

# A Study on Size and Duration of Training Programmes

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## Introduction

Training has long been recognized as an important component of most development activities. Training can help improve awareness, bring about change in knowledge, attitude, behavior and skills of the trainees which they can transfer to their jobs and thus contribute professionally. Training is a way of providing information and direction in a planned and structured manner to employees or customers or clients on how to accomplish specific tasks related to organizational needs and objectives.

In order to increase the effectiveness of training and also enhance its impact, certain factors need to be taken into account while planning a training programme. Some of these include the number of programmes to be taken up and duration of the programmes. The number of programmes to be organized will depend on the number of people to be trained and on the number of people who can be trained in each programme.

The number of participants in a class and duration of the training programme has a direct relationship with learning and realization of objectives conceived for any training programme. Neither a too small number of participants and duration of the course, nor a too big class size and long duration are adequate, particularly when adult learners or experienced executives are involved and the focus is on skill development and applied knowledge. It goes without saying that a critical mass also propels group synergy. The duration of training can also affect the effectiveness of the training in many aspects.

Keeping in view the relationship between number of participants in a class and duration of the training programme with learning and realization of training objectives, a study on size and duration of MANAGE training programmes was carried out with the following objectives.

## Objectives

The specific objectives of the study were:

1. To explore the perceptions of experts regarding the extent to which size of the class affects learning and acquisition of knowledge and skills

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2. To study the duration of training programmes for optimization of learning, and
3. To assess and understand the appropriate number of trainees and the ideal duration for different types of programmes.

The size of the class was studied with reference to learning, application of learning in the work situation, acquisition of knowledge, skills and attitudes, quality of discussion and group work, personal and distributive attention of faculty, effectiveness of audio visual aids, cost effectiveness, minimum number and its reasoning, constraints to receiving adequate number of participants, trainer vs. trainee ratio etc.

The duration of the training programme was studied with reference to the type of training programme viz., induction, seminar, workshop, thematic programme and level of participants, subject / theme to be covered.

As part of the study a review of literature was carried out on impact of class size and duration on learning and acquisition of knowledge and skills. The review of literature suggests that training is likely to be more effective in smaller classes, which would allow a better quality of teaching and learning. As class size increases, individual learning performance declines (Penner and Craiger, 1992), there is less opportunity for active learning activities, meaningful discussion, and personalized attention from instructors, and hence a negative effect on learner retention and learner satisfaction. Small classes can create facilitating conditions for training and learning. However while a smaller class size is somewhat more effective when the goals of instruction are motivational, attitudinal, or higher-level cognitive processes, it is not a particularly important factor when the goal of instruction is the acquisition of subject matter knowledge and academic skills (Pascarella & Terenzini, (1991). A smaller class size may also offer less opportunity to draw upon multiple experiences, perspectives, and contexts of a diverse group of participants.

Regarding duration, a week appears to be an ideal time in which to teach skills. Restriction on time may be a barrier to learning and must be taken into account when designing a programme instead of designing a programme to fit an available time frame (Rae, 2000).

## **Methodology**

The study is based on primary data gathered with the help of a questionnaire survey. Training managers, subject experts, and senior faculty from Training organizations at the national and state level, constituted the sample for this study. Responses were received from experts, training managers, senior faculty members from the International Crops Research Institute for the semi-arid Tropics (ICRISAT), national level institutions like

National Academy of Agricultural Research Management (NAARM), National Institute of Rural Development (NIRD), Tata Institute of Social Sciences (TISS), National Police Academy, regional/state institutions viz., Extension Education Institute (EEI), State Agricultural Management Extension Training Institute (SAMETI), Vasantrao Naik State Agricultural Extension Management Training Institute (VANAMATI), private training centres like Centre for Organization Research and Development in Management (CORD-M), etc.

The questionnaire covered parameters viz., ideal class size for optimum learning; class size vis-à-vis subject/theme of training; size and duration of class if focus is to impart knowledge and skills; class size vis-à-vis level of functionaries; relationship between class size and application of learning; quality of group discussion vis-à-vis class size, effective use of AV aids, class size and duration for different types of programmes like workshops, seminars, induction programmes, short and long duration programmes, etc.

Data were gathered from renowned experts engaged in the business of training for more than two decades. These experts were chosen carefully, representing disciplines like Extension Management, Administration and management, Human Resource Management, social sciences, from national and international institutions and private trainers and consultants. The analysis employed for this study was qualitative in nature in view of having experts' opinion on the above aspects. Data were further analyzed based on mean scores by adequately supplementing with qualitative statements and experts' views.

## **Results and Findings**

Data were collected and interpreted with reference to class size and duration vis-à-vis variables as mentioned above.

### **A. Class Size**

#### **1. Class size and Learning**

Majority of the experts (90%) stated that class size has an impact on individual learning and both too large and too small a class size can hamper individual learning. It was expressed that class size has an impact on quantum of learning, learning styles of trainees, individual attention by the trainer, trainer-trainee acquaintance, opportunity for trainees to participate in the learning process, interaction and clarification of doubts with the resource person, and has a bearing on learning particularly the participation of the learner in the learning process.

About 50% of the experts indicated that class size is inversely proportional to individual learning. If size is very large (more than 30) the trainer will not be able to give attention to individuals and participants will have less opportunity to interact with the trainer. A large class size impedes the learning process as individual requirements and absorption and retention in some cases vary drastically, no skill focus is possible, which affects individual learning. The large class size also affects sharing of experiences and learning from other participants given the fact that participants also contribute to each other's learning by providing different perspectives and sharing input and experiences.

On the other hand, if size is too small it does not appeal to participants or to trainers as there is no opportunity to learn from each other and group synergy is also missing for want of variety in perspectives. According to the experts, the ideal class size depends upon the type of training programme, objectives of the programme, nature of the training, familiarity with the subject, the level of participants, methodology adopted and the end results to be achieved.

Ideal class size was indicated as "up to 30" for maximum learning by 82% of the experts as may be seen in Table 1. This allows physical proximity, eye-to-eye contact, clarity in audio, visibility of audio visual projections and enables each participant to express his/her views. This also enables resource persons to have adequate interaction with the participants and manage group activities and learning effectively. Respondents also indicated that composition of the group is also an important factor and if it is diverse in nature, a smaller size up to 20 participants would further facilitate experience sharing and quality learning thereby, as expressed by a majority of experts.

Thus a too large class size affects individual attention and learning while a too small class size does not provide an opportunity to learn from diverse perspectives and hence, a moderate class size of 20-30 is suggested by most of the expert respondents for in-service and executive training programmes.

## **2. Class size and Application of Learning**

Majority of the experts agree that class size has a relationship with application of learning and the size of the class influences the extent of learning. Better learning would ultimately result in application in the field. Management games, participatory learning etc. need appropriate size of class for reinforcement, breaking the ice and motivate for effective and easy sharing of knowledge.

Majority of the experts indicated that smaller size enables more attention and time for each participant ensuring higher learning and its application; bigger the size lesser the learning and the application of learning is relatively poor. While class size can impact learning, application of learning is also governed by other factors apart from learning

which include the quantum of learning, quality of input, participants' level, relevance of experience and background of participants, and eventually on the attitude of superiors and colleagues, working environment and facilities back at work. Therefore, to enhance the application of learning, the factors in the back-at-work situation play an important role apart from the class size.

### 3. Class Size for Imparting Knowledge and Skills

Fifty per cent of respondents suggested a class size "up to 30" for imparting knowledge mentioning that any increase in group size requires more time for discussion. However considering the range of responses from a class size of 20-25 to 50-200, it appears that class size is not a particularly important factor when the goal of instruction is the acquisition of subject matter knowledge.

Experts generally agree that class size must be small if the course focus is on skill development, as sufficient practice time must be allowed. As may be seen in Table 1, fifty per cent suggested a class size "up to 30" followed by 40% suggesting class size "up to 20", to enable practice of skills by participants. It was suggested that it would be ideal if participants can be divided in groups and guided.

**Table 1. Ideal Class Size**

	(per cent)				
	Class Size				
	Up to 20	Up to 30	Up to 40	Up to 50	>50
Ideal class size for maximum learning	9	82	9		
Class size for imparting knowledge	10	50	10	10	20
Class size for imparting skills	40	50	10		
Ideal class size and New Subject	25	42	8	17	8
Ideal class size and Old Subject	-	36	46	9	9

### 4. Class size and Subject/Theme of Training

Majority (76 per cent) of the experts indicated that class size should vary depending on the theme/subject of the training and also with the kind of training programme. When the subject of training is new, the smaller the number up to 30; better the learning. When the subject is old and meant to reinforce learning a larger group up to 50 is advisable.

If the objective is general orientation, refresher training, mass awareness, information sharing or imparting knowledge on a simple subject, class size may be large but if the objective is skill development or the topic is new and of immediate practical application, diagnostic study is involved or the programme is attitude focused, size of the class must be small.

As may be seen in table 1, forty two per cent of the experts indicated that if the subject of training is being covered for the first time, class size should be “up to 30”, for better interaction, learning and appropriate feedback and to ensure that maximum queries of trainees can be answered.

Forty six per cent of the experts suggested a class size “up to 40” if the subject is old and being repeated to reinforce learning. It was mentioned that as participants have the basic knowledge, they need less individual attention. This was followed by 36 per cent of the experts who suggested a class size “up to 30”. It was also mentioned that class size should be smaller when reinforcing skills.

## 5. Class size vis-à-vis Type of programme

Class size also varies with the type of training programme. The types of programmes may range from a workshop, seminar, induction programme to short or long term training programmes and skill shop.

A. Workshop (orientation and diagnostic): In workshops, less number of participants in a class is advisable unless major activities are in groups. The experts have a divided opinion so far as ideal class size for a workshop is concerned and it was indicated “up to 30” by 33% and “up to 40” by 33% and “up to 20” by 25 per cent of the experts. It was also suggested that if the size is larger than 30, the major activities of the workshop may be carried out in smaller groups of 6-8 members.

B. Seminar: Majority of the experts suggested a larger size for seminars as compared to workshops. It was mentioned that, in a seminar presentations are made by key speakers, others listen while a few get an opportunity to discuss; hence size could be very large. A class size “up to 100” was suggested for seminars by fifty five per cent of the experts as may be seen in Table 2. As the themes and the sub themes of the seminar are pre decided, the key speakers are pre decided, the seminar input and material is pre circulated, seminars can have a larger size of 100 and above as expressed by most of the expert respondents.

C. Induction Programme: An induction programme is the process used within many businesses to welcome new employees and prepare them for their new role. Thirty three per cent each suggested a class size of “up to 30” and “up to 40” for an induction

programme. The reason cited was that all are first timers and need more time for individual interaction. In workshops and induction programmes less number of participants in a class is advisable unless major activities are in groups. The other reason for suggesting a limited class size in induction programme is given due to the fact that such programmes have significant component of skill building.

D. Short term training programme (up to 1 week): Majority of the respondents (66 per cent) suggested class size “up to 30” for short term training programmes of up to one week duration. It was also indicated that there should be representation of all relevant stakeholders from different disciplines, states etc. to enable individual participants to get optimum learning opportunities; have more interaction and share experiences from the field.

E. Long term training programme (more than 2 weeks): For a long term training programme, the size of class suggested was “up to 30” by 67 per cent of the experts for focused attention and guidance of the trainer. Based on the term and duration of the programme, the class size should not vary was the opinion expressed by more than 2/3rd of the expert respondents.

F. Skill shop is an activity which focuses on skill development of the trainees. Majority suggested a smaller class size for a skill shop as compared to other kinds of training programmes. Sixty seven per cent of the experts suggested a class size “up to 20” indicating that a smaller size helps teach skills on one to one basis. As has been mentioned earlier, when training is skill oriented, size must be small to allow sufficient practice time and enable individual supervision.

**Table 2. Class size vis-à-vis Type of Programme**

Class size	Workshop	Seminar	Induction programme	Short term	Long term	(per cent)
						Skill shop
Up to 20	25	-		17	8	67
Up to 30	8	9	33	66	67	33
Up to 40	33	18	33	17	25	
Up to 50	33	9	25	-	-	
Up to 100	-	55	8	-	-	
>100	-	9	-	-	-	

Thus the seminar, induction and entry level training may have larger class size whereas for workshops and skill shops and short and long term programme, it should be limited to a smaller number up to 30 for enhanced learning.

## 6. Class size and Level of Participants

In case of National level trainees, class size “up to 30” was suggested by 45 per cent of the experts (Table 3). It was indicated that size should be less for more interaction. For State heads and equivalent, 64 per cent of the experts suggested class size “up to 30”. In case of District heads and equivalent, 45 per cent suggested class size “up to 40”. In case of field functionaries, 46 per cent suggested class size of 30-40, mentioning that this size would keep the group together in relation to field related skills/knowledge.

In case of in-service professionals, all respondents suggested a class size “up to 30” as ideal. The data suggests that ideal class size may not vary much with the level of participants.

**Table 3. Class size and Level of Participants**

(per cent)

Class size	National level	State heads	District heads	Field functionaries	In-service trainees
Up to 20	22	27	22	9	
Up to 30	45	64	33	27	100
Up to 40	33	9	45	46	
Up to 50				9	
>50				9	

Ideal class size would also vary with the methodology of training to be adopted. In case of lecture and case discussion the number could be more than 30. However for participatory methods like group discussion, syndicate, buzz groups, tasks and assignments the ideal size as expressed by experts should be 25-30 if and when required with three groups of 8-10 participants in each.

## 7. Group Size and Quality of Discussions

All the experts agreed that the quality of group discussions or group work depends on the size of the class. A threshold level (minimum) number of participants are required for effective learning through group discussion. If the group is large only a few participants dominate the discussion and others feel left out and have less opportunity for focused and meaningful interaction. A large size is not ideal for group work as handling of ideas becomes difficult and effective participation of all cannot be ensured and thus affects the quality of group discussion.

More effective discussion can be ensured if the group is small. Hence 4-5 groups with a group size of 5-6 participants or 3 groups with 6-8 members each is suggested

to ensure quality discussion; and to ensure that every participant gets an opportunity to participate and share their ideas, opinion and experiences. With more people in a group there is possibility of multiple sub-groups not focusing on the same theme at a time. Moreover it must also be kept in mind that if the number of groups are more than 3 to 4 the single trainer would not be able to monitor group activity, progress and outcome.

The Coverdale approach to training at MANAGE, has substantive activity in smaller groups of 6-8 members and one can have up to 25 participants in a programme. Learning is through coaching and facilitation, inductive and non prescriptive in nature to enhance individual skills for action.

Depending on the kind of training programme, the number of groups could be decided based on the number of issues placed for discussion. Each group could be given a specific task/topic.

### **8. Personal Attention of Trainer vis-à-vis Learning**

All the experts agree that personal attention by the trainer or faculty contributes to the learning of trainees. Personal attention by the trainer motivates participants and gives them an opportunity to express their views, clarify problems and give suggestions resulting in better learning. It keeps participants active and attentive in class resulting in more learning, helps in clearing individual doubts and recognized for their point of view by the faculty and fellow participants. Addressing trainees by their names on the part of faculty also enhances his/her image in a group. As a result, the trainee will be more attentive resulting in better acquisition of knowledge, higher retention and impact on fellow participants.

Learning is always a two way process. The classroom gives the trainer and the trainee, opportunity to learn from others experiences. The trainer can monitor progress and understand the training needs more closely, identify issues and mentor the trainee and also can redesign the pedagogy if required during mid-course. Participant needs vary and each participant expects one-to-one interaction/consultation with the trainer/resource persons even beyond class room sessions. Thus personal attention by the trainer contributes to the learning process and, therefore, depends on the class size.

Over 50 per cent of the experts suggested 25-30 as an appropriate size of class to ensure personal attention by trainers. The programme schedule could also set some time aside for individual interaction with faculty or resource persons. Appropriate size for professional counseling, feedback/coaching and mentoring would be 1:1; and 1:5 for individual and group counseling respectively.

## 9. Class Size and effectiveness of Audio Visual Aids

Audio visual aids serve several purposes in the classroom. They can be used to help explain a point, to attract and retain trainee's attention and also provide a break from the monotony of a lecture. Audio Visual aids are often used in training to reinforce a message, support and supplement the message being transferred. As seeing is believing, message transfer is found more effective by supplementing through use of AV aids. Visuals can have a more immediate impact than words. Photographs of crops, videos of best practices and success stories are likely to arouse more interest than details read out by a trainer.

Majority (75 per cent) of the experts agree that effective use of Audio Visual Aids depends on the size of the class. Fifty per cent of the experts indicated that for a larger audience, use of Audio Visual Aids is very effective if visibility, audibility and clarity are ensured. However it also depends on the type of AV aid being used.

While an LCD projector can be used for any class size (provided the screen used for projection is a large one and there is good audio facility); OHP projector /slide projector etc would be more effective for a group of only 20-25. For a smaller group whiteboard can be used. However with a very large class size, those in the last row may not be able to see the visuals and hear audio clearly as that of the front row, as a result of which communication barriers set in leading to problems such as visibility, legibility etc. and hence attention distortion.

Often, more than class size, effective use of AV aids would also depend on the seating arrangement and distance of trainees from the screen. Audio visual aids need to be selected in accordance with the objective, the composition and size of the audience and the classroom itself where the aids will be used, to ensure that the audience will be able to see and hear clearly.

Audio-visual aids are only effective if they are appropriate to the situation otherwise they may distract the audience. Some aids may be more suited to a particular objective than others. For example, if accurate detail is needed, a photograph, slides or a careful drawing may be more appropriate. On the other hand, if the purpose is to highlight some points, a whiteboard or chalkboard may do.

Therefore, the class size matters little for audio-visual aids. However, audio-visual aids necessarily should be of superior quality, independent of the size of the class. It is needless to mention that the audio visual material by trainer has to be relevant as per the objectives and of high quality.

## **10. Trainer vs. Trainee ratio**

Majority of the experts opined that trainer versus trainee ratio would vary with the type of training programme, where the training is focused for imparting knowledge, imparting skills or awareness creation. It was suggested that ratio should be 1:30-35 for imparting knowledge or creating awareness; for skill-based training the ratio suggested is 1:15-20. A ratio of 1:10 was indicated for experiential learning. Wills suggests 1:18 for simple courses; 1:12 for complex courses and 1:6 where individual feedback is needed.

Thus a smaller number of trainees per trainer are suggested for skill based training and experiential learning programmes and a higher number suggested when the objective is to impart knowledge or awareness creation.

## **11. Number of trainees in a training programme**

All experts agree that there should be a minimum number of trainees for any given programme. Over 80 per cent suggested that there should be a minimum number of 15 trainees for an opportunity to interact and learn from each other, and for getting diversity in ideas and experiences.

If the number is too small the competitive atmosphere would not be at the required level and does not generate enough ideas among participants even in groups; moreover if the number is small, faculty also loses interest in training.

## **12. Class size and cost effectiveness of training**

The cost effectiveness is seen not only from the expenditure incurred, but also from the benefits it has accrued to the participants in terms of learning and effectiveness. It was agreed by most of the experts that an optimal class size is necessary for making the training programme cost-effective. Majority of the experts suggested a class size of 25-30 to be ideal to make for the cost incurred through optimization of the learning. A class size smaller than this will increase the cost per participant and hence, will not be cost beneficial.

The seminar, induction and entry level training programmes may have larger size up to 60 whereas for workshops it should be limited to 25-30 participants for enhanced learning and to remain cost effective, as suggested by 2/3rd of the expert respondents.

It is often observed that despite planning for 25-30 participants, fewer than expected participants report for the training programme. This becomes cost intensive covering lower number of participants. Moreover, there would be no group synergy. In order to receive adequate number of trainees the following points were suggested by the expert respondents;

- a. Identify training needs in consultation with sponsor and share the design with participants for any feedback and further redesigning the programme wherever necessary.
- b. Ensure adequate publicity through print, visual media, website, canvassing the training, highlighting the profile of the institution – its objectives and achievements to attract the intended participants.
- c. Training needs should reflect job requirements, develop competencies relevant for the job in a problem-solving mode.
- d. Liaison and Networking with stakeholders
- e. Advance planning is needed for assured participation. The programme must be announced sufficiently well in advance giving course content and faculty and resource persons profile. Objectives of the programme must be specified and reflected in the design and methodology. A drill of activities spanning 60-90 days is helpful for in-service programmes of a week's duration.
- f. Address state heads and officers' in-charge of training for nomination
- g. Conduct workshops and meetings to improve awareness on the need for specific training
- h. Project and Programme based training programmes covering the functionaries involved in them normally receives higher appreciation and participation
- i. Consultancy and research outcomes should be shared with the sponsors and clients and it also should back up and support the training function

## **B. Programme Duration**

### **1. Duration vis-à-vis Learning**

Majority (90 per cent) of the experts agree that duration of training enhances acquisition of content and learning from the programme and is directly proportional to learning. The more the duration, the more and better the learning; as adequate time provides scope for dialogue, absorption, retention, reflection and action. With more duration, each participant gets more time for discussion, contribution and involvement resulting in in-depth knowledge of the subject, practical orientation, and also develops necessary skills. It also gives an opportunity to laggards and slow learners to pick up momentum for interaction and building up understanding and learning.

However there needs to be a balance as a longer duration of a programme may also reduce the span of attention and interest of trainees. Certain skill development programmes need sufficient time for practice and hence require longer duration. Acquisition of knowledge should adequately be balanced with skill component for long duration programmes in order to sustain the interest and understanding of the learners. Senior officers cannot stay for more days away from their office and they could acquire knowledge of even complex subjects in less time and therefore, a shorter duration of 5-6 days programme is suggested for them. It was also agreed by the experts that at senior level the knowledge component is more vital than skills and hence, preferred a shorter duration for them. However, for junior level functionaries, a relatively longer period of training programme would be helpful.

In case of fast, medium and slow track learners the duration can't be the same. It was suggested that more challenging input, assignments and tasks may be given to fast track learners with more individual attention to slow track learners. While discussing about the duration for a session, thirty per cent of the experts suggested 90 minutes duration of the class to give an opportunity for presenting input, clarifying doubts and summing up. It was opined as the ideal duration for imparting knowledge as well as skills. A session of more than 90 minutes cannot hold the interest and attention of the learners.

## **2. Duration and application of learning**

Sixty per cent of the experts indicated that there is a direct relationship between duration and application of learning in back at work situation. Adequate duration of the programme and thereby more time for each session provides more opportunities for learning and better application. More the duration, higher the learning and therefore, greater and improved chances of application. It is also true that application of learning also depends on the environment in the parental department.

## **3. Duration and Level of Participants**

Sixty per cent of the experts mentioned that duration and level of participants were inversely proportional suggesting that higher the level of participants, lower should be the duration and lower the level, longer the duration. Sixty seven per cent of the experts mentioned that considering the time constraint for state heads 2-3 days duration programmes are adequate whereas for district level the suggested duration was up to one week by 89 per cent of the respondents. The duration of programmes suggested for field functionaries and equivalent varied from one to two weeks depending upon the focus whether it is on knowledge or skills or both.

**Table 4. Duration and Level of Participants**

(per cent)

Duration	State heads	District heads	Field functionaries	For in-service trainees
2-3 days	67	11		
Up to 1 week	33	89	37	91
1 to 2 weeks			63	
3-4 months				9

The duration suggested for in-service trainees was up to one week by a majority of the respondents (91 per cent) as may be seen in Table 4.

#### 4. Duration and Subject/Theme of Training Programme

Majority suggested that there is a relationship between programme duration and subject/theme to be covered in the programme. Duration should be decided based on subject/theme of the programme. A complicated or new subject / theme requires a longer duration while a refresher course may require a shorter duration; for a single theme, duration can be less, whereas for covering multiple issues more time is needed. A technical programme may need a larger duration; while a management programme may have a shorter duration.

Technical, complex and relatively newer subjects/themes like tissue culture, biofertiliser preparation, climatology, precision farming etc. need more explanation beginning from ground zero and hence, require more duration; whereas simple technologies like IPM, INM, Watershed Management, FSA etc. require less duration. Training duration for skill development programmes like mushroom production, bee keeping, dairy farming, vegetable production and first level and primary processing could be one week as it involves dealing with a single theme/subject.

While induction training would need one month and more since it is a first time exposure on multiple themes; orientation training would need a week as basic knowledge already exists. The policy related programmes and awareness about schemes could be of shorter duration of 2-3 days. If the subject deals with skill development in any of the above mentioned type of programmes, then time needs to be set apart for case studies and practice sessions also.

#### 5. Duration vis-à-vis type of programme

The ideal duration for an orientation programme/diagnostic workshop, seminar, induction training, short-term training, long-term training and skill shop was also assessed

in the opinion of the expert respondents. Their views are consolidated for each type of programme.

A. Workshop (orientation/diagnostic): The majority (64 per cent) of experts opined that the ideal duration for a workshop ranged between 2 to 3 days for orientation as well diagnostic workshop (Table 5). The respondents suggested that while 2 days may be ideal for an Orientation workshop so that the subject theme will be covered in depth; 3 days would be needed for a diagnostic workshop, which may include field visits. Interestingly it was opined by few experts that any workshop would generate recommendations whereas the skill shop in addition ensures the modalities of implementation of recommendations.

**Table 5. Different Types of Programmes and Duration**

Duration	(per cent)					
	Workshop	Seminar	Induction programme	Short term	Long term	Skill shop
1-2 days	18	27	40			
Up to 3 days	64	73				9
up to 1 week	18		20	91		64
Up to 2weeks			10	9	27	18
Up to 3 weeks					37	
Up to 1 month			10		18	
Up to 3 months			10		9	9
Up to 4 months			10		9	

B. Seminar: Majority of the experts (73 per cent) suggested up to 3 days duration for a seminar to have expert presentations and discussion as the main purpose is to exchange ideas and share results and experiences.

C. Induction Programme: There were varied responses. Forty percent of the respondents suggested 1-2 days. Other suggestions ranged from 1 week, 15 days to one month, 2-3 months to 3-4 months. However, there was an agreement among the expert respondents that the duration for an induction programme depends on the nature of the job, the coverage of subject matter, the level of the participants and the competencies available with them, their placement with the organization and role expected of them.

D. Short term training programme (up to 1 week): Majority (91per cent) have suggested up to 1 week duration for a short term training programme for working executives at all levels with the coverage of multiple but related subjects with focus on imparting of knowledge. One week programmes are effective and ensure optimum interaction, experience sharing and increased trainer and trainee interest and attention. As the

training programmes are some times also defined based on term and duration, majority of the respondents agreed that such training programmes may be of 5-6 days duration.

E. Long term training programme (more than 2 weeks): Thirty seven per cent of the experts suggested a programme duration up to 3 weeks for long term training programme covering theoretical as well as practical aspects on multiple themes and sub themes. This was followed by 27 per cent who suggested up to 2 weeks.

F. Skill shop: Over sixty four per cent of the experts suggested up to 1 week duration for skill shop for in-depth practical exposure. Eighteen per cent suggested 2 weeks duration. A skill shop focuses not only on the 'WHAT' aspects but more importantly the 'HOW' aspects of skill and performance. The skill shop not only generates the recommendations but also lays hands on realizing them in action and hence, requires a longer duration as compared to the workshops.

### **Conclusion**

Both too large and too small a class size can hamper individual learning. The size of the class affects sharing of experiences and learning from other participants who contribute to each other's learning by providing different perspectives. Class size also has a relationship with the application of learning and the quantum of acquisition of learning. Class size would also vary with the objective of the training programme. If the objective is general orientation, refresher training, mass awareness, information sharing or imparting knowledge, class size may be large but if the objective is skill development or the topic is new and of immediate practical application, or diagnostic study is involved, size of the class must be small.

Majority of the experts agree that class size should vary depending on the level of functionaries. Class size suggested is largest in case of Field Functionaries (25-35) followed by Executives (15-20) and then for Thought Leaders (10-15).

All the respondents agreed that the size of the class also has an impact on quality of group discussion or group work. While with a bigger group, handling of ideas becomes difficult and effective participation of all cannot be ensured; with a lesser number there may be lack of generation of ideas. The majority of the experts have suggested a class size of 25-30 for optimum learning and being cost-effective at the same time. Any number less than this would mean higher cost per participant with no proportionate increase in learning.

Regarding duration of training, majority of the experts agree that a longer training duration enhances acquisition of content and learning, as each participant gets more time for discussion, involvement and the opportunity to participate fully in the training

programme resulting in higher learning; obtain in-depth knowledge of the subject, understand theoretical concepts and get practical orientation; clarify doubts, develop necessary skills and avail more time to learn, think, seek answers and finally synthesize the learning, interact with others and build up his/her progress.

However duration must vary with the type of programme and the level and competence of participants. Technical and complex subjects may require more duration, while simple technologies and managerial issues may require less duration to realize, absorb, reflect, react and to act. For skill development, training duration should not be less than one week. While induction training would need one month and more since it is a first time exposure; orientation training would need a week as basic knowledge already exists. An awareness programme may be of a shorter duration. It was a consensus view of the respondents that higher the level of participants lesser the time needed to absorb new concepts.

The above findings indicate that training institutes need to work closely with clients, identify gaps and design training programmes in tune with participants' requirements, ensure optimum participation and enhance trainee satisfaction.

### **Suggestions**

1. The study indicates a class size of 50 and above for seminar, induction and entry level training. An ideal class size of 25-30 for executive training programmes and a smaller number of 15-20 for workshops and skill shops for enhanced learning. A class size of 25-30 in a training programme needs to be ensured also to make up for the cost incurred through the optimization of learning.

2. The study suggested a trainer vs trainee ratio of 1:30 when objective is to impart knowledge or create awareness; and 1:15-20 for skill-based training. The variants of group work and syndicate sessions should be used by trainers wherever the number of participants is large in the programme and the learning objectives require smaller size of the group. However, experts cautioned that the trainers need to be specialized in using right combination of different training methodologies with the superior command on subject matter.

3. Audio Visual aids are equally effective for a large as well as small class size. More than the size of the class, the relevance of quality of audio visual material prepared by trainers is important.

4. In order to have an adequate number of participants the following steps would help the trainer –

a. The programme must be announced sufficiently well in advance (60-90 days).

- b. Objectives of the programme, theme and contents, methodology to be adopted and intended participants, profile of faculty and resource persons must be specified in the opening communication.
- c. Adequate publicity must be ensured through print, visual media, website; announcement letters, leaflets, brochures etc.; highlighting profile of the institution – its objectives and achievements.
- d. Provision for online registration and links to necessary websites need to be communicated.
- e. Training design must be job focused to develop competencies relevant for immediate job requirements and in a problem-solving mode.
- f. Networking with various stakeholders would improve awareness about new projects and programmes, along with sharing the training intervention and research outcomes of the organizations with sponsors.
- g. Workshops and meetings may be conducted for sponsorers and heads of departments and project and Programme Directors.

7. As regards duration of training programmes the study suggests a programme duration of 2-3 days for state heads, 5-6 days for field functionaries for imparting knowledge and up to 10 days if it involves imparting knowledge and skills.

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