Chapter I

INTRODUCTION

Coming together is a beginning
keeping together is a process
Working together is a success
CHAPTER-I

INTRODUCTION

1.1 HISTORY OF TRAINING PROGRAM

The apprenticeship system emerged in ancient cultures to provide a structured approach to the training of unskilled workers by master craftsmen. This system was marked by three distinct stages; the unskilled novice, the journeyman or yeoman, and finally, the master of craftsman. Together, they found an “organic” process whereby the novice “grew” into a master craftsman over a period of years.

With the onset of the Industrial Age, the training of the unskilled underwent a dramatic transformation in which vocational education and training emerged to replace the traditional apprentice system. The division of labour in an industrial factory resulted in specific job tasks that required equally specific training in a much shorter time span. As training activities grew more methodical and focused, the first recognizable modern training methods began to develop during the 19\textsuperscript{th} and early 20\textsuperscript{th} centuries. Gaming simulations became an important tool in the Prussian military during the early 1800s and psychodrama and role playing were developed by Dr. J.L. Moreno of Vienna, Austria, in 1910.

The early 20\textsuperscript{th} century witnessed the emergence of training and development as a profession, resulting in the creation of training associations and societies, the advent of the assembly line requiring greater specificity in training, and the dramatic training requirements of the world wars important groups forming during this period.
include the American Management Association in 1923 (which began as the National Association of Corporation schools in 1913) ,and the National Management Association in 1956(which began as the National Association of Foremen in 1925). At the same time, Henry Ford (1863-1947) introduced the assembly line at his Highland Park, Michigan, plant. Because the assembly line created an even greater division of labour, along with an unprecedented need for precision and teamwork, job tasks and assignments required more highly specific and focused training than ever before.

The enormous production needs of the World War I and II created a heavy influx of new workers with little or no industrial education or skills to the workplace, thereby necessitating massive training efforts that were at once fast and effective. In particular, the heavy demand for shipping construction during world war I resulted in tenfold increase in workers trained on-site instructors who were supervisor using simple force step method: show, tell, do, check during world war II, large numbers of trained industrial workers left their Jobs to enter the armed forces, severely limiting the organisational support normally provided by co workers to train their replacements. Heavy demands were placed on foremen and supervisors, and training within industry (TWI) service was formed to trained supervisors as instructors. Job instruction training (JIT) was employed to train defence _ plant supervisors in instructing new employees in necessary job skills as quickly as possible. Other programs included job relations training (JRT), job methods training (JMT), and job safety training (JST). During this time, the American Society for Training and Development (ASTD) was formed.
By the end of World War II most of the companies and organisations realized the importance of training and development as a fundamental organisational tool. Training programs that originally were developing in response to national crises had become established corporate activities with long-term strategies working toward improving employee performance. In the mid 1950s gaming simulations gained popularity. Trainers began giving serious consideration to the efficacy of their training programs, and interest in the evaluation of training programs grew. The 1960s witnessed an explosion of training methods as a number of corporations using assessment centres increased from 1 to 100 by the end of decade. The government programs to train young men for industrial jobs, such as Job Development Program and the Job Corps, were initiated to improve the conditions of the economically disadvantaged. New methods included training laboratories, sensitivity training program instruction, performance appraisal and evaluation, needs assessments, management training, and organizational development.

By the 1970s, a new sense of professionalism emerged in the training community. Training programs grew dramatically, and the ASTD produced the Professional Development Manual for Trainers. Government programs were aimed increasingly at minorities as a group and required corporations to increase their efforts to recruit minorities. With the rise of organisational development, the focus of training shifted away from the individual and towards the organisation as a whole. Technological advances in training programs included the use of videotapes, satellites, and computers.
The 1980s and early 1990s saw important social, economic, and political changes that have had a profound effect on the way corporations do business, resulting in an ever increasing need for effective training. In a time of economic constraints coupled with increasing international competition, training and development programs needed to respond more quickly and effectively to technological change. Increasing governmental regulations also require breadth of training programs to reflect the greater diversity of employees.

Furthermore, computers became an integral part of business and industry during 1980s and 1990s, making knowledge of computer use essential for many workers. As the consequence, companies launched computer training and development programs to ensure that, their employees possessed the needed computer skills. In addition, companies used computers as a training method known as computer-based training, relying on specially designed computer programs to impart knowledge and skills needed for a host of tasks.

1.2 DESIGNING TRAINING PROGRAMS

The design of training programs covers the planning and creation of training and development programs. Like the training programs themselves, the development of training programs has evolved into a profession that utilizes systematic models, methods, and processes of instructional systems design (ISD). Instructional systems design includes the systematic design and development of instructional methods and materials to facilitate the process of training and development and ensure that, training programs are necessary, valid and effective. Although the instructional design process can take a variety of sequences, the process must include the collection
of data on the variety of sequences, on the tasks, the development of methods and materials, delivery of the program, and finally the evaluation of the training’s effectiveness. Table I describes the process in greater details.

Training and development programs often rely on the principles and theories of various behavioural sciences such as psychology and sociology. The behavioural sciences provide useful theories on individual behaviour, motivations, organisational dynamics, and interpersonal relationships, which the developers of training programs can draw on when creating their programs.

Table I
A Typical instructional Systems Design Model

<table>
<thead>
<tr>
<th>STEP</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Needs analysis</td>
<td>Measuring the disparity between current and desired skill levels</td>
</tr>
<tr>
<td>Task Assessment</td>
<td>Collection of data on job tasks and the subsequent identification of learning requirements and possible difficulties.</td>
</tr>
<tr>
<td>Stating objectives</td>
<td>Creation of concise statement of objectives and purpose as a benchmark.</td>
</tr>
<tr>
<td>Assessment/testing</td>
<td>Development of testing materials designed to measure the performance of the objectives.</td>
</tr>
<tr>
<td>Development of materials</td>
<td>Selection of effective instructional strategies followed by the development of materials based on the chosen strategies.</td>
</tr>
<tr>
<td>Plot Programs</td>
<td>Piloting the program to gauge the effectiveness of the materials as well as identify potential weaknesses through subsequent evaluation.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Evaluation of the efficacy of the methods and materials.</td>
</tr>
</tbody>
</table>
Adult educational model has influenced the development of training programs, giving them an exclusive focus on adults. According to this model, adults learn best through goal-oriented instruction, unlike children, who learn best through instruction based on the subject matter itself. Hence, given the goal-oriented needs of adult education, the design and development of training materials have taken on a much higher level of structure and methodology than traditional methods for instructional development.

1.3 EVALUATION OF TRAINING PROGRAMS

Once a company implements a training program, it must evaluate the program’s success, even if it has produced desired results for other companies and even if similar programs have produced desires for it. Companies first, must determine if trainees are acquiring the desired skills and knowledge. If not, then they must ascertain why not and they must figure out if the trainees are failing to acquire these skills because of their own inability or because of ineffective training programs.

In order to evaluate training programs, companies must collect the relevant data. The data should include easily measurable and quantifiable information such as costs, output, quality, and time, according to Jack J. Phillips in Recruiting, Training and Retraining New Employees.

1. **Costs:** budget changes, unit costs, project cost variations, and sales expenses.

2. **Output:** Units produced, units assembled, productivity per hour, and applications reviewed.
3. **Quality**: Error rates, waste, defective products, customer complaints and shortages.

4. **Time**: On-time shipments, production or processing time, overtime, training time, efficiency, and meeting deadlines.

Companies also can use qualitative data such as work habits, attitudes, development, adaptability, and initiative to evaluate training programs. Most of the companies, however, prefer to place more weight on the quantitative data previously outlined.

Furthermore, according to Phillips, companies tend to evaluate training and development programs on four levels: behaviour, training, reaction, and results. Businesses examine employee behaviour after training programs in order to determine if the programs helped employees adjust to their environment; also, companies can obtain evidence on employee behaviour via observation and interviews. Throughout the training process, employers monitor how well trainees are learning about the company, the atmosphere, and their jobs.

To evaluate training and development programs effectively, employers also gauge employee reactions to the programs. This feedback from trainees provides companies with crucial information on how employees perceive their programs. Using questionnaires and interviews, companies can identify employees’ attitudes towards various aspects of the training programs. Finally, employers attempt to determine the results of their training programs by studying the quantifiable data addressed earlier as well as by considering the employee turnover rate and job
performance of workers, who recently completed a training and development program.

1.4 NATURE OF TRAINING AND DEVELOPMENT

In simple words, training and development refers to the imparting of specific skills, abilities, knowledge to an employee. A formal definition of training and development is determined as follows:

“It is any attempt to improve current or future employee performance by increasing an employees’ ability to perform through learning. Usually by changing the employee’s attitude or increasing his or her skills and knowledge”

The need for training and development is determined by the employee’s performance deficiency, computed as follows:

\[
\text{Training and development needs = Standard performance – Actual performance}
\]

We can make a distinction among training, education and development. Such distinctions enable us to acquire a better perspective about the meaning of the term “training”, which refers to the process of imparting specific skills, education, and on the other hand it is confined to theoretically learning in the classroom.
To distinct more, the training is offered in case of operatives, whereas development programs are conducted for employees at higher levels. Education however is common to all the employees.

1.5 INPUTS IN TRAINING AND DEVELOPMENT

Any training and development program must contain inputs, which enable the participants to gain skills, learning theoretical concepts and help acquire vision to look into the distant future. The inputs of training and development are as follows:

1. **Skills**
2. **Education**
3. **Development**
4. **Ethics**
5. **Attitudinal changes**
6. **Decision making and problem solving skills**

**Skills**

Training is imparting skills to the employees. A worker needs skills to operate machines, and use other equipments with least damage and scrap. This is a basic skill without which, the operator will not function.

There is also a need of motor skills or psychomotor skills as they refer to the performance of specific physical activities. These skills involve learning to move various parts of their body in response to certain external and internal stimuli.
Employees particularly like supervisors and executives, need interpersonal skills mostly know as people skills. These skills help a person understand oneself and others better and act accordingly. Examples of interpersonal skills include listening, persuading and showing and understanding of others’ feelings.

**Education**

The purpose of education is to teach the theoretical concepts and develop a sense of reasoning and judgement, that any training and development program must contain an element of education is well understood by the HR specialist.

In fact, sometimes, organisations depute or encourage employees to do courses on a part time basis. Chief executive officers (CEOs) are known to attend refresher course conducted in many Business schools. The late. Manu Chanbria, Shaw Wallace, attended such a two month program at the Harvard business school. Education is more important for the managers and executives than for lower-cadre workers.

**Development**

Another component of a training and development program is development, which is less skill – oriented but stress on knowledge. Knowledge about business environment, management principles and techniques, human relations, specific industry analysis and the like is useful for better management of a company.

Development program should help an employee to be a self-starter, build sense of commitment, motivation, which should again help him being self generating.
It should make their performance result oriented and help them in being more efficient and effective. It should also help in making the employee sensitive towards the environment that is his work place and outside. This program should keep the employee aware of him i.e. his potentials and his limitations; help him to see himself as others see him and accept his self image as a prelude to change. It helps to teach an individual to communicate without filters, to see and feel points of view different from their own. Also helps them to understand the powers in their hands and thereby develop leadership styles, which inspire and motivate others. And finally, helps to install a zest for excellence, a divine discontent, a nagging dissatisfaction with the status quo.

Ethics

There is a need for imparting greater ethical orientation to a training and development program. There is no denial of the fact ethics are largely ignored in the businesses. They are less seen and talked about in the personnel function. This does not mean that, the HR manager is absolved of the responsibility. If the production, finance or marketing personnel indulge in unethical practices, the fault rest on the HR manager. It is his/her duty to enlighten all the employees in the organisation about the need for ethical behaviour.

Attitudinal Changes

Attitudinal changes represent the feelings and beliefs of an individual towards others. Attitudes affect motivation, satisfaction and job commitment. Negative
attitudes needs to be converted into positive attitudes. Changing negative attitudes is
difficult because of

(1) Employees refuse to change

(2) They have prior commitments and

(3) Information needed to change attitudes may not be sufficient.

Attitude must be changed so that, the employee feels committed to the
organisation and give better performance.

**Decision making and problem solving skills**

Decision making and problem solving skill focus on methods and techniques
for making organisational decision and solve work related problems. Learning related
to decision making and problem solving skills seek to improve trainee’s abilities to
define and structure problems, collect and analysis information, generate alternatives.
Training of this type is typically provided to potential managers, supervisors and
professionals.

**1.6 IMPORTANCE OF TRAINING AND DEVELOPMENT FOR THE ORGANISATION**

There are many benefits of Training and Development to the organisation as
well as employee. It is categorised as under

1) Benefits for the organisation

2) Benefits for the individual
3) Benefits for personnel and human relation, intra group and internal group relation and policy implementation.

**Benefits for the organisation**

a. Improves communication between group and individuals.
b. Aid in orientation of new employee and those taking new job through transfer or promotion
c. Provides information on equal opportunities and affirmative action.
d. Provides information on other governmental laws and administration policies.
e. Improve interpersonal skills.
f. Makes organisational policies, rules and regulations viable.
g. Builds cohesiveness in group.
h. Provides a good climate for learning, growth and co-ordination.
i. Makes the organisation a better place to work and live.

**Benefits for the individual**

a. Helps and individual in making better decision and effective problem solving.
b. Through training and development, motivational variables of recognition achievement, growth, responsibility and advancement are internalized and operationalised.
c. Aid in encouraging and achieving self-development and self confidence.
d. Helps a person to handle stress, tension, frustration and conflict.
e. Provides information for improving leadership, knowledge, communication skills and attitudes.
f. Increase job satisfaction and recognition.
g. Moves a person towards personal goals while improving interactive skills.
h. Satisfies personal needs for a trainee.
i. Provides the trainee an avenue for growth in his or her future.
j. Develops a sense of learning.
k. Helps to eliminate fear in attempting new task.
l. Helps a person improve his listening skill, speaking skills also with his writing skills.

**Benefits for personal and human relation, intra group and internal group relation and policy implementation**

a. Improves communication between group and individuals.
b. Aid in orientation of new employee and those taking new job through transfer or promotion.
c. Provides information on equal opportunities and affirmative action.
d. Provides information on other government laws and administration policies.
e. Improve interpersonal skills.
f. Makes organisational policies, rules and regulations viable.
g. Builds cohesiveness in group
h. Provides a good climate for learning, growth and co-ordination.
i. Makes the organisation a better place to work and live.
1.7 TRAINING PROCESS

The Steps of Training Process are as under:

- Organisational Objectives and Strategies
- Assessment of Training Needs
- Establishment of Training Goals
- Devising Training Program
- Implementation of Training Program
- Evaluation of Results

a) Organisational objectives and strategies

The first step in the training process is an organisation in the assessment of its objectives and strategies. What business are we in? At what level of quality do we wish to provide this product or service? Where do we? What to be in the future? Its
only after answering these and other related questions that the organisation must assess the strength and weakness of its human resources.

b) Needs assessment

Needs assessment diagnoses present problems and future challenges to be met through training and development. Needs assessment occurs at two levels i.e. group level and individual level, an individual obviously needs training when his or her performance falls short or standards that is when there is performance deficiency. Inadequate in performance may be due to lack of skills or knowledge or any other problem.

The following diagram explains performance deficiency:-

![Performance Deficiency Diagram]

- Lack of skills or knowledge
- Other causes
- Training Measures
- Non training Measures

The following diagram explains performance deficiency:

\[ 	ext{Performance Deficiency} \]
\[ \downarrow \]
\[ \text{Lack of skills or knowledge} \]
\[ \downarrow \]
\[ \text{Training Measures} \]
\[ \downarrow \]
\[ \text{Non training Measures} \]

\[ \downarrow \]
\[ \text{other causes} \]

The following diagram explains performance deficiency:

\[ 	ext{Performance Deficiency} \]
\[ \downarrow \]
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\[ \downarrow \]
\[ \text{Training Measures} \]
\[ \downarrow \]
\[ \text{Non training Measures} \]

The following diagram explains performance deficiency:

\[ 	ext{Performance Deficiency} \]
\[ \downarrow \]
\[ \text{Lack of skills} \]
\[ \downarrow \]
\[ \text{Or knowledge} \]
\[ \downarrow \]
\[ \text{Training Measures} \]
\[ \downarrow \]
\[ \text{Non training Measures} \]

The following diagram explains performance deficiency:

\[ 	ext{Performance Deficiency} \]
\[ \downarrow \]
\[ \text{Lack of skills or knowledge} \]
\[ \downarrow \]
\[ \text{Training Measures} \]
\[ \downarrow \]
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\[ 	ext{Performance Deficiency} \]
\[ \downarrow \]
\[ \text{Lack of skills or knowledge} \]
\[ \downarrow \]
\[ \text{Training Measures} \]
\[ \downarrow \]
\[ \text{Non training Measures} \]

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\[ \downarrow \]
\[ \text{Non training Measures} \]

c) Training and development objectives

Once training needs are assessed, training and development goals must be established. Without clearly-set goals, it is not possible to design a training and
development program and after it has been implemented, there will be no way of measuring its effectiveness. Goals must be tangible, verifying and measurable. This is easy, where skilled training is involved.

d) **Designing training and development program**

Who are the trainees? → Who are the Trainers? → What methods and Techniques?

What is the conduct of training program? → what are the Principles level of training program? → Where to learn?

e) **Conducting training activities**

Where is the training going to be conducted and how?

- At the job itself.
- On site but not the job for example in a training room in the company.
- Off site such as a university, college classroom hotel, etc.

f) **Implementation of the training program**

Program implementation involves actions on the following lines:

- Deciding the location and organising training and other facilities.
- Scheduling the training program
- Conducting the program
- Monitoring the progress of the trainers.
i) Evaluation of the results

The last stage in the training and development process is the evaluation of the results. Since huge sums of money are spent on training and development, how far the program has been useful must be judged/determined. Evaluation helps to determine the results of the training and development program. In practice, however, organisations either overlook or lack facilities for evaluation.

1.8 METHODS OF TRAINING

A multitude of techniques are used to train the employees. Training techniques represent the medium of imparting skills and knowledge to employees. Training techniques are means employed in the training methods. They are basically of two types.

1) Lectures

It is the verbal presentation of information by an instructor to a large audience. The lecturer is presumed to possess knowledge about the subject. A virtue in this method is that, it can be used for large groups and hence, the cost of training per employee is very low. However, this method violates the principle of learning by practice. Also, this type of communication is a one-way communication and there is no feedback from the audience, because in case of very large groups it is difficult to have interactive sessions. Long lectures can also cause boredom.
2) **Audio Visuals**

This is an extension of the lecture method. This method includes slides, OHPs, video tapes and films. They can be used to provide a range of realistic examples of job conditions and situations in the condensed period of time. It also improves the quality of presentation to a great extent.

3) **On-the-Job Training**

It is used primarily to teach workers on how to do their present jobs. Majority of the industrial training is on the job training. It is conducted at the work site and in the context of the job. Often, it is informal, as when experienced worker shows a trainee how to perform tasks. In this method, the focus of trainer’s focus is on making a good product and not on good training technique. It has several steps; the trainee first receives an overview of the job, its purpose and the desired outcomes. The trainer then demonstrates how the job is to be performed and to give trainee a model to copy. And since a model is given to the trainee, the transferability to the job is very high. Then the employee is allowed to mimic the trainer’s example. The trainee repeats these jobs until the job is mastered.

4) **Program Instruction (PI)**

In this method, training is offered without the intervention of the trainer. Information is provided to the employee in blocks, in form of books or through teaching machine. After going through each block of material, the trainee goes
through test/answers a question. Feedback in the form of correct answers is provided after each response. Thus PI involves:

- Presenting questions, facts and problems to the learner.
- Allowing the person to respond
- Providing feedback on the accuracy of the answers
- If the answers are correct, he proceeds to the next block or else; repeats the same.

However, it is an impersonal method and the scope of learning is less as compared to other methods of training. Also the cost of preparing books, manuals and machinery is very high.

5) Computer Assisted Instruction (CAI)

This is an extension of the PI method. In this method, the learner’s response determines the frequency and difficulty level of the next frame. This is possible due to the speed, memory and the data manipulation capabilities of the computer.

6) Simulation

It is any equipment or technique that duplicates as nearly as the actual conditions encountered at the job. It is an attempt to create a realistic for decision-making. This method is most widely used in Aeronautical Industry.
7) Vestibule Training

This method utilizes equipment, which closely resembles the actual ones used in the job. It is performed in a special area set aside for the purpose and not at the workplace. The emphasis is placed on learning skills than on production. It is however, difficult to duplicate pressures and realities of actual situations. Even though the kind of tension or pressure may be the same, the employee knows it is just a technique and not the real situation. Also, the employees behave differently in real situations than in simulations. Also additional investment is required for the equipment.

8) Case study

It is a written description of an actual situation in the business, which provides the reader to think and make decisions/suggestions. The trainees read the case, analyze it and develop alternative solutions, select the best one and implement it. It is an ideal method to promote decision making skills. They also provide transference to an extent. They allow participation through discussion. This is the most effective method of developing problem solving skills.

The method/approach to analysis may not be given importance. Many a times only the result at the end of the case may be considered and not the line of thinking to approach it. This is a major disadvantage, since case studies must primarily be used to influence or mend the attitude or thinking of an individual.
9) Role playing and Behaviour Modelling

This method mainly focuses on emotional (human relation) issues than other ones. The essences are on creating a real life situation and have trainees assumed parts of specific personalities (mostly interchanged roles of boss and subordinate to create empathy for one another). The consequence is better understanding of issues from the other’s point of view.

Concept of Behaviour Modelling

- Fundamental psychological process by which new patterns of behaviour can be acquired and existing ones can be altered.
- “Vicarious process” learning takes place not by own experience but by observation or imagination of others’ action.
- It is referred to as “copying”, “observational learning” or “imitation” implying that it a behaviour is learned or modified through observation of other’s experiences.
- This change may be videotaped and showed to the trainee and he can review and critique it.
- It also helps him to see the negative consequences that result from not using the behaviour as recommended.
10) Sensitivity Training

It uses small number of trainees usually less than 12 in a group. They meet with a passive trainer and get an insight into their own behaviour and that of others. These meetings have no agenda and take place away from the workplace. The discussions focus on why participants behave the way they do and how others perceive them. The objective is to provide the participants with increased awareness of their own behaviour, the perception of others about them and increased understanding of group process. Examples: Laboratory training, encounter groups. Laboratory training is a form of group training primarily used to enhance interpersonal skills. It can be used to develop desired behaviours for future job responsibilities. A trained professional serves as a facilitator. However, once the training is over, employees get back to being the way they are.

11) Apprenticeships and Coaching

It is involved learning from more experienced employees. This method may be supplemented with other off-the-job methods for effectiveness. It is applied in cases of most craft workers, carpenters, plumbers and mechanics. This approach uses high levels of participation and facilitates transferability. Coaching is similar to apprenticeships. But, it is always handled by a supervisor and not by the HR department. The person being trained is called understudy. It is very similar to on the job training method. But in that case, more stress is laid on productivity, whereas here, the focus is on learning.
In this method, skilled workforce is maintained – since the participation, feedback and job transference is very high. Immediate returns can be expected from training – almost as soon as the training is over the desired outcomes can be seen in the trainee.

1.9 CLASSIFICATION OF TRAINING PROGRAMS

Training method is a systematic procedure or technique, by which a particular skill is developed in a person/employee of an organisation. The quality of any training program depends upon combination of training methods adopted. On the basis of their characteristics, the important training methods are classified as:

A – On the job training methods

- On the job training
- Job rotation
- Counselling
- Syndicate groups

B – Simulation Methods

- Role plays
- Case methods
- Management games
- In basket exercise
C – Knowledge Based Methods

- Lecture
- Extension talk
- Group discussion
- Seminar, symposium, conferences etc.
- Brain storming

D – Skill Based Methods

- Assignments
- Demonstration
- Skill teaching
- Work shops

E – Experimental Method

- Sensitivity training

A – On the job training methods

On the Job training

On-the-job training is the heart and soul of all training in business and industry. The most universal form of employee development is on-the-job training, OJT, as it is known, or sometimes called “shop training”.

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This is the traditional method of skill learning, which is designed to maximise learning while allowing the employee to perform his job under the supervision and guidance of a trained worker or instructor, providing him practical application and making principles and concepts of learning meaningful and realistic.

**Job rotation**

Job rotation which is also termed ‘Position Rotation’ is a procedure or method for imparting diversified training to managers through their performance on a succession of different types of jobs.

This provides an opportunity to young executives to familiarize themselves with the company in general and thus gain experience.

**Counselling**

Counselling, involves a discussion between a subordinate and his superior on matters concerned with the former’s personal hopes, fares, emotions and aspirations.

In counselling, generally a superior perform a passive, non directive and listening role. However, the primary emphasis on managerial counselling should be on helping the subordinate to learn the technique of administration. This may involve job knowledge, managerial skill or personality adjustments.
Syndicate Group

Syndicate is a form of small group organisation; various small groups are often designated as syndicates, e.g. discussion groups in a course, or at a conference, which are asked to report to a plenary action.

This method is used as a device not only for the study of specific problems, but for other tasks also.

B – Simulation Method

Role Plays

Craig has defined role playing, “as an educational or therapeutic technique in which some problem solving human interaction, real or imaginary is presented and then spontaneously acted out. The enactment is casually followed by a discussion and/or analysis to determine what happened and why and if necessary, how the problem could be better handled in the future”

Role-playing essentially is one of the earliest forms of simulation technique in training. It has been increasingly accepted as a valuable training tool in recent years.

The success of role playing, mainly depends on the abilities of the trainees, as they exhibit in adopting their prescribed roles, and react in a manner as if they were truly in a work situation.
Case Method

Case study method is essentially a group-oriented technique, which has been steadily increasing in popularity and widely use as a common form of training and a valuable training aid. This method is frequently used in supervisory and managerial training in industry.

Simply stated, ‘case study’ presents a written outline of a business situation or a problem.

Management Games

A Management game is a training exercise in an administrative or business context. It is a simulation of an administrative situation in which the constraints and pressures of day-to-day work environment are duplicated and participant is placed in the midst of the situation to find a solution. It creates a real life situation in which the participants apply their knowledge and skills and obtain feedback on the correctness of their decision.

In Basket – Exercise

The In basket technique is a situation bound simulation exercise, designated to develop decision-making and its implementation, problem solving and organising ability. It has emphasis on internal as well as external problems. The In Basket technique imparts training in the following ways:
Ordering of priorities

1) Decision-making and its implementation
2) Interpersonal relationships and
3) Use of time

C – Knowledge Based Methods

Lecture

The ‘Lecture Method’ – a conventional training technique and a traditional form of classroom teaching still occupies, though a very limited and specific place in the area of training and development, because of the advent of a number of other new and improved methods and techniques.

This method permits the imparting of a substantial amount of material to a large group in a relatively short time.

Simply explained, ‘a Lecture is a formal organised talk by the instructor to a group of students – a standard instructional method in college and universities’.

Extension Talk

Another method, which is similar to lecture method or rather a modified form of lecture method is extension talk method. In this method, a lesson is prepared to class primarily through talk but black/green/white board is used as an aid to talk. In this method, the trainer does most of the talking and tries to make it more effective by the use of other aids.
**Group Discussion**

The group discussion aims at free exchange of knowledge, ideas and opinions among the trainees and the trainers. Every group discussion has its own dynamics.

The participants in a program can be formed into groups and allowed to discuss a particularly subject in the presence of an authority called resource person. The participants are enabled to express their views on the subject, which are then clarified and simplified by the resource person.

In simple, “A group discussion is a planned and purposive interchange of ideas and feelings under the supervision of the discussion leader”

The group discussion is a participative method in which each member of the group gets an opportunity to express his views.

**Seminars**

Seminars are organised to discuss issues from various point of view. Major focus is on expressing different point of views on a subject with in-depth discussion on them.

The general objective of seminar, symposium and other discussion methods is to provide participants with opportunities for exchanging of ideas and experience.
Symposium

Actually there is a thin line between a panel discussion and a symposium, which differentiate the two. It is very much similar to panel discussion. The only difference is that in a symposium, there is only one subject, which is discussed by all the experts and not the different aspects of the subject as happened in a panel discussion.

Conference

It is a widely used method in the training and development of supervisory and managerial personnel.

Beach states that, “a conference is a small group meeting conducted according to an organised plan, in which the leader seeks to develop knowledge and understanding by obtaining considerable amount of oral participation from trainee students”

Conference methods primarily involve groups, composed of ten to twenty-five participants. The leader introduces the subject and guides the discussion and deliberations. Every member of the group is encourages to actively participating in the discussion of mutual problems.

Brain-Storming

Brain storming is one of the innovative and comparatively newer methods used in training. The method as its name implies storm out ideas from the participants.
In Brain-storming, a group uses both vertical and horizontal thinking. In this technique, a small group of persons is given a problem and are asked to produce as many solutions as possible within a given period.

D. Skill Based Methods

Assignments

There are three types of assignments such as

(i) Written assignments
(ii) Library assignments
(iii) Individual assignments

Written assignment

One of the effective methods of learning, is to give written individual or group assignments to the trainees to reflect on and to summarise systematically the learning both of knowledge and skills during a particular period and on a particular topic. This is done along with suggested readings.

Library assignments

One of the effective ways of ensuring that the trainees make themselves knowledgeable about a particular topic and are able to analyse a topic and to express their views, library oriented assignments are given to the trainees.
Objectives of library assignments are:

(i) Compulsory reading on a particular topic
(ii) Acquiring knowledge on the subject/topic assigned.
(iii) Develop skills to write notes on topics in a informative and analytical manner.

Individual Assignment

Individual practice of specific skills, reading and writing assignments, tutoring etc. are some of the conventional methods of individual training.

The trainer adopts activities at the trainees’ rate of learning, which is a gauge of the trainee’s competence and motivation.

Demonstration

There are two principal types of demonstration; method demonstration and result demonstration. In the former, a procedure is carried out step by step slowly and accurately before the trainees, the demonstrator ascertaining that, the trainees understand how to perform it. In the later, the results of some activity carried out by the trainer or author are demonstrated and discussed.

Skill Teaching

The skill teaching can be defined as “to train the learners, to perform a skill or its part as quickly as possible, under supervision”. According to Bhargava’s
**dictionary**, the skill means to develop practical ability in a person to perform a particular task.

Today, the modern and scientific practices require a skilled person for economic and profitable level of production. The scientific production skill must, therefore be developed for higher and profitable production. The extension workers as well as the trainers must know what is “skill teaching”, and must use this method in their training programs.

**Workshops**

The workshop is a method of providing the trainees with opportunities for performing practical exercise in order to develop their skill in administrative functions. The theories and principles learnt by assigned readings or in a discussion group can be put into practice in a workshop assignment, which is in the nature of concrete exercise requiring the practical application of theories and principles. The workshop is a participative method in which program activity, job functions and administrative situations are simulated and analytical skills are developed.

Workshops have been organised, for instance, to convert conventional budgets into performance budgets for preparing PERT charts depicting stages of project implementation.
E – Experimental Method

Sensitivity Training

The trainees are put into situations in which,

a) Behaviour of each individual in the group is subject to examination and comment by the other participants.

b) The behaviour of the group is examined.

The trainer is a behavioural scientist, psychologist, sociologist or a person, who has himself, received special training. For a trainee to learn the effects of his behaviour on other people and effects of their behaviour upon him increase his knowledge of how and why people at work behave as they do. It increases skills at working with other people and of getting work done through their people. It is a valuable way of learning the skills of communication.

1.10 ADVANCED MANUFACTURING TECHNOLOGY (AMT) ENVIRONMENTS

Historically, the process of manufacturing goods has evolved from craftsmanship to a highly organised factory system. The factory system itself has changed dynamically from mechanized powered systems to the present day trend towards application of advanced manufacturing technology (computerized design, planning, and manufacturing tools such as CAD, CAM, MRP, etc). Paralleling this, evolutions have been dramatic changes in the skills required of the human component of the system. Such improved skills are needed in both cognitive and psychomotor
areas. Although recent developments in technology have made very significant contributions towards improving productivity in the manufacturing sector, there has been an increase in the skill demands placed on the human as an integral component of the cognitive skill demands, and in many cases, it has not addressed its primary objective of decreasing the level of physical demands placed upon workers. Nevins and Whitney (1969) state that the drive to automate has led to automating activities, leaving difficult tasks for humans to perform. Further, the changes in the organisational structure, workplace philosophy, and the market demands on product mix, volume, economy, and quick response times have placed additional burdens on the skill demands of the entire workforce, ranging from the hourly worker to the professional manager. As a result, a member of the workforce in a modern manufacturing setting frequently has to work as the member of a team and is required to make decisions while being confronted with a continual flow of vast amounts of information. The worker must be able to make elective use of the tools of modern technology. Members of work teams have been relegated to the roles of system monitor and controller as opposed to routine performers of a task. Organisationally, changes in the expected role of the human component in a manufacturing environment demand that workers possess a wide variety of skills at various levels.

Manufacturing may be viewed as the application of skills resident in humans to produce marketable goods of benefit to the society. The skills necessary to produce these goods are acquired by a person (in this context, the worker) by developing basic abilities inherent in the individual. The process by which, such inherent abilities are developed into job specific skills can generally be considered as training.
Currently, most manufacturing organisations train their employees in various ways, using different means, and achieving different levels of proficiency. Rarely does one standardized and consistent training programs to develop worker skills; optimal training programs are not generally known. This leads to workers acquiring industry or company-specific skills, often leaving them with only a few transferrable skills. It is well recognized that, the failure of many companies to transition to modern competitive manufacturing organisations is primarily due to their mismanagement of human resources. Specifically, many organisations have failed to upgrade worker skills to levels compatible with advanced manufacturing technologies. It has been shown that, variables such as, comprehensive training are essential to human resource management practices, particularly in advanced manufacturing environments. A number of investigators have shown that worker skill levels are a direct determinant of levels of quality performance. It is also reasonable to suggest that investments in human resources should keep pace with the changing technology particularly if the workers are to take responsibility for quality, productivity, and customers.

The present climate contains changing industrial trends (e.g. Downsizing of the organisations), renewed social policies and governmental regulations (e.g. The family leave act and the Americans with Disabilities Act), and the changing demographics of the workforce (e.g. The ageing of America and its influence on the nation’s competitiveness). It is essential that, workers in manufacturing environments receive training to meet the changing market needs as reflected by the demands placed on their skills.
As the brief discussion above points out, the quality of workers’ performance is directly tied to their skills. Further, many firms have yet to make serious investments in human resources, particularly when it comes to upgrade worker skills to levels that are compatible with the needs of advanced manufacturing technologies.

1.10.2 Background

Manufacturing systems are considered essential by most nations for the creation and propagation of wealth, and for improving the standard of living of its people. Estimates show that, developed countries such as, USA, Japan, Germany, and other nations in the Pan-pacific region, such as Taiwan, South Korea, Singapore, and Hongkong, have a manufacturing base comprising at least 20% of their gross domestic product which provides for at least 30% of their traded goods. Given the extent of manufacturing systems assume tremendous importance from the world, the design and operation of manufacturing from the perspective of making nations competitive. The ability to compete is vital for contemporary manufacturing due to the globalization, or internationalization, of all aspects of product manufacture (quality, product variations, labour, technology, markets, etc).

In the United States, the issue of designing and operating manufacturing systems that can retain the global economic advantage is a major concern to the industry leaders, academic researchers, Congressional policy makers, and officials in the Federal Government. The report of the President’s Commission on Industrial Competitiveness (1985), and research reports generated by the National Academy of Engineering (1988), the National Research Council (1990), and the National Science Foundation sponsored workshops conducted at the University of Cincinnati (Mital et
al., 1994b; Mital, 1995, 1996) demonstrate the seriousness of this concern. Some of these reports also contrast the relative importance of advanced technology with human resource-based technology and highlight the fact that, among countries with a large manufacturing base, the United States no longer dominates in the creation of new and advanced technologies. The worldwide share of American advanced machine tool production in 1987 dropped to 7.8% as compared to Japan’s share of 20.5% and Germany’s share of 19.9%. Also, in advanced machine tool exports, the US share was low (4.4%) compared to Japan (20.8%) and Germany (22.6%). Further, many countries now have the scientific and technological infrastructure to create new technologies. What then must make a positive difference to the United States industrial competitiveness, these reports conclude, is the development of a skilled human resource base.

There is now a broad consensus among the members of various academic, industry, and government institutions that a manufacturing organisation in the United States, in order to be competitive in the global market, must be able to produce wanted and needed products that have a very high quality, are reliable and economical, and can be produced easily and quickly. It is also realized that, the development of a highly-skilled human resource base in manufacturing is vital if these manufacturing organisations are to retain, or regain, their competitive edge in the global product market in fact, understanding the personal preferences and interactions between the individuals within the organisation will be the key to accomplishing this change quickly and electively. It is worth noting that many industries, such as IBM, Xerox, and General Motors, have begun to, or are planning to, reintroduce humans as a key element in their manufacturing operations, emphasizing the importance of
individual personal preferences and interactions in teams for change towards competitiveness. Many of these industries, for example Xerox, have been ardent supporters of complete automation in the past and now advocate human in the-loop control, particularly for cognitive functions, emphasizing, in general, the need for a highly-skilled manufacturing workforce capable of interacting with AMT.

1.10.3 Evidence of Human necessity

The argument that humans are essential, and will remain essential, in manufacturing environments has been put forth by Mital et al (1994c,d). Their arguments are based on economics, human performance and cybernetics (system and task factors). To summarize, the fact is that, fully automated factories are not yet viable for technical and economic reasons except in a very few special cases. Furthermore, for cybernetic reasons, it is likely that full automation will be a suboptimal solution for manufacturing organisations for the foreseeable future compared to hybrid systems combining people, machines and computers in elective partnership. The importance of people as components for control and innovation in manufacturing systems is recognised worldwide.

1.10.4 Benefits of Training

Overall, training leads to acquiring new skills and/or improvements in existing skills (Carnevale and Goldstein, 1990). These, in turn, lead to two distinct economic benefits. (1) Improvements in individual choices and earnings, and (2) cost savings for the organisation. According to Carnevale and Goldstein (1990), on the average, about half of one’s lifetime earnings are driven by learning in school and on
the job. People with low skills, or skills not needed by employers, have limited choices and low earnings (Lillard and Tan, 1986). Increasingly, we are encountering situations where people with low or unneeded skills are unable to employment that will maintain their standard of living, or are being forced to accept jobs that result in a substantial lowering of their earnings. Since the skills learned on the job complement educational experiences and lead to individuals’ having more choices, on-task training is critical.

Economical benefits of training for organisation include significant improvements in productivity (through improvements in quality, reduction in scrap and waste, reduction in throughput time, greater flexibility to respond to needs, etc.), and a competitive advantage of employers and the nation as a whole. The United States Department of Labour has reported that formal worker training introduced in 180 manufacturing firms in the United States increased overall productivity by 17% in 3 years when compared to industries that did not introduce any training program. The department of labour also reported that another survey of 157 small manufacturers observed a drop of 7% in scrap and an increase of 20% in the productivity of production workers.

The economic benefits of training, thus, point out the necessity of introducing formal training programs in manufacturing industry. Moreover, the greater the complexity of technology, the greater will be the training and human resource management needs.
1.10.5 Difficulties with existing training programs and training research

A review of training literature reveals that, the wealth of learning and training studies are concerned to collect data in laboratory settings, needs assessment, individual and cultural differences or deal with mathematical or behaviour modelling of training (eg. Bilodeau, 1966; Special issue of Human Factors, vol. 27 (3), 1985, Adams, 1987; Mayer and Russell, 1987; Campbell; 1988; Black et al, 1990; Park, 1991; Glencross, 1992; Felan et al, 1993; Stewart et al, 1994; Gilbert and Rogers, 1996; Volpe et al, 1996; Prislin et al, 1996). Analytically based training techniques have generally been concerned to the military (eg. Johnson, 1981; Travillian et al., 1993; Goettl et al, 1996). Reviewers, in general, have conducted that, training theory and practice do not complement each other, and that research findings are not interpreted into elective training methods (cannon-Bowers et al, 1991). Wexley (1984) stated that, certain critical areas of training need systematic study, which includes factors such as the organisation, task and program design, individual differences for training strategies, and workplace factors affecting the transfer of training. In fact, very few research studies using systematic procedures for developing employee training protocols have been conducted and validated within an industrial setting. Also, statistically designed experiments to test various training methods have not been formulated and evaluated within the workplace. Thus, there is a need to develop training protocols using a systematic procedure and conduct empirical assessments using these developed training protocols within an industrial setting to determine the effectiveness, efficiency, and productivity of training.
There is also the issue of the lifespan of learning for adults. In the era of rapidly changing technology, ability to learn new things is more critical than experience or years on the job. The ability to learn is particularly critical for adult employees as employers tend to believe that workers who have been on a job for sometime have difficulty in adapting to new methods (Hall and Mirvis, 1994). The learning also needs to be holistic and systematic, and less linear (Senge, 1990; Fullan, 1993; Muncie and McQuilan, 1996). While significant work has been done on child learning (goal oriented), relatively little has been done in the area of goal oriented adult learning (Tannenbaum and Yuki, 1992; Froman, 1994). Adult learning has implications for the development of comprehensive performance based goal-oriented training programs. Many adult workers turned themselves in a transition period, particularly in mid-career, and question and reappraise their life and career structure. In such periods, individuals may experience conflict between the motivation to learn, on the one hand, and perceptions, fears, and habits that block change, on the other. Any elective training program will need to consider employee needs, their motivation, career plans, etc.

Despite the economic advantages of training and the need to prepare the American workers for global competitiveness, training studies dealing with industrial applications, particularly those that are performed in, are scarce. It is also worth noting that, critical review articles dealing with the training issues are lacking (Howell, 1996). Workers in Modern manufacturing environments not only need training in depth (level of proficiency in a skill) but breadth (different skills) as well (Jacobs, 1994). Moreover, these skills need to be updated and modified regularly as the technology changes. In contrast, the traditional model of industry training, if any,
requires an apprenticeship, sometimes an extended one (e.g. 5 Years) only at the beginning of a career.

At present, relatively few American industry workers receive training. Those trained, in turn, train others. A survey of auto workers at a General Motors assembly plant revealed that less than 20% of production workers received technical training, although nearly 83% received some form of training. A survey of contract labour in the US petrochemical industry by the John Gray institute (1991) revealed less than 33% of workers to have received company training upon entering the industry. Further, 20% of this same labour force reported receiving no on-going training throughout their employment. Also relevant is the question ‘How well current training programs work? This question has been partially answered at the Senator Mike Dewine, the current Chairman of the Senate Labour and Human Resources Committee, there are over 160 different job training programs sponsored by the Federal Government. These programs are frequently not only duplicative; they are short on proven results. Such job training programs, considered essential to improve the American work force, need to be consolidated, to just 4 or 5 primary programs with training success being quantities and documented (Senator Mike DeWine in The Cincinnati Enquirer, 3 January 1997). It is also known that, the amount of training is a function of professional position) managers receive far more training than line workers (Carnevale, 1991), and professional associations) union labour receive significantly greater training than non-union labour (John Gray Institute, 1991), and direct-hires receive double the level of on-going training as contract labour (John Gray Institute, 1991). This directly contradicts conclusions drawn by several national agencies (Manufacturing Studies Board, 1986, Office of Technology Assessment,
1988, 1990; US Department of Labour, 1993b). It is important to note that Japan, an economic giant, second only to the United States, spends considerable time and effort on in-depth training of its line workers in a variety of skills. Such philosophy is rarely seen in industry in the United States; exceptions are plants using Japanese management techniques (e.g. Honda of Ohio and Lucas-Sumitomo, Inc.)

Also of considerable importance is the fact that workers, in the present atmosphere of downsizing, need to be trained in a variety of skills to improve their chances of regaining meaningful employment. The want for such training has been reported by Muramatsu et al. (1987). Existing American industry training programs not only provide inadequate skill training for success in contemporary manufacturing, training programs are generally not linked to product designs (determining the manufacturing technologies and skills necessary to produce a quality product). Without such linkage, it is not possible to optimize worker skills and, consequently, organisational productivity and product quality. Such a linkage would also assist in evaluating needs for updating and modernizing worker skills.

The paucity of on-site industrial training studies in the published literature is alarming. Particularly since the economic wellbeing of our nation depends on the skills of our workforce. The “National Science Foundation workshop report on workforce needs for global competitiveness, prepared by Mital (1996), stated that `... it is important to recognize the special role training has to play in preparing the American workforce for global competition beyond the year 2000a. This report also referred to President Clinton’s 1996 state of the union address during, which he stated that, there are nearly 160 different Federal training programs and yet, according to
Louis V Gerstner, jr. (CEO, IBM), we have a significant number of people in the workforce who can barely read, compute, communicate, or think (National Education Summit, Palisides, Newyork, April, 1996). Clearly, training related research particularly industrial training research that is carried out in field is a dire necessity (Tannenbaum and Yukl, 1992) for the United States, if we are to remain competitive in a global economy.

1.10.6 Final Remarks

As pointed out in the previous sections, various national agencies (E.g. OSCE of Technology assessment, US department of labour, National Academy of Engineering, and Manufacturing Studies Board), academic researches (E.g. The National Science Foundation Workshop Reports), and industry leaders (E.g. Louis Gerstner, CEO, IBM) agree that workforce skill requirements have become greater and more complex as a result of investments in AMT. The investments are essential, if the US industry is to remain competitive in the global economy. Further, it is necessary, and to industry advantage for humans to remain an integral part of manufacturing environments for economic and cybernetic reasons.

The discussion in previous sections has revealed the scarcity of industrial training research, particularly field studies. Given the complexities of modern manufacturing, the national need to be globally competitive, the need to retain and enhance the standard of living of Americans through gainful employment, and the increased burden placed on the skills required at the workforce (at all levels line and maintenance workers, supervisors, professionals and managers). It is absolutely essential that, the United States initiate a comprehensive industrial training program.
The dire necessity of such a program is further demonstrated by the fact that we have; workers who do not have skills industry needs (and such workers often remain without jobs for prolonged periods of time); a proliferation of training programs that do not meet worker, industry, and national needs; inadequate training given to line workers; few transferrable skills possessed by workers; etc.

Realizing that, the economic growth of our country is dependent upon developing our human resources (e.g. Coleman, 1988; Boothroyd, 1990; St. Charles, 1990) and the productivity of Americans is directly proportional to America’s economy, it is essential that we develop an industry-based generic training process that, at the very least:

1. Can enhance the skills of workers at all levels,
2. Give them options for personal and professional growth,
3. Cut costs, increase productivity, and quality of products manufactured, and
4. Make the U.S. human resource base second to none in the world.

1.11 EVALUATION OF TRAINING AND DEVELOPMENT

1.11.1 Definition Of Evaluation

Various definitions of evaluation can be found in the literature, many of them stipulate, and the inconsistencies in the use of the terminology cause confusion in training evaluation, affecting the success of evaluation efforts.
A review of the literature on training and development was conducted to identify methods employed in effective training programs. According to Berry (1995, p.54), having knowledge and understanding of learning principles, designing and conducting training sessions is important so that, trainees are able to transfer the learnt material to their job situation. He further notes that, after training has been conducted, it is worthwhile for the organisation to determine how effective the training goals were.

Brown and Seidner (1998, p.57) define evaluation as a disciplined inquiry to gather facts and other evidence that will allow an evaluator to make assertions about the quality, effectiveness, or value of a program, a set of materials or some other object of evaluation in order to support decision making.

Holli and Calabrase (1998, p.60) define evaluation as a comparison of an observed value or quality with a standard or criterion of comparison. Evaluation is the process of forming value judgements about the quality of programs, products, and goals.

It can be concluded that, evaluation is the application of systematic methods to periodically and objectively assess the effectiveness of programs in achieving expected results, as well as their impacts, both intended and unintended, and also continued relevant and alternative or more cost-effective ways of achieving the expected results.
The definitions of evaluation have been discussed. It is therefore appropriate, to define the purpose for evaluating training and development initiatives. It is important to be clear from the onset as to what the purpose of evaluation is.

1.11.2 Purpose For Evaluating Training And Development

The purposes of training and development are rather broad and are determined by the primary focus of the kind of training and development initiative. Foxon and Lybrand (2005, p.4), concurs that there is a lack of agreed on definitions of evaluation and therefore, there are an equally broad range of opinions on the purpose of evaluation.

Foxon and Lybrand (2005, p.4) observe that, more than 20 per cent of the writers neither describe nor imply a purpose for evaluation. Where purposes are outlined, they provide some telling insights. For example, 15 per cent see the purpose for evaluation as justifying the training department’s existence and providing evidence of any cost benefit to the organisation. The majority of these articles surfaced in the period 1980-83, and clearly reflects the preoccupation of many practitioners with keeping their jobs during the economic downturn and resulted in human resources development budgets being cut (Foxon & Lybrand 2005, p.4),

While a mere 2 per cent consider assessing trainees’ reactions to be the purpose of evaluation, and 50 per cent see the purpose of judging the quality and worth of the training and development program in order to effect improvements and/or identify the benefit of training. It should be remembered that studies already referred to provide evidence that many trainers are not evaluating beyond the level of
the trainee reaction. What trainers are not evaluating beyond the level of the trainee reaction. What trainers believe should be done and what they do in reality differ remarkably. Despite the regular reference in the literature to Kirkpatrick’s four-stage model which highlights the following stages, (reaction, learning, behaviour, and results), only a small percentage consider the purpose of evaluation specifically in these terms (Foxon & Lybrand 2005, p.5)

Evaluation goals involve multiple purposes at different levels. These purposes include student learning, instructional material, transfer of training, and return on investment. Attaining these multiple purposes may require the collaboration of different people in different parts of the organisation.

1.11.3 Feedback

Bramley (1991, p.87) brings in a different dimension to the purpose for evaluating training. He further states that, the common view of evaluation is that, it completes the training cycle. The purpose for evaluation is therefore integral to the cycle and has a key role in the quality control of the cycle by providing feedback on:

- Effectiveness of the methods being used;
- The achievement of the objectives set by both trainers and trainees; and
- Whether the needs originally identified, both at organisational and individual levels, have been met.

Bramley (1991, p.88) identifies five purposes for evaluating training and development, namely: feedback, control, research, intervention and power games.
Feedback provides quality control over the design and delivery of training and development activities. Feedback to trainees is critical for imparting a learning process during training and development. Timely feedback to participate on the effectiveness of particular methods and on the achievements of objectives set for the program will help in the development of the program currently being run and those planned for future occasions. Information which needs to be collected for feedback evaluation is:

- The extent to which the objectives are being or have been met;
- Before and after measures of levels of knowledge, concepts used, skills, attitudes and behaviour;
- Sufficient detail about content to be able to estimate the effectiveness of each topic;
- Evidence of transfer of learning back to the workplace, and
- Some least identification of those for whom the programs was of most and least benefit so that, the target population can be more closely defined.

Bramley (1991, p.88) concludes by noting that, the main purpose of feedback evaluation is the development of learning situations and training programs to improve what is being offered. The secondary aspect in identifying is what is good and what is not so good in improving the professional ability of members of a training department. Reports based on feedback evaluation tend to have conclusions in them, which the training department can consider and act upon (or not act on) as appropriate.
Evaluation cannot be conducted without guidelines and procedures to help the trainer confine them within the context of the process without interference.

### 1.11.4 Control

Control measures for the evaluation are crucial and the organisation must ensure that, policies on the evaluation of training and development are in place before they begin the evaluation.

Control evaluation relates training policy and practice to organisational goals. There could also be concern for the value added to the organisation of the contribution and costs of the training function. Control evaluation may be the answer to such questions as: Will the main focus on training give a better solution to the problem than re-structuring the department or re-designing some of the jobs? The information required for control evaluation is therefore:

- That which is required for feedback;
- Some measures of the worth of the output of the training to the organisation;
- Some measures of costs; and
- Some attempts at a comparative study with different combinations of methods for tackling the problem (Bramley 1991, p.88)

It can therefore be concluded, that control evaluation is something that an organisation might require of a training manager or might impose through the creation of a group which is responsible for evaluating, but is not part of the training function in an evaluation cell. Training evaluation may be carried out for research purposes.
1.11.5 Research

This evaluation seeks to add to knowledge of training principles and practice in a way which will have more general application than feedback evaluation. Studies of ways, in which people learn or studies of factors, which facilitate transfer would be examples. Research evaluation can also serve to improve the techniques available for other purposes like feedback, control and intervention.

Bramley (1991, p.89) states that, research evaluation is particularly concerned with two types of validity. Internal validity may be described as the extent to which particular conclusions may be drawn from the data. The data should be derived from a carefully controlled situation with good experimental design so that alternative explanations cannot be ruled out. External validity is defined as the extent to which the conclusions that are drawn from the experimental situation may be generally applicable to other situations. Research evaluation into training and development within organisations is particularly difficult due to few opportunities to set up well designed projects with true control groups and adequate time for a series of observations.

1.11.6 Interventions

Training evaluation can be used for internal communication between all stakeholders such as trainers, trainees, and managers.

Bramley (1991, p.89) states that, it is an illusion to believe that the process of evaluation is able to provide some objective measuring instrument that is independent
of the program being evaluated. The evaluation will almost inevitably affect the way, in which the program is viewed and can be used to redefine the sharing of responsibility for the learning between the trainers, trainees and employing managers.

Planned intervention through evaluation can:

- Involve the line manager in pre- and post- measurement;
- Involve the line manager in the extension of training after the event by debriefing and helping with the implementation of the action plan;
- Change the way in which the employing managers select and brief people before the learning event; and
- Cause the training department to rethink the deployment of trainers to the functions within the organisation and to strengthen the liaison role (Bramley 1991, p.89).

1.12 STRATEGIES FOR EVALUATING TRAINING AND DEVELOPMENT

There are ample of evidence that, evaluation continues to be one of the most vexing problems facing the training fraternity. Catanello and Kirkpatrick’s 1968 survey of 110 industrial organisations evaluating training (Burgoyne and Cooper 1975, p.60) revealed that, very few were assessing anything other than trainee reactions.

This section will cover strategies for evaluating training and development, as well as various approaches to the evaluation of training and development. Also covered in this section is the need for evaluating training and development, evaluating
changes due to training and development and lastly, evaluating training and development through the implementation of a performance management system.

Wigley (1988, p.13) describes a ‘production approach’ to training, in which evaluation activities are seen as being isolated from the training itself. In this approach evaluation is focused on statistics that describes the number of training days per year, the number of courses per year and the number of trainees attending each course, among other things. Whilst these statistics are useful in providing data about how popular the programs offered by the training department are, they have little effect in showing whether the training department is fulfilling any useful purpose for the organisation.

Having knowledge of and understanding learning principles, designing and conducting training sessions is only relevant when trainees learn material that they can subsequently transfer to their actual jobs. After training has been conducted, it would seem only natural that organisations would devote significant effort determining how effective training has been i.e. have training goals been met? (Berry 1995, p.54). This discussion leads to an important question, why evaluate training and development?

1.13 THE NEED FOR EVALUATING TRAINING AND DEVELOPMENT

Other than determining the effectiveness of the training and development initiative, why is there a need for evaluating training and development? Most importantly, before answering the question of why evaluate training and development,
it would be appropriate to consider possible reasons why systematic evaluation of training and development is not carried out in organisations.

There is a strong belief amongst trainers and those involved with training that most of the training they conduct are once-off programs and therefore why bother to evaluate such programs. Berry (1995, p.56) states that, one of the reasons why training evaluation is neglected by the trainers is because many academic analysis have been strong on telling trainers that, evaluation should be conducted but they have offered trainers limited practical guidance and few examples, which show trainers how the evaluation ought to be conducted. He further states that, academic researchers create the impression that, evaluation must be conducted in laboratory-like conditions of experimental control and that, such rigour are unattainable and practitioners tend therefore to conclude that evaluation is impossible.

It is possible that, training evaluations are not conducted because of the fear amongst trainers who, like most job incumbents, tend to avoid performance appraisal unless a positive outcome is guaranteed, hence the popularity amongst trainers of end-of-course reaction forms (or “happy sheets”). Evaluation also makes it possible to question training programs that have been allowed to continue for many years (and often at great cost) unchecked (Berry 1995, p.56)

1.14 TECHNIQUES FOR EVALUATING TRAINING AND DEVELOPMENT

Goldstein and Ford (1998, p.178) and Wynne and Clutterbuck (1994, p.231) reckon that managers and trainers must be introduced to different types of evaluation techniques which they can use to assess the effectiveness of training and development
initiatives in the organisation. It is important to see evaluation as an integral part of the training cycle. Evaluation may appear to be the final phase/stage of the training cycle, but consideration should be given to each stage. It is also important to build it in as a phase on its own in order to evaluate the total process.

The following evaluation techniques will be covered in this section and these include: interviews, pre-test/post-test, questionnaires and surveys, observations, documents, simulations, action plans, tracking charts and gap analysis.

1.14.1 Interviews

Holcomb (1994, p.40) states that, interviews can be formal and structured, or very informal, like “how did it go?” kind of discussion. The main objective of the interview as the evaluation technique is to ask people about the specific training program.

Buckley and Caple (2000, p.243) note that, in a structured interview, both the trainer and the trainee get involved in a face-to-face conversation structured around the checklist of prepared questions (usually a mixture of open-ended, problem-solving and closed questions, i.e. Yes/No or related answer questions) that can take place in or away from the workplace. The interview can be conducted with any individual or a small group who may have relevant information. These might include job holders, supervisors, higher management or, in some cases, the customer may be involved as well.
The main purpose of the interviews both formal and informal is to investigate reasons why certain units or individuals in the organisation have benefitted from training or to gather information about the training program. The great benefit of interview-based evaluation however, is that the trainer can gain a great deal of information through the use of both open and closed questions designed to probe the trainee’s views on the program and other training-related issues. These issues can cover knowledge, skill and attitude assessment both in the initial and at a later phase of the evaluation. If the approach is linked to a more quantitative approach, it can provide the trainer with a good feel for the effectiveness of the programs delivered (Wynne and Clutterbuck 1994, p.239)

The interview evaluation techniques are the most cost effective and reliable technique that can be used to evaluate training and development initiatives. Pre-test and post-test is the next evaluation technique to be discussed.

1.14.2 Pre-test/post-test evaluation technique

Wynne and Clutterbuck (1994, p.236) state that, an ideal way of measuring learning is to measure it at the start of the program, and then measure the same set of knowledge when the training program is completed. It is often helpful in deciding what needs to be built on, particularly when teaching is targeted at a specific skill.

Holcomb (1994, p.44) describes the pre-test and post-test as the most common and reliable ways to evaluate training and development initiatives in an organisation. In its basic form, the evaluator simply finds out what the trainees know or can do before training. When they finish training, trainees are expected to know more and be
able to perform better. A pre-test/post-test is generally a set of written questions to
determine knowledge. A similar question is given before and after, to see if the
trainee has learned anything. A pre-test/post-test is also applicable to behaviour and
skills, and does not need to be written. A manager could test behaviour before
training commences by observing performance on the job. Counting mistakes,
complaints, widgets produced before training and counting change afterwards is a pre-
test/post-test method. The same at improving performance and a post-test is used to
evaluate the improvement.

Other than the last-mentioned disadvantage, the pre-test/post-test evaluation
technique is reliable and most effective. The other technique that can be used to
evaluate training and development is questionnaires and surveys.

1.14.3 Questionnaires and surveys

Wynne and Clutterbuck (1994, p.237) are of the opinion that, a systematic
approach to training and development evaluation often requires the training
department to follow up with people who have attended specific programs. These
authors believe that, if the objective of evaluation is to assess retention and
application, the questionnaire should be designed primarily to assess the levels of skill
or knowledge that the trainee has retained during the periods following the training,
after six months, or twelve months, whichever period the trainer believes is right. It is
important for trainees to answer the questions as honestly and openly as possible
without referring to their notes or hand-outs.
Wynne and Clutterbuck (1994, p.237) state that, questionnaires and surveys can be used to identify how and how well learning has been applied. What benefits trainees have gained and what opportunities they now have for increasing learning? It must be noted that considerable benefit can also be obtained from negative responses. The trainer would be keen to know what learning has not been applied and why. Is it perhaps due to the fact the learning was not relevant, or is it because the timing was not right? On the basis of such responses, the trainer can then assess the relevance of the delivered training programs and its applicability (Wynne & Clutterbuck, 1994, p.237).

As stated, these evaluation techniques are common and thus people are comfortable in completing them. The next evaluation technique is observation.

1.14.4 Observation

An observation is made at the job site while employees are working. It is aimed at determining how well employees are able to perform a particular task or skill. Only behaviour can be observed, not feelings or attitudes. It is therefore for the evaluator to determine what kind of behaviour he or she is looking for before conducting this type of evaluation.

Like interviews, observation can be formal or informal. The trainer can observe how behaviour has changed as a result of learning and feedback, and can reinforce this with additional feedback from trainees after a particular exercise or experience. It must be noted that the trainer cannot expect sound behaviours they observe to be repeated unless trainers provide some kind of positive reinforcement.
(Wynne & Clutterbuck 1994, pp.240-241). As in previously discussed techniques, observation has its own advantages and disadvantages.

Every company keeps some form of written records or documentation for future reference or as a way of evaluating training and development.

1.14.5 Documents/records

Marshal and Wallace (1994, p.243) state that, there is a need for training documents or records to be kept for various reasons.

According to Holcomb (1994, p.59), some companies do a sterling job when it comes to documenting training information. But even poorly kept records can give the evaluator information about training needs and how to evaluate them. There are a number of documents that lead to training efforts and these include performance appraisal, profit and loss, employee grievances, and accident reports.

Marshal and Wallace (1994, p.243) believes that, performance appraisal may indicate areas where employees need improvement. If an employee is performing badly, on a performance appraisal, the company also needs to allow that particular employee to rectify his/her performance through training. Poor performance may be due to lack of skill, knowledge, behaviour or an attitude.

Profit and loss documentation often leads to training. Companies are always trying to find better ways to produce goods or services of higher quality and lower cost. This often requires technical or skill training to improve speed or to reduce errors and waste. Evaluating training is directly related to improvement in the bottom
line, resulting in higher profit margins, lower costs or both (marshal & Wallace 1994, 243).

These authors suggest that employee grievances, especially in an environment where a labour movement is militant, can cost the company time and money. Supervisory and management training is normally provided as a response to complaints about how supervisors and managers are treating employees. If grievances decrease after training, then those documents can be used to evaluate the results of training.

Marshal and Wallace (1994, p.244) note that customer complaints or response cards guide much of the training done in hotels and other service-based businesses. Customer’s responses tell management how the organisation is doing and if training is needed. The practice in modern business is that customers play a critical role in providing the organisation with the necessary feedback that guides the organisation’s direction.

According to Marshal and Wallace (1994, p.244), accident reports and occupational health and safety inspections lead to required employee safety training. Evaluation of these programs varies according to the significance of the accidents. In the case of a hazardous job with the evaluation of results is critical.

1.14.6 Simulations

Simulations are exercises that trainees participate in to demonstrate the real job situation.
The simulations are planned to mimic the problems or tasks that are faced on the job. Simulations probably present the greatest diversity and variety for evaluating training and development initiatives. Many organisations have introduced different games to equip their employees to deal with certain situations.

1.14.7 Action plans

Action plans, commonly known as learning contracts, are developed by the participants at the end of a training program. They are some of the commonest forms of evaluation because they follow the adult learning theory that stipulates the adults learn what they are ready to learn.

Holcomb (1994, p.70) believes that this technique allows the participants to decide exactly what changes they will make based on the things they learned during training. When adults are learning in a situation, a wide variety of maturity, experience and interests are brought into the session. People can learn valuable but different things, or they can learn the same things but apply them differently. Action plans are designed to allow participate flexibility.

1.14.8 Tracking charts

Tracking charts are simply a way of keeping score, which people love to do because it gives them a way of competing.

Holcomb (1994, p.70) explains that, tracking charts can be used on an individual basis to keep track of one’s scores. Tracking charts can also be used for teams to keep score on each other. Keeping score is highly motivating. According to
Holcomb (tracking charts were used in the 40s when time/motion studies were being done in factories to improve productivity. The development of tracking charts gained popularity when used for Total Quality Management as a way of recording changes in employees’ performance. This resulted in training initiatives being designed to meet the employees’ shortfalls.

Tracking charts can also be used to motivate employees. Employees are individually asked what they perceive as a fair day’s work and what pay should be given for such work. The supervisor keeps track of an individual employee’s day performance and gives feedback to the employee on how he or she has performed over a specific period of time and reward him or her for their performance (achievement).

1.14.9 Gap analysis checklist

A gap analysis checklist is developed by determining “what is’ and “what needs to be done”. It is based on individual competencies and helps trainees become competent in identified skills. Its purpose is to help trainees improve by finding out what they can do, checking if they are alright, and then training for what still needs to be improved. A Gap analysis checklist is useful especially when one needs to be certified or competent in several areas before being allowed to face the public. It is a developmental process where 100 per cent efficiency is the goal, but not immediately attainable after training.

Holcomb (1994, p.71) states that, the checklist allows trainees to develop at their own pace, realising that some trainees enter a program with more skills than
others. Once they are checked off as competent in all areas on the list, attention no longer needs to be focused on that employee. Time needs to be devoted to those, who need reinforcement in order to bring them up to the standard. The checklist allows the evaluator to focus on small steps in the evaluation and development of employees.

The gap analysis checklist appeals to managers who view training as a developmental process with small steps leading to competence. Ideally, rewards are given when trainees have successfully demonstrated their competence and completed all the items on the checklist.

It can be concluded that, different training and development evaluation techniques discussed in this section provide the evaluator with different approaches to determine the value of changes that occurred during and after training.

This section covered the pros and cons for evaluating training and development initiatives in the organisational context. The next section will cover evaluation approaches that can be utilised by trainers and evaluators for the effective evaluation of training and development initiatives in the public, and private sector organisations. The thrust of the discussion is premised on the effective evaluation of training with the view to improving organisational performance.
KIRKPATRICK’S LEARNING AND TRAINING EVALUATION THEORY

Kirkpatrick’s four levels of training evaluation in detail

This grid illustrates the Kirkpatrick’s structure in detail, and particularly the modern-day interpretation of the Kirkpatrick learning evaluation model, usage, implications, and the examples of tools and methods. This diagram is the same format as the one above but with more detailed explanation:

<table>
<thead>
<tr>
<th>Evaluation level and type</th>
<th>Evaluation description and characteristics</th>
<th>Examples of evaluation tools and methods</th>
<th>Relevance and practicability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reaction</td>
<td>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 good use of their time? Did they like the venue, the style, timing, domestics, etc., Level of participation. Ease and comfort of</td>
<td>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.</td>
<td>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 the same.</td>
</tr>
</tbody>
</table>
| 2. Learning | Evaluation is the measurement of the increase in knowledge of intellectual capability from before to after the learning experience:  
Did the trainees learn what intended to be taught?  
Did the trainee experience what was intended to be experienced?  
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. | 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

Evaluation is the extent to which the trainees applied the learning and changed their behaviour, and this can be immediate or 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?

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

<table>
<thead>
<tr>
<th>Hard-copy, electronic, online or interview style assessments are all possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation and interview over time are required to assess change, relevance of change, and sustainability of change.</td>
</tr>
<tr>
<td>Measurement of behaviour change is less easy to quantify and interpret than reaction and learning evaluation.</td>
</tr>
<tr>
<td>Simple quick response systems unlikely to be adequate.</td>
</tr>
<tr>
<td>Cooperation and skill of observers, typically line-managers, are important factors, and difficult to control.</td>
</tr>
<tr>
<td>Management and analysis of ongoing subtle assessments are difficult, and virtually impossible without a well-designed system from the beginning.</td>
</tr>
<tr>
<td>Evaluation of implementation and application is an extremely important assessment- there is a little point in a good increase in capability if nothing changes back in the job, therefore evaluation in this area is vital, albeit</td>
</tr>
</tbody>
</table>
| **person?** | **needs to be measured in a consistent defined way.**

360-degree feedback is useful method and need before training, because respondents can make a judgement 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. |
| **Is the trainee aware of their change in behaviour, knowledge, skill level?** | **Behaviour change evaluation is possible when good support and involvement from line managers or trainees are given. So it is helpful to involve them from the beginning, and to identify the benefits for them, which links to the level ‘4’ evaluation below.** |
4. 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 organizational key performance indicators, such as:

Volumes, values, percentages, time scales, return on investment, and other quantifiable aspects of organizational performance, for instance; number 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 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 trainee, 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 organization; 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 organizational and business performance, which cloud the true cause of good or poor results.
Since Kirkpatrick established his original model, other theorists (for example, Jack Phillips), and indeed Kirkpatrick himself, referred to a possible fifth level, namely ROI (Return on Investment). ROI can easily be included in Kirkpatrick’s original fourth level ‘Results’. The inclusion and relevance of the fifth level is therefore arguably only relevant if the assessment of Return On Investment might otherwise be ignored or forgotten, when referring simply to the ‘Results’ level.

Learning evaluation is a widely researched area. This is understandable since the subject is fundamental to the existence and performance of education around the world, not least universities, which of course contain most of the researchers and writers.

The ‘Training Evaluation Quintet’ advocated consists of:

- Senior management
- the trainer
- line management
- the training manager
- the trainee

Each has their own responsibilities, which are detailed next.

**Senior management – training evaluation responsibilities**

- Awareness of the need and value of training to the organization
- The necessity of involving the Training Manager (or equivalent) in senior management meetings where decisions are made about future changes when training will be essential.
• Knowledge and support of the training plans,

• Active participation in the events

• Requirement for evaluation to be performed and require regular summary report.

• Policy and strategic decisions based on results and ROI data.

**The trainer- training evaluation responsibilities**

• Provision of any necessary pre-program work etc and program planning.

• Identification at the beginning of the program of the knowledge and skills level of the trainees/learners.

• Provision of training and learning resources to enable the learners to learn within the objectives of the programs and the learners’ own objectives.

• Monitoring the learning as the program progresses.

• At the end of the program, assessment of and receipt of reports from the learners of the learning levels achieved.

• Ensuring the production by the learners of an action plan to reinforce, practice and implement learning.

**The line manager – training evaluation responsibilities**

• Work – needs and people identification.

• Involvement in training program and evaluation development.

• Support of pre-event preparation and holding briefing meetings with the learner.
• Giving ongoing, and practical, support to the training program.

• Holding a debriefing meeting with the learner on their return to work to discuss, agree or help to modify and agree action for their action plan.

• Reviewing the progress of learning implementation.

• Final review of implementation success and assessment, where the ROI is possible.

The training manager – training evaluation responsibilities

• Management of the training department and agreeing the training needs and the program application

• Maintenance of interest and support in the planning and implementation of the programs, including a practical involvement where required.

• The introduction and maintenance of evaluation systems, and production of regular reports for the senior management.

• Frequent, relevant contact with senior management

• Liaison with the learner’s line managers and arrangement of learning implementation responsibility learning programs for the managers.

• Liaison with line managers, where necessary, in the assessment of the training ROI.

The training or learner – training evaluation responsibilities

• Involvement in the planning and designing of the training program, where possible.
- Involvement in the planning and designing of the evaluation process where possible.
- Obviously, to take interest and an active part in the training program or activity.
- To complete a personal action plan during and at the end of the training for the implementation on return to work, and to put this into practice, with support from the line manager.
- Take interest and support the evaluation processes.

Although the principal role of the trainee in the program is to learn, the learner must be involved in the evaluation process. This is essential, since without their comments, much of the evaluation could not occur. Neither, would the new knowledge and skills be implemented. For trainees to neglect either responsibility the business wastes its investment in training. Trainees will assist more readily if the process avoids the look and feel of a paper-chase or number-crunching exercise. Instead, make sure that the trainees understand the importance of their input – exactly what and why they are being asked to do.

**The trainer’s overall responsibilities – aside from training evaluation**

The trainer’s roles have changed over the years, but the basic of the trainer is to provide efficient and effective training programs. The following suggests the elements of the basic role of the trainer, but it must be borne in mind that, different circumstances will require modifications of these activities.
1. The basic role of a trainer (or however they may be designated) is to offer and provide efficient and effective training programs aimed at enabling the participants to learn the knowledge, skills and attitudes required for them.

2. A trainer plans and designs the training programs, or otherwise obtains them (for example, distance learning or e-technology programs on the Internet or on CD/DVD), accordance with the requirements identified from the results of a TNIA (Training Needs Identification and Analysis – or simply TNA, Training Needs Analysis) for the relevant staff of an organization or organizations.

3. The training programs cited at (1) and (2) must be completely based on the TNIA which has been: (a) completed by the trainer on behalf of and at the request of the relevant organization (b) determined in some other way by the organization.

4. Following discussion with or direction by the organization management, who would have taken into account costs and values (e.g. ROI – Return on Investment in the training), the trainer will agree with the organization management the most appropriate form and methods for the training.

5. If the appropriate form for satisfying the training need is a direct training course or workshop, or an Intranet provided program, the trainer will design this program using the most effective approaches, techniques and methods, integrating face-to-face practices with various forms of e-technology wherever this is possible or desirable.
6. If the appropriate form for satisfying the training need is some form of open learning program or e-technology program, the trainer, with the support of the organization management obtain, plan the utilization and be prepared to support the learner in the use of the relevant materials.

7. The trainer, following contact with the potential learners, preferably through their line managers, to seek some pre-program activity and/or initial evaluation activities, should provide the appropriate training programs to the learners provided by their organization(s). During and at the end of the program, the trainer should ensure that: (a) an effective form of training/learning validation is followed (b) the learners complete an action plan for the implementation of their learning, when they return to work.

8. Provides, as necessary, having reviewed the validation results, an analysis of the changes in the knowledge, skills and attitudes of the learners to the organization management with any recommendations deemed necessary. The review would include consideration of the effectiveness of the content of the program and the effectiveness of the methods used to enable learning that is whether the program satisfied the objectives of the program and those of the learners.

9. Continue to provide effective learning opportunities as required by the organization.

10. Enable their own CPD (Continuing Professional Development) by all possible development means – training programs and self-development methods.
11. Arrange and run educative workshops for the line managers on the subject of their fulfilment of their training and evaluation responsibilities.

Dependant on the circumstances and the decisions of the organization management, trainers do not, under normal circumstances:

1. Make organizational training decisions without the full agreement of the organizational management.

2. Take part in the post-program learning implementation or evaluation unless the learner’s line managers cannot or will not fulfil their training and evaluation responsibilities.

Unless circumstances force them to behave otherwise, the trainer’s role is to provide effective training programs and the role of the learner’s line managers is to continue the evaluation process after the training program, counsel and support the learner in the implementation of their learning, and assess the cost-value effectiveness or (where feasible) the ROI of the training. Naturally, if action will help the trainers to become more effective in their training, they can take part in but not run any pre- and post- program actions as described, always remembering that these are the responsibilities of the line manager.
1.15. EFFECTIVENESS AND IMPACT OF TRAINING AND DEVELOPMENT

1.15.1 Importance of Training Program

- **Optimum Utilization of Human Resources** – Training and Development helps in optimizing the utilization of human resource that further helps the employee to achieve the organizational goals as well as their individual goals.

- **Development of Human Resources** – Training and Development helps to provide an opportunity and broad structure for the development of human resources’ technical and behavioural skills in an organization. It also helps the employees in attaining the personal growth.

- **Development of skills of the employees** – Training and Development helps in increasing the job knowledge and skill of employees at each level. It helps to expand the horizons of human intellect and an overall personality of the employees.

- **Productivity** - Training and Development helps in increasing the productivity of the employees that helps the organization further to achieve its long-term goal.

- **Team spirit** – Training and Development helps in inculcating the sense of team work, team spirit, and inter-team collaborations. It helps in inculcating the zeal to learn within the employees.
- **Organization Culture** – Training and Development helps to develop and improve the organizational health culture and effectiveness. It helps in creating the learning culture within the organization.

- **Organization Climate** – Training and Development helps in building the positive perception and feeling about the organization. The employees get these feelings from leaders, subordinates, and peers.

- **Quality** – Training and Development helps in improving upon the quality of work and work-life.

- **Healthy work environment** – Training and Development helps in creating the healthy working environment. It helps to build good employee, relationship so that, individual goals aligns with organizational goal.

- **Health and Safety** – Training and Development helps in improving the health and safety of the organization thus preventing obsolescence.

- **Morale** – Training and Development helps in improving the morale of the work force.

- **Image** – Training and Development helps in creating a better corporate image.

- **Profitability** – Training and Development leads to improved profitability and more positive attitudes towards profit orientation.
Training and Development aids in organizational development i.e. Organization gets more effective decision making and problem solving. It helps in understanding and carrying out organizational policies.

Training and Development helps in developing leadership skills, motivation, loyalty, better attitudes, and other aspects that successful workers and managers usually display.

One key factor in employee motivation and retention is the opportunity employees want to continue to grow and develop job and carrier enhancing skills. In fact, this opportunity to continue to grow and develop through training and development is one of the most important factors in employee motivation.

There are a couple of secrets about what employee want from training and development opportunities, however, plus, training and development opportunities are not just found in external training classes and seminars. These ideas emphasize what employees want in training and development opportunities. They also articulate the opportunity to create devoted, growing employees, who will benefit both the business and themselves through the training and development opportunities.

**Choose appropriate training for the biggest splash**

Any 10-year-old know that, we don’t grab just any rock to make an impact: we consider our options wisely, drawing on prior experiences and basing our selection on the outcome we’re shooting for planning our employee training is not all that different.
For maximum benefit, align training topics closely with the company’s goals, select participants whose job performance will be most enhanced by the new information. After completing the training, the employee should return to the workplace with a clear understanding of how this new knowledge will improve what he or she is already doing.

In his recent analysis of employee training’s impact on the bottom line, teaching strategies expert Oliver Tian suggested a method to quantify the return on investment (ROI) of employee training.

I. Attach a monetary value to the quality to quantity – say, increased employee job satisfaction or decreased customer complaints.

II. Find the difference between any change in this quality and the cost of training.

III. Obtain ROI by dividing this total by the cost of training.

However, Tian went on to report that, truly the best indicator of effective training would come from answering questions such as these; Did the content of the training address your company’s needs? Did the training set a specific goal and achieve it? Are your employees now using what they learnt? Is their implementation of this new knowledge impacting the way things are done at your site? Reflecting on these concerns will help you not only assess the usefulness of that particular training, but will also help you to know your search for the next training opportunity.
Training’s effects ripple throughout the organization

The training empowers employees and adds value to the organization as a whole. “It eases the burden on management when employees can alleviate situations immediately before they boil over, “From a guest complaint to a problem with a room – whatever the situation is, when employees can resolve issues, it reduces stress for everyone.”

Increased employee efficacy and decreased workplace stress, results in a bonus: “it leads to satisfaction of the customer.”

The correlation of employee training to employee retention is nothing to sneeze at; some studies have attributed a retention increase by as much as 70 per cent to employee training. They can have a huge impact on the bottom line, especially when an organization consider the resources that go into establishing a new hire into its organization. And retention isn’t the only benefit of employee training as it relates to smooth operations and financial concerns. Training increases employee efficiency and productivity (some say up to 230 per cent). It also keeps employees up-to-date with new technology and current best practices, resulting in superior job performance.

Training and Development Options

1. Job Content and Responsibilities

You can impact training and development significantly through the responsibilities in an employee’s current job.

- Expand the job to include new, higher level responsibilities.
• Reassign responsibilities that the employee does not like or that are routine.

• Provide more authority for the employee to self-manage and make decisions.

• Invite the employee to contribute to more important, department or company-wide decisions and planning.

• Provide more access to important and desirable meetings.

• Provide more information by including the employee on specific mailing lists, in company briefings, and in your confidence.

• Provide more opportunity to establish goals, priorities, and measurements.

• Assign reporting staff members to his or her leadership or supervision.

• Assign the employee to head up projects or teams,

• Enable the employee to spend more time with his or her boss.

• Provide the opportunity for the employee to cross-train in other roles and responsibilities.

2. Internal Training and Development

Employees appreciate the opportunity to develop their knowledge and skill without ever leaving work or the workplace. Internal training and development brings a special plus. Examples, terminology, and opportunities reflect the culture, environment, and needs of your workplace.

• Enable the employee to attend an internally offered training session. This session can be offered by a co-worker in an area of their expertise or by an outside presenter or trainer.
• Ask the employee to train other employees with the information learned at a seminar or training session. Offer the time at a department meeting or lunch to discuss the information or present the information learned to others. (Make this an expectation when employees attend external training and conferences.)

• Perform all the activities listed before, during, and after a training, which, employees discuss a current book and apply its concepts to your company.

• Purchase business books for the employees. Sponsor an employee book club during which employees discuss a current book and apply its concepts to the company.

• Offer commonly-needed training and information on an Intranet, an internal company website.

• Provide training by either knowledgeable employees or an outside expert in a brown bag lunch format. Employees eat lunch and gain knowledge about a valuable topics. (Some ideas include: investing in a 401(k), how to vary and balance investments, tips for public speaking, how to get along with the boss, and updates on new products that make work easier. These opportunities are unlimited; survey employees to pinpoint interests.)

• The developers and other interested employees at a client company recently put on a day-long conference with lunch and all of the trappings of an external conference at a local conference centre. Attended by interested employees, the conference sessions were almost all taught by internal staff on topics of
interest to their internal audience, Picture a “real” day-long conference and you’ll see the opportunity. Employees were pumped up beyond belief; they learned and enjoyed the day and gained new respect for the knowledge and skills of their co-workers.

3. External Training and Development

Especially to develop new skills and ideas, employees’ attendance at external training is a must. Attaining degrees and university attendance enhance the knowledge and capabilities of the staff while broadening their experience with diverse people and ideas.

- Enable the employee to attend an external seminar, conference, speaker, or training event.

- Perform all the activities listed before, during, and after a training session to ensure that the learning is transferred to the employee’s job.

- Pay for the employee to take online classes and identify low or no cost online (and offline) training.

- Pay for memberships in external professional associations with the understanding that employees will attend meetings, read the journals, and so forth and regularly update co-workers.

- Provide a flexible schedule so the employee can take time to attend university, college, or other formal educational sessions.
• Provide tuition assistance to encourage the employee’s pursuit of additional education.

Training and Development Secrets

There are several motivation and retention “secrets” relative to employee training and development. These are key factors in multiplying the value of the training and development you provide.

• Allow employees to pursue training and development in directions they choose, not just in company-assigned and needed directions.

• Have your company support learning, in general, and not just in support of knowledge needed for the employee’s current or next anticipated job. Recognize that the key factor is keeping the employee interested, attending, and engaged.

The development of a life-long engaged learning is a positive factor for your organization no matter how long the employee chooses to stay in your employment.

Building the Employee Training and Development Program

Whatever the reason for conducting an employee training session, an employer need to develop the employee training within the framework of a comprehensive, ongoing and consistent employee training program. This quality employee training program is essential to keep the staff motivated about learning new concepts and your department profitable.
Essential Components of Employee Training Program

A complete employee training program includes a formal new hire training program with an overview of the job expectations and performance skills needed to perform the job functions. A new hire training program provides a fundamental understanding of the position and how the position fits within the organizational structure.

The more background knowledge the new associate has about how one workgroup interrelates with ancillary departments, the more the new associate will understand his or her impact on the organization.

Another aspect of a comprehensive employee training program is continuing education.

The most effective employee training programs make continuing education an ongoing responsibility of one person in the department. This is an important function that will keep all staff members’ current policies, procedures and the technology used in the department.

New Hire Training

A solid new hire training program begins with the creation of an employee training manual, in either notebook format or online. This manual acts as a building block for practical and technical skills needed to prepare the new individual for his or her position.
In order for the department to understand the current policies and procedures, a manager must ensure the department manuals or online employee training must be kept current. This includes any system enhancements and / or change in policy or procedure. In addition,

I. Keep the user in mind when designing training manuals or online training;
II. Keep the employee training material interesting for the learner;
III. Use language that is not “corporate” and include images and multi-media.

Much of this employee training and reference material belongs online these days in a company intranet. But, if the organization is not ready to embrace the online world, then must keep the manuals up-to-date and interesting. When possible, in computer training, incorporate visual images of the computer screen (multi-media screen capture) to illustrate functions, examples.

**On the Job Training**

Another form of new hire training includes having the new associate, train directly next to an existing associate. Some call this On the Job Training (OJT) or side-by-side training. This type of employee training allows the new associate to see the different facets of the position.

Also, OJT allows the new hire as the opportunity to develop a working relationship with an existing associate. This type of employee training reinforces the concepts learnt in the initial training and should be used to reinforce and apply those same learnt concepts.
Here are the additional resources about new employee training and orientation.

- Employee On boarding: One Chance for a Positive New Employee Experience.
- Tips for a Better New Employee Orientation.
- Employee Orientation: Keeping New Employees on Board.
- Orientation Vs. Integration.

**Continuing Education in Employee Training**

A continuing education program for a department is just as important as the new hire training. When training a new associate, it is found that, they will only retain approximately 40 per cent of the information learnt in the initial training session. Therefore, a continuous effort must be placed on reminding the staff about various procedures and concepts. This continuing education can be formal or informal.

The formal or traditional approach, to employee training often includes a member of management sending a memo to each associate. The informal, and often more appealing approach to a visual learner, is to send a one-page information sheet to staff. This information sheet, called a training alert, should be informative and presented in a non-threatening manner. So, if the policy or procedure changes, the informal approach would better prepare the department to receive this presentation.

Prior to putting together a continuing education employee training program, the management team must decide upon their desired outcome. One question that is
important to answer is, “Do you want the program to enhance the skills of the associate or do you want to help the associate with personal development?”

While there is some commonality between these answers, the main difference is the opportunity for the management team to mould future management team members. If the desired outcome is simply to enhance skills, with no personal development, the department will have staff, who simply knows how to do their job a little better. While that is a positive outcome, the company want it to think “outside the box,” and design a program that allows, and even encourages, critical thinking and problem solving.

Therefore, when designing a continuing education program, the desired outcome should be a blending of both technical and personal enhancement. This type of training program will allow the staff the opportunity to develop solid management skills, coupled with a better understanding of their position and function, and how that fits into the relationship of the organization.

**Blend Technical Training with Personal Development**

This writing training session would include topics on the basics of writing, such as spelling, punctuation, sentence structure and correct word use. Building on those basics, one could give his participants an applicable topic, such as writing a letter to a customer apologizing for a late shipment.

Provide the participants background information about the customer, tell them that, the customer has purchased from them for ten years and has always made
payments promptly. Give them ten or fifteen minutes to compose a rough draft and have them present their letter to the group. Once someone has read a letter, ask the other participants to offer feedback for the improvements, and as the trainer, point out the positive aspects of the letter.

Another mechanism that will help with the ongoing continuing education is to enable staff members to develop an affiliation with an association or industry group. This type of education is tangible and has been proven to have a positive track record with the local offices and their industry trade groups. Staff members are given the opportunity to come together periodically, and discuss the issues they are experiencing in their business.

This is a positive experience for everyone involved because the information gained in this type of setting can prove useful to others, who may have the potential to partake in a similar situation. Also, others who have experienced a similar situation have the opportunity to talk about their resolution(s) that worked effectively.
1.16 CHAPTER ARRANGEMENT

The report has been structured into the following chapters:

**Chapter – 1 Introduction** – The introductory chapter highlights the extent of importance of training as an instrument of Human Resource Management.

**Chapter – 2 Review of Literature** – Second chapter is about the review of literature, which has identified various research studies carried out not only in India but also abroad emphasizing various aspects pertaining to training and its effectiveness.

**Chapter – 3 Research methodologies** – Third chapter discusses the Methodology and Research design of the study.

**Chapter – 4 Profile of the company** – The profile of the company is given as the fourth chapter.

**Chapter 5 – Analysis and Discussions** – The fifth chapter deals with the analysis and interpretations derived from meticulous application of the respective statistical tools.

**Chapter 6 – Summary of the study, findings, suggestions and conclusion** – The sixth chapter briefly summarises the study, presents the findings followed by the suggestions and conclusion.