abstract. Training&development is the top priority of human resource management in enterprises. It enables enterprises to occupy a strong advantage in market competition potential. Through summing up many years of work experience, the author puts forward to attach importance to the training evaluation mechanism, and discusses the training effect evaluation mechanism.

Keywords: Strategy; Training; Evaluation Mechanism.

1. Introduction

Management of training and development is without doubt one of the most important assets of any manufacturing organization, particularly the people involved in the actual production process, on-the-job performance and improved quality because training must have specific objectives and outcomes, which directly lead to business benefits and produce 'hidden' assets. A number of writers have been concerned to establish what 'effective' management of training might actually be in terms of common principles guiding in it. In various ways they express their views that 'effective' can only mean which brings an improvement in practice, perhaps changing attitude, giving insights, confidence, information and the ability to exercise new skills. Although the benefits are recognized, some employers do not attempt to assess the benefits from training programmes, and therefore are unable to quantify their results. In view of this, it is believed that developing more effective training programmes for production operators, which must include appropriate levels of objective setting and evaluation with a structured review of progress. Within such aspects, it is important for those professionals in organizing and managing training and development activities to have a clear understanding of knowledge and skills related to evaluation and consider both in the context of current arrangements for quality assurance and accreditation and as an integral part of training and development cycle. The demands of different forms of accreditation & quality and how these impact on the purposes and processes of evaluation should be recognized, as well as the key concepts & principles in evaluation, the implications of evaluator's decision about purpose, audience and consideration of issues of reliability and validity should also be addressed.

This article will present a reasoned proposal through definition, strategic evaluation plan, methods of delivery for the exercise relating to some training and development activity, and Improving the effectiveness of training evaluation.

2. Definition of evaluation and implication

It's important for us to be clear of definition of evaluation, especially training evaluation because this will shape the kind of strategy we wish to apply. In Valuing, The key sense of the term "evaluation" refers to the process of determining the merit, worth, or value of something, or the product of that process [1]. According to need-based evaluation theory, the profession of evaluation should meet important social needs captured in the definition: to use feasible practices to construct knowledge of the value that can be used to ameliorate the problems to which the evaluation is relevant[2].To developmental evaluation, they have as purpose the vague, general notion of development. The process inevitably leads to results. During the process, they have identified a problem or issue and hope to explore some potential solutions or interventions, but they realize that the outcome is different for different participants.

In this process, developmental programming requires development evaluation, and the evaluator becomes a member of the design team to help monitor the process and results of what is happening, in a constantly changing and rapidly changing feedback and changing environment.They've identified an issue or problem and want to explore some potential solutions or interventions, but they realize that where they end up will be different for different participants – and participants themselves should play a major role in goal-setting. Developmental programming calls for developmental evaluation in which the evaluator becomes part of a design team helping to monitor what's happening, both processes and outcomes, in an evolving, rapidly changing environment of constant feedback and change[3]. Concerning with empowerment, empowerment evaluation is the use of evaluation concepts, techniques, and findings to foster improvement and self-determination[4]. Empowerment evaluation has an unambiguous value orientation - it is designed to help people help themselves and improve their programs using a form of self-evaluation and reflection. Program participants conduct their own evaluations and typically act as facilitators; The outside evaluator often serves as a coach or additional facilitator depending on internal program capacities. Empowerment evaluation is necessarily a collaborative group activity, not an individual pursuit. An evaluator does not and cannot empower anyone; people empower themselves, often with assistance and coaching.... As a result, the context changes: The assessment of a programme's value and worth is not the end point of the evaluation - as it often is in traditional evaluation. The investigation of worth or merit and plans for program improvement become the means by which self-determination is fostered, illumination generated, and liberation actualized[5].

The definition is hardly perfect. There are many types of evaluations that do not necessarily result in an assessment of worth or merit -- descriptive studies, implementation analyses, and formative evaluations, to name a few. Better perhaps is a definition that emphasizes the information-processing and feedback functions of evaluation. For instance, one might say: Evaluation is the systematic acquisition and assessment of information to provide useful feedback about some object.

Because evaluation takes place within a political and organizational context, it requires group skills, management ability, political dexterity, sensitivity to multiple stakeholders and other skills that social research in general does not rely on as much.

So we'll recognize that evaluation is a systematic endeavor and use the deliberately ambiguous term 'object' which could refer to a program, policy, technology, person, need, activity, and so on. The definition emphasises acquiring and assessing information rather than assessing worth or merit because all evaluation work involves collecting and sifting through data, making judgements about the validity of the information and of inferences we derive from it, whether or not an assessment of worth or merit results.We believe that evaluation as a systematic approach is encapsulted, which relates not only to the effects of the training, but also the processes involved. It is the systematic collection and analysis of information necessary to make effective decisions related to the selection, adoption, design, modification and value of training programme. Kenny and Reid (1986), who argue that evaluation: It can be used to demonstrate a clear and reliable linkage between training effectiveness and the fulfilment of strategic organizational objectives[6]. According to Stern (1990): Evaluation is any activity that throughout the planning and delivery of innovative programmes enables those involved to learn and make judgements about the starting assumptions, implementation processes and outcomes of the innovation concerned[7].

These definitions will be very important for us to adopt and explore how we can design evaluation strategy in certain context, in which evaluation methods should be planned.

3. Evaluation Strategies

3.1. Four Categories

Evaluation strategies' means broad, overarching perspectives on evaluation. William (2000) concludes four categories which can be concluded as Scientific-experimental models, Management-

oriented systems models, Qualitative/anthropological models and Participant-oriented models[8]. Here, we can have a briefly review to them firstly.

3.1.1. Scientific-experimental models

They are probably the most historically dominant evaluation strategies. Taking their values and methods from the sciences -- especially the social sciences -- they prioritise on the desirability of impartiality, accuracy, objectivity and the validity of the information generated. This models would be: the tradition of experimental and quasi-experimental designs; objectives-based research that comes from education; econometrically-oriented perspectives including cost-effectiveness and cost-benefit analysis; and the recent articulation of theory-driven evaluation.

3.1.2. Management-oriented systems models

Two of the most common of these are the program evaluation and review technique, and the critical path method. Both have been widely used in business and government. Two management-oriented systems models were originated by evaluators by the model with units—treatments--observing observations and--settings; and the other model with context—input-- process and --product. These management-oriented systems models emphasize comprehensiveness in evaluation, placing evaluation within a larger framework of organizational activities.

3.1.3. Qualitative/anthropological models

They emphasize the importance of observation, the need to retain the phenomenological quality of the evaluation context, and the value of subjective human interpretation in the evaluation process. Included in this category are the approaches known in evaluation as naturalistic or 'Fourth Generation' evaluation; the various qualitative schools; critical theory and art criticism approaches; and, the 'grounded theory' approach of Glaser and Strauss among others.

3.1.4. Participant-oriented models

As the term suggests, they emphasize the central importance of the evaluation participants, especially clients and users of the program or technology. Client-centred and stakeholder approaches are examples of participant-oriented models, as are consumer-oriented evaluation systems.

3.2. Training Measurement Models

Secondly, let’s consider two specific training measurement models as Kirkpatrick and CIRO model in order to closely apply:

3.2.1. Kirkpatrick model

This is a widely accepted model, which can be used for evaluating the effectiveness of training in the manufacturing industry sector[9]. It is mainly concerned with measuring the change in skill levels achieved as a result of the training. There are four main elements within the model: reactions; learning; behaviour; and results.

The main strength of the Kirkpatrick model is the focus on the change in behavioural outcomes of the learners involved in the training programme [10] .

However, the model does not consider the measurement of other critical areas before training, such as: objectives; contents; and equipment needed for training[11] .

3.2.2. CIRO model

This is also a measurement model widely used in current business. The four main elements are: context; inputs; reactions; and outcomes[12] .

The CIRO model focuses on measurements both before and after the training has been carried out. The main strength of the CIRO model is that the objectives and the training information regarding the current situation of the training course, leading to improvements.

3.3. Objective-oriented Training Evaluation Model.

Thirdly, McClelland S[13] introduces a model for designing objective-oriented training Evaluations shown as the figure 1: Objective-oriented Training Evaluation Procedural Model

With considering the trainees' learning motivation and abilities, the focus is on the improvement of individual abilities and qualities of employees before and after the training.

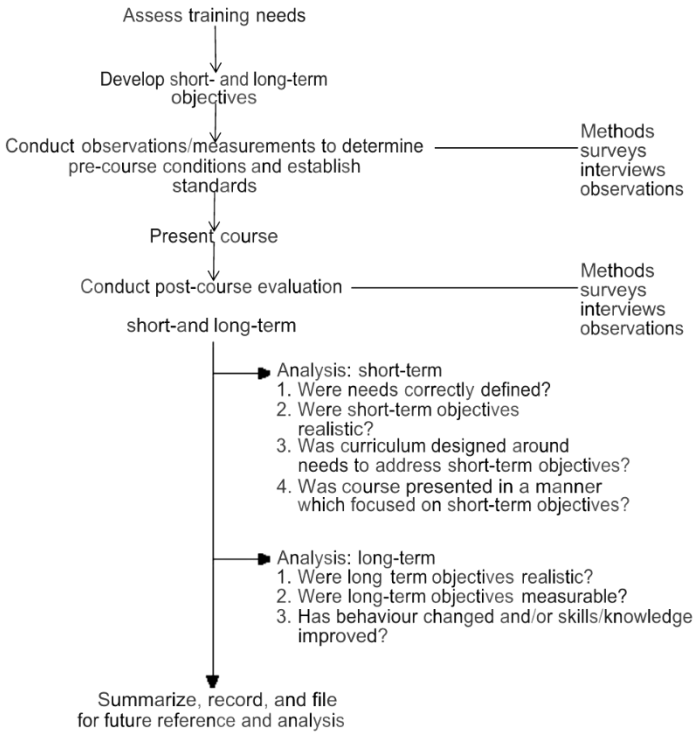

Figure 1. McClelland S (1994): Objective-oriented Training Evaluation Procedural Model

3.4. Training Measurement Model

At last, a simplest training measurement model can be recommended that is:

3.4.1. Immediate test.

An immediate test is required for testing the new skills that the learners have gained from the training programme. It should be carried out immediately after the training programme has been completed.

3.4.2. Intermediate test.

An intermediate test should be carried out when the learners return to their jobs, to identify whether they can apply what they have learned in their workplace environment.

3.4.3. Ultimate test.

An ultimate test should be used after an appropriate time has elapsed in order to measure the improvement of the skills, and behavioural changes.

Facing all the categories, how can we choose the most effective strategy to fit in a certain perspective/ situation? It would be a good idea to critically adopt all the relevant issues through all of them. In reality, most good evaluators are familiar with all four categories and borrow from each as the need arises. There is no inherent incompatibility between these broad strategies -- each of them brings something valuable to the evaluation table. In fact, in recent years attention has increasingly turned to how one might integrate results from evaluations that use different strategies, carried out from different perspectives, and using different methods. The problems are complex and the methodologies needed will and should be varied.

4. Methods of Evaluation

4.1. Purposes/ Tasks

It's well-known that most evaluations is to provide "useful feedback" to a variety of audiences including sponsors, donors, client-groups, administrators, staff, and other relevant constituencies. Most often, feedback is perceived as "useful" if it aids in decision-making.

Hesseling (1966) suggested that one of the main tasks of the trainer is to test for training effectiveness, and to validate that the selected training methods have achieved a desired result[14]. Many companies such as Sheraton Grand Hotels adapt the 360-degree feedback process for performance management and career development has been reported as being a useful mechanism for identifying training needs and evaluating the outcomes, but is typically aimed only at employees in managerial positions[15].

From the content of problem solving, Jackson (2001) suggests that evaluation is used to identify problems, mistakes and weaknesses so that they could be rectified[16] ; The evidence of the benefits and potential demand for the service, the evidence of the impact and effectiveness of the project and the guidance for future plans should be all provided.

Furthermore, discussing and lecturing the purpose of evaluation, module tutor concludes the following points:

Quality control
Efficient training design
Identification of approperiate training resources
Track record of budgetary
Identification of criteria
Defining place of training in organisation
Identifying organisational effects of application of training and development activity and outcomes

4.2. Criteria / Techniques

Besides the purposes of evaluation mentioned above, the criteria for selecting evaluation techniques play an important role for effective evaluation process. It has been described in Course Handout 1 as:

Fitness for purpose. Is it a technique which will produce valid evidence?
Evaluator skills. Self-explanatory?
Acceptability to subjects. Capacity eg to e introspective, familiarity with particular techniques.
Acceptability to organisation. Culture, history, organisational climate.
Resourcing. Demands on evaluator's own time or availability of support persons.
Secondary benefits. Some approaches also help to identify continuing needs, reforce learning or simply have a PR benefit.
Multiple techniques. Likely to be necessary both for reliability- through cross checking and also since training issues transcend immediate outcomes/ reactions.

For collecting information in evaluation, course tutor also provided a number of techniques together with relevant advantages and disadvantages:

Questionnaires/ Checklist
Interviews
Group discussion and interviews
Delphi Techniques
Documentary Analysis
Diaries
Observation
Action Research

Our application or selection depends on different situations/ cases. While it was recognised that questionnaire and surveys are limited in that they are self selecting, it was decided to use them to

gather impressions about use and user opinions on interface design and development. Concerning with observation, Mullings (1984) records that: Observation is a way of collecting data in a purposeful and systematic manner about the behaviour of an individual or a group of people at a specific time and place – observation studies events as they actually occur and also what people do rather than what they say they do – observation can be used to study both users and usage[17] . Mann (1998) points out that: Talking to people (interview) can provide you with a quick overview of the whole field; it can give you not only the answer to a question but also the larger context in which the question should be asked[18].

5. Approaches

It has previously been emphasised that a strategic approach should be adopted, to ensure that training programmes are consistent with the overall objectives of the organisation. Alternatively, Bramley(1992), believing that behavioural change is introduced through training evaluations, presents a three-part approach[19]:

5.1 Evaluation of training as a process.

5.2 Evaluation of changes in knowledge, skills, attitudes and levels of effectiveness.

5.3 Various approaches to evaluation such as interviews, surveys, various methods of observing behaviour and testing.

However, in evaluation process, it is found that, no matter how carefully plans were made, many activities took longer than expected, especially when they involved other departments in institutions and other organisations and groups which had their own agendas and priorities. There was a need therefore, to allow much more time than had initially seemed appropriate for these activities and also to allow ‘‘slippage’’ time between activities. It is also found that careful consideration must be given to evaluation materials and their distribution and collection. A questionnaire was devised for the performance evaluation for the first iteration of the project. This was considered by some of the users to be too long and too complex. A shorter and less complex version of the questionnaire was produced for the second iteration.

In designing a training evaluation process, Cotton (1995) suggests that: Four significant elements should be considered for designing assessment tasks and assessment[20]:

Validity. Does it measure what you want it to measure?

Reliability. Does it measure in a predictable way?

Practicality. Is it useful in real life?

Fairness. Does it advantage or disadvantage any students?

Overall, systematic and strategic approach should be pay the most attention. There are many disadvantages in using standardized evaluation instruments. First, they present a “one size fits all” approach to training course design, in that they assume that each course has relative similarities in its content, style, and expectations. Second, they are generally not as comprehensive nor focused on critical content (objective-driven) areas as would be either necessary or desirable. Third, they offer little assistance in assessing the longer-term effects of the training – in essence, the pay-off in determining a course’s overall usefulness and cost-effectiveness.

A valuable alternative to standardized evaluations can be found in designing a customized and systematic approach in which the principal goal is to obtain feedback aimed specifically at a particular programme’s objectives.

Clearly, this is not meant to be exhaustive. Each of these methods, and the many not mentioned, are supported by an extensive methodological research literature. This is a formidable set of tools. But the need to improve, update and adapt these methods to changing circumstances means that methodological research and development needs to have a major place in evaluation work.

6. Conclusion

This article has presented some proposals for strategy evaluation. The proposals presented began as a theoretical approach collecting data of both qualitative and quantitative to make informed decisions regarding the overall effectiveness of training activities. In this context the validity and reliability of the findings are indeed constrained and the theoretical context needs much further clarification. Long-term effectiveness lie in flexibility, functional and behavioural competence. While emphasising observable and measurable results the activity should offer added value. Somehow, the evaluation measures should also be implemented concurrently with the training programme, in order to achieve continuous improvement of training courses, and help organisations identify the true value of training rather than merely the cost. Sometimes, we should also pay attention to the factors which influence the outcome of the evaluation. For example, from trainers' role, do they fully understand what constitutes the evaluation of training? From organisation aspect, how do the nature and type of organisation influence the scope and methods of evaluation? From the conduct of evaluation, whether internal or external evaluators are used? Form the process, are the methods available and effective? And others resources like time, money, and personnel.

So on and so forth, a number of frameworks and tools exist when developing an appropriate set of training objectives and output measures, yet not all models are completely perfect due to the changes. Therefore, further research needs to be carried out continously to develop adaptations of established strategy execution methods which may enable companies to apply training programme measurement models (such as suggested in this paper) to integrate training successfully with strategic objectives, and deliver bottom-line value.

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