Chapter-6

Effectiveness of Training
Programme: Evaluation and Measurement
6.1: Introduction

Training, like any other organizational aspects, requires commitment of organizational resources in the forms of time, energy, managerial efforts and money. Organizations therefore need to know whether an investment made on training is producing the desired results, i.e., whether training imparted is effective\(^1\). The classroom learning is more of theoretical in nature. Unless theory is integrated into practice, the learning remains incomplete and static. Training programmes invariably inherit expectations in terms of demonstrated benefit to the organization. The purpose of this chapter is therefore to make an in depth analysis of the training programmes being practiced in Rourkela Steel Plant (RSP), vis-à-vis other standard organizations in Steel manufacturing business namely, SAIL, Tata Steel, and JINDAL so as to evaluate and judge their effectiveness.

6.2: Training evaluation and effectiveness

Organizations often fail to realize the need to evaluate the training programmes once the session ends. The apparent reason for ignoring this ‘evaluation’ is lack of time, resources and tools. As organizations are increasingly adopting training programmes, there is a greater need to evaluate the same.

The process of examining a training programme is called training evaluation. Training evaluation ensures that candidates implement their learning in their respective workplace, in the regular work routine.

Training programme is a transforming process that requires some inputs and in turn produces output in the form of knowledge, skills and attitudes (KSA). Now-a-days, training programme is an investment because the departments such as marketing and sales, human resource, production, finance etc. depends on training for its survival. Training programme provides the opportunity to raise the profile development activities in the organization. Training programmes need to be evaluated in the line and parameters as reflected in Table 6.1.
Table 6.1: Major aspects of training evaluation

<table>
<thead>
<tr>
<th>Areas of Evaluation</th>
<th>Dimension</th>
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<tbody>
<tr>
<td>1. Pre-training factors</td>
<td>Context</td>
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<tr>
<td>a) Preparation.</td>
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<tr>
<td>b) Learning motivation.</td>
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<td>c) Expectations.</td>
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<tr>
<td>2. Training Inputs</td>
<td>Input</td>
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<td>a) Curriculum including strategy.</td>
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<td>b) Specific events.</td>
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<td>c) Specific sessions.</td>
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<tr>
<td>3. Training Management</td>
<td>Context</td>
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<tr>
<td>a) Areas of satisfaction/dissatisfaction.</td>
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<tr>
<td>b) Training facilities.</td>
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<tr>
<td>c) Other facilities.</td>
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<tr>
<td>4. Training Process</td>
<td>Process</td>
</tr>
<tr>
<td>a) Learning climate.</td>
<td></td>
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<tr>
<td>b) Training methods.</td>
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<td>c) Other facilities.</td>
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<tr>
<td>5. Participant Development</td>
<td>Outcome</td>
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<tr>
<td>a) Conceptual development.</td>
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<td>b) Learning skills.</td>
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<tr>
<td>c) Change in values/attitudes.</td>
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<td>d) Change in behavior.</td>
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<td>e) Application.</td>
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<tr>
<td>6. Organizational Development</td>
<td>Context</td>
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<tr>
<td>a) Job effectiveness.</td>
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<td>b) Team effectiveness.</td>
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<tr>
<td>c) Organizational support.</td>
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<tr>
<td>d) Organizational factors hindering or facilitating use of training.</td>
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</tbody>
</table>

The primary responsibility of an organization is to assure that its people perform the assigned jobs safely and effectively. So training personnel must be responsive to the needs of the organization, working hand-in-hand with line managers and supervisors to ensure that training needs are properly analyzed and accordingly that training programmes are developed and implemented in the most efficient and effective way.

There are generally two types of training inputs in the organization: training on the job provided by the supervisor and the managerial staff to their subordinates; and formal training provided by specialized agencies set up by independent organizations for the purpose.

In a number of organizations, training of employees is put under the responsibility of the supervisors or the managers. The first source of evaluating training is the manager(s) under whom the trainees work. The trainees themselves are the second source. So, it is more useful to obtain their views about the training programmes a few months after completion of the training than when they are at the training centre. A brief questionnaire may be sent for the purpose at a regular interval of time to each trainee after he has completed the training course.

Generally, evaluation is done at four levels: reaction, learning, behavioural change and result in terms of application of learned behavior in the job and resultant benefits to the organization.

Training effectiveness is judged from different angles such as knowing how much learning has been acquired by the learners after the training intervention; how much of those learning objectives have been put into practice on their jobs; and with what results for the organizations.

Measuring learning just after completion of training and impact of training on the job are important aspects for effectiveness of a training programme. Trainer, learner and beneficiary organization must use their knowledge expertise in stating training objectives clearly, objectively and in line with the specifications of writing a good objective.
Designing a training programme involves an investment of creativity, hard work and money. So, training practitioners justify such investment in the belief that training makes a real difference in the workplace contributing to organizational effectiveness that means it is ‘Returns on Investment (ROI)’. The contribution of a training programme to the organization is arrived at through the process of evaluation. The key to conducting an effective training evaluation is to first identify the questions to be answered such as 1) should the programme be modified by the evaluation; 2) what performance gains are being realized; and 3) is the need for training programme being addressed in the best way?

The principles of effective training are intended to assist organizations in establishing and maintaining effective training programmes that produce well-qualified, competent personnel to operate and maintain the organization in a safe and reliable manner. Training evaluation is a critical component of analyzing, designing, developing and implementing an effective training programme. The persons responsible for evaluation of training programmes are the senior management, trainer, line management, the training manager, and the trainee.

Generally, training evaluation determines a training programme’s effectiveness in meeting its intended purpose, which mainly produces competent employees. Programme evaluation focuses on the results of the training programme and not on the process of training programme. The key elements of training programme effectiveness that should be addressed are:

1. Training design and development
2. Training delivery and
3. Training implementation

**Training design and development**

If the trainees are already qualified to do their job, then the provided training programme will not be effective, so there is wastage of time and resources. Therefore, the first element i.e., training design and development requires properly designed and developed with a defined set of jobs.
**Training delivery**

Defined set of activities and methods to evaluate training delivery effectiveness.

**Training implementation**

This element helps management to allocate resources effectively and addresses activities as well as methods which will ensure that training to be developed is needed and resulted in improving performance of job.

The best way to determine if training has been effective is to fully understand the reason why training has been developed. The reason to develop and implement training programme is to determine the effectiveness in addressing performance deficiencies. When the purpose of training programme is not clearly identified before development of training programme then training is not appropriate to correct the short fall of performance. Therefore, it is necessary to establish a valid need for training in an organization that determine training effectiveness. Once valid training need has been identified, and then accordingly programme is developed. Effective training programme must address a deficiency such as human performance, policy, procedure, facility or equipment. If these deficiencies identified and eliminated, then that training programme is effective. After developing and implementing the training programme, organization can also determine its effectiveness by using many of the techniques. Measuring the effectiveness of training is one of the most difficult tasks of the manager’s and an evaluation of the training programme by the trainee is the prime source of information.

### 6.2.1: Importance of training evaluation and its effectiveness

As organizations invest large expenditures for training programme, it is important to develop a tool that will help the organization to improve the training effectiveness. If a training programme is proven to be effective, it will definitely yield to positive results that are desired by the company. The effectiveness of training programme can be maximized by following ten steps as under:\(^3\):

1) Training-needs identification
2) Pre-training activities
3) Planning and organizing the program properly
4) Designing the module
5) Feedback on the faculty
6) Feedback from the external faculty
7) Training plan and budgets
8) Development of In-house faculty
9) Nomination to external seminars and training programs
10) Focus on quality training.

6.2.2: Purpose of training evaluation

It is important to understand the purpose of evaluation and its effectiveness before planning it and choosing methods to do it. Evaluation feedback assists in improving efficiency and effectiveness of: training content and methods; employee performance; organizational productivity; and use of organization capital, personnel and other resources. For evaluation of training two principal factors that need to be considered: 1) who is responsible for the evaluation processes? ; And what resources of time, people and money are available for evaluation?

The five main purposes of training evaluation are: Feedback, Research, Control Power games, Intervention:

Feedback: It helps in giving feedback to the candidates by defining the objectives and linking it to learning outcomes.

Research: Research helps in ascertaining the relationship between acquired knowledge, transfer of knowledge at the work place and training.

Control: Controls helps in controlling the training program because if the training programme is not effective, then it can be dealt with accordingly.

Power games: At some point of times, the top management (higher authoritative employee) uses the evaluative data to manipulate it for their own benefits.
**Intervention:** It helps in determining that whether the actual outcomes are aligned with the expected outcomes.

The purpose of training evaluation may be represented as in Figure 6.1.

**Figure 6.1: Purpose of training evaluation**

Source: [http://traininganddevelopment.naukrihub.com/training-evaluation.html](http://traininganddevelopment.naukrihub.com/training-evaluation.html)

6.2.3: Training evaluation process

The process of training evaluation comprises three stages—before training, during training; and after training.

**Before training**

The learner's skills and knowledge are assessed before the training programme. During the start of the training, candidates generally perceive it as a waste of resources because at most of the times candidates are unaware of the objectives and
learning outcomes of the programme. Once aware, they are asked to give their opinions on the methods used in the training programme and confirm whether those methods prefer for learning or not.

**During training**

During training is the phase at which instruction is started. This phase usually consist of short tests at regular intervals.

**After training**

This is the phase when learner’s skills and knowledge are assessed again to measure the effectiveness of the training. This phase is designed to determine whether training had the desired effect on individual, department and at different organizational levels.

The process of training evaluation may also be represented as in Figure 6.2.

**Figure 6.2: Process of training evaluation**

![Figure 6.2: Process of training evaluation](http://traininganddevelopment.naukrihub.com/training-evaluation.html)

Source: [http://traininganddevelopment.naukrihub.com/training-evaluation.html](http://traininganddevelopment.naukrihub.com/training-evaluation.html)
6.2.4: Models for evaluation of training programme

A few widely used and popular training evaluation models are

(1) Kirkpatrick’s Four Levels of evaluation
(2) The Productivity model of evaluation
(3) Keam’s Baseline model of evaluation

6.2.4.1: Kirkpatrick’s Four Levels of evaluation

Specialists have been using a number of training evaluation models. And it is observed that most of the trainers are evaluating training programme on the basis of four level model developed by Kirkpatrick (1959). The four levels proposed in his model are: Reaction; Learning; Transfer; and Result.

Reaction: ‘Reaction’ is the phase where the focus lies on gathering information about the participants perceived thoughts on the training program. Evaluating reactions implies examining the satisfaction levels of the trainees and the trainer. However, it does not measure the learning that takes place during the session. Based on the participants’ reactions towards the training, one can draw conclusions on the success of the training session and make necessary improvements in the approach.

Learning: The next level of the model ‘Learning’ assesses the extent to which the learners have been able to learn and improve their skills. In Kirkpatrick model, each successive evaluation level is built on information provided by the lower level.

Transfer: The ‘Transfer’ phase measures the extent to which the trainees have been able to apply the acquired skills and knowledge in their day-to-day tasks.

Result: The last stage of the model, ‘Result’, evaluates the training program by recording the improvements in business results and the productivity as a result of undergoing the training program.
The four levels of Kirkpatrick model can be grouped based on two factors, i.e.,

1. Behavioural changes at the individual level, and
2. Observed changes in the business outcomes.

The first two levels, reaction and learning are more inclined towards understanding the trainee's perception towards training and the extent to which he has been able to acquire what has been taught during the training. Hence, these two levels if evaluated properly can indicate the amount of contribution of the training towards individual development and satisfaction levels of the trainee.

The last two levels, transfer and results, contribute to the development of the organization. It is only in these phases that the trainee is actually applying what he has learnt and thus he is able to influence the organizational processes through his behavioral changes. Trainers can decide upon the success rate of the training programme by observing the individual while performing the job, comparing trainee's job execution style before and after the training period and reviewing the business results before and after the training period.

6.2.4.2: The productivity model of evaluation

Philip McGee's 'The productivity Model: A conceptual Framework' represents that any system comprises three basic elements for the effectiveness and efficiency part of a training program.

\[ \text{Resources} + \text{Activity} = \text{Results} \]

All systems to produce results some activity must take place and for this resources must be used. This evaluation model examines the relationships between the three elements of a system i.e., resources, activity and results.
Effectiveness:

When any activity produces a predetermined result then we can say it must be effective.

Effectiveness Dimension
Qualitative Measures
Concern for quality
Ask: How well?

\[ \text{Resources} + \text{Activity} = \text{Results} \]

Effectiveness is based on the concept ‘How well?’ which is concerned with quality.

Efficiency:

Efficiency establishes relationship between resources and an activity.

\[ \text{Resources} + \text{Activity} = \text{Results} \]

Efficiency Dimension
Qualitative Measures
Concern for quality
Ask: How much?

Efficiency is based on the question ‘How much?’. If we cut resources then there is a chance of producing poor results. So, there is a need to keep balance between resources-activity and activity-results. This balance is known as ‘productivity’.
Most of the trainers focus on general training evaluation models to assess the success rate of a training program. However, a more practical idea will be evolving for assessing the training program conducted by the organization.

6.2.4.3: Kearn's Baseline model of evaluation

The Baseline Evaluation Model has several features that fundamentally distinguish it from those of other evaluation models. It focuses on two variables simultaneously and makes a clear, casual connection between the two, i.e., individual performance as well as organizational value.

However, it also offers many other beneficial features:

1. A systematic methodology- not just a model.
2. Designed to actually aid the learning process.
3. Based on a total quality, continuous improvement cycle that can be totally integrated with other business improvement schemes.
By using just four variables such as output, cost, quality and revenue, Baseline evaluation model mainly focus on:

1. How training will add value.
2. How training will help the trainee to perform better.

Kearns (2005) argues that organizations must understand how to evaluate return on investment, to ensure that the choices made have added value to the organization, rather than simply consuming resources.

Baseline level of Evaluation Model comprises:

1. **Level 1** - Reactions to training
2. **Level 2** - Measuring what was learned
3. **Level 3** - Is learning being applied at work?
4. **Level 4** - What value did the training add/Return on Investment (ROI).

Kearns uses the simple formula of ROI to assess the benefits of training development program:

\[
\text{ROI} = \frac{\text{Gross benefit from training} - \text{cost of training}}{\text{Cost of training}} \times 100
\]

There are difficulties in trying to quantify the results of training and development programmes. Usually, a lot of time, money and other resources are invested in the training programs and hence it becomes mandatory for any organization to investigate the effectiveness of the training programme, the benefits achieved and the ROI. The evaluation process generally involves informing the participants about the prime objectives of the training programme. The opinions and views of the participants, regarding the relevance of the goals to them as well as to the organization are mainly based on Kearn’s Baseline Evaluation Model. The participants are informed well in advance regarding the context of the programme, the training methods and they are continuously encouraged to write their own thoughts throughout the entire programme so that they can easily recall these points.
when they are actually required to fill in their feedback questionnaires. This information would also help the participants draw an action plan of applying the acquired knowledge in their jobs. After the completion of the programme after some periods of time again the participants have another opportunity to re-evaluate the impact of the training received on their performance.

6.3: Evaluation and effectiveness of training programmes in practice in the Indian Steel Industry

6.3.1: Training evaluation and effectiveness in RSP

The assessment of in-house training is carried out for faculty competence and programme content on the basis of a programme evaluation Performa filled up by the participants at the end of each programme. The feedback information is analyzed by using statistical methods as follows:

1. Based on the feedback sheet received from the individual participant, if the 'Average general rating of the programme' is less than 3 for a particular programme, then the programme module is relooked and redesigned by the Head of Department, HRD Centre.

2. Based on the feedback sheet received from the individual participant, if the 'Average rating of the faculty' is less than 3 for a particular programme, then the faculty concerned is communicated for improvement. If average rating of the same faculty for the same topic in the next programme is less than 3, then faculty member is reviewed by the programme incharge /Head of HRD Centre.

3. The effectiveness of basic engineering skill programmes and multi-skill programmes are evaluated by using 3-tier 'Training Evaluation System' with the help of the following three questionnaires

   i) Training course evaluation Performa
   ii) Post training feedback Performa and
iii) Effectiveness/implementation on actual work situation

Performa.

4. Competence evaluation of employees is done by respective department based on questionnaire, interview and observation.

5. Competence of faculty engaged by HRDC is also evaluated.

6. Assessment of training is done by administering questionnaire and competency checklist by line manager through specific formats.

Prior to 2005-06 training effectiveness was measured only at the learning level through pre and post training tests. During 2005-06, for the first time the effectiveness of training at the learning level and application level was carried out in technical areas also. For the first time efforts are also being made to analyze effectiveness of foreign training. All the 15 young engineers who have been sponsored for training at UK and Austria have submitted a report on their visit giving a detail of action plan of the activities that they shall carry out in the organization. They are also presenting the same before their Heads of the Departments and the Executive Director (works).

6.3.2: Training evaluation and effectiveness in SAIL

The evaluation of training and its effectiveness is also conducted at SAIL and its different units. These programmes have been selected by taking into consideration the duration, frequency, organization wide programmes and usefulness in imparting critical skills. The programmes are being evaluated for training effectiveness at Reaction level, Learning level and Application level while assessment of performance improvement workshops is done at Result level also.

SAIL through MTI conducts training related to management subjects and such training influences thought and behavioral process of the participants.

MTI gives due importance to quality of training. To assess relevance and process of training, the training department has Quality Management System (QMS) in place. The audit of quality of training is done every quarter by internal auditors. Annual audits are conducted by external auditors. The Management Review Committee
MRC meets every quarter to look into deviations and thereby decides about corrective action. By using various parameters, the committee also reviews the trend and variation over a period of each quarter.

**Effectiveness of training at Reaction Level**

For assessing training at reaction levels following three indices are used:

i) Customer Satisfaction Index (CSI)
ii) Support Service Index (SSI)
iii) Content and Process Rating (CPR) of individual sessions.

After each programme, the reaction level assessment is obtained from the participants. Based on responses, the CSI and SSI are also calculated. Each session of the programme is assessed by the participant for its content and the process adopted by the concerned faculty.

**Effectiveness of training at Learning Level**

A lot of importance is given to the second level of assessment that is learning. What do they learn and what learning they apply at workplace is important piece of information to assess effectiveness of any management training programme. A system of learning sheet has been introduced in every training programme. A well-structured format of learning sheet is distributed to all participants. Participants are requested to record learning points against each session of the programme. They are also expected to list down those proposed applications for which the progress can be monitored by them.

**Effectiveness of training at Application Level**

Assessing effectiveness of training at result level is a long process. There are various methodologies and each methodology requires collection of primary data from the workplace of the participants.
6.3.3: Training evaluation and effectiveness in Tata Steel

Safety is a high priority area in Tata Steel. Several movements towards culture of safety have been practiced in the company. The Technical Education Advisory Committee guides employee training in line with strategic goals of the company and its long-term objectives. The in-house training centers impart majority of the training programs. Tata Steel recognizes the importance of continues enhancement of knowledge, skills and capabilities of its employees and has invested greatly in education, training and development.

At Tata Steel quality programmes are also rolled out in-house by TMTC, XLRI and IIMs for its officers. Development in managerial competencies and leadership elements, especially for the officers is now also being addressed through on-the-job assignment, rotation, working in task forces and committees. The Training evaluation procedure at Tata Steel is as under:

1. The employee need identification form is available with the various departments. The concerned employee fills in whatever training he feels he needs which is approved by the immediate superior. The department head also gives a list of training needs that he feels is required for the employee.

2. The department HOD then fills a needs identification form. This form indicates the number of employees who will be participating in various training programmes from that department. The department HOD compiles all the individual employee need identification forms and then fills up the group needs identification form.

3. All the HOD's send their forms to the training department. The training department compiles all the forms and prepares a final document consisting of the various training programmes and the number of people that will attend these programmes from the various departments.

4. The training calendar is thereafter prepared.
5. The training programmes are now conducted as per the calendar and recorded into the ‘Training Program Particulars’ form. This form consists of the list of participants, the venue and the training department co-coordinator etc. of a particular training programme.

6. In some cases when the announced programme could not be conducted, the concerned HOD is informed for onward communication to all the participants. The details are recorded in the ‘Training Program Cancellation’ record.

7. The training department coordinator is in-charge of the smooth running of the training programme. He has to ensure that all the participants are present for the training; all the instructional material is present and ready for use.

8. After the training programme is over, evaluation of the programme is carried out based on the ‘participant feedback’ forms received. Corrective action is taken by the training department in case of programmes where feedback rating is very poor. The results are recorded into the ‘Program Evaluation’ form.

9. The immediate superior of the employees assess training effectiveness within few days of imparting training for all technical programs. Sometimes, the effectiveness of the training programme is generally assessed by interviewing the employee. During this, the employee is judged on the following parameters:

   1. Initiative taken by participant
   2. Relevance of objectives taught
   3. Support from supervisor.

10. Tata Steel also uses the Kirkpatrick model for measuring training effectiveness, i.e., on the line of Reaction, Learning, Reinforcement and Outcome.
11. The respective HOD’s do the ‘Competency Mapping’ for all permanent employees whose work affects quality and performance. Training need is identified from the gaps found.

6.3.4: Training evaluation and its effectiveness in JINDAL

At JINDAL, the Human Resource Department is also ensuring to get the feedback form from the employee after his completion of the course. A half day session for the employee by a few managers to transfer the learning should be organized by the Human Resource Department after the days of the return from training programme. The employee shall submit the course material to the Human Resource Department for the purpose of maintaining the library and is so required to retain a copy of the same. Then the evaluation/feedback from the trainee indicates appropriate changes that have to be made in the programme and contents design which will improve the effectiveness of the programme.

The feedback also consists of an action plan by the concerned employee with a specific time frame to implement the learning to the actual performance. The feedback forms are available with the Human Resource Departments. It is the responsibility of the Head of the Department and the Human Resource Department to work together to assess the effectiveness of the training attended by the employee. This will also help in updating the training records of the individuals and in conducting an analysis of various training programmes.

6.4: Training evaluation and effectiveness of RSP, SAIL, Tata Steel, and JINDAL-A comparison

RSP provides a conducive climate for the enhancement of knowledge, skills and capabilities of its employees. The RSP training programmes are designed by keeping career progression and employee performance into consideration. RSP also provides training to employees for sister units. RSP briefed about the workings of an integrated steel plant. Facilities are being provided to its employees like township, medical and health care, social amenities and corporate social responsibilities through class room inputs and plant/township visits. A new ISO procedure on competence mapping is prepared and circulated to all HODs and training
A presentation is also made in the training review meeting with the training engineers and the procedures are discussed and explained. Department specific modules, equipment specific modules and unit training, where training need arises in the competency mapping exercise, are discussed in various organised workshop.

A presentation on Unit Training (UT) is made in the Training Engineers (TE) meeting conducted at HRDC\textsuperscript{14}. The objective is to appraise all new TEs about the concept of unit training, the steps involved, the role of TEs in organising unit training on the shop floor and to prepare the plan for unit training. To make the training programme effective, RSP ensures that the management commits itself to allocate major resources. Moreover, RSP also provides adequate time to time training programme like a high performing organization. RSP provides a systematic approach to training programme done at all levels on a continuous and on going basis. RSP also ensures that there is proper linkage among organizational, operational and individual training needs. RSP is doing well today and looks after the training needs of employee and provides full of training facility which will open the way of great success.

In SAIL, after the identification of training needs, the Annual Training Plan (ATP) is made and new modules, if required, are designed and accordingly programmes are conducted. The effectiveness of the training programme conducted is assessed at three levels\textsuperscript{15}:

<table>
<thead>
<tr>
<th>Level</th>
<th>Reaction Level</th>
<th>How did the participants react to the programme?</th>
<th>Immediately collected after the programme.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level II</td>
<td>Learning Level</td>
<td>To what extent did participants improve knowledge and skills as result of the training?</td>
<td>Assessed through pre and post training tests.</td>
</tr>
</tbody>
</table>
Planned training programme well return values to the organization in terms of increased productivity, greater organizational stability and flexibility to adopt to changing external requirements. So, training must be systematic and organized on the basis of organizational and individual levels that means training is an organized procedure for increasing the knowledge and skill of people for a definite purpose. In order to make the training programme more effective in improving organizational as well as individual performance, it is important that perception regarding effectiveness of training be made positive which can be done by employees involvement in training and development related activities, by creating good learning environment, by providing encouragement in terms of promotion or increment and by linking training more closely to work practices.

In Tata Steel, training is considered successful only if the desired outcome is achieved. Therefore, it is necessary to measure the effectiveness of training programme at Tata Steel by using Kirkpatrick model. They evaluated various programme at four levels:

1. Reaction
2. Learning
3. Reinforcement, and
4. Outcome.
But evaluation of training is of no value if training has not been conducted systematically. At Tata Steel, the aim of training is to provide potential knowledge and skills of trainees to carry out defined tasks and responsibilities and working systematically and efficiently that develop a systematic way of performing duties and assigned tasks. Tata Steel well established Human Resource Division and has invested in the development of a talent pool with number of qualified engineers and a large skilled work force. The company lays special emphasis on integrity and competence and regularly monitoring.

After providing the training, the right-skilled employees are placed on the job and feedback on performance is taken from the internal sources. Based on the requirements specified by internal employees (i.e., the Departmental Chiefs & Heads) and the existing skill gaps, a new approach of ‘man to position mapping’ has been introduced. For each position, the skill requirement has been detailed analyzed and a specific training programme and skills for imparting these position has been developed\(^{16}\).

The qualified talent in the non-officer category sought further growth opportunities in line with the industry growth. Tata Steel also decided to create a new Officer's level (IL-6) to which its employees could progress. This new level handles transactional jobs where the majority of the responsibility is routine in nature and this can be performed by Diploma holders who have some experience in the organization.

JINDAL creates appropriate model to evaluate the effectiveness of training such as\(^{17}\):

1. Specific training should be outlined on the basis of the type of performance required to achieve organizational objectives. An audit of personal needs compared with operational requirements will help to determine specific training needs of individual employees. This evaluation should form a well defined set of performance standards towards which each trainee should be directed.
2. Take necessary steps to determine if the trainee has the intelligence, maturity and motivation to successively complete the training programmes. If deficiencies noted in these respects, the training programme must be cancelled till improvements are visible.

3. The trainee should aware of the personal benefits that he can achieve through better performance.

4. The training programme should be properly planned and it is related to the trainee’s previous experiences and background. This background should be used as a foundation for new development and new behavior.

5. Careful measure should be made to create organizational conditions that are conducive to a good learning environment. It should be made clear why changes are needed. The support of the upper level of management should be obtained before applying training at lower levels.

6. If possible, the personal involvement or active participation of the trainee should be measure in the training programme. He should be provided with opportunities to practice the newly needed behavior norms.

7. As the trainee acquire new knowledge, skills or attitude are applies them in job situation, he should be significantly reward for his efforts.

8. The trainee should be provided with regular, constructive feedback concerning his progress in training and implementation of newly acquired ability.

9. The trainee should be provided with personal assistance when he encounters learning obstacles.

A summary of the above described comparison of training evaluation and measurement at RSP, SAIL, Tata Steel, and JINDAL may be given as in Table 6.2.
Table 6.2: Training evaluation and effectiveness at RSP, SAIL, Tata Steel, and JINDAL

<table>
<thead>
<tr>
<th>Parameters</th>
<th>RSP</th>
<th>SAIL</th>
<th>Tata Steel</th>
<th>JINDAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring training effectiveness</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Systematic training valuation</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Four levels of evaluation</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Productivity</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Unit efficiency</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Adequacy of talent reservoir</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Note: SAIL $\Rightarrow$ Steel Authority of India Limited, RSP $\Rightarrow$ Rourkela Steel Plant, 
Y $\Rightarrow$ Yes

6.5: Conclusion

Training activities of an organization is measured by number of training programmes conducted per year or number of training programmes per employee which does not reflect quality of the training programme. In addition to the quantity, quality needs to be taken as a measure of evaluating training activities of the organization. Theoretically, there should be proper matching between the training output and expectations from the training which yields benefits to the organization. When there is a wide gap between the two, effectiveness of the training programme decreases. This gap is mainly because of many organization’s training is imparted routinely and for the fulfillment of the good figures to come out without proper assessment of its impact on the organization. It is common that for the execution of a function nicely attached more significance than evaluating the positive impact of the training programme. At RSP, SAIL, Tata Steel, and JINDAL training programmes are considered as an effective tool to assist the organization for the achievement of the desired objectives.
Effective training programme refers to the process that occurs before, during, and after training to evaluate the programmes. The value of training programmes not only come from individual learning but from having employees interact and share ideas through communication which improve manufacturing, service and interdepartmental processes nicely. Effective training programme focuses on both the design and the attitudes of the trainers in the organizational context. Organizations like RSP, SAIL, Tata Steel, and JINDAL are reconsidering their investments in training programme as they recognize that knowledge, skill and attitude of employees give an advantage to face competitors to meet changing environment. Based on the information gathered from evaluating training programme that they can make important decisions on modifying the training programme by reducing the shortcomings and to come out with a better approach. The above companies can use appropriate employee surveys and propose models based on the ideas from Kirkpatrick’s four levels for developing the employees to work in this challenging and highly competitive environment.

Organizations like SAIL and RSP have marked considerable expense for the training programme whether provided by in-house or off-the-job. They use training to facilitate the learning skill to retain employees, improve their culture and to create reward system for their good performance. Although, the process of training evaluation in other competitive firms like the Tata Steel and JINDAL are broader as compared to that of SAIL or RSP, training evaluation done in RSP also indicates its remarkable impression. The evaluation of training programme and measurement of effectiveness at RSP is in line with other competing organizations namely Tata Steel and JINDAL.
References


10. Assessment report of Rourkela Steel Plant.


