



# Challenges of Training in DRDO

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**Abstract :** Training is a process of conscious learning to improve the level of performance of the trainee. Educational qualification offers just opportunity to get employment but training helps to develop required skills and abilities to complete the work with confidence. Defence Research and Development Organization (DRDO) is a premier R&D organization in the Ministry of Defence employing more than 30,000 scientific and technical personnel of all categories ranging from engineers, scientists, administrators and other supported staff distributed in more than 50 laboratories spread over the length and breadth of India. Since different categories of DRDO employees work in different laboratories having different charter of duties manpower training cannot be uniform in all laboratories. It is a great challenge for HR Coordinator to arrange different specialized training for achieving perfect satisfaction in upgrading skills among the various categories of the employees. Besides in-house training DRDO has started Target Training Centres at various places like Bangalore, Jodhpur, Mussoorie, etc. According to DRDO Training policy three-tier intensive training is carried out for all categories of employees. These are (i) induction training for fresh recruit, (ii) on job training as per job requirement and (iii) development training tailored to the specific program. About 150 training courses under Continuing Education Program (CEP) are conducted every year in DRDO as development training for keeping its employees abreast of current developments in the state-of-the art technologies in their fields of specialisation. No one doubts on the contribution of training in providing benefit to both individual employee as well as the serving laboratory. However training effectiveness depends on proper selection of trainee as well

as skilled trainer keeping view on after use of gained knowledge. Identification of training need for each employee should be done on the basis of gap between the skill and performance of employee. Training will be effective and popular if successful completion of training by the employee gets consideration in performance appraisal marking system or in award selection. It is a great challenge to HR Coordinators to keep track on the core competence and training capability by different lab of DRDO. It would be a great help if a panel of expert trainers interested in giving training with their subject expertise is created by Directorate of Human Resource Development, DRDO Headquarter and circulated to all HR Coordinators as well as different Target Training Centres of DRDO for taking full advantage of their expertise in conducting different training program.

**Keywords :** Training, DRDO Policy, HR Challenges

## I. INTRODUCTION

Training is the process of enhancing the skills, capabilities and knowledge of employees for doing a particular job. It is crucial for employees as well as organizational development and success, thus beneficial to both employee and employer. Training is generally carried out in two ways : (i) On the job training and (ii) Off the job training. **On the job training** is the process of explaining, demonstrating and the structured supervision of specific skills or particular tasks carried out by the seniors for the subordinates during everyday working of the concern. This is nothing but 'learning by doing' and hence simple and

cost effective method. It is highly effective in resolving people problems, strengthening relationship within the group and in achieving continuous improvement in skills as well as results since obtaining feedback and support is easier. Counselling, Coaching, Mentoring, etc are some of the approaches followed during on the job training. **Off the job training** are those in which training is provided away from the actual working condition by arranging workshops, seminars, conferences and training courses. This is costly but effective since employees are getting opportunity to concentrate on the subject as well as to meet and exchange views with their counter parts working in other establishments. New place, new trainer, new technique and new environment no doubt help trainees to be more attentive. It is costly since the organization has to pay a considerable amount as course fee, travel expenditure and accommodation arrangement for the trainees besides losing the productive man-days. It is, on the other hand, cost effective if the training is conducted in-house where no hotel fees, trainer fees or extra training equipment are incurred. Table 1 presents some typical signs of change in behaviour or performance of the employee, which points towards necessity of training.

**Table 1. Typical signs of change in behaviour of employee**

Absenteeism	Argumentative	Avoids difficult work
Avoiding contact	Blaming others	Complaining
Delegating to others	Depressed	Irritability
Lack of interest	Laziness	Making mistakes
No communication	No cooperation	No initiative
Poor productivity	Poor quality	Unsafe working

## II. BENEFITS OF TRAINING

Training gives benefit not only to individual employee but also to the organization where the employee works. Well trained

employees show both quantity and quality performance and hence are assets for the organization. They help in reducing wastage of time, money and resources. Training helps in developing both technical and behavioural skills, in optimizing the utilization of human resources for achieving organizational goal, in creating learning culture and healthy working environment and in improving team spirit, positive attitudes, efficiency and productivity of the employees. It improves the moral of employees by creating job security, job satisfaction and promotional chances. A well trained employee needs less of supervision and commits fewer accidents in job. Thus training can no longer be viewed as a support system, it is an essential part of organization culture to reduce the gap of skills in workforce, thus equating with profit of the organization.

## III. TRAINING POLICY OF DRDO

Defence Research and Development Organization (DRDO) is a premier R&D organization in the Ministry of Defence employing more than 30,000 scientific and technical personnel of all categories ranging from engineers, scientists, administrators and other supporting staff distributed in more than 50 laboratories spread over the length and breadth of India. It has a corporate R&D Headquarter at New Delhi and the individual laboratories / establishments in different places of the country. R&D functions being very different from a normal production organization, knowledge explosion happening in all scientific disciplines at a very fast rate, there is a continuous requirement to upgrade the skills of all the employees from time to time through specialised and tailor-made training and development programs in DRDO. Three-tier intensive training policy is followed to satisfy those requirements. First is '**Induction training**' which is conducted for fresh recruits to familiarize them with aims and objectives of DRDO and its different policies and procedures as well as

to make them aware on different on-going projects / programs and past achievements of DRDO. Second is ‘**On the job training**’ which is given at lab level depending on the place of posting and the job requirements. Third is ‘**Developmental training**’ tailored to the specific programs on hand, mainly conducted as ‘Continuing Education Program’ (CEP) for updating the knowledge and skills of DRDO employees to realise their full potential in the laboratory and also to meet the future needs of the organization. Every year near about 150 CEPs are conducted in DRDO (Table 2) besides various training courses arranged in some professional institutes.

**Table 2. Region wise CEPs conducted in DRDO during 2008 - 2012**

Region	2008 - 2009	2009 - 2010	2010 - 2011	2011 - 2012
Bangalore	22	26	32	20
Delhi	54	57	54	45
Hyderabad	24	34	29	32
Pune	21	30	17	14
Total	121	147	132	111

**Table 3. Proposed Target group of DRDO and Time to be spent by individual on training**

DRDS			DRTC			Admin & Allied Cadre		
Grade	Target group	Time to be spent	Grade	Target group	Time to be spent	Grade	Target group	Time to be spent
Sc ‘B’	492	3.3 %	TA ‘B’	287	< 0.5 %	AA	75	< 0.5 %
Sc ‘C’	250	2.5 %	TA ‘C’	116	-do-	SAA	250	-do-
Sc ‘D’	180	1.5 %	STA ‘B’	303	-do-	AO	31	-do-
Sc ‘E’	217	2.0 %	STA ‘C’	58	-do-	SAO	21	-do-
Sc ‘F’	169	1.6 %	TO ‘A’	148	-do-	CAO	18	-do-
Sc ‘G’	52	0.7 %	TO ‘B’	341	-do-			

Source : DRDO Training Policy Report, January 2005<sup>2</sup>

#### IV. CHALLENGES TO HR COORDINATORS AT LAB LEVEL

DRDO does not recruit management professionals to manage its R&D projects / programs, the scientists and engineers only manage the various projects and programs.

Source : CEP booklet issued by DHRD, DRDO Hq<sup>1</sup>

DRDO has also started Target Training Centre at Bangalore, Central Training Centre at Defence Laboratory, Jodhpur, besides Institutes of Technology Management (ITM), Mussoorie to provide unmatched training in the highly competitive environment created due to liberalization and globalization. There was also a proposal in 2005 to start zonal Training centres at Hyderabad (DLRL/DRDL), Bangalore (ADE), Pune (ARDE), Dehradun (IRDE), Chennai (CVRDE) and Gwalior (DRDE). The monitoring of training of DRDS scientists is done by Directorate of Human Resource Development (DHRD), DRDO Headquarter while that of DRTC personnel and Admin & Allied Cadre is looked after by Centre for Personnel Talent Management (CEPTAM), Delhi. According to DRDO Training policy, the number of individual in different cadre to undergo training and the percent time of individual to be spent on these training courses are mentioned in Table 3.

Employees come to work together from various regions with divergent habits and bents of mind. They have the diversified skills, personal feelings, perceptions, desires, motives, values and initiatives. With awareness about DRDO culture and maturity while working, they become assets to the organization. DRDO is a unique

organization of the world where scientists from 24 different subjects are employed for research activity (Table 4). It is a great challenge for any HR Coordinator to arrange different specialized training for achieving perfect satisfaction in upgrading skills among the various categories of the employees.

**Table 4. Subjects / Disciplines of DRDO scientists**

Sl. No	Disciplines	Sl. No	Disciplines
1	Aerospace Engineering	13	Food Science
2	Agriculture Science	14	Instrumentation
3	Armaments	15	Mathematics / Statistics
4	Biology	16	Mechanical Engineering
5	Chemical Engineering	17	Medicine
6	Chemistry	18	Metallurgy
7	Civil Engineering	19	Naval Architecture
8	Computer Science	20	Oceanography
9	Documentation	21	Physics
10	Electrical Engineering	22	Physiology
11	Electronics	23	Psychology
12	Fire Science	24	Textiles

Source : Guidelines for APAR of DRDO Scientists<sup>3</sup>

Training is based on needs which are determined again on the basis of organization needs, job needs and the individual needs. Training need is identified by analysing what the organization is doing and what is its future requirement, what the employees are presently doing and what they have to do in future and finally what is actually happening now and what should be happening in future, thus determining a gap on performance and requirement of professional skills. At present successful completion of training by the employee is not considered much during marking in Performance appraisal report or during selection for different DRDO awards. This

will help to motivate employees for attending training.

## V. SUGGESTIONS TO IMPROVE TRAINING EFFECTIVENESS

DRDO is spending a considerable portion of its budget for training by conducting CEP courses in different DRDO labs (in-house) or by sending its employees outside to some professional institutes. But training effectiveness always depends on the accountability of trainees, faculties as well as organisers.

- Effort should always be made to make training cost effective.
- Data base on training need of each employee and training completed by them should be made and updated regularly by HR Coordinator of each DRDO lab. The data base must be accessible to DHRD, DRDO HQ and CEPTAM, Delhi for taking decision on future training programs.
- HR audit should be done in every lab by expert professionals.
- Instead of conducting CEPs at Lab level, more emphasis should be given on conducting CEPs at zone wise Training Centres (TCs) to maintain uniform standards.
- A panel of expert trainers interested in giving training with their subject expertise should be created. DRDO experts are no way inferior to experts of other institutes. On the contrary, they are better than others as they are grown up in DRDO culture and well versed with its requirements. TCs will select trainer from this panel.

## VI. CONCLUSION

In 21<sup>st</sup> century training for employees in the organization is viewed as most vital activity not as welfare point of view but as strategic measure to catapult the organization to the next higher level of performance. DRDO is

also spending a good amount on training for achieving success by reducing gap between skills and performances. Training is the responsibility of three partners : the participant's organization, the participants and the training establishments. Accountability of each is of paramount importance to the success of training. Time has come to give more stress on this accountability. This will motivate not only employees for training but also management authority in efficient use of trained personnel.

## REFERENCES

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