CHAPTER - III

CONCEPTUAL FRAMEWORK

INTRODUCTION

Training and development was not considered as an important requirement in the olden times. Now-a-days the old view has changed and it is felt by organizations, that those organizations which go in for training and development achieve better financial results, customers’ satisfaction etc. It helps in meeting the competitive field successfully and effectively. It is all the more necessary for organizations that try to bring in new products, in the competitive situation, the workers need training and skill to manufacture with assured quality.

The customers want products with high quality. Therefore the organizations have to strive hard to improve quality and live upto the expectations of the customers. The organizations have to improve the skill and knowledge of the workers and thereby use the talents of the workers in new designs and technologies. The organizations may aim for high technology but the basic need is the manpower to utilize the technological advancement. For this the training and development is absolutely essential.

The present day challenges can be met only by systematic training and development. The emphasis of training has moved from the training program to different spheres like requirement of training managers, human resource experts and trainers. As training is considered as an organized process of activities that is concerned with acquisition of capability and improving the existing skill, the requirements are increasing in the modern age. It is a learning that can occur through collaboration, online learning, classroom training or a combination of all methods.

There is a pertinent point in the question that why training and development is used side by side. When the objective of training is to acquire a set of new skills, those who acquire such skills are often said to undergo some development knowingly.
or unknowingly. The term development is associated with long term requirements of an organization as well as the individual.

Further the individual worker or employee who undergoes training is a well developed employee responsible for the job wherever he is placed. The training gives a perfect blend of confidence and motivation to accept any job within the sphere of his activity and meet the challenges.

Career development is an activity increasingly practiced by the organizations. It is a process of planning and execution of moves over a period of some years so that an individual is presented with existing work and reasonable future prospects. This process must be both motivating and satisfying. The object of the career development from the point of view of the organization may be motivation of work force to achieve greater contribution from the employees. But at the same time it brings down labour turnover more efforts for sustained work etc. along with it.

Manpower development is an expression which is used similar to that of career development. Manpower development is slightly different from career development even though much of the objective is uniform. The difference is the requirement of trained work force for future in manpower development. Not a larger work force for future but a specialized and well trained one.

In the new millennium, the career development and manpower development have been merged together and become a new genre called Human Resource Development (HRD). The basic objective of HRD is the same i.e. Low attrition rate. The HRD is a set of activities that differs from organization to organization but the underlying principle is the development of an individual worker along with the organizational development.

Some of the HRD practices are the performance appraisal, training and development, Rewards and Recognition, career planning and development, job rotation, stress management and employee participation in management. And the Human Resource Information System has emerged as a result of the revolution in the fields of Information Technology.
The Process of Liberalisation, Privatisation and globalization have changed the employer, employee relationship. The changing business environments have forced the management not to provide job security. The Hire and fire policy is the dominant force in the manpower activities. The down sizing and the job security issue forces the employees not fully committed to the organization. Both the employers as well as the employees are concerned with development of future skills and career. Employees want to develop the skills so that they can be employable anywhere. Employers need a workforce which is highly motivated, productive, can learn quickly the new skills to meet the changing customer needs. Hence the mutual urge to excel in the competitive world has made them realize the importance and need for training.

Need for training: The difference between actual and required human performance at work forms the basis of the need.”

This definition gives the complete meaning to the concept. The difference in the level of performance is indiscriminately defined as ‘performance gap’ not yet competent etc. These definitions may bring in contempt and embarrassment among the employees. The training need is one of several possible reasons for the performance gap. Lack of ability, poor performance, lack of motivation may be termed the other possible reasons.

Lack of ability: The innate abilities of an individual forms the basis for better performance. Intelligence, aptitude for learning, attitude towards job, enthusiasm towards job, conscientiousness etc. contribute to the performance of a job. All the workers are not equally capable of learning new skills.

Poor Performance: Poor Performance cannot be attributed to a single reason. It is very difficult to analyse the reasons. A thorough study is required to measure the performance.

Lack of motivation: The definition of motivation is very difficult. It may be qualitative or quantitative. Motivation is a complex area and it is very difficult to analyse the reasons for poor motivation. Training may provide an opportunity to some to get motivated. Lack of enthusiasm for training, fear, complexes are some of the
identified reasons for lack of motivation. In course of time, the motivation may catch up with those employees who were showing signs of lack of motivation.

Generally the training needs are divided into (a) organizational needs (b) individual needs (c) Occupational needs (d) Development needs and (e) Proactive and reactive needs.

Organisational needs: The training need is applicable to the whole organisation. It is classified into (a) training needs due to change (b) training needs required to make changes

a) training needs due to change

- Introduction of new product
- New technology introduction
- New legislation by government affecting the organization
- introduction of new managerial system
- change of ownership of the organisation
- changes due to acquisition, merger, disposals and some structural change

b) Training needs required to make changes

- Low productivity
- Low level of employees morale
- corporate culture is not encouraging development
- Management is not customer focused

Occupational needs for training: It is required for a particular set of employees involved in the performance of a task. It is task oriented.

Individual Training need may also be categorized as occupational need. The basic reasons for organizational needs and occupational needs are combined at times to achieve individual needs for training.
Development needs are concerned with the introduction of new learning. It involves with the taking of an individual an occupation or the whole organization to new areas of learning.

Proactive needs for training is the classification of needs for future requirements and reactive the need that arises after the occurrence of some events.

The identification of training needs are largely based on the job and person analysis, task analysis and fault analysis.

Job and person analysis: It is a description of job requirements. Performing a job becomes a problem of the employees don’t know how to perform and hence not a single worker is entrusted any job, without the basic instruction, on the job training or observation of a job. Training becomes the basic need for better performance, Job analysis is carried out through observation, interviews, surveys and questionnaires etc. In a way job analysis becomes the person analysis, ie. The personnel who are going to perform a job. Person analysis is the process to identify the pre-requisite skills, attitudes and beliefs required to complete the training programmes.

Task analysis: Task analysis is the identification of the task requirements. Ie. The toughness of the task, knowledge, skills and the abilities. The employees are to be trained in those areas to perform the task in an exemplary manner. It may be a specialized task requiring some highly structured methodologies. The structured training is the requirement to see that all learn the very effective ways of performing the tasks and achieve success even though trial and error method.

Task analysis must be attempted only after the identification of what the organization needs and the resources that could be earmarked for training through organizational analysis.

Competency modeling is the latest approach in identifying the competencies required for each job, the knowledge, skills, behaviour and the personality features pointing each competency.
Task analysis is a time consuming, tiring procedure that requires a huge time commitment to collect data from different resource persons like managers, job incumbent and trainers and summarise them for better analysis and conclusion.

Fault analysis: Generally when something goes wrong, the natural tendency is to identify the wrong first and analyzing the courses for such faults. This type of analysis is the fault analysis. The reason behind this analysis is the desire to prevent such faults in future so that the resources can be saved much. To put the things right, the analysis helps out and it is a ground for training the new incumbents to avoid the pitfall.

In the fault analysis, the operations are carried out procedurally. Not all procedural tasks require very high level of skill or knowledge to follow the procedures. But some procedural talks may demand very high skill and knowledge.

Better training methods may give an edge to the workers to avoid the faults in procedures. Hence training becomes a necessity.

Generally, to maximize the level of motivation among employees to take part and shine in training programmes, the managers and the trainers have to understand the factors like the analysis for training needs and the basic skills required among the employees.

1. **Significance of Training Programme**

   Training has made remarkable contributions to the improvement of all kinds. Training is neither a panacea for all ills nor is it a waste of time. What is required is an insight into what training can or cannot do, and skill in designing and executing training successfully and cost effectively.

   Technical know-how alone, however, does not assure success unless it is sustained by workforce possessing indispensable expertise. Hence, organisations should train the employees to enrich them in the areas of changing technical skills and knowledge from time to time.
The firms consider its human resources as one of their most precious assets. Training is a valuable assessment device that helps the organisations to improve the performance and skill levels of their employees and to monitor them on continuous basis for effectiveness of human resources. The training should be imparted to all the staff on their specialized areas as well as general areas, irrespective of their position in the company.

In the context of globalisation, human resource development with proper training to the workforce is required to meet the challenges in future and to win the global competitive advantage. The organisations spend huge amounts of money on imparting training to its employees. So it is very important to evaluate the efficacy of the training programmes conducted so far, and to find out whether the executives are able to implement the skills that they learned in the training and development process.

2. Organisation care for Training Programme

In the manufacturing sector, training is imparted to the employees at the entry level as well as during the course of employment. Since the manufacturing companies are known for their extensive training programmes, they are designed to achieve the potential of the employees as well as improving their skills in practical work.

3. Induction Training Programme

The Induction Training Programme is vital in all organisations to improve knowledge and skill of the employees. It provides an opportunity of learning to equip themselves during the course of elevation or transfer. This training programme also helps them to acquire a multifarious knowledge about various department and microscopic skills to performing their jobs for the perfect accomplishments.

4. Non Induction Training programme

In order to keep abreast of the latest developments in Technology and skills, the Non-Induction Training programmes are conducted. During the course of employment, an employee gets more chance to attend non-Induction training if there
is growth in career prospects. The Non-Induction Training generally motivates the employees to know the latest developments in the field.

5. **Different segments of training**

a. **Pre-Training:** The training requirements are to be carefully planned prior to the beginning of Training programmes. Training needs include the expectations of the employees out of the training programme. According to the needs the training course is designed so that the planned outcome can be achieved through the training policies and strategies.

This may also be called the preparation phase. The process starts with identification of the circumstances requiring more efficient performance. A firm’s concern prior to training lies primarily in four areas. Clarifying the precise objectives of training and what the organization expects to make use of the participants after training; selection of the appropriate participants; building favourable expectations and inspiration in the participants before training; and planning for any changes that improved task performance requires in addition to training.

b. **During training:** The trainers or facilitators are expected to ensure the smooth execution of the course during the programme. It provides an opportunity to the trainees to know their seniors and executives.

During the course of training, participants focus their attention on the new impressions that seem useful, thought provoking and engaging. There is no guarantee that the participants will in fact learn what they have chosen. But the main reason remains; trainees explore in a training situation what interests them, and a training institution’s basic task is to offer the required opportunities.

c. **Post training:** On completion of the training programme, the trainees are obviously expected to implement the fresh ideas gained. The training programme is designed in such a way that the trainees achieve greater heights in their career growth, through acquired skill, modified behaviour and attitude.
This may be called the “follow up” phase. When the trainees go back to job after attending the training, a practice of adapting change begins for each one who participated. The newly acquired skills and knowledge undergo modifications to fit the work condition. Participants may find their organisations offering support to use the training and also the support for continuing contact with the training institution. On the other hand, they may step into a quagmire of distrust. More effective behaviour of people on the job is the prime objective of the training process conducted by an organisation as a whole.

**Training strategies and Training designs**

The training programmes require a conceptual framework to enable those responsible for training to consider the various actual and possible requirements and the types of people to whom these requirements apply.

Managers are responsible for the training and development of the staff. Even though the managers have different responsibilities they must devote some time to get the staff trained. The purpose of training is to help employees learn so that they can perform their jobs successfully. Learning depends on certain conditions whatever be the methods of training. The conditions are

a. the opportunities available for trainees to practice and get the feedback.

b. getting a purposeful training content.

c. identifying the pre-requisites for the trainees to complete the training programme

d. opportunities for the trainees to learn through observation and training

Learning depends upon what is to be learned ie. To identify the outcome of learning. It is directly linked to the performance of a job. Learning is making a permanent change in the capabilities that is not linked to the human growth process. Verbal information are facts, bodies of knowledge etc. It includes specialized knowledge that is needed to perform the job successfully.
Intellectual skills include the concepts and rules. These skills are required to serve the customers and create new products.

Motor skills is the requirement of coordination of physical movements. Attitudes are a combination of belief and feelings that constitute a person. Attitudes include job satisfaction organizational commitment and job involvement. Training programmes are useful to develop or change attitudes, since attitudes have been shown to be related to physical and mental withdrawal from work, behaviour that impact the well being of the organization.

The cognitive strategies regulate the process of learning. The learners decision to pay attention to particular information.

The designing of a training programme is most important for all the learning to be made. It is a well designed programme schedule, creating a comfortable training environment, and the facilitation of healthy and meaningful interaction between the trainer and among the trainees.

Structuring of a training design is an important task. There is no single” one-size-fits-all” solution to the problem. In some organizations there is centralized training function, headed by specialists to ensure that training is imparted properly and is well documented also. Some organizations have independent department or division oriented training schedules. There is no centralized training function. In some organizations there exists a combination of centralized as well as the independent divisional training with a central coordinating functional head.

The importance of objectives, course materials, training methods, feedback and opportunities for practice has been well emphasized in all the training programmes. The trainers and their roles is to be highlighted in a well scheduled programmes.

The trainers after becoming well versed with the content material, may ensure the proper training site, the equipments, the optimum group size, the design of the programme and the lesson plan.
The management of group dynamics is an important task. The group can be classified into experienced or experts in a topic voluntarily. This enables the trainers to pay attention on the programme as per requirements.

Programme design refers to the organizing and coordination of a training programme. Despite all the provisions like good planning, course material, opportunities training programme may fail if there is no proper programme design. Programme design includes considering the programme purpose and designing the lessons within the programme. Even though the programme design is the responsibility of the trainer, the HRD manager may be made actively involved in the programme design. They may also review the prototype programmes, programme content and participate as programme instructors.

The lessons in a programme design can be designed for some hours or for a full day or a week. If the training programme is scheduled for some days, lesson plan can be made for each specific day's requirement.

It modifies the content and the sequence of training activities into a monitoring guide, made useful to the trainer. It helps the trainees and the trainer to be aware of the course and programme objectives.

While developing the lesson plan it must be ensured that there is proper sequencing of topics. It is very important to consider the target audience. Information about the target audience can be made available from the person analysis of the needs assessment of training. The trainee pre-requisites formed from the person analysis refers to the basic skills, knowledge that the trainee needs prior to the training programme. Lesson plans are designed to cover the evaluation and assignments that the trainees need to complete. This is the end product as the trainees are now equipped to do their jobs.

**Training Evaluation**

Training evaluation refers to the activities of collecting the data as outcomes of training to determine whether it is effective. Large investments are made in training programmes to gain competitive advantage and hence it differentiates the
organization and employees who are successful and those who are not that much. Such organizations view training as a strategy to be successful, they expect the outcomes or benefits related to training to be measurable.

The reasons for evaluation can be summarized as

- The effectiveness of an investment in training to be measured which will help to justify the future expenditure
- It helps in comparing different methodologies and their outcomes
- It acts as a feedback to the programme designers, trainers about their own performance and methods.
- It leads to the identification of improvements to be made in the programme, structure or design
- It facilitates the motivation of trainees.
- It facilitates the motivation of trainers
- It enables the organization to assess the achievement of its training objectives and decide whether further training needs are required

Evaluation can be classified into formative evaluation and summative evaluation. Formative evaluation is the activity that takes place during the programme design and development. Formative evaluation leads to make the programme more effective. It is qualitative data about the programme

Summative evaluation refers to the process of identifying the extent to which the trainees have changed due to undergoing a training. Summative evaluation includes the monetary aspects viz. the return on investment. It is the collection of quantitative data through some tests, ratings of behaviour etc.

**Technology and Training**

Technology is having a major contribution towards making the training programme a successful one. Making use of technology for learning requires coordination among the areas of training, technology, and management. The effective use of technology for training leads to the designing of training programme,
infrastructure facilities, transfer and evaluation as important components of technology.

Even though technology is gaining popularity, almost all organizations use the classroom instruction for training. As the technology improves, the cost of technology decreases through the use of PCs etc. However the technology improvement is unlikely to totally replace the face-to-face instruction.

New technologies have made it possible to cut costs in training programmes. New training technology includes on-line learning or e-learning, distance learning, simulations virtual reality expert systems, electronic support systems and learning management systems

**Technology and learning**

The revolution in learning is made possible by the use of internet. Learning has been a linear process. In the traditional classroom learning, there are only learners and instructor. Trainees have no active role in learning process. There was one way communication only. Experts and resource materials were not part of the learning environment.

Technology has made learning a dynamic activity. It enables greater interaction between the learner and instructor and among the learners. Technology has made the instructor more of a coach and a resource person. Learning happens basically through communicating with fellow learners, working on virtual team projects, games, listening, exchanging ideas, interaction with experts and role plays. Even though new technologies help the creation of a dynamic learning environment, the collaboration with other resources like design and development of training programme are required.

Technology has changed the delivery of training to employees. It can be taken to different geographical locations through internet. Distance learning involves the video conferencing as the learners and instructors are located in different geographical area.
Web based training and e-learning accommodate the virtual reality, animation, interaction and communication. There are 6 levels of technology based training.


Multimedia training integrates audio-visual training methods with computer based training. There are advantages and disadvantages of multimedia training. It motivates the learners to excel. It gives immediate feedback and guidance, and allows the trainees to learn at their own pace. The great disadvantage is the cost. Multimedia training is not suited for training interpersonal skills, especially of the training involves behavioural ones or cognitive process.

Computer based training is an innovative training method using the technology for training needs. It is an interactive training activity in which the computer provides the learning stimulus, the learner responds and the computer analyses the responses and provides the feedback. The computer based training has become more sophisticated with the development of laser discs, DVDs and CD ROMS and with increasing use of internet.

Interactive video combines the uses of video and computer based instruction. It is provided one-on-one basis to trainees via a monitor connected to a keyboard. The trainees use the keyboard or use the screen by touching to interact with the programme. It is used to teach technical procedures and interpersonal skills.

Internet based or web based training refers to the process of training that is delivered on public or private computer networks, a Intranet based training refers to the organizations own computer network. It is accessible only to the employees of the organization. Both the internet and intranet use the same technologies. Only the accessibility is the difference.

Combined Learning: The short comings or deficiencies related to online learning viz. insufficient bandwidth, lack of high speed web connections etc., as well as the trainees’ preference for face to face learning and the difficulty in time schedule,
some organizations are adopting the hybrid, or blended approach for learning. Blended learning blends the methods viz., the face-to-face instruction, on-line learning and other methods for learning content and instruction. It provides the features of both face-to-face instruction and technology based delivery and instructional methods. Blended learning is able to provide more learner control, self-directedness and makes the learners to take more responsibility for their activities. The combined learning process uses the classroom for the trainees to learn together and discuss.

Virtual reality is a computer based technology that refers to the three dimensional learning experience. It makes simulations become more realistic viewing the virtual model on screen. The trainees feel the simulated environment and interact with its components. The advantage is that provides trainees to practice hazardous tasks without putting themselves or others into danger. It requires the cognitive processing. It requires more memory and it is improved by virtual reality training. Intelligent tutoring systems are those which use the artificial intelligence for instructions. The three types of intelligent tutoring systems are tutoring, coaching and empowering. Tutoring is the method to make the trainee understand the content. Coaching is the flexibility provided to trainees practice the skills. Empowering is the trainees ability to explore the content of the training programme. Intelligent tutoring systems are used in astronaut training for space research application.

Distance learning: It is used by geographically divided and dispersed organizations to provide information on new products, policies or procedures as well as skills training. Distance learning is based on two way communications. It is based on two types of technology. One is teleconferencing and the other webcasting. Teleconferencing is the synchromesh exchange of audio, video, and text between two or more individuals or groups, at two or more locations, webcasting refers to classroom instructions provided on line through live broadcasts.

The advantage of distance learning is the savings on travel costs. Expert knowledge is spread to different locations easily. The disadvantages are the lack of
face-to-face interaction between trainees and experts, failure of technology, unprepared trainers.

The classroom instructions may be necessary when the trainees require interaction and support. Many organizations realize the strengths and weaknesses of both face to face and technology based training methods. They are making use of both in blended learning approach. It is easy to store and record training information such as course enrolments and employee training records. Technology has turned the retrieval of training related information easier.

**Contribution of Training in employee development**

Employee development is an important feature of an organizations efforts to improve quality to take on the global competition to make use of the technology development in work designs. Traditionally employee development referred to the managerial level employees, whereas the core group of employees and workers got trained to improve a particular set of skills required for the present job.

However the scenario is fast changing with the development of concepts like team spirit, workers participation in management etc. The development encompasses all the people associated with an organization in any capacity.

The internal environmental pressures of an organization like training the managerial talent, providing training and development to all employees and motivate all employees to learn through the organizations compensation system, have contributed to the development of not only the managerial level employees but also the line staff.

Development refers to formal education, work experiences, relationships and assessment of personality and abilities of employees to perform incumbent jobs as well as in future. The development is not only attempted through training but it also get enhanced through work experiences. Though the training and development look alike there is some differences. Training is imparted to improve the level of skill in the current job, while development is future focused. As long as the training becomes
more strategic ie. Related to business objectives, the difference between training and development will be murkier.

The methods of development refers to formal education, junk experience, assessment and interpersonal relationships organizations use a combination of these methods for development.

Organisations that focuses more on in house programmes for development, feel that the programmes can be easily related to the business needs specific to them. It is also easy for evaluation using the metrics of the organization. Formal programmes are those which involve learning by employees. Some organizations provide personal development courses while there is separate courses for job specific.

The executive development programmes include the leadership training, entrepreneurship training and e-business training.

A recent development in executive development is the trend of organization and the executive education provider joining together to create short, customized courses with specific needs of the business being addressed in the content.

Assessment is used to spot employees with managerial potential and also to measure the capabilities and lackings of the present executives. Many different methods are adopted for the developmental assessment.

Development planning process: It comprises of development needs, development goal, and actions needed to achieve goals. A development need is identified by the gap in current capabilities and the type of work the employees are interested in future.

The role of an executive in development planning is to provide coaching, communicate about opportunities, help eliminate barriers to development and refer employees to other areas viz. human resources.
Organisational strategy for development

The organizations practice many strategies for development processes. Among the strategies, one is for provisions of developing the higher level executives, Senior executives, and employees identified with potential for development. In this strategy, the lower level executives who work tirelessly in motivating the employees are easily avoided. It is a gross injustice to hard work.

Among the different development strategies the most effective is the involving of individualization. It ensures that development strategy is focused on employees weaknesses. The personality tests, and the employees interest inventories reveal an employees interests, values strengths and weaknesses. Organisations should offer a menu of options for development, instead of directing the employees to attend workshops and courses.

Training issues are related to internal needs of an organization. The internal needs of an organization are not fully met by recruitments of competent hands. The training is a mandatory one for the improvement of basic skills and cognitive ability. They are developed in this manner for future roles as competent hands. Like wise organizations loose many senior executives due to retirement. While the middle level managers are not in a position to step into the roles of senior managers due to various reasons like lack of experience, and skills, the need for succession planning is felt. It is a process of identifying and developing the hands for future leadership.

Training has been turned into a system that is linked to employees compensation through the skill based pay system. The idea behind such a system is to motivate employees to learn through inducement of pay system. This skill based pay system is useful in cross training. Ie. Training employees to learn the skill of one or several jobs.

Core analysis is a study to know the estimate of people in a particular group. The core analysis method is able to identify the no. of employees in a particular category for future leadership, the spectrum of quality of such employees are identifiable by different bases. They are statistical and individual assessment method.
In the statistical analysis of an organization, in a period of 20 years, some percent of executives at the age of 30, become competent and move to senior level at 37, then it is reasonable to expect that this development is repeated. If during 20 years, of 350 executives aged 30 in junior level. To have occupied middle level and of these, 35 have moved to senior level, then it is assured that 10% junior level managers take senior level and 20% take middle level. It may not show who is the middle level or senior level manager, but it shows executives with the caliber.

In the individual assessment, each person is assessed in order to find that one has the character, capability and capacity for development. The assessment may be carried out by specialists, managers through specially designed tests and exercises.

The training process go a long way in assessing the employee potential to future development so that the organization is able move forward in the competitive age

**Effectiveness of Training**

Training has been referred to as an agent of change. The effectiveness of training is manifest in the changes brought in the activities of an organization. Training is associated with the change in distinct ways. The relationship between training and change, and training contribution to inspiration to change must be considered. The members who have learnt new things through training may want to introduce in the work place. This is inspiration. The decision to introduce a change is called implementation.

Transfer of training is referred to the process of application of skills, knowledge, cognitive strategies learnt in training by the trainees.

The trainer characteristics play an important role in the effectiveness of training. The ability and motivation level of a trainee affect the effectiveness. The work environment which provides support to the transfer training include manager's support, peer support, technology support, the climate for transfer of training, and the available opportunities to utilize the newly acquired capabilities.
Not only the transfer of training occurs after training but even before training starts. To motivate the learners, the benefit of training is communicated. The benefits include the transfer of training among other things.

The transfer of training to be more effective some theories have been formulated. They are theory of identical elements, the stimulus generalization approach and cognitive theory.

Transfer of training will be more effective of the tasks, materials, equipment and other characteristics of the learning environment are similar to those in the work environment. The trainees ability to apply the skills learned to work situation is called the near transfer. The theory of identical elements do not apply to transfer where the work environment and training are different. It is especially manifest in the interpersonal skills training. But at the same time it does not mean the training is ineffective. At such instances the general principles of conflict resolution is applied.

Stimulus generalization theory refers to the learners ability to practice the learned capabilities to situations where it may be different from training environment. It is the application of generalized approach.

The cognitive theory is the trainees ability to retrieve what was learnt in training. It is the information processing model of learning, application assignments or situations are provided in which the learners are asked to solve the situation or problem using the training content.

Self management strategy is the application of certain characteristics of decision making and behaviour. Training prepares the employees to self manage the acquired skills and behaviour on the job.

Research shows that those who undergo training in self management are capable of higher level of transfer of training. Self management is a vital requirement since the trainees are exposed to several obstacles in the workplace that act as barrier to transfer of training.
A trainee must overcome the obstacles of lack of support from peers and managers, work pressure, restructuring, downsizing and cost cutting measures so that the training undergone may become effective.

Managers are responsible for providing support to training activities. The higher level support will lead to more transfer of training and effectiveness of training.

Peer support is the support network among the employees who underwent training. They can share the successful experiences of training on the job.

Opportunity to use learned capabilities is the pre-requisite for the determination of training effectiveness. It also depends on the degree to which the trainees are willing to take responsibility and seeking assignments to apply the newly acquired skills.

The training effectiveness is measured through evaluation. Evaluation is the methodologies through which the effectiveness is assured. Outcomes includes the level of satisfaction of the trainees after training, the acquiring of knowledge and skills, the application of acquired knowledge and skills on the job. Outcomes also include the results such as improved productivity, less wastage, accident prevention, increased sales etc. Outcomes help to decide the level of knowledge, skill and behaviour to which the training programme resulted in learning and transfer of training.

Training and development provides for an organization's intangible assets like human resource. The measurement of human capital is also an important factor in training effectiveness.

There is no single method for measuring the human capital. The metrics used to measure the value differs from organization to organization.

Training effectiveness refers to the benefits that the organization and trainees get through training. Benefits for employees are the acquiring of new skill, modified behaviour, change of attitude etc. The organization is benefitted through improved
sales, profit, and satisfied customers. The customers are satisfied with the improved quality, low cost, promptness in delivery and after sales service. The effectiveness of training is a three pronged approach and a social benefit in general.

**Training and career elevation**

Career elevation is a continuous process where in a continuous environment for learning is created. Studies suggest that organization which focus much attention on career development are very much successful in business expansion, creation of high demand for product. The use of teams to products and provide services help organizations to bring in talented people both inside and outside the organization as need based.

The major portion of lives of employees are spent in work life, they look to satisfy a number of needs, such as affiliation, achievement, power and growth. Career elevation is increasingly becoming an important because the work place is the area where social equality, diversity, and personal liberation can be accomplished.

Career elevation has become a difficult task with the widespread recruitment of contingent employees and contractors. It is not without reasoning that training encompasses career and career management It is necessary to notice the motivation of employees in undergoing training and the outcome they expect in career advancement. The expectations of employees and employers have changed in recent times. They have caused more stress on using the work experiences and relationships for learning.

Career management is very vital for the employers and employees alike. Lack of career elevation may bring in frustration to employees and the sense of belongingness may vanish. From the employers perspective, the career management if not properly designed will lead to less employee commitment, higher attrition rate and shortage of manpower.

Employees with high career motivation, participate in developmental activities which lead to achievement of their goals. They are committed to continuous learning,
willingness to use their skills, take responsibility for career management and are interested in organizational achievements.

Studies show that lack of career motivation may be a detriment to experienced and older employees.

Career management is also affected by the opportunities provided for achievement, encouragement for development and information related to career management.

The basic requirement of career development is the identification of competencies and capabilities required for success in the jobs. Five major areas of competencies are identified based on studies and surveys. Business knowledge and contribution to financial results, leadership, customer focus, individual effectiveness and associative development.

The concept of career is defined in different ways. First career is defined as an advancement, second career is described as profession, third definition is that career is defined as the life long sequence of jobs. The fourth defines career as the life long sequence of role related experience.

Employees’ values needs and feelings vary depending upon the stage of their career level and biological age. It forces the managers and human resource professionals to understand the career development process and the differences in employee requirements and interests at each stage of career development.

Career development is the process of activities through which employees get elevated through a series of stages, each stage characterized by a set of tasks activities and relationships.

The life cycle models prove that employees encounter some developmental tasks over the life of their careers and move to distant stages. The organization based models also suggests that careers move through a series of stages, but the models suggests development involves employees learning to perform certain activities. The directional pattern model describes the form or shape of careers. Some employees
plan on sticking in a job or occupation further entire life period and have got well determined plan to move within the job.

Career management systems include the different components such as self assessment, reality check, goal setting and action planning.

Self assessment refers to the utilization and analysis of information by employees to develop their career, values aptitudes and behavioural tendencies.

Reality check is the processing of information received by employees from the management that how their skills and knowledge are evaluated. (Promotional opportunities and lateral moves).

It is a common approach in well developed career planning systems, for the manager to have separate performance appraisals and career development discussions.

Goal setting is the planning of short term and long term career objectives by employees. These goals are connected to the desired levels of career.

Action planning makes the employees determine the path of achieving their short term and long term goals. Action plan involves attending training courses, seminars and applying for job openings within the company.

Managers play an important part in the career management process. Employees seek the advice of managers in career elevation and management.

Managers assume the roles of appraiser, advisor and referral agent in developing the employees career management systems.

Human resource managers may provide information about training and development opportunities.

The organization also required to monitor the career planning system to ensure that managers and employees make use of the system and evaluate whether the system is helping the organization to meet the objectives.
Career management systems are to be evaluated to ensure that they are suitable for the needs of employees and the organization. Evaluation of a career elevation must be based on objectives. The career management system should help the employees realize their potential and achieve career elevation. At the same time it must help the organization in achieving the objectives.

**Training Evaluation**

The theoretical aspects of the approaches methods and models are identified in order to make the evaluation process gainful. The inadequacies of the existing one may be overcome to adjust to the needs of the changing situation through the contribution of eminent personalities which are unique and the training cannot be treated an exception to the trend. The training helps in the adoption of the well suited methods to the requirements of respective organisational units. Hence the present chapter deals with the process of conceptualisation of training methods with reference to evaluation.

Evaluation may be called the process of weighing different alternatives and suggesting the required information to the needs of training. It may be termed as feedback also. While the feedback is properly carried out, it will reflect the efforts of those involved in training.

Generally speaking, the training programmes invite evaluation on important areas. They are classified into five by (Watson 1979)

- **Learning**: Knowledge gaining, acquiring skills and transformation in attitudes
- **Job Behaviour**: The functional aspects of trainees on undergoing training and the application levels of the trainees after training.
- **Organisational implications**: The measurement of visible changes in the organisational Functioning through trainees
- **Reactions**: Approaches of the trainees to the training modules
Extra Gain: These areas may not be assessed by the preceding four aspects. They are Social Benefits through training, the modification of trainees’ perception of self and other issues like individual goals in relation to self concept etc.

No single method of evaluation can be termed as all pervasive. In order to get reliable data more sources could be solicited. The widely utilised methods to evaluate any training programme is the assessment of experiences of the trainees.

The basic aspect of evaluation is the assessment of the functioning of the organisation after training since the organisations spend the required finance for all the training needs.

The impact created on the organisational functioning by the behaviour of trainees is more challenging than the impact on the particular behavioural change of individuals.

The effectiveness of organisational operation may be expressed by the indices, that is the very important level of identifying the indices. Zemke (1977) identifies a formula.

The earnings before taxes less the amount spent on training, divided by the compensation paid and benefit gained by the trainees.

The improvement over a period of time shows that the training is cost effective. Donaldson and Scannell (1978) suggest a detailed list of the ways in which the outcome of the training may express itself.

1. Productivity
2. Quality of work
3. Quantitative outcomes
4. Productivity of trained versus untrained employees
5. Direct cost reduction
6. Accident
7. Absenteeism
8. Improvement in sales volume
9. Turnover rate
10. Profit escalation
11. Customer complaints
12. Efficiency of worker
13. Training time required for proficiency
14. Cost per untrained employee
15. Employee suggestions
16. New product development
17. Grievance reduction
18. Supervisory rating

Paul R. Bernthal suggests a road map on measures that cover the entire stages of evaluation of training programme.

Donald Kirk Patric issued a paper in the year 1959 that grouped the manifestation of training into four distinctive stages viz. reaction, learning, behaviour and results. It is a classic model that has been utilised well. At the same time, it can be said that it has curtailed the thinking on the fruitful evaluations further. There seems to be a tendency among the trainers to make use of the model without providing enough time to calculate the different needs and resources. The trainers consider the four stage system of evaluation as a universal model. They may fault in avoiding to assess whether the model itself satisfies their requirements.

Different options: The model developed by Kirk patrick is a standardised process. However, other options can also be examined. The re-testing of the assumptions merit place in the four stage evaluations.

Assumption: Evaluations are definitive. But in reality it is not so. Because the principles of evaluations mostly assume that one single study may bring out all the effects of training. The level of certainty on the outcomes depends on certain variables like the sampling design, the measures and the reliability of design.
The certainty of results is ensured through the replication of the findings. One single study may not manifest the defects or alternative explanations and hence different studies are required.

Assumption: Evaluation equals effectiveness

Evaluation identifies the acquiring skills aspect of training. It is the stage two of Kirkpatrick’s model. When the intended benefits of training are to be measured, it is the effectiveness of training. The effectiveness and evaluation are different concepts. But the problem arises when evaluation is used to measure the effectiveness of training. There are different variables at all levels like training related, individual and organisational.

Assumption: The accountability for effectiveness lies on the trainers.

The trainers may have skill in training methods. But it cannot be said that they have a comprehensive knowledge about the area of training. It does not make any sense for the trainers to be accountable for effectiveness of training. In these circumstances the trainers and evaluators must be different.

Assumption: The stage four evaluation is far superior,

There may be some correlation in the stage 1 to 4 of Kirk Patrick’s model. But they do not measure the same thing. It is perceived that the stage four evaluation is the most difficult measurement of training, even though there may not be real linkage to training. Since there are stage four variables the reverse process of selecting the stage four evaluation and linking it to the training needs should not be attempted.

In the case of training to improve interpersonal skills, some variables like operational cost and equipment may have some linkage to trainees interpersonal skills. However those variables used may not be the best indices for evaluation of training. The stage four evaluation is considered to be to post evaluation method by some trainers. Each stage has got its own importance and provides some data on the type of trainees being evaluated.
The end results of stage 1 and 2 are generally considered to be simple to measure and alter.

Assumption: Measurement has to be done

The measurement techniques and methods are not reliable. There are deficiencies in designing the questions to gather information and hence the methods are not able to measure the functional changes in trainers or in their behaviour.

Model construction; There is scope for making the additions to the model developed by Kirkpatric by not selecting a particular level and treading on to the process of evaluation.

1. Contextual Basis for consideration: The work ambience depends on many factors other than the training. It is most important that the training must go hand in hand with the organisational culture and activities. The laxity on the part of the management to support may have some effects on the most carefully designed training programme. This becomes very important while evaluating the stage 3 or 4 changes.

2. Understanding the linkage: The age old customs of finding the linkage between cause and effect is also applicable to the training programme and its outcome that is manifest on the productivity. The linkage leads to the measurement of differences.

3. Making available the proper options: Knowing what really is needed is the requirement and the outcome for the requirement will lead to the approach. It is utmost important to select a proper evaluation design and correct measurements. Evaluation of specific results is better served by the selection of specific level at a time.

4. Listing the resources: In order to ensure the accomplishment of any effort, it must be practicable and realistic. The resources play a vital role in determining the cost, time spent by trainees (answering the
questionnaire or evaluation of instruments) and the clients’ expectations viz. (the clients being trainees, higher level executives and others)

Goal setting and Long term planning: The practical approach is the establishment of a programme of evaluation. Because the lapse of time may cause obsoleteness in the programme. At the same time the training programmes undergo changes along with the organisation and vice versa. The process of feedback at every stage is the most sought after programme to be included in evaluation.

Jack philiphs (Editor of American Society for Training & Development 19877) advises the percentage for evaluation at every stage. A programme could be evaluated 100% at stage 1 Stage II it may be 80% at Stage III is 50% and at Stage IV it could be 10% only.

Training – Impact Analysis: The primary concern in establishing a long term evaluation programme is to establish the impact analysis. It helps in the identification of factors that may affect the training programme. It also helps in knowing the cause and effect linkage on training and organisational culture and operations. The impact analysis may be established only after studying the changes of training brought on the organisation. All the team members must be in the know of the organisations, culture, values, environment, etc. They must be aware of the scope of training, the necessity of training including the factors that may make the training effective. The team may spend sufficient time in analysing the impact of training.

Stage 1: Realising the values, the organisation has set, and the organisational practices.

Every organisation may have its own values and it is highly doubtful whether the values that are preached are followed. Hence it becomes an important task of the team to identify the core values of the organisation and the related practices. Team work may be regarded as a value of an organisation. It is practiced in the team efforts, thereby establishing the linkage for group goals and individual goals. The value of team work opens up the line of communication for the entire organisation as a whole.
Stage 2: Awareness about the attitude of people, their knowledge and skills in an organisation

Unless the values of the organisation are matched with the practices, it may not be easy to choose the training that is required for the people in the organisation so that they may undertake their work very effectively and efficiently. Having this end in mind, the team shall unite each and every practice with that of the knowledge, skills and attitudes of the people.

According to Kurt Kraiger, University of Colorado, the evaluation of any training must chiefly concentrate on the three important spheres of learning. They are (1) skills (2) Cognitions and (3) feelings.

1. The areas of skills include technical and motor.
2. The cognition process is divided into a knowledge and thoughts
3. Feelings include the emotions and attitudes.

It may be stressed that training may affect, what one is doing, the way one thinks, and the various manifestations of feelings. If the team perceives the free exchange of information and knowledge within the organisation as a goal, it has the task of understanding the specific skills, the levels of cognition and the state of emotions that are normally related to free communications at all levels. A skill may be defined as the knowledge of sharing ideas when not requested. Cognition is the art of understanding the individual in a group, and how each individual could affect the functioning of the group. Feeling can be defined as the emotional state of mind about the outcomes of the group activities.

Stage 3. Definition of evaluation, the scope and the reasons or motives.

Evaluation is expected to measure the learning process, other than the reaction to training, the behavioural modifications and the end products besides the usual purpose of finding out how the training programme is suitable to the organisation.

The levels of evaluation chiefly aim at the outcomes. Normally they ignore the process or (processes) that leads to the outcomes. An example is, the measurement of
behavioural changes. It does not recognize the motivational aspects, the support of the executives after the completion of training or the extent of necessity for selecting the proper training process to meet the requirements.

There are many areas besides the four level of evaluation and its scope

1. Training quality, the service delivery or the retention of service quality and delivery
2. The reduction of deficiencies through training in a particular work group
3. The efficiency and effectiveness of simultaneous training imparted to executives and their staff group
4. The variances in the work ambience that may cause improvement in the effect of training or the negative cause in effect.

When the evaluation process is attempted through the point of view of organisational context, the evaluation may get maximum benefit out of it. If the training impact analysis is taken as a tree, it may display both the hurdles to training as well as the factors that enrich the training in the organisational context other than the usually attributable values and practices.

John Mathien, Jennifer Martinean and Scot Tannenbaum in the article, ‘Individual and Situation Influences on the Development of Self Efficiency – Implication for Training Effectiveness (Personnel Psychology Spring 1993) opines that training should not be treated as an isolated aspect in workers job responsibilities. Rather it is an integral part of their lives. Mere allocation of time for training may not assure effectiveness of training.

The non-positive approach of employees towards training may not have any correlation with the training. Some organisations which are in the habit of making use of standard feedback such as smile sheet, will try to implement improvements which may prove infructuous. Normally the time spent on training may not be to the liking of employees, when it becomes mandatory. They may even resent the programme
itself citing personal routines which get affected for a while. Sometimes the theme itself becomes a reason for resentment.

Stage 4. Listing the sources of data: Generally the dependability of anything is related to the sources of data. The three basic attributes needed for selecting a data source is the objectivity of source, the accessibility and the reliability. The concept of self-assessment may not have objectivity, in measuring whether the trainees behaviour is modified or not after training. Hence bias is to be eliminated in the sources of data, and it should not be affected by the unwanted influences.

Human beings have got the tendency to self findings that are identical even though collected from a variety of sources. Divergent perspectives of information is the output of dissimilarities in sources of data.

Stage 5: Methodology for data collection: Proper design and its implementation is the basis for evolving a suitable evaluation process. The traditional research methodology can make use of any design. There may not be unlimited choices in selecting a design.

The necessary questions:

1. **What is the frequency of data collection?**

   On conclusion of training, the effectiveness must be assessed since the assessment may be more meaningful with a long term follow up. It is an easy task to identify the changes that were measured over a period of time.

2. **How far the findings will be supported by the data from a control group?**

   The improvements reflected by the trainees over a period of time may be owing to factors other than training. The comparison between the trainees and control group is the platform for identifying the changes. (control group is the people without training)
3. **What is the number of people to be selected for data collection?**

There are no hard and fast rules for determining the no. of people from whom data is to be collected. The criteria for selecting the no. of people for data collection depends on a no. of factors like the size of sample, its randomness, representativeness, the no. of trainees and lastly the expected statistical outcome.

Random sampling method is the most recommended method for drawing samples from population. However the training to employees cannot be held on a random basis in an organisation. There are departments in an organisation which are similar in many aspects and in that case, the shifting focus on particular department is not a correct approach. The homogenity of the employees leads to the conclusion that only a limited number of people are required for training. At the same time, the selected sample must be in the nature of representative of the entire population. As far as possible the cluster in the population may drive to include a good number of people for the sample size.

The effectiveness of training is chiefly measured to know whether the objectives and validity are met. The necessity of narrowing down the list of that are most required is the absolute determinant for the size of the number of evaluation criteria becoming widespread.

The acceptance of training, suitable to the trainees, objectives of training, the assessment of training and relatedness to job are some of the criterial factors which are most essential and basic.

The absolute demand for evaluation depends upon some of the following objectives.

1. To ascertain that a training program has achieved its objectives
2. To understand the objectives of HRD process and also the strength and weak points inherent to it.
3. To ascertain the cost benefit ratio of a particular programme
4. To select the participants of training programme in future
5. To determine from among the participant that who was mot successful as well as the least successful

6. To evolve the any programme for future requirement

Assessment of design.: A design is finished much earlier to the evaluation process is attempted. The General aim is to identify the level of knowledge or skill possessed by the trainees, that they have been chosen after careful study of the needs of training. On the completion of training process, a test may be held to get data that may determine whether the objectives were achieved. The collected data through the test shows that all those trainees who could not pass the test before training, but are able to clear the test on completion of training, will go along way in establishing the fact that the effectiveness of training in improving the skill and knowledge level of trainees is beyond any doubt.

An evaluation of a training programme must be attempted at various time point ie. At the end of a schedule, topic or on completion of the entire programme, or immediately on completion of 3 months, 6 months of the training 1 year to 3 year period after the training.

Approaches to Evaluation

It is all the more necessary to establish whether the training programme has achieved the objectives or the cost benefit ratio. The evaluation is also needed to examine the validity and clarity of the content, so as to assess the effectiveness of training. In the past, it was thought that the training is an expenditure and it is necessary so that the employees get motivated on visiting different places under the pretext of training. But those thinking have got no place in the modern time. The training is treated as an investment for future. Training has become an integral part of HRD and the HRD manager has to establish the credibility of the training programme through appropriate evaluation process.

The evaluation of training programme is approached differently by various methods viz. Virle Patrick approach, Bell systems approach, CIRO approach, Saratoga approach, IBM xerox and CIPP model.
**Virle Patrick approach**

It attempts evaluation through four levels based on four fundamental questions.

<table>
<thead>
<tr>
<th>Level</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction</td>
<td>Whether the trainees are happy with the programme or not?</td>
</tr>
<tr>
<td>Learning</td>
<td>What, that the participants have gained through the programme?</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Is there any behavioural change on account of training?</td>
</tr>
<tr>
<td>Results</td>
<td>What did the organisation gain through the change of behaviour of Trainees?</td>
</tr>
</tbody>
</table>

Reaction may be defined as a modification of behaviour of trainees towards materials, facilities, content pedagogy instructors and presentation

**Learning denotes skills, techniques and facts**

Behaviour is assessed by comparing the effectiveness of training before and after. This can be done by superiors, peers, co-participants and subordinates

Results are the pointers towards cost reduction, output improvements, quality appreciation and less rejection.

**Bells system approach**

This method was evolved on a study conducted at AT & T and Bell systems unit of USA. This method advocates that any evaluation must be based on the following:

- **Reaction outcomes**: Activity method contents, materials
- **Capability outcomes**: Outcomes, against the expectation of the trainee
- **Application outcome**: Putting everything learnt in training to work set up
- **Worth outcome**: Benefits reaped by organisation interms of money, resources, time and effort
**CIRO approach:** it was evolved by Warr, Bird and Rachal. It lays emphasis on evaluation as to context, input, reaction and result.

Contextual evaluation: Gathering of relevant information on performance deficiency and formulating the objectives under three levels known as immediate level intermediate level and ultimate level

Immediate level objective : The gaining of new knowledge, skills and attitudes to aim for next level.

Intermediate level objective : Change of attitude leading to work efficiency for reaching the next level

Ultimate level objective : It is aimed at eradication of any identified deficiency of the Organisation

Evaluation : It is attempted by searching the answers for the following Questions

- What are the various advantages of different methods adopted in HRD?
- Whether the programme can be conducted by an outside agency feasibly?
- Should the programme be limited to the internal resources?
- Whether the line managers could be engaged?
- How much time is required for HRD?
- What are the results for the previous programme conducted?

Reaction Evaluation : The feed back from the trainees about the entire training Programme

Evaluation of outcomes : It is carried out in the following order

- Definition of the training programme objectives
- Choosing and developing of some measures for the defined objectives
- Developing the measures at the proper time
- Analysis of results so as to improve upon the ensuing programmes
THE APPROACH OF SOROLOGA INSTITUTE

This method emphasises the evaluation must analyse the satisfactory level of participants, modification in learning, behavioural modifiers and the change brought on organisation.

IBM Approach

This was purely evolved and followed in the IBM Corporation. It is based on under mentioned

- Reaction : It is a question put to the trainees to measure their mental satisfaction
- Testing : The level of knowledge and skill gained before and after the training Programme
- Application : The skills acquired through training are applied to show results
- Business results : It is the conversion of gains achieved, in monetary terms to the organisation

XEROX CORPORATION APPROACH

The xerox corporation has attempted the evaluation in the following manner:

- Entry capability : The pre-requirements of the programme
- End of course performance : measurements of the results achieved by trainers
- Masley Job performance : In the real time job situation, whether the trainees perform to their potential after training.

EFFECTIVENESS MEASUREMENT

Measuring the effectiveness of training is the ultimate goal of Systemmatic Assessment of training. It is the ultimate point in analysing the expenditure involved in structuring the programme and its needs. Whether the results show a positive trend
in the gaining of skill through training. In an ideal situation, the individual as well as the organisation is assessed for the gains achieved. The particulars gathered from the analysis will show not only the necessity for such an investment but also for future modifications.

While measuring the effectiveness of training of an individual, the necessity arises on certain occasions. Viz.

1. To identify the training objectives that have been fulfilled at the end of the programme

2. To assess whether the actual performance shows the improvement gained in skill level, after the expiry of some period immediately on completion of training.

The joint evaluation of the effectiveness of training by the trainers to be recommended ie. By the trainers and line managers.

It is carried out in a formal manner with the scheduled arrangements in the systematic assessment training. The scheduled arrangements are connected to the requirements of efficient performance of work and the objectives of training, with a clear cut definition of the acquiring skills through training, then it can form the basis for assessing the performance.

Broadly speaking, there are two ways available for gathering information about individuals, for the effectiveness of training. One is the objective test and the second one is the subjective opinion formation. The finality in assessment, may be attempted only on measuring the work performance which may be based on the subjective opinions of line managers.

Another subjective opinion is the feeling of both the trainers and trainees on the value of training. In the case of trainers, it is a routine opinion, while the trainees opinion are more subjective. A course comraderie is developed on such formal central courses which may prove to be an emphoria at the end of the programme. These envelopes the judgements which are sober in nature. More often than not, the trainees,
may end a course after an enjoyable experience, however not fully aware of the gains of the course. The maximum benefit on exchange of opinions by trainers and trainees can be achieved through a well structured feedback information. The requirements and objectives of the participants of a programme can be scrutinized by themselves so that they have an idea about what they have learned and gained for future performance. In the same manner, the trainers, or course conductors may compare the views expressed by different trainees to evolve a consensus in modifying the design, development of the programme.

On completion of a training programme the participants while returning to actual work may have a free talk with the line managers. The major point in discussing with the line managers is, the expression of views on training and in turn, the line managers may help the trainees to exhibit the skill in actual performance. At times, because of the attitude of the line managers, the trainees may not be motivated to show improvement and put the skills gained into practice. Such attitudes of line managers must be ignored by the trainees while return to work.

On completion of a considerable period of time, the second stage of measuring the effectiveness of training for individuals is attempted. Due to the rigours of daily work, it is possible that the trainees may forget the training undergone. Therefore, in order to avoid such a situation, a standardised organisational practice and discipline may be enforced.

The second stage measurement is of paramount importance to line managers, since the previous trainees are included in the scheme for performance appraisal. The feedback to the trainers and staff is very much important while the training is central or external.

The feedback may answer the questions.

1. How the requirements of work were met by the training programme?
2. What alterations are required for future requirements?
   a. Was any content of course becoming irrelevant?
   b. Was any relevant material omitted and subsequently required?
c. How the training methodology is proper for the learning process?
d. What are the changes required?

There are 3 main sources of information for central as well as external trainers on feedback.

1. Contacting the ex-trainees and their line managers through questionnaire
2. Visiting the places of work of ex-trainees and having a discussion in person
3. Conducting a symposium for ex-trainees to have a post training experience, and for the measurement of the effectiveness of training.

A final script has to be made in the measurement of effectiveness of training to individuals. The former trainees and the line managers get some real time work performance after the expiry of certain period. In the intervening period between the completion of training and the stage of measurement of training effectiveness, some factors influence the performance ie. Positive or negative. The factors that influence the performance are working conditions, working methods, personal problems, managerial styles, internal factors, external factors and some concealed factors. Hence the impact of training on actual work cannot be evolved as a separate measurable unit.

Seven perspectives of evaluation of Training impact

There are seven perspectives of training to be evaluated. Each perspective is assigned with three parts. The parts are linked with dimensions – KIPO. The diagram arranges these perspectives in to a conceptual training scheme.

Evaluation of Training Impact The levels

The evaluation strategy depends upon what is to be evaluated. The answer is not a straighter one because the answer is based on several aspects of training viz, the type of training programme, the entity and the motives of evaluation.

The material gathered and utilised for the process of evaluation is clubbed into various categories or levels. At any point of time for an observed category, some
techniques of evaluation may seem to be relevant than others. The different types of grouping actually varies with different practitioners of HRD. There are five models.

Model 1

The Kirk Patrick four level approach

The widely known method for grouping the areas of evaluation was evolved by Kirkpatrick. It consists of four levels of evaluation. This model helps in identifying the data required and answers the basic questions.

KIRK PATRICK’S FOUR LEVELS OF EVALUATION OF TRAINING IMPACT

<table>
<thead>
<tr>
<th>Level</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reaction</td>
<td>Whether the trainees are happy with the programme</td>
</tr>
<tr>
<td>2. Learning</td>
<td>What did the trainees acquire in the programme</td>
</tr>
<tr>
<td>3. Behaviour</td>
<td>Whether the trainers have changed their behaviour through training</td>
</tr>
<tr>
<td>4. Results</td>
<td>Whether the changes of behaviour affects the organisation positively?</td>
</tr>
</tbody>
</table>

Reaction

Reaction is the perception of the trainees about the programme. It includes content, methodologies, facilities, materials, trainers etc. The trainee reaction is considered to be a vital factor in revamping the training programme or continuing with the existing one. The responses obtained for reaction questionnaires assist in ensuring against decisions based on the adverse comments of some trainees.

Learning

Evaluation of learning is associated with the principles, facts and the knowledge of techniques gained and skills acquired. There exist different methods to
measure the levels of learning. It includes the paper and pencil tests, skills execution and simulations.

**Behaviour**

The modified behaviour on the job, through the employment of knowledge and skills acquired by training, is measured. The measurement includes the comparison of behaviour pre and post training as well as observations from the superiors, self assessment, peers, co-trainees and subordinates.

**Results**

The organisational gains from training programmes like cost reduction, work output improvements, increase in quality are evaluated through results.

**Model 2**

**Training Impact Evaluation – KAUFMAN’S MODEL OF FIVE LEVELS**

The four level model of Kirkpatric offered some scope for improvement and some researchers found that it can be modified based on his basic work. One such research is Kanfman, He added one more level i.e. Fifth level and improved upon level 1. The availability of inputs of different resources and the intervention made possible by the enabling concept is identified in level 1. At level 5, the social and customer reaction is evaluated. Also the performance improvement programme is assessed for its effective implementation on the organisation and environment.

<table>
<thead>
<tr>
<th>Level</th>
<th>Evaluation importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. The concept of enabling</td>
<td>The availability of all input resources viz. human mortuary and physical resources</td>
</tr>
<tr>
<td>b. Reaction</td>
<td>The different methodology and its acceptance and usefulness</td>
</tr>
<tr>
<td>2. Acquisition</td>
<td>The efficiency and skill of the individual and small group</td>
</tr>
</tbody>
</table>
3. Implementation: Making use of the small group and individuals output in the organisation

4. Organisation outcome: Contribution of the organisation

5. Social outcome: Customer reaction including societal. The after maths and the contribution

**Model 3**

**The MODEL OF CIRO IN EVALUATING THE IMPACT OF TRAINING**

This is an yet another four level model, basically evolved by Warr, Bird an Racham. It is a different way of evaluation technique

The Alphabets CIRO stand for

C – Contextual Evaluation
I – Input Evaluation
R – Reaction Evaluation
O – Outcome Evaluation

The Evaluation is based on the gathered information about the existing conditions to evolve the needs of training and defining the objectives. The fundamental question of whether the training is necessary is determined by the evaluation. Under the process some objectives are analysed.

1. The end objectives of (identifying the short coming of the organisation, either to eradicate or overcome)

2. The intermediary objectives (The behavioural modification of the workers to achieve the end objectives)

3. Current objectives (the new understanding skills that the workers have gained in order to modify their behaviour in achieving the intermediary objectives)
Contextual Evaluation

It is the gathering of information on the identified shortcomings of the organisation, analysing the information to identify the training needs and establishing objectives at three levels.

Input Evaluation

In this evaluation, the information is gathered to assess the available resources and alternative resources for the training needs. It also analyses the resources both internal as well as external. At the same time the successful implementation of resources to obtain the objectives. There are certain factors that may curtail the alternatives in the form of budgetary constraints and managerial expectations. Therefore it is an evaluation of gathering information and making use for the needs of training.

Reaction Evaluation

This evaluation depends on the trainees’ reactions to modify the process of HRD. The information collected is analysed to improve upon the HRD practices. The common feature is that the information is more or less subjective reactions. It can be useful when implemented in an objective manner.

Outcome Evaluation

As the name suggests, this evaluation is based on the information gathered on the outcome of the programme. In any training programme the outcome is the most expected information. The evaluation becomes more successful with the planned preparation of the programme.

The outcome evaluation has got four stages

1. Definition of the current objectives
2. Analysing the measures for the objectives
3. Proper timeliness in measurement
4. Analysis of outcomes to improve upon future training programme
In analysing the outcomes of training programmes will go a long way, if the training outcomes are determined in an hierarchical fashion. i.e. the three levels of objectives viz. The immediate, intermediary and the ultimate

Some basic change is manifested on a trainee, on successful completion of a training programme. The changes is manifested in the knowledge, skills and attitudes of the trainee immediately. The changes are easily measurable while undergoing training or at the end of training

Training is not only for learning. The main objective of training is to modify the behaviour of the trainee to work situation. It is the intermediate objective which is measured as a performance improvement on the jobs

The improvement in performance of the job is noticed, it may influence the organisation. The implication on the organisation of the job performance is the ultimate objective of any training programme. The cost reduction, less scrap, reduction of frequency of accidents are some of the objectives achieved by the organisation through training imparted and of course it is a tough area for measurement.

**MODEL 4**

**THE PHILIPS FIVE LEVEL ROI TO EVALUATE IMPACT OF TRAINING**

The ROI framework extends to fifth level of model evolved by Kirkpatrick

The five level ROI (Philips)

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reaction and planned action</td>
<td>The reaction of the trainee is assessed and suggests the plan of action.</td>
</tr>
<tr>
<td>2. Learning</td>
<td>Weighs the skills acquired, knowledge gained and change of attitudes</td>
</tr>
<tr>
<td>3. Job implementation</td>
<td>On the job behavioural changes are underlined on application of training inputs</td>
</tr>
</tbody>
</table>
4. Business outcomes : The impact on the business is measured by the Outcome
5. Return on Investment : The costs involved in the expressed in terms of money value normally shown in percentage

Level 1

Reaction and planned action: The satisfactory level of the trainee is assessed, along with the plan of action of the trainee to implement the learning. It is a measurement through a generic questionnaire at the completion of training. Even though this evaluation is termed as mandatory

Level 2

Learning: There are various assessment methods to evaluate, what the trainees have learnt through training. The tools include simulations, role plays group discussion, tests and some skill practices.

The evaluation is important in a way that the trainees have well received the training material and know the ways to utilise the same. A positive learning curve is not the guarantee for the trainees to utilise the training material on the job. Rather it is a story of more failure to transfer what was learnt in the training to the job.

Level 3

Job Application: Whether the trainees implement what they learnt on the job is the application part of the training material. There are various methods are available to measure the application on the job. The level 3 evaluation is the measurement of skills applied on the job so as to enable to adjudge the victory of the programme. However, the positive organisation impact is not ensured by the success of application on the job.

Level 4

Business Results: The application of programme material to impact the actual results is the assessment of business results. The measures of results include the
quality of output, increased output, reduction of cost, time and the improvement in customer satisfaction

Level 5

Return on Investment: The comparison of actual cost of programme and the benefits is the measurement of Return on Investment in training. It is a presentation of cost / benefit ratio analysis in short. The full evaluation process is completed only on the conclusion of level 5 evaluation.

The ROI level evaluation is attempted by only a few organisations while almost the entire HRD organisations make evaluations to analyse the satisfaction level. Since the ROI level is a cost consuming and tough process of evaluation most of the organisations skip this level.

The business results are the outcome of the application of the skills, knowledge gained (level 2) to the job (level 3) The evaluation of other levels is also as important as that of the evaluation of business results.

In order to assess the results of Training programme, the measurements are to be attempted at each level. It is highly desirable to evaluate at all levels where a five level evaluation is attempted.

This study has established from various models and techniques of measurement, the various dimensions of the effectiveness of training to a great extent. In the current scenario, the CIRO method is considered to be more akin to the meeting of suitability by its emphasis on context, input, reaction and outcome. In the backdrop of this, the questionnaire, is designed to gather the primary data from the employees at various levels of manufacturing organisations for analysis and interpretation.