Title: A Study on Training Programme in Engineering & Manufacturing Company

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Abstract

Training Programs are necessary in any organization for improving the quality of work of the employees at all levels particularly in this present world of rapidly changing technology, changing values and environment. Every organization needs to have well trained and experience people to raise the skill levels and increase the versatility and adaptability of employees. The employees recruited in an Organization to perform a specific task. That task differs for each employee. For a new comer it is not necessary that he should know the job. For that he is provided training in the Organization. Training is a process by which the employees are trained about the job theoretically as well as practically. So that, he can performs the job efficiently. All the employees in an Organization are given training for a specific period. With this survey we can know about the Training programme at Bharat Heavy Electricals Limited.

Introduction

Training plays an important role in the effectiveness of organizations and to the experiences of people in work. Training has implications for productivity, health and safety at work and personal development. All organizations employing people need to train and develop their staff. Most organizations are cognizant of this requirement and

invest effort and other resources in training. Such investment can take the form of employing specialist training staff and paying salaries to staff undergoing training. Every organization needs to have well trained and experienced people to perform the activities that have to be done. If the current or potential job occupant can meet this requirement, training is not important. But when this is not the case, it is necessary to raise the level and increase the versatility of employees. Training is the corner stone of sound management for it makes employees more effective and productive. It is actively and intimately connected with all the personnel or managerial activities. It is an integral part of the whole management program, with all its many activities functionally interrelated.

Objectives of the Study

- To find out the changes in individual performance due to training programme.
- To analyse the improvement of team building.
- To give suggestion for further improvement in training programme in the Organization.

Review of Literature

An outcome of the TNA is the specification of the training objectives that, in turn, identifies or specifies the skills and tasks to be trained. For a specific task or training contents, a giving training delivery approaches may be more effective than others because all training delivery approaches are capable and intended to communicate specific skills, knowledge, attitudinal or task information to trainees, so different training delivery approaches can be selected in order to deliver different training contents (Hamid, 1987).

(Wexley and Latham 2002), the need to consider skill and tasks characteristics in determining the most effective training delivery approaches should be highlighted. A number of typologies have been offered for categorizing skills and tasks (Gagne, Briggs and Wagner, 1997, Rasmussen, 1982) which can be categorized into two broad categories: people or technical skills, is crucial in designing training programmers. Many organizations fail because their employees are not trained well enough in skills that truly matter in the age of information. However, people skills are typically hard to observe; quantify and measure as much as it needed for everyday life and in work because it's have to do with how people relate to each other: communicating, listening, engaging in dialogue, giving feedback, cooperating as team member, solving problems and resolving conflicts (Coates, 2004).

Positive effects of technical skills training have been evaluated in several studies: technical skills training leads to the performing of more skills on the organizations higher scores on written skills test (Remmen, Scherpbier, Van Der Vleuten, Denekens, Derese, Hermann, Hoogenboom, Kramer, Van Rossum, Van Royen and Bossaert, 2001) and improved employees performance (Bradley and Bligh, 1999). The technical skills training played by tutor or trainer projected a positive attitude towards the method of role playing, which achieved better results in employee's commitment and performance (Nikendei, Zeuch, Dieckmann, Roth, Schafer, Volkl, Schellberg, Herzog and Junger, 2005).

Research Methodology

- ✓ Type of research design undertaken for the study is 'Descriptive research'.

- ✓ The sampling plan that was used for the study is 'convenience sampling'.

- ✓ There are around 120 total employees and sample size is 60.

- ✓ Sampling is convenience sampling

- ✓ Statistical Tools : Percentage Analysis

Data Analysis and Interpretation

Table-1- Department wise Classification

S.No	Department	No. of Respondents	Percentage (%)
1	Quality	9	15
2	Finance	6	10
3	Engineering	12	20
4	Production	24	40
5	Maintenance	6	10
6	Stores	3	5
Total		**60**	**100**

Inference:

From the above table, 40% of the respondents are from Production department, 20% of the respondents are from Engineering department, 10% of the respondents are from Maintenance department, 10% of the respondents are from Finance department and remaining 5% of the employees are from Stores department.
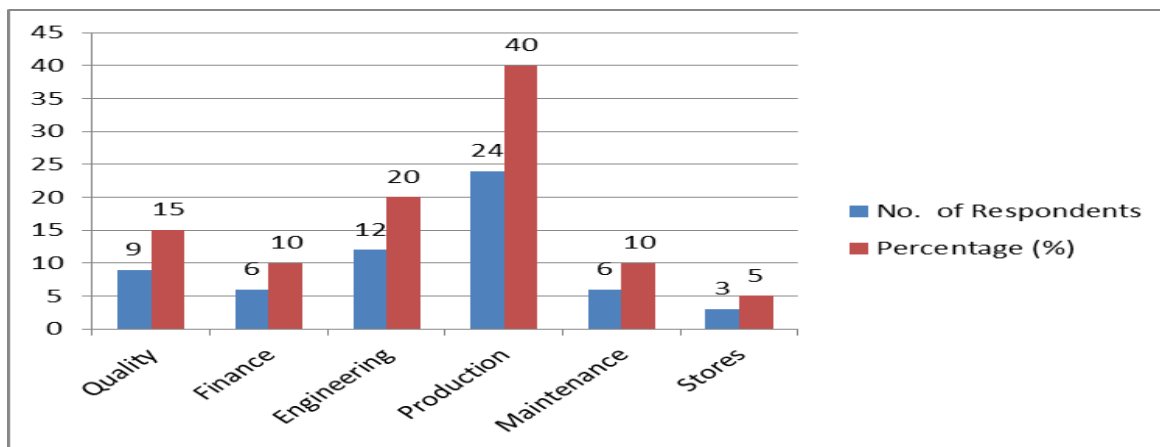
Chart-1- Department wise Classification

Table-2 -Educational Qualification of Respondents

S.No	Qualification	No. of Respondents	Percentage (%)
1	HSC	0	0
2	Diploma	33	55
3	Engineering	15	25
4	Under Graduate	12	20
	Total	60	100

Inference:

From the above table, 55% of the respondents are belongs to Diploma, 25% of the respondents are Engineers and remaining 20% of the respondents are undergraduate.
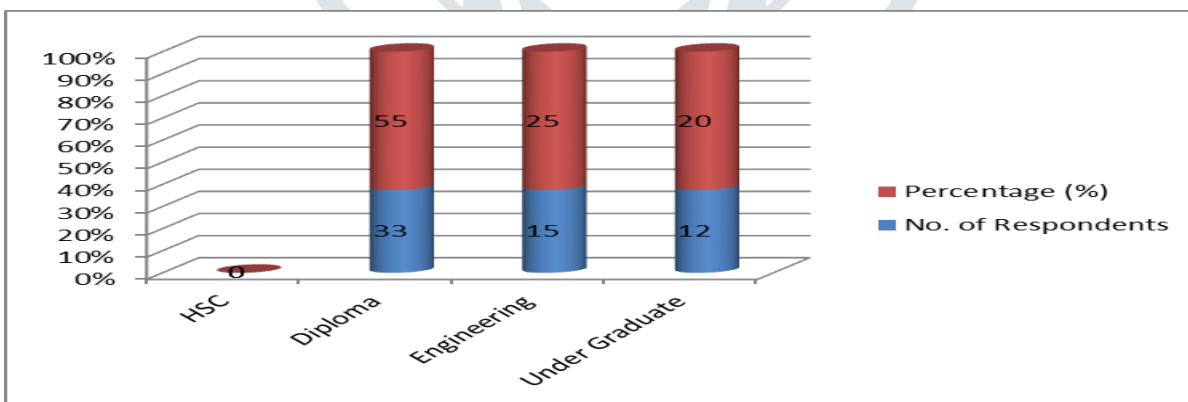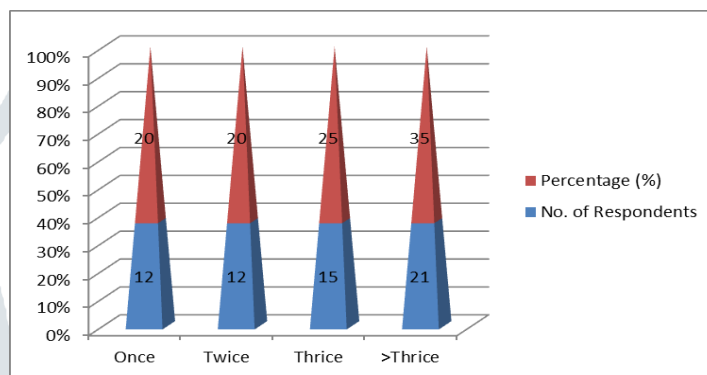

Chart-2 -Educational Qualification of Respondents

Table-3 - No. of Times Training Programme Attended

S.No.	No. of Times Training Attended	No. of Respondents	Percentage (%)
1	Once	12	20
2	Twice	12	20
3	Thrice	15	25
4	>Thrice	21	35
Total		60	100

Chart-3 - No. of Times Training Programme Attended

Inference:

From the above table, 35% of the respondents attended more than thrice, 25% of the respondents attended thrice, 20% of the respondents attended twice and remaining 20% of the respondents attended training programme only once.

Table – 4- Frequency of Training Programme conducted

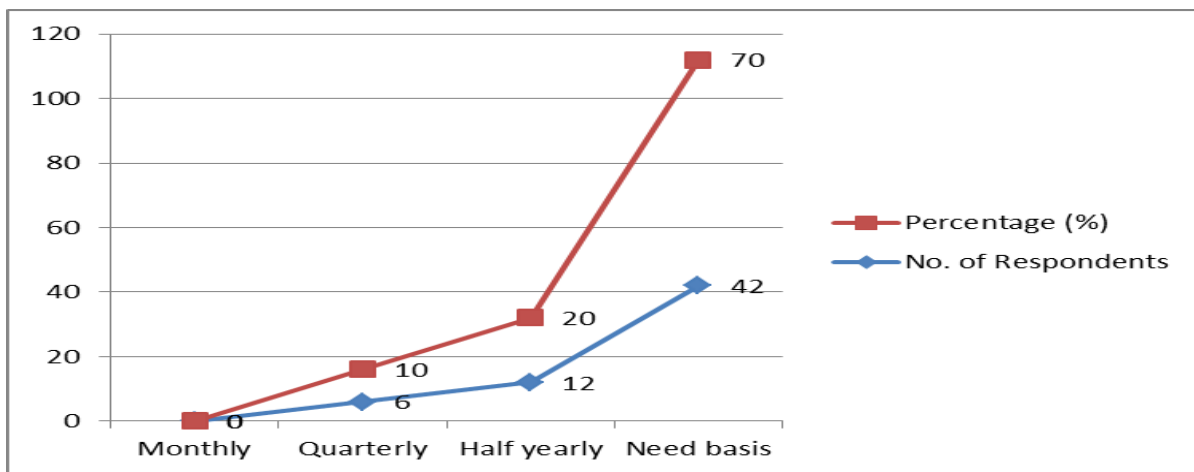| S.No.	Frequency of Training Program	No. of Respondents	Percentage (%)
1	Monthly	0	0
2	Quarterly	6	10
3	Half yearly	12	20
4	Need basis	42	70
Total		60	100

Chart – 4- Frequency of Training Programme conducted

Inference:

From the above table, 70% of the respondents attended training programmes on need basis, 20% of the respondents attended on half yearly basis and remaining 10% of the respondents attended on Quarterly basis.

Table-5 - Satisfaction Level in Given Training Period

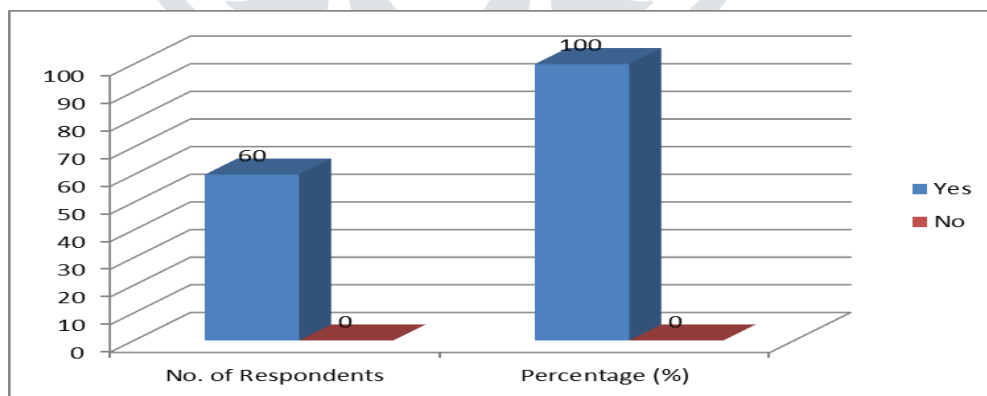| S.No.	Satisfaction Level	No. of Respondents	Percentage (%)
1	Yes	60	100
2	No	0	0

**Chart-5 - Satisfaction Level in Given Training Period**

Inference:

From the above table, 100% of the respondents satisfied with the given training period.

Table-6- Effective Methods in on-the Job Training

S.No	Effective Training Method	No. of Respondents	Percentage (%)
1	Job-instruction Training	39	65
2	Coaching	6	10
3	Apprenticeship	-	-
4	Others	-	-
5	Not attended	15	25
	Total	60	100

Inference:

From the above table, 65% of the respondents attended Job instruction training (JIT),   10% of the respondents attended Coaching method and remaining 25% of the respondents not attended training programme.
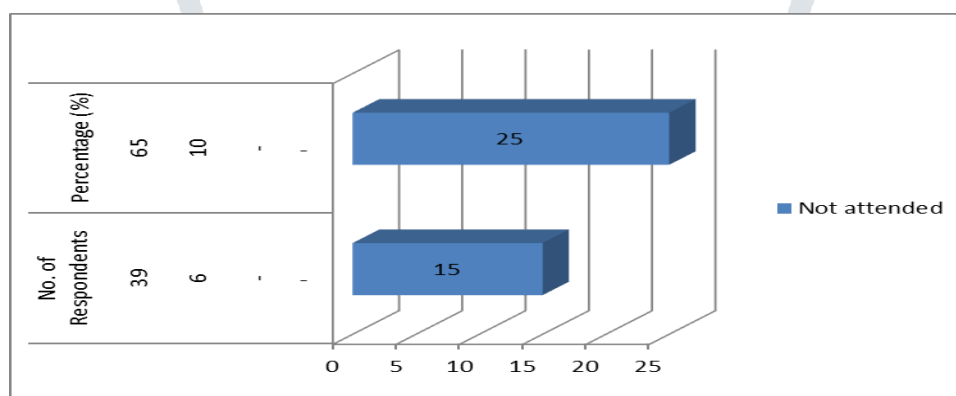
Chart-6- Effective Methods in on-the Job Training

Table -7- Effective Method in off the Job Training

S.No	Effective Training Method	No. of Respondents	Percentage (%)
1	Lecture	0	0
2	Case study	15	25
3	Role playing	0	0
4	Others	0	0
5	Not attended	45	75
	Total	60	100

Inference:

From the above table, 75% of the respondents not attended Off-the-job training and remaining 25% of the respondents attended Case study method.
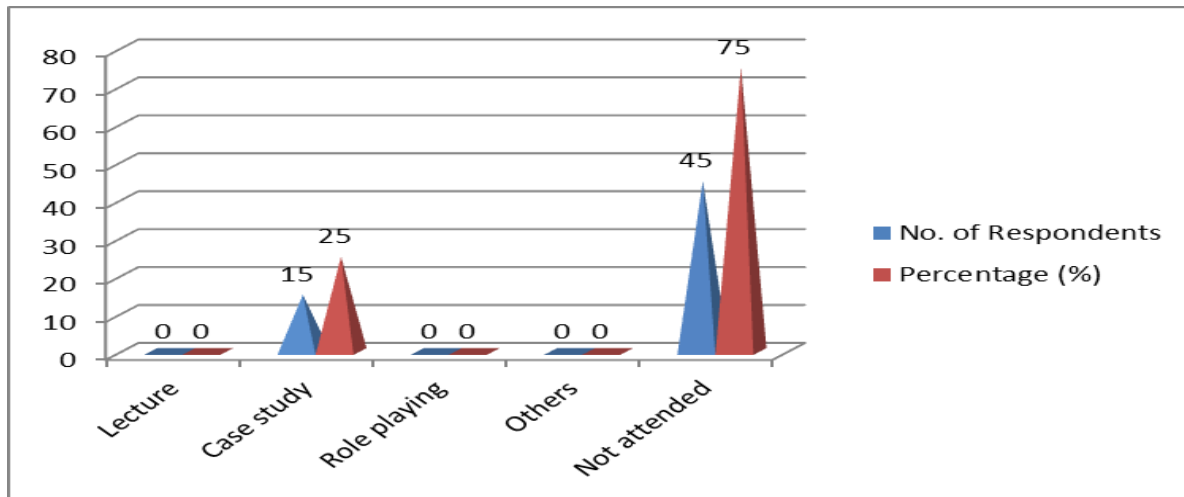
Chart -7- Effective Method in off the Job Training

Table-8- Training Programme Increase the Performance

S.No	Performance Increased	No. of Respondents	Percentage (%)
1	Yes	60	100
2	No	0	0
	Total	60	100

Inference:

From the above table, 100% of the respondents agreed that, training increased their performance.
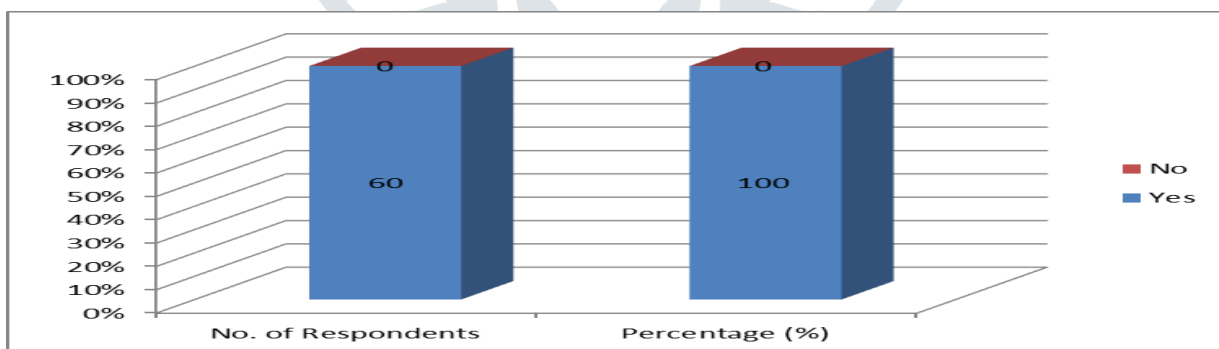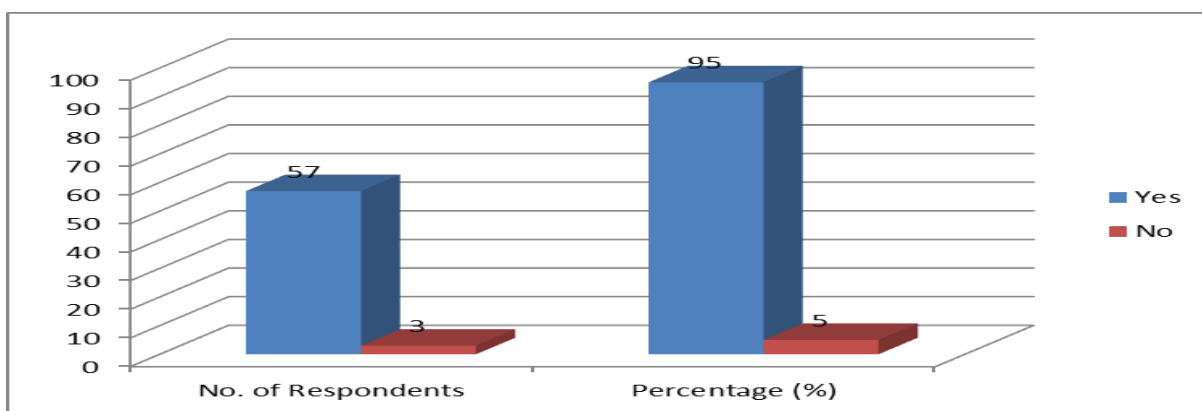

Chart-8- Training Programme Increase the Performance

Table – 9 - Training Programme Increase the Productivity

S.No	Productivity Increased	No. of Respondents	Percentage (%)
1	Yes	57	95
2	No	3	5
Total		60	100

Inference:

From the above table, 95% of the respondents accepted that training programme increased the productivity and remaining 5% of the respondents not accepted.

Chart – 9 - Training Programme Increase the Productivity

CHI-SQUARE:

1) Relationship between Department and Rating.

Cross Table:

Dept/ Rating	Quality	Finance	Engineering	production	Maintenance	Stores	Total
Excellent	0	1	3	1	1	0	6
Good	5	5	6	18	5	3	42
Fair	4	0	3	5	0	0	12
Poor	0	0	0	0	0	0	0
Total	9	6	12	24	6	3	60

Solution:

Null Hypothesis (Ho):

There is no significant difference between Department and Rating

Alternate Hypothesis (H1):

There is significant difference between Department and Rating

Formula

$$\Psi^2 = \sum \left((O-E)^2/E \right)$$

O= Observed Frequency.

E= Expected Frequency.

     Expected Frequency= R*C/T

R=Row Total

C=Column Total

OBSERVED FREQUENCY O	EXPECTED FREQUENCY E	(O-E)^2	(O-E)^2/E
0	0.9	0.81	0.9
1	0.6	0.16	0.26
3	1.2	3.24	2.7
1	2.4	1.96	0.81
1	0.6	0.16	0.26
0	0.3	0.09	0.3
5	6.3	1.69	0.26
5	4.2	0.64	0.15
6	8.4	5.76	0.68
18	16.8	1.44	0.08
5	4.2	0.64	0.15
3	2.1	0.81	0.38
4	1.8	4.84	2.68
0	1.2	1.44	1.2
3	2.4	0.36	0.15
5	4.8	0.04	0.008
0	1.2	1.44	1.2
0	0.6	0.36	0.6

Calculated Value = 10.33

- Calculated value =10.33

- Degree of Freedom= (r-1)(c-1)

     = (4-1) (6-1) =3*5 =15.

Tabulated value of Ψ^2 for 15 degree of freedom at 5% level of Significance is 24.996.

Level of Significance=0.05%, Degree of freedom=15, Calculated value=10.33, Tabulated value=24.996.

Since the calculated value (10.33) of chi square < Tabulated value (24.996)

We accept Null Hypothesis Ho.

That is, there is no significant difference between Department and Rating in BHEL.

2) Relationship between Qualification Vs acquiring knowledge and skills.

Cross Table:

Qualification/ Acquire skills	HSC	Diploma	Engineering	U.G	Total
Strongly Agree	0	20	8	5	33
Agree	0	13	7	7	27
Disagree	0	0	0	0	0
Strongly Disagree	0	0	0	0	0
Neutral	0	0	0	0	0
Total	0	33	15	12	60

Solution:

Null Hypothesis (Ho):

There is no significant difference between Qualification Vs acquiring knowledge and skills *Alternate Hypothesis*

(H1):

There is significant difference between Qualification Vs acquiring knowledge and skills

Formula

$$\Psi^2= \sum ((O-E)^2/E)$$

O= Observed Frequency.

E= Expected Frequency.

Expected Frequency= R*C/T

R=Row Total

C=Column Total

OBSERVED FREQUENCY (O)	EXPECTED FREQUENCY (E)	(O-E)^2	(O-E)^2/E
0	0	0	0
20	18.15	3.422	0.188
8	8.25	0.0625	0.0075
5	6.6	2.56	0.387
0	0	0	0
13	14.85	3.422	0.230
7	6.75	0.0625	0.0092
7	5.4	2.56	0.474

Calculated value=1.29

- Calculated value=1.29.
- Degree of Freedom=(r-1)(c-1)

$$= (5-1)(4-1) = 4*3 = 12.$$

Tabulated value of Ψ^2 for 12 degree of freedom at 5% level of Significance is 21.026.

Level of Significance=0.05%, Degree of freedom=12, Calculated value=1.29,
Tabulated value=21.026.

Since the calculated value (1.29) of chi square < Tabulated value (21.026)
We accept Null Hypothesis Ho.

That is, there is no significant difference between Qualification Vs acquiring knowledge and skills

FINDINGS

- ✓ 40% of the respondents are from production Department.
- ✓ 40% of the employees are above 35 years of age.
- ✓ It is found out that, 70% of the employees are attended training according to the need basis.
- ✓ 75% of the employees attended On-the-job Training.
- ✓ 100% of the employees accept that, training programme increased their performance.
- ✓ About 65% of the employees attended Job Instruction Training.
- ✓ 85% of the employees accept that, training reduces Stress on Work.
- ✓ 50% of the employees prefer to under go training according to their need.
- ✓ About 60% of the employees agree that, training improve the Team building.
- ✓ 70% of the employees rated the existing training programme as good.

SUGGESTION

- ✓ Some of the respondents pointed out that a follow of mechanism is required after training programmes.
- ✓ Records on training programmes, conducted by personnel Department have to be maintained and used as a future Source.
- ✓ Feedback from the trainee is obtained after attending the programme. Concerned operating head can evaluate the form and necessary action should be taken periodically.
- ✓ User Friendly material :
- ✓ It can be prepared by keeping the trainee's level in mind.

CONCLUSION

The efficiency and productivity will increase from the effort of those who finish Training effectively, with the help of Training the employees get clear idea about the job description. In this project, the analysis was done to study the Training programme and given suggestions to improve.

It is concluded that, in this Organization Training is most important for all employees to increase the productivity and performance level. So the management must provide   substantial time and effort in planning Training program according to the Technology Development.

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