# "A Literature Review on Various Models for Evaluating Training Programs"

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Abstract: In today's dynamic marketplace, the need for consistent skill up gradation never loses its importance. What was said to be an effective training program in the past may not be so now. We need to continuously adapt it to suit our current needs. This is possible when we know how effective our previous training program was. This paper will describe various ways to evaluate training programmes. We can use the models suggested here depending on the available resources, size of the training program and corporate culture.

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# I. Introduction

Evaluation of Training programmes are actually assessment of various methods and techniques used for imparting training. It identifies weakness of training programmes and thus helps to accomplish closest possible correlation between the training and the job.

"Training evaluation can be described as a systematic process of collecting and analyzing information for and about a training programme which can be used for planning and guiding decision making as well as assessing the relevance, effectiveness, and the impact of various training components" (Raab et al., 1991). This demonstrates the wide range of activities that are associated with it as well as the many benefits.

James and Roffe (2000:12) provide a simplified explanation of evaluation: "comparing the actual and real with the predicted or promised" which emphasises the need to reflect on what was achieved in comparison to what was hoped for.

The question basically arises as to why to evaluate training programme?

Training costs can be significant in any business. Most employers are prepared to incur these costs because they expect their business to benefit from employees' development and progress.

The extent to which business has benefited can be assessed by evaluating training. There are also other reasons for evaluating training. It helps to:

- track the development of staff knowledge and skills
- find out if the learning is being applied in the workplace
- identify training gaps and future training needs
- establish if the investment was worthwhile
- inform future training plans and strategy
- ensure training continuously improves

The problem for many businesses is not so much why training should be evaluated, but how!

They often overlook evaluation, perhaps because the benefits - particularly financial ones - can be hard to describe in concrete terms.

It is generally possible to attach the benefits, enabling organization to make a business case for training, by choosing what to measure or compare before and after training. Organizations need to set objectives for training, e.g. increase in skills, reduction in errors or accidents, increase in workloads and decide how to check that they have been met.

What makes a company superior to its competitor?

The technology, access to information, knowledge, raw material and other things are equally available to all the companies. It is said that 80 percent of what a company does can be done by another company in a similar business. The ability to utilize the other 20 percent is what gives the company an edge over the competitors. The other 20 percent is all people. The efficiency of the staff can make or break the company. Globalization, increasing customer sophistication, ready access to technology and growing emphasis on quality has all transformed the structure of organizations. (A Handbook for Training Strategy / MartynSloman)

#### II. Review of Literature

HarshitTopo in his research "Evaluation of Training and Development: An Analysis of Various Models" analysed training evaluation is the most important aspect of training and development. It is a subject which has been much discussed but superficially carried out. There are various reasons for that . One of the main reasons is that all models are descriptive and subjective in nature, its indicators for evaluating training and development is not clearly given and explained. Kirkpatrick model is widely used model at reaction level but in this case also what should be the main indicators at reaction level and other levels is not explained properly.

Professor Sharon Mavin, Lesley Lee, Dr. FionaRobson in their research "The evaluation of learning and development in the workplace: A review of the literature" found evaluation should become built into the training process; something that takes place after all learning interventions however this does not mean that one size fits all approach is appropriate. This is also partly a cultural issue — managers and employees need to accept that this is an important stage in the overall learning and development provision.

ShefaliSachdeva in her study "EffectivenessEvaluation of Behavioural Training and Development Programmes" analysed evaluation being a process of establishing a worth of something, is a difficult and complex task in reference to behavioural training and development programmes. The purpose of evaluation is to ensure that a given programme is effective, to control the expenditure or provision of training and development activity and more importantly to recognize the areas of intervention into organisational processes to improve them further. Though there are many researches that have been done in the field, there are limited numbers of studies that focus on evaluation of behavioural training and development programmes due to its methodological limitations. Yet this does not eliminate the need to ensure that the resources employed in such programmes are used effectively. Evaluation of such programmes serves as an evidence of the contribution that the programme is making to employees development as well as to organisation"s growth.

It concludes that restricting to merely finding that the programme was effective in general would lead the organisation to wrong conclusion about the modification, continuance or discontinuance of the programme. We hereby attempt to highlight the gap in literature by proposing to measure degree of effectiveness of behavioural training and development programmes and thinking beyond a level 4 assessment to see how we can go about measuring ROI of these programmes as well, as is measured for other HR interventions and various other training and development programmes.

Joseph S. Mattoon in his research "Evaluating Training & Educational Programs: A Review Of The Literature" found in his research the birth of many large educational programs in the 1960s was followed by the passing into law of ESEA, the Congressional Budget and ImprovementControl Act, and the fostering of a general initiative for greater accountabilityin Government-funded programs. This growth brought about a substantialincrease in the need for program evaluation. However, early evaluation effortsfailed to (a) measure the degree of program success and (b) provide programdecision makers with information to improve their programs. This crisis led tothe development of new organizations devoted to clarifying the purposes and processes involved in program evaluation and developing new evaluation procedures. Many new journals and books were published during the late1960s and early 1970s that focused on program evaluation. A substantial number of these publications are relevant to the philosophy, theory, and methodology of educational program evaluation. Since the 1960s, evaluation39researchers have expanded the concept and definition of program evaluationand have assembled a substantial number of new methods, tools, and strategies for practitioners. Many of the shortcomings of recent program evaluations appearto be due to (a) the failure of evaluators to investigate and heed the lessonslearned during past evaluation efforts, (b) the lack of or misapplied use of evaluation tools, and (c) the failure of program sponsors, decision makers, and evaluators to develop a clear understanding of evaluation's roles within programplanning, implementation, and operation.

DenizEseryel found that the activities involved in evaluation of training are complex and not always well-structured. Since evaluation activities in training situations involve multiple goals associated with multiple levels, evaluation should perhaps be viewed as a collaborative activity between training designers, training managers, trainers, floor managers, and possibly others.

There is a need for a unifying model for evaluation theory, research, and practice that will account for the collaborative nature of and complexities involved in the evaluation of training. None of the available models for training evaluation seem to account for these two aspects of evaluation. Existing models fall short in comprehensiveness and they fail to provide tools that guide organizations in their evaluation systems and procedures. Not surprisingly, organizations are experiencing problems with respect to developing consistent evaluation approaches. Only a small percentage of organizations succeed in establishing a sound evaluation process that feeds back into the training design process. Evaluation activities are limited to reaction sheets and student testing without proper revision of training materials based on evaluation results. Perhaps lack of experience in evaluation is one of the reasons for not consistently evaluating. In this case, the organization may consider hiring an external evaluator, but that will be costly and time consuming. Considering the need for the use of internal resources and personnel in organizations, expert system technology can be useful in providing

expert support and guidance and increase the power and efficiency of evaluation. Such expert systems can be used by external evaluators as well.

Strong, completely automated systems offer apparent advantages, but their development and dissemination lag behind their conceptualization. Future research needs to focus on the barriers to evaluation of training, how training is being evaluated and integrated with the training design, how the collaborative process of evaluation is being managed and how they may be assisted. This will be helpful in guiding the efforts for both the unifying theory of evaluation and in developing automated evaluation systems.

WaseemRehmat, IirisAaltio, Mujtaba Agha and HaroonRafiq Khan in their study "Is Training Effective? Evaluating Training Effectiveness in Call Centers" analysed that by using the framework and mapping of call center evaluations in Kirkpatrick model in this study, organizations can measure effectiveness of their training programs. Furthermore, analysis in the study revealed that organizations that are considering reactions as the parameter to gauge effectiveness of training can be highly mislead by results as Reactions of trainees after end of training are usually highly inflated about trainings. Gauging effectiveness at Level 2 of Kirkpatrick model gives comparatively reasonable results but actual results are what trainee participant delivers on job. Therefore, organizations must strive to capture training results at this level which is the 3rd level of Kirkpatrick model.

At abstract level, we endeavored to contribute in the current discourse of training evaluation by appraising the effectiveness of the evaluation process and by providing a framework of complete training lifecycle in which evaluation is embedded in the planning and execution phase. Though scope of this study was limited to call center trainings where results at each level of evaluation could be gathered objectively, the study opens an interesting and challenging area for management researchers to exploring and improve quality of training programs by developing and customizing similar evaluation models for diverse training fields such as soft skills and leadership training.

Dr.Mu.Subrahmanian in his study "Evaluating Training Programmes In India Post" found thatthe success of an organization depends largely on a sound training strategy. In the face of continuous technological innovation, higher levels of knowledge and skills and their applications are crucial resources that can only be mobilized by training. Many researches conducted so far on training and development and their evaluation indicatethat no objective and reliable yardsticks have been evolved for measuring learning during training and subsequently by various tools have been suggested but still there exists a lack of complete understanding about the entire training process. However, evaluation should be continues process which would help the trainer to constantlyimprove the programme amidst global competition. It is necessary for the organization to build up effective human resource capital, by providing effective training. Based on these three levels of opinion collected from the employees in India Post and opinioncollected from the trainers, the researcher has evolved a new model for evaluation of trainingprogramme i.e., AIM (Appraisal, Intervention & Measure) Model that will try to achieve thetraining purpose of the India Post and will enhance the quality and effectiveness of the trainingprogramme. The mantra for effective training should be, learn fast, remember often and apply withsincerely.

AlYahya, Mohammed Saad,Dr. NorsiahBinti Mat in their research"Evaluation of Effectiveness of Training and Development: The Kirkpatrick Model" concluded thatIt will be acknowledged in training evaluation literature that the actual barrier and obstacle to training effectiveness comes from within the human resources development functions. For instance, the appraisal system may be inadequate to and poorly executed to identify the skill gaps. Some establishments do not have reliable job descriptions, the connection between training function and other personnel functions such as succession and career planning must be streamlined to facilitate proper synergy to take place. Other notable barrier may be political or structural in nature. To overcome this barrier training must be defined in term of either training based on poor performance or defined based on organizational objectives, although both directly related.

Improvement in training effectiveness can directly be facilitated by the following, employee's awareness of objectives of training courses, continuity of training, and application of training in the work place and proper implementation of the program. A well designed and executed training will facilitates participant's involvement, attitudinal changes and this provides opportunity for application of new skills and knowledge in workplace, job commitment, employees' alignment to organizational visions and strategies (Shahrooz, F. 2012).

AkhilaKunche, Ravi Kumar Puli, SunithaGuniganti, Danaiah Puli "Analysis and Evaluation of Training Effectiveness" concluded that Back planning causality should continue in a circular fashion in that the results achieved should now drive the performers' perceptions of the need to learn more and perform better in order to achieve even better results. Of course this assumes that not only the customer understands the level of impact achieved, but also the performers/learners' perception on how close they came to achieving the desired result.

Rama Devi ,NagurvaliShaik "Evaluating training & development effectiveness - A measurement model "found that Training and Development contributes in such a way that employees can enhance their dexterity. There is a causal relation between training and employee performance. Training helps organizations in achieving their strategic objectives and gives organizations a competitive edge. In this context, organizations train and develop their employees to the fullest advantage in order to enhance their effectiveness. It is not just sufficient to conduct a training program. Organizations should evaluate whether training & development programs are effective and producing desired results. Proper evaluation is the base to effective training. Training evaluation should be a regular system by the fact that trainees are transient groups. They attend training program to acquire specific skills and return to work to apply them. Over time, new knowledge and skill becomes necessary; again they return to training program.

## III. Models of evaluation

# 1. The Kirkpatrick model

In the 1960's Donald Kirkpatrick wrote a series of articles on evaluation where he identified four stages (or levels of evaluation). Despite its age, Kirkpatrick's model continues to be used in contemporary research (Schmidt et al, 2009 and Elliott et al, 2009). Kirkpatrick (1977:9) divided the evaluation process into four segments or stages as shown below in Figure 1.

Evaluation	Evaluation description and	Examples of evaluation tools	Relevance and Practicability
level and type	characteristics	and methods	resevance and racticality
1. Reaction	Reaction evaluation is how the delegates felt and their personal reactions to the training or learning experience, for example: Did the trainees like and enjoy the training? Did they consider the training relevant?  Was it a good use of their time? Did they like the venue, the style, timing, domestics, etc?  Level of participation.  Ease and comfort of experience.  Level of effort required to make the most of the learning.  Perceived practicability and potential for applying the learning.	Typically 'happy sheets'. Feedback forms based on subjective personal reaction to the training experience. Verbal reaction which can be noted and analysed. Post-training surveys or questionnaires. Online evaluation or grading by delegates. Subsequent verbal or written reports given by delegates to managers back at their jobs.	Can be done immediately the training ends.  Very easy to obtain reaction feedback Feedback is not expensive to gather or to analyse for groups.  Important to know that people were not upset or disappointed.  Important that people give a positive impression when relating their experience to others who might be deciding whether to experience same.
2. Learning	Learning evaluation is the measurement of the increase in knowledge or intellectual capabilityfrom before to after the learning experience: Did the trainees learn what was intended to be taught? Did the trainee experience what was intended for them to experience? What is the extent of advancement or change in the trainees after the training, in the direction or area that was intended?	Typically assessments or tests before and after the training. Interview or observation can be used before and after although this is time-consuming and can be inconsistent.  Methods of assessment need to be closely related to the aims of the learning.  Measurement and analysis is possible and easy on a group scale.  Reliable, clear scoring and measurements need to be established, so as to limit the risk of inconsistent assessment.  Hard-copy, electronic, online or interview style assessments are all possible.	Relatively simple to set up, but more investment and thought required than reaction evaluation. Highly relevant and clear-cut for certain training such as quantifiable or technical skills. Less easy for more complex learning such as attitudinal development, which is famously difficult to assess. Cost escalates if systems are poorly designed, which increases work required to measure and analyse.
3. Behaviour	Behaviour evaluation is the extent to which the trainees applied the learning and changed their behaviour, and this can be immediately and several months after the training, depending on the situation:  Did the trainees put their learning into effect when back on the job?  Were the relevant skills and knowledge used	Observation and interview over time are required to assess change, relevance of change, and sustainability of change. Arbitrary snapshot assessments are not reliable because people change in different ways at different times. Assessments need to be subtle and ongoing, and then transferred to a suitable analysis tool.	Measurement of behaviour change is less easy to quantify and interpret than reaction and learning evaluation.  Simple quick response systems unlikely to be adequate.  Cooperation and skill of observers, typically line-managers, are important factors, and difficult to control.  Management and analysis of ongoing subtle assessments are difficult, and virtually impossible without a well-designed system from the beginning.

17 | Page

	Was there noticeable and measurable change in the activity and performance of the trainees when back in their roles? Was the change in behaviour and new level of knowledge sustained? Would the trainee be able to transfer their learning to another person? Is the trainee aware of their change in behaviour, knowledge, skill level?	Assessments need to be designed to reduce subjective judgment of the observer or interviewer, which is a variable factor that can affect reliability and consistency of measurements.  The opinion of the trainee, which is a relevant indicator, is also subjective and unreliable, and so needs to be measured in a consistent defined way.  360-degree feedback is useful method and need not be used before training, because respondents can make a judgment as to change after training, and this can be analysed for groups of respondents and trainees.  Assessments can be designed around relevant performance scenarios, and specific key performance indicators or criteria.  Online and electronic assessments are more difficult to incorporate - assessments tend to be more successful when integrated within existing management and coaching protocols.  Self-assessment can be useful, using carefully designed criteria and measurements.	Evaluation of implementation and application is an extremely important assessment - there is little point in a good reaction and good increase in capability if nothing changes back in the job, therefore evaluation in this area is vital, albeit challenging.  Behaviour change evaluation is possible given good support and involvement from line managers or trainees, so it is helpful to involve them from the start, and to identify benefits for them, which links to the level 4 evaluation below.
4. Results	Results evaluation is the effect on the business or environment resulting from the improved performance of the trainee - it is the acid test.  Measures would typically be business or organisational key performance indicators, such as:  Volumes, values, percentages, timescales, return on investment, and other quantifiable aspects of organisational performance, for instance; numbers of complaints, staff turnover, attrition, failures, wastage, non-compliance, quality ratings, achievement of standards and accreditations, growth, retention, etc.	It is possible that many of these measures are already in place via normal management systems and reporting.  The challenge is to identify which and how relate to to the trainee's input and influence.  Therefore it is important to identify and agree accountability and relevance with the trainee at the start of the training, so they understand what is to be measured.  This process overlays normal good management practice - it simply needs linking to the training input.  Failure to link to training input type and timing will greatly reduce the ease by which results can be attributed to the training.  For senior people particularly, annual appraisals and ongoing agreement of key business objectives are integral to measuring business results derived from training.	Individually, results evaluation is not particularly difficult; across an entire organisation it becomes very much more challenging, not least because of the reliance on line-management, and the frequency and scale of changing structures, responsibilities and roles, which complicates the process of attributing clear accountability. Also, external factors greatly affect organisational and business performance, which cloud the true cause of good or poor results.

"Kirkpatrick's four levels is the best I've ever seen in evaluating training effectiveness. It is sequentially integrated and comprehensive. It goes far beyond 'smile sheets' into actual learning, behavior changes and actual results, including long-term evaluation. An outstanding model!" Stephen R. Covey Author, The 7 Habits of Highly Effective People and The Leader in Me.

Since Kirkpatrick established his original model, other theorists (for example Jack Phillips), and Kirkpatrick himself, have referred to a possible fifth level, namely ROI (Return On Investment). In particular, the Phillips

ROI Methodology offers a practical way to forecast the potential payoff—return on investment (ROI)—of a proposed training or human resources development initiative before funds are committed.

The MCPCC ROI Forecasting Tool, based on the Phillips approach, is an easy-to-use decision support tool that allows organizations to quickly develop and examine the business case for investing in workforce development. While the tool itself is a selfcontained and self-explanatory ROI calculator, the following is a brief overview of the ROI MethodologyTM underlying the forecasting tool. ROI and cost-benefit analysis are familiar decision-making tools used in business management worldwide. They are used most commonly to analyze planned investment decisions for the acquisition of capital equipment and technology. At its simplest, ROI is the ratio of the net benefits of an investment compared to its total costs.

The formula for ROI is:

ROI =Total Program Benefits- Total Program Costsx 100% Total Program Costs

or,

ROI = Net Program Benefits x 100% Total Program Costs

ROI is the ultimate level of evaluation. It compares the monetary benefits from the program with the program costs. Although the ROI can be expressed in several ways, it is usually presented as a percentage or cost/benefit ratio. (Phillips 2005)

ROI allows decision makers to compare the ultimate value of a training investment with other potential investment opportunities.

#### 2. CIPP evaluation model

CIPP evaluation model was developed by Daniel Stufflebeam and colleagues in the 1960s. CIPP is an evaluation model that requires the evaluation of context, input, process and product in judging a programme's value. The CIPP framework was developed as a means of linking evaluation with programme decision-making. It aims to provide an analytic and rational basis for programme decision-making, based on a cycle of planning, structuring, implementing and reviewing and revising decisions, each examined through a different aspect of evaluation –context, input, process and product evaluation.

The CIPP model is an attempt to make evaluation directly relevant to the needs of decision-makers during the phases and activities of a programme.Stufflebeam's context, input, process, and product (CIPP) evaluation model is recommended as a framework to systematically guide the conception, design, implementation, and assessment of service-learning projects, and provide feedback and judgment of the project's effectiveness for continuous improvement.

Four aspects of CIPP evaluation

These aspects are context, inputs, process, and product. These four aspects of CIPP evaluation assist a decision-maker to answer four basic questions:

- What should we do?
  - This involves collecting and analysing needs assessment data to determine goals, priorities and objectives. For example, a context evaluation of a literacy program might involve an analysis of the existing objectives of the literacy programme, literacy achievement test scores, staff concerns (general and particular), literacy policies and plans and community concerns, perceptions or attitudes and needs.
- How should we do it?
  - This involves the steps and resources needed to meet the new goals and objectives and might include identifying successful external programs and materials as well as gathering information.
- Are we doing it as planned?
  - This provides decision-makers with information about how well the programme is being implemented. By continuously monitoring the program, decision-makers learn such things as how well it is following the plans and guidelines, conflicts arising, staff support and morale, strengths and weaknesses of materials, delivery and budgeting problems.
- Did the programme work?
  - By measuring the actual outcomes and comparing them to the anticipated outcomes, decision-makers are better able to decide if the program should be continued, modified, or dropped altogether. This is the essence of product evaluation.

Using CIPP in the different stages of the evaluation

The CIPP model is unique as an evaluation guide as it allows evaluators to evaluate the program at different stages, namely: before the program commences by helping evaluators to assess the need and at the end of the program to assess whether or not the program had an effect.

CIPP model allows you to ask formative questions at the beginning of the program, and then later gives you a guide of how to evaluate the programs impact by allowing you to ask summative questions on all aspects of the program.

- Context: What needs to be done? Vs. Were important needs addressed?
- Input: How should it be done? Vs. Was a defensible design employed?
- Process: Is it being done? Vs. Was the design well executed?
- Product: Is it succeeding? Vs. Did the effort succeed?

#### 3. Kaufman's Five Levels of Evaluation

Kaufman's Five Levels of Evaluation is a reaction to and development of Kirkpatrick's four levels. Where Kirkpatrick's model divides evaluation by type of impact, mainly to the learner, Kaufman's model evaluates the impact on different groups.

Kaufman's main developments from Kirkpatrick are:

- the splitting of Level 1 into input and process,
- the grouping of Levels 2 and 3 under the "micro" level, and
- the addition of fifth level, mega. Kaufman also sees Kirkpatrick's model as being restricted to training delivery, while his own model considers both delivery and impact.

One interpretation of Kaufman's levels is summarized in below Table, including the corresponding Kirkpatrick levels.

(Note: This is not how Kaufman presents the final form of his five levels. Itis explained later).

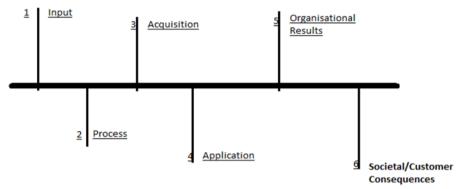
Kaufman	Kirkpatrick	Explanation
Input	1a	Resource availability and quality These are training materials,
		digital resources, etc., used to support the learning experience
Process	1b	Process acceptability and efficiency This is the actual delivery of
		the learning experience.
Micro	2and3	Individual and small group payoffs This is the result for the 'micro-
		level client' (normally the learner). Did the learner 'acquire' the
		learning? Did he or she apply it on the job?
Macro	4	Organizational payoffs This is the result for the 'macro-level
		client', the organization, and includes evaluation of performance
		improvement and cost benefit/cost consequence analysis.
Mega	n/a	Societal contributions This is the result for the 'mega-level client',
		either society as a whole or a company's clientele.

Input and process the division of Kirkpatrick's Level 1 into input and process is perhaps the most practical and useful of Kaufman's suggestions. In a world that allows quick and easy access to websites—such as Google, Wikipedia, and YouTube—the availability and quality of web-based resources are becoming increasingly important evaluation factors. Different types of questions need to be asked when evaluating resource availability versus delivery, so it's helpful to think about them separately. Focusing on resource availability may be seen similarly to our suggested introduction of a level zero to Kirkpatrick, evaluating any informal learning that's happening socially or in the workplace. It's important to consider all available resources, not just those formally created within the organization.

Kaufman also replaces Kirkpatrick's measure of learner satisfaction with the learning experience, looking directly at learning resources and delivery themselves. It's helpful that Kaufman recognizes that, while input from learners is important when evaluating these elements, it's not the only source of data. Micro-level evaluation The grouping of Kirkpatrick's Levels 2 and 3 is less helpful, as learning and job performance can and should be evaluated separately. While we can't see inside the learner's brain, good assessments and simulations can capture data about learning. We can then track job performance to evaluate whether that learning has been correctly applied in the workplace. Having this evaluation data is important because it will determine the best way to resolve any issues. For example, the solutions to learners failing to apply their learning in the workplace are different from the solutions to learners failing to learn in the first place. Six levels? In Kaufman's final presentation of his five levels of evaluation, he attempts to mirror Kirkpatrick's levels, presumably to cater to those familiar with Kirkpatrick. This results in Kaufman keeping input and process together as Levels 1a and 1b of his model. At the same time, he keeps Kirkpatrick's Levels 2 and 3 separate, but titles them both "micro-

level." This attempt at continuity with Kirkpatrick is understandable, but confusing. Therefore, it may be more practical to think of Kaufman's model as having six levels and remove the mega/macro/micro terminology as illustrated in Figure 2.

Six Levels of Kaufman



#### Mega-level evaluation

Alongside the confusing terminology, the additional requirement to evaluate societal consequences and customer benefits make Kaufman's model less practical than Kirkpatrick's model. We might be able to gather some anecdotal evidence about societal and customer impacts, but getting robust data at such a high level is often not feasible. While it's helpful to consider the impact of learning on customers and society in some contexts, this evaluation often can be included in the business goal that the learning is expected to achieve. For example, if the learning is expected to improve sales, more customers will benefit because they're using your wonderful product. It's not necessarily helpful to evaluate that customer benefit separately from achievement of the business goal, though. Even when the goal is something such as "improving customer satisfaction," it doesn't need to be seen as a separate level from business results.

#### The CIRO Model

The CIRO model was developed by Warr, Bird and Rackham and published in 1970 in their book "Evaluation of Management Training". CIRO stands for context, input, reaction and output. The key difference in CIRO and Kirkpatrick's models is that CIRO focuses on measurements taken before and after the training has been carried out.

One criticism of this model is that it does not take into account behaviour. Some practitioners feel that it is, therefore, more suited to management focused training programmes rather than those designed for people working at lower levels in the organisation.

Context: This is about identifying and evaluating training needs based on collecting information about performance deficiencies and based on these, setting training objectives which may be at three levels:

- 1. The ultimate objective: The particular organisational deficiency that the training program will eliminate.
- 2. The intermediate objectives: The changes to the employees work behaviours necessary if the ultimate objective is to be achieved.
- 3. The immediate objectives: The new knowledge, skills or attitudes that employees need to acquire in order to change their behaviour and so achieve the intermediate objectives.

Input: This is about analysing the effectiveness of the training courses in terms of their design, planning, management and delivery. It also involves analysing the organisational resources available and determining how these can be best used to achieve the desired objectives.

Reaction: This is about analysing the reactions of the delegates to the training in order to make improvements. This evaluation is obviously subjective so needs to be collected in as systematic and objective way as possible. Outcome: Outcomes are evaluated in terms of what actually happened as a result of training. Outcomes are measured at any or all of the following four levels, depending on the purpose of the evaluation and on the resources that are available.

- The learner level
- The workplace level
- The team or department level
- The business level

#### IV. Conclusion

Evaluation is a vital process but has been ignored by many organizations. Long time is spent on Design, Development &Implementation of Training Programs. Training Professionals ignore Analysis & Evaluation processes. There are three reasons for evaluating training programs. The most common reason is that evaluation can tell us how to improve future programs. The second reason is to determine whether a program should be continued or dropped. The third reason is to justify the existence of the training department (Corporate University) and its budget. Well Organized Training programs can help organizations to get better results by improving the performance of their employee.

Above discussion shows that various models have been discussed by many researchers but only Kirkpatrick model is widely used. After discussing a lot on various models of evaluation of training & development it can be concluded that there are enough number of models , they should be modified and optimally used so that evaluation of training programs can become effective.

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