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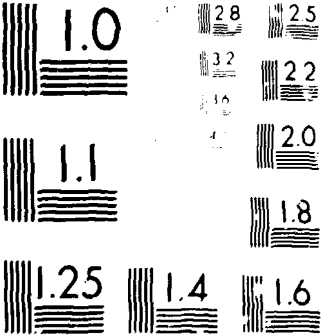

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MANAGEMENT TRAINING

A manual for instructors at the
Industrial Services Centre
in Nepal. DP/NEP/72/007

Based on the work of W. Conacher-Crow,
expert in management training and consultancy

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This manual was prepared by the secretariat of the United Nations Industrial Development Organization (UNIDO) and is based on the work done by W. Conacher-Crow, an expert in management training and consultancy, for the United Nations Development Programme (UNDP) project "Industrial Services Centre" (DP/NEP/72/007), for which UNIDO was the executing agency. The views and opinions expressed are those of the expert and do not necessarily reflect those of the secretariat of UNIDO.

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INTRODUCTION

The aim of this Manual is to instruct in the preparation, presentation, conduct and evaluation of training courses for instructors of the Industrial Service Centre (ISC) in Nepal.

The length of the course should not be less than 72 hours, ideally spread over at least 18 days, which is the minimum time required for an instructor to acquire and practise the necessary skills.

An attempt has been made to cover all aspects of training needs from programme and lesson development to evaluation and follow up, but concentrating on management development. Specific techniques have been discussed and practice sessions included.

The bulk of the contents are in the form of a training course for instructors, based on the following assumptions:

There will be only one full-time tutor

There will not be more than 12 participants

Each participant will be available throughout the training course

Based on this course, it will be possible to design: (a) a series of shorter courses for particular aspects of training; (b) a course intended for use in, say, a particular industry or group of companies; and (c) an extended course.

As training techniques, aids and approaches continue to evolve, this Manual should be periodically updated, preferably by people who have taken the practical training course.

It should also be continually evaluated for its relevance and application to training problems in Nepal, which are likely to alter in both content and difficulty.

I. OBJECTIVES

The first step in planning the training course is to agree on the objectives, which must fit in with those of the National Plan, the general ones of ISC, and those of the training branch.

A. In the context of the National Plan

The industrial policy of the Government of Nepal in the fifth Five-Year Plan is to retain certain areas, such as defence and public welfare, under its own wing and to establish certain industries in which private participation will be possible.

Privileges have been accorded to entrepreneurs based on the nature of the industry, the investment made and the employment generated.

Specific procedures have been laid down to obtain permission to set up a new establishment and to obtain the necessary finance and supply of raw material. Cottage and small-scale industries, as measured by fixed capital investment, are reserved exclusively for the Nepalese, but foreign investment in medium- and large-scale activities is allowed.

Modernization and extension of existing businesses have been foreseen. Specific industries are proposed for different regions to take account of local circumstances. Imports of luxury goods have been restricted. Export trade is to be encouraged and more export promotion activities are planned.

The majority of the larger industrial units in Nepal are Government-owned and administered. There are problems of specialization, security of tenure and accountability.

Many management techniques that are suitable for private industry are unlikely to be as effective in public enterprises that are administered according to Government regulations. Training courses for the administration of public enterprises will require special study and analysis. In accounting, for example, the commercial system of accounts is not in use; therefore, the chief administrator and his subordinates are never in a position to measure either the effects of their actions or their efficiency. In addition, it is not the policy of the Government to retain senior personnel in the same post for extended periods. If such personnel are transferred to similar work, their training will not be wholly wasted but additional instruction may become necessary.

Some participants recruited from public enterprises may require more or different motivation during training because there is no specialization policy, and functional training, which will certainly form the greater part of the management development activities of ISC for several years, provides little impetus to promotion.

Cottage and village industries are very small; many of the units consist of only one or two families. Management training needs in such a situation are likely to be more for individual counselling or consultancy than for the development of suitable training courses.

To summarize the management situation it appears that:

(a) In the public sector, the majority of the administrators are theoretically and academically well qualified. They lack, however, practical experience in management and are not held accountable for their procedures, which were probably established prior to their commencement. They would probably welcome new theories and concepts, but might never be in a position to apply them;

(b) In the private sector, many of the establishments are small and are owner- or family-managed. They may not have had exposure to modern management techniques, and even if they have, they are unlikely to have had the time to work out for themselves how they should be applied, or even if the application is feasible.

It seems evident, in both instances, that the training officer should not rely on textbooks but should have special knowledge and the ability to apply that knowledge to particular problems.

B. Industrial Services Centre

When ISC was established in November 1974 by the Government, its overall objective was "to help the industrial development in Nepal by providing a package of non-banking services necessary for industrial promotion".1/

To achieve this objective, the package of non-banking services was to include:

A techno-economic study for small and medium-scale industries

Management training programmes for people engaged in the management of industrial and related enterprises

Consultancy services for industrial enterprises

Information on viable projects for local and foreign investors

Management and development of all aspects of industrial district operating

Advice to the Government on necessary modifications to its industrial policies

To provide these services, ISC was organized into four divisions:

Industrial Promotion, Planning, Feasibility Studies, Documentation and Publications Division (IPPFSD)

Industrial Extension Services Division (IESD)

Administration and Finance Division (AFD)

Industrial Districts Co-ordination Division (IDCD)

ISC objectives could be restated in the following terms:

To identify opportunity investment areas for industrial development

To find and attract potential investors (entrepreneurs) and provide them with information on the opportunity investment areas

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1/ Industrial Service Centre, An Introduction, 1977.

To provide, manage and develop physical facilities in the industrial districts in which the entrepreneurs can establish activities

To provide the entrepreneurs and others engaged in industrial activities with advice and assistance on technical, managerial, development and operating problems

To provide information to the Government on which governmental industrial policy can be based and maintained in an up-to-date and effective condition.

C. Training branch

The training branch is part of IESD; other branches are project engineering and management consultancy. Each branch is operated separately under a branch chief; all three branch chiefs report direct to the division chief.

Staff are drafted in or out of the branch according to the fluctuation of work. Much time is taken up in administration, especially of external fellowships. No specific routines are evolved to deal with such activities or with arrangements for training courses. Specific responsibilities are not allocated on a permanent basis.

The training officer in ISC needs to know what is going on in management development in Nepal so that he is aware of the available resources for problem solving.

Management training appears to be catered for primarily by the Centre for Economic Development and Administration (CEDA) at Tribhuvan University. According to a report issued in 1974 by the Asian Regional Team for Employment Promotion, the main efforts of CEDA have been directed towards the training of civil servants. Its industrial training has been limited to top- and middle-level managers of a few large industrial enterprises, mainly public factories.

To fulfil the responsibility of ISC to provide management training programmes for people engaged in the management of industrial and related enterprises, the training branch has the following objectives:

To ensure that the training provided is related to actual training needs

To ensure training courses are properly designed, executed and evaluated

To use appropriate methods of training for the particular subjects etc.

To improve the practical content of training based on up-to-date theories applicable to conditions in Nepal

To improve the standard of instruction

To administer training courses in such a fashion as to permit maximum participation

To make the optimum use of training facilities, visual aids etc

To provide participants with individual advice and assistance

To ensure that the ISC training facility makes the maximum contribution to the national well-being

To train instructors who will be able to apply training in their own organizations

To avoid overlap in training activities between ISC and other training institutions

To train ISC staff so that they can make a maximum contribution to the achievement of the objectives of ISC

To establish standards for the application of training courses and the evaluation of their achievements

To train instructors in outlying districts to train local personnel

If the ISC training branch is to achieve its objectives and take a more active part in the actual training process, the following prerequisites must be met:

The specialist nature of the training officer's or consultant's job must be recognized

The contribution that ISC can make to improved management through the training branch must be recognized

Officers with particular attributes, personality, attitudes and skills must be available

The affinity of these officers with members of the consultancy branch must be made clear and fostered

Training (and consultancy) must be recognized as offering career prospects

Training officers must be executive as well as administrative in training activities

The allocation of individual tasks, with specific routines for carrying them out, and the acceptance of individual accountability, must be recognized

There is a need for greater co-ordination of consultancy and management training. Consultants sometimes have to act as instructors. On the other hand, training officers have to be able to use consultancy-type investigations on occasion. They have also to be able to differentiate between problems that can be solved by training and those that cannot.

The allocation of personnel to the training and consultancy branches should be based on the work to be done and the attributes and qualities of the men involved.

D. Other branches

Similar statements of the objectives of other branches could be developed. This could be a theme for a training session in initiation, motivation and integration.

E. Current training course

The objectives of the current training course are:

To determine training branch objectives as related to ISC objectives

To train the personnel of the training branch to make their maximum contribution to the achievement of training branch and ISC objectives

To improve the skills of participants in:

Assessing training needs

Developing training course content relevant to established needs

Documentation and administration of training programmes

Developing effective lesson plans and identifying appropriate training methods

Improving presentation of lessons

Evaluating lesson and course content and the presentation thereof

Instructing, by increasing self-confidence

Using practical and participatory methods of teaching

Planning and scheduling etc.

F. Evaluation

The achievement by the training branch (or any other branch) of its objectives should be evaluated using the following criteria:

Relevance

Content

Presentation

ISC contribution

Individual contribution

Co-operation with other institutions

Methods

Administration

Facilities

Instructor development

Continuity and growth

Follow-up

II. MANAGEMENT TRAINING

A. Definitions

Management training is defined as the systematic and continuous development of the knowledge, skills and attitudes that both the manager and his organization need to achieve their objectives.

Management education denotes theoretical courses that emphasize principles and provide data on practices in order to give a knowledge of management as a basis for the development of courses. Managers may, and certainly should, benefit from continuous, life-long management education, however, for managers who may have several years experience, a more practical approach to management development is sought.

Management development is the planning of the training opportunities and experience for managers at all levels; training is the most important aspect of management development.

The training officers in ISC should be able to analyse a situation, isolate a problem, understand the means required for its solution, and solve it through the management of the organization under study.

B. Training

A major objective of ISC is to prepare and conduct management training programmes for people engaged in the management of industrial and related enterprises. This requires the involvement of successful Nepalese entrepreneurs and managers to gain the confidence of trainees in order to understand their problems and assist them to improve their enterprises. Officials from banks and other institutions should also be involved. Specialized training in banking procedures and management is conducted by the larger banks, for example, the Nepal Rastra Bank, Thapthli, Kathmandu.

The management training branch identifies training needs and arranges training programmes in various parts of the country. The courses cover a wide range of subjects such as financial management, marketing management, philosophy of management, production planning and control, entrepreneurship development, and supervisory skill development.

The Department of Cottage and Village Industries is conducting, in different parts of the country, five management training courses cum seminars to provide basic and practical knowledge on different aspects of the management of cottage, small and handicraft industries.

The Corporation Co-ordination Council (CCC) also conducts seminars from time to time.

Although provision is made for management training at several levels, and for varying purposes, there is no overall management development plan for Nepal. Specifically, there is a lack of knowledge in five major areas:

(a) The companies and enterprises that exist, and their individual and shared training needs, members, areas, levels etc.;

(b) The number of people in Nepal, if any, with specialized knowledge that could be utilized for training others, and the type and amount of training required to turn them into skilled instructors;

(c) The training facilities available, such as lecture and discussion rooms, and their cost and location;

(d) Future training programmes;

(e) Existing co-ordination arrangements to avoid repetition, overlapping etc.

A major element in ISC organization is the emphasis on its role as a national productivity organization. This is exemplified in the statement of ISC objectives in "Industrial Services Centre - An Introduction" published in 1977:

"To advise and suggest methods for modernization, expansion, and to improve productive efficiency of industries;

"To study the performance of industries within the context of the existing industrial policy and to make recommendations to the Government for changes necessary to help industrial growth;

"To undertake research and make case studies on industrial management and to publish its findings in order to help industrialists improve their management systems and policies;

"To conduct industrial management training programmes for people engaged in the management of industrial and related enterprises".

ISC should be problem-oriented, based on studies of the current situation in existing enterprises, and directed to the improvement, expansion and modernization of the entire industrial and industry-related field. There should be no exclusion of public enterprises, private business, regions, functions, systems, techniques or approaches, but unfortunately, this could lead to problems of co-ordination between, say, CEDA and ISC or between Cottage and Village Industries and ICS. However, if ISC were to adopt a co-ordinating as well as an executing role these could be overcome. For example, CEDA and Cottage and Village Industries could concentrate more on training before actual engagement in industry and industry-related activities. ISC, on the other hand, could take responsibility for all management development of those actually employed in business activity. This would provide a means of ensuring uniformity in management approach to particular situations and might ultimately make it easier to introduce and operate commercial management practices and systems in all industry or industry-related activities whether publicly or privately owned.

C. Instructor/training officer

Experience has shown that the contribution training makes to productivity equals, if not surpasses, any other single activity.

The effective training officer must have management knowledge, preferably sufficient to understand problems of teaching in all branches, and possessing specialized knowledge of one or more functions to enable him to prepare lessons and present them. (Lesson plans 1-4 are given at the end of the section.) He must also know thoroughly, and be skilled in applying, all appropriate teaching methods. He must understand how people learn. His skills must include communication, analysis and evaluation, the preparation and presentation of logical arguments, and the ability to construct a training programme based on an analysis of needs and individual training lessons. He should also be able to evaluate participants, other instructors and the effectiveness of his own teaching. He must also understand the Nepal industrial situation, its problems and history and their implications for training.

LESSON PLAN No. 1

Subject: Inauguration and management development in Nepal

Duration: 35 minutes
85 minutes

Method: Introductory talk then lecture with aids

Step	Duration (Mins)	Description	Comments
1	5	Tutor requests chairman to open course	
2	25	Chairman introduces course	Indicate reasons for course and membership selection basis
3	5	Tutor thanks chairman and escorts him to door	
4	75	Tutor lectures on management training definitions: scope limitations, organization in Nepal, the role of ISC and its contribution	
5	10	Questions and answers	Tutor ensures that participants understand the background to the training activities of ISC

LESSON PLAN No. 2

Subject: Objectives of ISC training and the international training course

Duration: 2 hours   **Method:** Introductory talk; Discussion; "Brainstorming"

Step	Duration (Mins)	Description	Comments
1	5	General introduction to course	Reason for the course. Details of membership etc.
2	10	Self identification	Tutor and each participant will give short self history. "Brainstorm". Use flip charts, pens etc.
3	10	An objective defined. (An objective is a target that it is possible to achieve and will stimulate action)	
4	5	Why objectives	Talk. Questions from tutor
5	15	ISC objectives: Objectives of the training branch; Objectives of other branches	Question and answer. Blackboard and chalk
6	15	Evaluation of objective achievement especially the Training Branch	Prepared headings: Management levels regions; Needs based; Public service; Private entrepreneurs etc.
7	15	How to improve performance?	"Brainstorm" Flip charts, pens. Better knowledge of needs; better facilities.
8	10	Training course objectives	Better instructors. Evaluation and follow-up etc.
9	5	Conclusion	Talk
10	30	Exercise in developing individual objectives, e.g. Personal development, domestic contribution to ISC/Nepal etc.	Discussion and review

LESSON PLAN No. 3

Subject: Assessing training needs: regionally: by industry: by unit: for the individual manager

Duration: 2 hours **Method:** Stage by stage investigation of training needs assessment

Step	Duration (Mins)	Description	Comments
1	5	Introduction	D^scription of scope of lesson plan and differences likely to be found. Chalkboard/ flip chart
2	15	The training cycle	Feltboard/chalkboard headings Identify problem Devise remedy Plan application Implement plan Review/measure/evaluate result Analyse feedback Modify training Arrange additional training
3	5	ISC fields of operation	Generalized: Region by industry Particular: Individual enterprise Individual manager
4	5	Problems of collection and analysis of data	
5	10	Specialized comprehensive training and consultancy questionnaire. (Example not essential)	Sp imen blank questionnaire forms 1. To be completed in parts "as and when" 2. To be completed by ISC personnel not companies
6	15	Regional/industry training indicators	14 examples listed in hand-out
7	5	Potential of training consultancy	
8	10	Individual unit indicators	7 list^d in hand-out
9	10	Approach to assessing needs of individual manager	Details in hand-out
10	30	Evaluation: basis and suggested methods. Review and analysis. Feedback	Examples of Evaluation Forms enclosed in Manual
11	10	Summary	

LESSON PLAN No. 4

Subject: The learning process

Duration: 2 hours **Method:** Lecture and discussion

Step	Duration (Mins)	Description	Comments
1	10	Introduction and definition	Chalkboard/flip chart. An instructor does not teach anyone anything
2	15	What does an instructor do in the face of the statement displayed?	Flip chart: "Brainstorm". Attempts to reach conclusion
3	10	Importance of knowing how people learn best	"Presents material in a way that makes it easy for the learner to learn"
4	10	Six conditions to be satisfied if learning is to take place	Visual aids: Motivation; Stimulus/response/reward; Feedback; Participation/practice; Transfer; Perception
5	10	Motivation: Individual variations. Maslow's "Hierarchy of Needs". Note possible irrelevance in developing countries	Needs satisfaction includes physical conditions fatigue etc.
6	10	Stimulus/response/reward: Define each term. Equate reward with reinforcement	Experiments with parrots etc. should be quoted
7	10	Feedback/confirmation: Promptness adds to reinforcement	The learner needs to know how successful he has been
8	10	Participation/practice: Essential for skills	Talking won't help anyone build a better anything
9	10	Transfer: Ability to apply knowledge/skill to actual work	Help by making conditions as close as possible to reality
10	10	Perception: Allows use of knowledge/skill in conditions other than those in which they were acquired. Correct arrangement of teaching material aids perception	Note practice sessions in course
11	15	Summary and questions	

D. The learning process

A knowledge of how people learn helps training personnel to select the most suitable method of teaching.

In An Introductory Course in Teaching and Training Methods for Management Development"[2/] are given six conditions important to learning:

(a) Motivation, which is considered to be the most important. Motives vary from person to person but without them learning is unlikely to take place. Normally, the strength of motive influences learning, but if, for example, the learner becomes too tense, learning is less effective. The need to belong, the need to acquire status, and the need for achievement normally have the most effect on learning.

Important aspects of the satisfaction of needs include comfort (seating, lighting, ventilation etc.), fatigue (the tired student learns with greater difficulty so the time at which a courseis held, or a subject dealt with, is importent), and the need to feel accepted and respected;

(b) Appropriate stimuli, assessment of response, and the existence of a rewarding situation. Experiments may be needed to identify the reward that encourages learning. It may simply consist of a word of commendation or a little personal attention from a training officer;

(c) Confirmation or feedback. To learn effectively, the learner has to know whether he has been successful, i.e. whether he has responded correctly to the stimulus. The instructor can inform him, the reaction of the group may indicate it or the situation may alter. Feedback should be prompt. If it is delayed,

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2/ Management Development Manual No. 36 (Geneva, International Labour Office, 1978).

the learner has to decide what caused the effect and the reinforcing action is weakened.

In some situations it is more effective to give the learner a series of intermediate objectives rather than the final one. The achievement of each reinforces his learning pattern and his motivation to continue the learning process.

Case studies, role playing and discussion methods all provide prompt feedback. So also do business games in which feedback is regularly provided at short intervals. Programmed learning is probably the best example of any since progress is conditioned by correctness of response;

(d) Participation, which means an active response that can be controlled and reinforced. Practice assists in dealing with problems of transfer to the actual work situation, but should not stop with the first effective performance. Learning requires consolidation, and repeating the correct response will achieve this;

(e) Relevance of training to the job to be done. This does not imply that on-the-job training is the ultimate answer to all training problems. However, if there is no relationship between what is being learned and the actual physical situation, the training course will merely have put up extra barriers.

The trainee will be faced with unlearning some habits before learning new ones, and retraining is much more difficult than initial training. For management subjects, if it is not possible to provide practical work identical in nature to the tasks for which training has been introduced, the most helpful methods to facilitate the transfer of learning are business games or simulation, "in-basket" exercises, case studies and role playing;

(f) Perception, which is the ability to recognize, discriminate, relate and select. Perception allows the use of knowledge and skill in conditions that differ from those in which they were acquired. Audio-visual aids, models, symbols, the use of examples and analogies are instances of the use of perception since what is learned from them can be applied to other situations.

Arranging teaching material in a way that makes sense to the learner is another instance of the use of perception. Material may be organized so that it progresses from the known to the unknown and from the simple to the complex, and so that the presentation relates to current tasks.

To influence people's perceptions, material must be within their understanding. An instructor needs to bear in mind that within any group there are individual differences in motivation, attitude, ability, education, ambition, habits, personality, and in many other areas. Wherever practicable, participants from training should conform to a norm, with the smallest possible spread of difference over any of the items mentioned above. There are circumstances in which the group may suffer from diversity and lack of homogeneity. In such a situation, less will be achieved since there will be a much greater need for individual attention.

E. Communication skills

A very large proportion of a manager's time is taken up with communications of one sort or another. Whether he is speaking to a customer on the telephone, reporting to his superior, writing letters to suppliers, instructing his subordinates, negotiating terms with agents or completing export formalities, he is communicating his wishes, thoughts, ideas and so on. One of his most useful qualifications must be communications skill. This skill is no less important to a training officer or consultant who must exchange information and communicate easily with his clients or trainees.

For good communication both parties must understand that the spoken word calls for skill in listening and the written word, skill in reading. In both actions there is implied a need for considerable concentration on the part of the listener and the reader, if real communication is to be established.

Oral

Oral communication is an everyday activity that covers: conversation; discussion; interviews; arguments; lectures; speeches; message transmission; acting; telephone conversations; and sales talks. All these require the same basic activities of preparation; presentation; development or argument; analysis; summary; and repetition.

A good oral communicator must be natural; direct; animated; enthusiastic; emphatic; and concerned that the listener understands and accepts the message. All these qualities are needed to ensure that the listener reacts by showing interest rather than boredom and perplexity, enthusiasm rather than apathy, understanding rather than confusion. (Lesson plan No 5 is given at the end of the section.)

Preparation is almost the same as that covered in the discussions on the lecture or indeed any aspect of training. It needs decisions on the objective, the approach to be adopted, the accumulation and arrangement of the appropriate data, and a plan of presentation.

The plan of presentation should be modified, where necessary, by feedback from the listener. Items that require careful consideration in such a plan are:

(a) Language utilization. The language used should suit the listener and the objective. Simple short sentences are preferable to long. involved ones. Multisyllable words should only be used if no others will serve. Technical terms should be avoided if possible. Jargon and cliches should never be used. Words with more than one meaning should be replaced by those with an unmistakable meaning and, where such words cannot be avoided, care must be taken to ensure that they are properly explained;

(b) Logical arrangement. Listening to the recorded conversation of a group of people will show how difficult it is to understand ideas that are put forward without any attempt being made to present them logically. Themes are picked up and dropped only to be picked up again later. If logical presentation were followed discussion would be much more comprehensible;

(c) Use of the voice. Boredom can be induced in even the most willing listener if ideas are presented monotonously. Voice modulation and clear, deliberate pronunciation should be practised. This helps to emphasize particular points as well as prevent boredom. Some variation in speed of delivery also helps depending on the purpose of the communication and the environment. If a lecture hall is large, delivery must be slowed down otherwise the audience at the rear will not hear clearly. Care should be taken to avoid dropping either pitch or volume at the end of a sentence.

If the listener is present, it can help to provide him with simple visual aids to help him to retain material.

Listening is a corollary to good oral communication. Since oral communication is essentially an exchange, the speaker must be looking for a reaction. Most often this comes in verbal form and the original communicator must become the good listener. This involves concentration, leaving aside for a moment the next thing he wants to say, and considering carefully the information being presented so that when he resumes he can modify, if required, the rest of the presentation he has prepared.

The communicator must also be aware of the need to adhere to the time schedule he has drawn up. On the telephone time is money.

To summarize, the oral communicator needs to possess certain skills and attributes, most of which can be acquired by practise.

Written

Many of the rules that apply to the preparation and presentation of oral communication and written data are similar (Lesson plan No 6 is given at the end of the section) Some are given below.

The order must be logical

There must be an introduction

The main themes should be kept separate and the development of each completed before moving to the next

Reference numbering should be used, if necessary

Short sentences, without parentheses, are preferable

Repetition should only be used to serve a proper purpose

Punctuation must be correct

Simple language should be used

Technical terms and abbreviations must be explained if the text is likely to be read by laymen

Cliches or jargon should be avoided

Written material lacks the urgency of the spoken word. It benefits, however, from the permanency of its presentation, giving the reader the opportunity to study and reread the material until it is fully understood. It can also be edited before being finally presented.

The preparation of written material begins with the collection and classification of the required data. If the objective is, for example, to present a written report on the United Nations Development Programme (UNDP) in Nepal, the first step would be for the author to familiarize himself with any written material on the subject.

This might be followed up by a request for a series of individual interviews with officials of UNDP in Nepal. Much of the data would be unorganized. There might be, for instance, pamphlets on individual United Nations agencies: information on individual projects, on the organization and personnel of UNDP in Kathmandu, and on the relationships between the World Health Organization or the Food and Agriculture Organization of the United Nations and UNDP. This information must then be classified otherwise the report will be undisciplined and disorganized. A simple way of organizing the material is to take a large sheet of paper ruled into wide columns, each of which carries the heading of one aspect or theme of the report. Items should then be in the appropriate columns in order of importance. It should be ensured that there is no repetition.

Then an outline or skeleton of the report can be produced; this must have an introduction, main points and summary. The summary may precede the report or be at the end.

A sample outline on the subject of the United Nations is given below.

<u>Introduction</u>

The reason for the preparation of the report; its planned distribution; comment on information sources.

<u>History of the United Nations</u>

<u>Origin and membership</u>

(Constitution etc. in annexes)

<u>Operating arrangements</u>

General Assembly

Other constituents

<u>Operating agencies</u>

An analysis with full details in an annex

<u>Most important activities</u>

<u>Conclusion</u>

Possible future developments etc.

Other written communications are hand-outs to accompany the sessions in a training course. These should serve as reference material for the participants after the course is over; therefore, they must be accurate, and should incorporate the main points and particularly difficult ones.

It may be useful in some hand-outs to define key terms and list them alphabetically.

If reference is to be made to the text during the session, then the paper must be distributed before the lesson. However, it is best not to distribute hand-outs immediately before the lesson begins because the participants attention will then almost certainly be focused on the written text and not on the instructor.

The interview

Interviewing is one of the most necessary skills of any manager, practically every aspect of his job can involve him in an interview. This is equally applicable to the supervisor on the shop floor, the personnel officer, the training officer, the managing director or the chairman himself. Whenever two individuals meet some aspect of an interview is created.

Like many other skills, interviewing depends on complete understanding of the objective sought, careful preparation, careful and thorough presentation, constant practical application, and a review of results.

There are many sorts of interview: employment, transfer, promotion, disciplinary, counselling, fact finding, training-needs assessment, sales, market research, termination, performance appraisal, goal setting, job definition and evaluation, and so on. Whatever they may be intended to achieve, they have certain characteristics in common.

The environment in which the interview takes place is of paramount importance, no matter what the objective may be. If the purpose of the interview is disciplinary, the setting and arrangement for the interview require careful preparation.

The interview room should be private and the presence of other people avoided unless they are involved in the interview. For example, an interview can be conducted by a group, but in such case, responsibilities should be allocated beforehand otherwise the effectiveness of the interview will be impaired.

Interviews should take place without interruption. Instructions should be given to intercept telephone calls and the interceptor should either deal with the calls or take messages. If a promise has been made to call back, this should be done.

Visitors should be dealt with similarly with courtesy and alacrity. If possible, their needs should be met. If not, follow-up action should be taken.

Reception of the interviewees should be planned, and arrangements made to permit them to attend to personal needs. If they have to wait, suitable accommodation, seating etc. should be provided. If there is likely to be a long delay, up-to-date and relevant reading material should be available. They should be sent instructions on the interview in advance. Any requests for documents or data needed should also be made in advance.

Interviews should be planned. There are two sides to an interview and as the information required should be planned for, so also should the information to be given. If the interview is disciplinary, the actual incident or incidents around which it revolves must be identified. The interviewee's reaction should be obtained, otherwise the meeting is not an interview at all, and its real objective, the need for the transgressor to understand his disciplinary lapse and to change his behaviour, will not be achieved.

If the interview has employed selection as its objective then the information required from the candidates must be defined. This can best be done on the basis of a proper job description, which should indicate the qualifications, skills, experience etc. required. The interviewer should then plan his approach and how he is to record the data obtained in order to make comparisons easier. He must also prepare data to be given to applicants to help them obtain a complete picture of the situation. This should include details of the organization, its policies, payment arrangement, facilities, employee benefits, working conditions, hours of work etc.

Similarly, when the objective of other types of interview has been defined the interviewer must go ahead and prepare a statement not only of the information he requires, but also of the information he has to give in order that the exchange will be complete.

Good interviewing includes:

(a) The proper preparation of interview environment; information to be given and an assessment of that required; documentation; and reception;

(b) The interviewee should be put at ease and made as comfortable as possible as an uneasy interviewee is unlikely to be co-operative. He should be acquainted with the purpose of the interview;

(c) The interviewer should start by confirming known data and providing information; he should attempt to elicit information as conversation rather than questions; and he should encourage the interviewee to volunteer information and to ask questions. In the case of a disciplinary interview, the interviewee should be permitted to make a statement of his own case. If required, information can be checked by dealing with it from different angles;

(d) If possible, the interviewee should be informed of the result of the interview on the spot. Otherwise he should be given fixed timing, which should be kept;

(e) If necessary, the interview should be followed up in writing.

LESSON PLAN No. 5

Subject: Oral communications

Duration: 2 hours

Method: Introduction - qualities of a good communicator

Exercises - Impromptu speach, message transfer etc.

Step	Duration (Mins)	Description	Comments
1	5	Introduction - Definition of communication	
2	5	Four facets of communication: speaking, listening, writing and reading. The latter two are dealt with separately in the exercises	Speaking Listening Writing Reading
3	5	Scope of oral communication	Flip chart and brainstorm Conversation; interviews; discussion; lectures; speeches/orations; telephoning acting; message transmission; arguments
4	5	Basic action needed: preparation, presentation, development, analysis, summary, repetition	Chalkboard list as shown
5	5	Qualities of a good oral communicator	Chalkboard or feltboard Naturalness Conversational directness Animation Enthusiasm Ability to enthuse Concern for acceptance Concern for understanding
6	20	Exercise in message transfer Original message was: "Mr. Lunden is a Swede" (Swedish) "A Swede is a vegetable" "Men eat swedes" "Can we eat Mr. Lunden" (Items in brackets are not included in message)	Message relayed quickly by tutor to first participant. Each participant in turn passes it to the next. On return to their places, each participant writes down the message he gave Each participant starting with the last reads out what he has written and passed on

7	15	Discussion on message transfer	Points to be made No repetition was allowed Need for clarity of speech Need for directed listening Need for using words which cannot be misunderstood e.g. Swede has two meanings
8	40	Exercise in public speaking	Tutor prepares list of subjects Participants have 5 minutes for preparation and 3 minutes to make remarks on the subject Group comments in a constructive way
9	15	Discussion of problems	Need for logical collection of points to be made Control or constraint on number of points that can be made Simple wording Simple construction
10	5	Summary	Tutor summarizes

LESSON PLAN No. 6

Subject: Written communication

Duration: 2 hours **Method:** Talk: discussion: exercise in report preparation

Step	Duration (Mins)	Description	Comments
1	5	Introduction - Comparison of wirtten and spoken communication	Visual aids Feltboards and signs Written: Formal; Less urgency; Permanency; Repetition; Construction Spoken: Informal; Personal character; More urgent
2	10	Preparation: collection of data	Specimen approach to report on UNDP Acquire written material Seek interviews Approach agencies
3	10	Classification by subject	Columnar large sheet of paper with headings History | Agencies | Activity | Finance
4	5	Classification by importance	
5	10	Presentation - Outline report	
6	10	- Development	
7	10	Hand-outs - Reference material for participants	INCLUDE Definitions (especially technical terms) Explanations Examples All main points Special hints
8	5	- Timing	
9	10	Summary and general rules for all written material	Order Introduction Main themes Referring Short sentences Repetition if needed Punctuation Simplicity Avoid words with more than one meaning

10	10	Discussion and questions	
11	5	Allocation of exercise task	Prepare an outline. Report on any aspect of individual's present work
12	30	Exercise	Tutor should check that each individual understands what he is asked to do
13		Collect exercises for review and comment	

III. PROGRAMME PLANNING

Prior to programme planning, the following action should be taken:

Assess the training needs

Establish the trainee population

Establish the objectives

Decide on administrative details such as location and duration of the course.

Programme planning is concerned with content; sequence: method; and duration. (The duration of lessons should remain flexible since interruptions do occur.)

Other aspects also require careful consideration, for instance, the cost of the programme. Apart from the cost of preparations, external speakers or contributors, and so on, there are also the costs of the errors that trainees might make if they are not properly trained; of the raw material spoiled or faulty work produced (particularly in operator or technician training); and of delays in completing work satisfactorily if enough skilled labour etc. is not available.

The objectives of the programme should always be kept in mind when planning the training schedule. The programme planner must be completely aware of:

(a) Exactly who the programme is being prepared for;

(b) What the trainee will be expected to achieve at each stage of the programme;

(c) Whether the performance will be checked in the classroom or at work;

(d) What standard of achievement will be required and how it will be tested, for example, a written test will not show the acquisition of skills.

The training facilities should be perfect, but as this condition can seldom, if ever, be met the constraints under which the programme will operate must be taken into account. To ensure that the limitations of environment, equipment etc. do not force the quality of the programme too low, an attempt should be made first to plan a schedule for the ideal situation, then to consider modifications one by one. (Lesson plans 7 and 8 are given at the end of the section.)

The availability of satisfactory instructors affects the training schedule. If, for instance, there is no instructor available who has been adequately trained in methods time measurement, the possibility of including any session on this subject is not very good. If, for some subjects, the details of a training lesson are available, a really skilled instructor of some other subject could teach it.

In order to establish the logical order of development of the various subjects, it is necessary to specify the knowledge to be acquired and the management skills to be learned. A good way to start is to list both knowledge and skills in the logical order of learning and then to consider both lists with a view to co-ordinating them. When one list has been made it should be checked to see that, so far as practicable, theory keeps pace with the related skills, and that the total picture makes sense from the participants' point of view.

There are three major ways of structuring a training programme:

(a) A broad outline should be made and in-depth training given in one subject at a time;

(b) The whole programme should be repeated with greater penetration each time. (This method is appropriate when each part is so complex that relationships between parts may be obscured if the parts are dealt with separately in depth.);

(c) Each item or subject should be dealt with separately and then brought together at the end. (This method should be used if each component is complete in itself as it helps the trainee to find out for himself the relationships between the various components.)

The trainee must have sufficient time to learn, but too much time leads to boredom and extra cost.

Timing should be sufficiently flexible to cater for the varying speeds at which trainees learn and instructors teach, and the varying daily conditions.

The ability of the trainees generally determines the rate of instruction, with some exceptions. For instance, trainees who have not been in a training situation for a considerable time will be slower. Also, a need to consolidate what has already been learned may slow the rate of learning.

The programme should always challenge the participants, and if the speed of the job for which they are training is considerable, the training programme should reflect this urgency.

Instruction must be at the right level, and the instructor should check this by performance tasks, tests and questions.

One of the most important items in a training programme is the teaching method. When choosing it, there are four aspects to be considered:

(a) The objective;

(b) The type of trainee. For example, retraining men who have had years of experience will not be easily achieved by demonstration and formal talks. To a large extent they have to convince themselves of the benefits of the new ideas or methods. If, therefore, immediate interest can be aroused there will be a greater possibility of success. Young people also, who may have joined on their first job, are likely to respond better if the atmosphere of the schoolroom, which they have just left, can be forgotten;

(c) The timing, which is of considerable importance. Morning is usually the best time to learn. Difficult learning concepts are better not presented when the trainees are hungry, tired, thirsty or have just had a heavy meal. After a meal-break something active is likely to be better received than, say, a lecture or a film;

(d) The instructor.

LESSON PLAN No. 7

Subject: Programme planning

Duration: 2 hours

Method: Stage by stage description of planning a programme

Step	Duration (Mins)	Description	Comments
1	5	Introduction, prior action required	Feltboard and displays Assessing training needs Estimating training population Establishing objectives Establishing location Setting duration
2	15	Scope of programme planning	Displays: Content Sequence Technique/method Time allocation
3	10	Constraints exercised by training facilities on ideal programme	Chalkboard or flip chart Training facilities
4	10	Cost constraints	Cost
5	10	Availability of appropriate instructors	Instructors
6	15	Manuals and written material	Manuals/hand-outs Case studies Visual aids Models
7	15	Specification of knowledge and skills to be acquired	Knowledge content, skills List in logical order List separately Co-ordinate in one list
8	15	Three major ways to structure a programme	Broad outline then detail Repetition of whole with greater penetration each time (Complex subject)
9	10	Timing and rate of progress	Individual items, then all together
10	10	Choosing the method - constraints	Objective Trainee Variety Time of day Instructor
11	5	Summary	

LESSON PLAN No. 8

Subject: Programme planning

Duration: 2 hours

Method: Presentation by participants of programme drawn up by them

Step	Duration (Mins)	Description	Comments
1	10	Introduction emphasizing the importance of a well-developed programme designed in a logical sequence with suitable objectives etc.	Tutor opens, then each participant explains his programme plan, methods to be adopted, objectives etc.
2		Each participant allowed 15 minutes to describe programme and answer questions	
3		Group discussion on programmes, problems encountered etc. Tutor comments individually	

A Identification of needs

Training forms a continuous cycle of activity as follows:

Identify the problem

Devise a solution

Plan the application of the solution

Implement the plan

Review or evaluate the result, and reconsider the problem

Analyse feedback

Arrange any further training needed

The ISC training branch should have two major training areas. First, a region or particular group of enterprises all in the same industry, e.g. textiles, with each enterprise requiring individual attention. Secondly, the enterprise within which the training has to operate, and the individual - manager, supervisor, technician or operator - from whom better results are expected.

When analysing the situation, the training officer cannot concentrate purely on the training aspect. He must take a more comprehensive view - people and things combined to achieve the desired level of performance. This is a particularly difficult approach when dealing with a regional or industry-wide problem. Conditions vary from enterprise to enterprise so much that the establishment of standards by which to judge performance will be very difficult. Nevertheless, it is just as necessary to establish what the problems are under these circumstances as it is to do so when assessing the problems of an individual manager.

A questionnaire suitable for both assessing training needs and identifying consultancy opportunities has been designed for ISC (annex I). It should be used to build up a body of information not possessed by any other institution. Its full use would be time-consuming and costly, but since it is differentiated in functional areas, it could be partly utilized. Every time a member of ISC called on a company, he could check beforehand whether there was a file on the enterprise concerned: if so, he could familiarize himself with the data already available: if not, he could take a questionnaire with him and use it to start a file.

For a regional training course, discussions with the chief executive or top manager would be fruitful. Once the correct relationship has been established between the training officer and the manager, the interviewing skill that every good training officer, or consultant, should have, should be used to elicit such information as:

Whether he is satisfied with the performance of his management team

The type of manager he is

The organizational structure of the enterprise

The type of problem experienced

The policies of the enterprise, and whether they work in practice

The control exercised in the organization

The most profitable department

How he recruits his managers and their stability

His attitude to training

Whether the enterprise appraises performance

growth plans for the enterprise

In addition, there may be feedback from local government offices and institutions.

Comparison between different enterprises will indicate whether there are common problems. If so, a regional training programme is probably justified. More specific problems could be isolated in further interviews. Not until this had been done can further action be justified.

If an enterprise has problems which training should help to solve, and is big enough, further visits could be made to diagnose what is wrong and, providing the ISC training branch has the time and suitable personnel, to design and implement a specialized training programme.

Training needs within a particular enterprise are indicated by:

More absenteeism in one particular section, and the overall level higher than is normally acceptable

A high labour turnover

A lack of adherance to timing schedules and programmes

Lack of job definition and responsibility

Poor performance

Careless and slipshod housekeeping and personal appearance

Lack of information channels between levels

There may be other indicators according to the environment and circumstances. A full analysis of the findings is required for which it may be necessary to interview each manager individually, and to offset the findings from these interviews against the information already collected.

A training officer may be asked to advise on development for an individual manager. This would normally involve gathering the information already described and in addition:

(a) Preparing a job description, if one is not already available, and having it agreed, preferably by both the boss and the individual concerned;

(b) Establishing the difference between the current standard of performance and the performance of the manager owing to the difference in knowledge, skills, and a lack of facilities and capacity. The differences that can be resolved by training and those that cannot should be established.

Thereafter the training officer should recommend action designed to wipe out those differences so that the manager concerned can produce a standard performance.

In every case, the next step is to evaluate what has been achieved. This includes the collection of data on the situation as it existed before training (or indeed any type of consultancy activity), and comparing them with the situation after training. The only justification for continued activity is an improvement of performance. The manager's superiors will recognize an improvement in his work; for instance, he may use his initiative instead of always referring problems to his superiors. Also, relationships with subordinates may improve.

Evaluation is essential for improvement, and may take several forms; for instance, opinions expressed during discussions on the work. The three main areas that should be subject to continual scrutiny are:

(a) The programme. Does it meet the needs of the participants? Has it developed in a logical, understandable way? Was the proportion of practical involvement sufficient? And so on. A sample training evaluation form is given in annex II.A. This evaluation needs to be made only once for each course. Participants cannot be forced to complete such a form but if a rapport has been established between the instructing staff and the participants, some attempt will be made to complete it. It does not have to be signed;

(b) Each lesson. (A sample form suitable for the assessment of individual lessons is given in annex II.B.) The remarks made with regard to the programme evaluation apply here also;

(c) The instructor. Evaluation of each instructor is as essential for the continuous development of the ISC training branch as is evaluation of the programme and the individual sessions. (A sample evaluation form, which should be the responsibility of the programme director to complete, is given in annex II.C.)

The completion of such evaluation forms is not sufficient, in itself, to improve the quality of ISC training activities. The evaluations should be analysed and the results used to improve future courses. Such evaluation should never be received as a negative criticism but rather as a stimulus to remedial action. Discussions should be held, and attended by all members of the branch and such instructors as may be available. Interviews with the instructors might be called for.

In many instances, feedback on the effects of training can be obtained from follow-up visits to participants at their place of employment. Any real improvement of behaviour that has taken place can be seen there, and assistance given with the application of concepts and theory to the practical day-to-day work issues. From such visits can come much teaching material and experience in the pressures of the commercial and industrial fields.

B. Organization of courses and conferences 3/

There are four common factors in the various activities that ISC will be required to organize: an audience, an objective, a speaker, and a place.

On the one hand, there is nothing complicated or difficult about the organization of courses and conferences. Indeed, there may not be anything that could not be described as common sense. On the other hand, many factors are frequently neglected. However enthusiastic the audience, however good the speakers, objectives are not achieved because they are considered unimportant.

The suggestions made are not applicable to every situation, but are intended to cover a whole range of possible situations. (Lesson plan No. 9 is given at the end of the section.)

Beware of over-organizing which is almost as bad as the opposite. An atmosphere of quiet efficiency should be the aim.

3/ Adapted from a paper by Rex Strayton, Associate Professor of Personnel Administration, International Centre for Advanced Technical and Vocational Training, Turin.

The audience

The courses, conferences, seminars etc., with which the training branch is concerned are organized for the benefit of the participants, and this must be kept in mind at all times.

Of the five common factors mentioned above, the most important is the audience. They are the ones who pay the fees, give their time, come to learn, and change their attitudes. In their hands rests the reputation of an organizer and, by implication, the reputation of the organization represented.

What does the audience expect from the organizer?

Publicity

Publicity material should be simple, attractive and well-presented. If not, it is probable that it will go straight from the in-tray to the waste-paper basket. However, it need not necessarily be expensive. The outside cover should attract people who see it lying around to pick it up and read it.

It will help to sell the programme if the pamphlet describes briefly the speakers and their qualifications. It should clearly state what the course is about, and for whom it is intended. The titles of the various sessions should be given, with subtitles, if necessary, for clarification, and should give a true indication of the content of the session; they should not be changed or dressed up in order to sound more impressive. There is nothing more annoying than to go to a course or conference expecting one thing and getting something entirely different. Nothing will destroy the reputation of the lecturer and the institute represented more quickly than this type of deception.

Notice

The length of notice given depends, to some extent, upon the customs of the country, but clearly, whatever the country, if the first notice reaches a participant two days or so before the meeting it is unlikely he will attend.

The length of notice appropriate for an activity tends to vary with the level of the activity, the distance the participants have to travel and the cost. For international conferences the date may be announced many months in advance. Many institutions that are engaged full-time in the organization of training activities publish a programme for a complete calendar year. If the advance notice is sent out more than three weeks before the actual date of the activity, a remainder may have to be sent.

Reminder

If a series of activities is being organized over months, a reminder sheet could be printed. This is a piece of paper, the same width as a page of a diary, and of differing lengths. The sheet is perforated horizontally into 10 or 12 sections, each section being a specific reminder, e.g., "Lecture on training next week". The back of the sheet is adhesive and the various reminders can be separated and stuck onto appropriate pages in the diary.

Make acceptance easy by incorporating a "tear-off" reply coupon in the pamphlet.

The objective

An organizer should approach his task in four steps.

Objective

What exactly is the organizer trying to achieve: to inform, to persuade, to amuse, to explain, to advise, to exhort, to investigate or to teach a skill?

Factors

What are the factors affecting the objective?

Who else is planning or has already carried out activities in this field - what type of activity, and with what results?

What is the demand for this type of activity - from what type and class of people?

How many people are likely to be interested, and where is this information obtained?

What are they likely to already know, feel and think about this subject?

How much will they be prepared to pay?

How much time will they be prepared to devote to this, and at what time of the day?

Alternatives

What are the possible courses of action open to the organizer?

Plan

Which of these alternatives will be adopted?

If the plan has to be sold to other people, such as top management, it may be helpful to present the proposal in the following form:

Objective

Plan

Advantages

Cost

Once the plan is drawn up, a planning and control sheet should be prepared. If other departments have to co-operate in this activity, it will have to be carefully co-ordinated. Adequate notice should be given and they should be thanked for their help. The master planning and control sheet should be used for allocating initial responsibilities, and for controlling the preparations.

If the activity being planned is not just a single lecture but involves a number of sessions, then it should be remembered that the first and last sessions are vital. The series must begin with an impact and end on a high note. Many training activities do not conclude, they just stop or fizzle out, or else they end with a post-mortem. This should be avoided if possible, and a final session arranged that is forward-looking to give the participants some indication of where they go from there.

<u>The speaker</u>

Two aspects are contained in this heading: (a) What the speaker expects from the organizer; and (b) What the organizer expects from the speaker.

The speaker should be given a good briefing on, for example:

The sort of audience to expect, and its size

The objective of the programme

What the audience already knows, feels, and thinks about the subject

The subjects of any other speakers

The date, time, place of the meeting, and travelling instructions

The time available

The organizer should:

Be at the meeting place ahead of time to receive the lecturer

Introduce him adequately

Thank him at the end

Inquire about any expenses he may have incurred in connection with his talk, and see him off the premises

Interruptions

The first 10 or 15 minutes are among the most important of the whole session, during them the speaker is trying to establish contact with the audience and the audience is weighing up the speaker. Once the starting time has been fixed, a certain grace period should be allowed, then the door closed, and the lecture started. No one should be allowed to enter during the first 15 minutes of the lecture. Then any late comers can enter together, and the speaker can make his first intermediate summary - which is a good thing to do anyway.

Notices "Conference in progress" should be displayed at strategic points.

What is expected of the speaker

If it is a formal lecture the speaker should be persuaded to remain standing. If it is an informal discussion, it is not only permissible, but desirable for him to sit down.

He should be dissuaded from reading a prepared text.

The organizer should attempt to persuade him to use appropriate audio-visual aids, and should offer help and advice in advance.

He should be warned of the common error of including in the session more material than can reasonably be assimilated in the time available. The saturation point in the lecture, however good the speaker, tends to be reached after 20 minutes as people forget quickly.

It should be decided whether smoki is to be allowed or not. If so, ashtrays should be provided. If not, readable, conspicuous "No Smoking" notices should be posted.

The audience should be informed at the beginning if summaries of the lectures are to be distributed or not so that they know whether to take notes.

A list of the delegates and the organizations they represent should be prepared, and copies of it made available at the entrance to the lecture room.

The lecture should begin and end punctually.

It should be ensured that the time allocated for questions and discussions does not disappear, no matter what else has to be curtailed.

If the activity being organized consists of several sessions, name cards for the tables or lapel badges for the participants may be useful. If lapel badges are used, the sort that can be reused should be chosen, and the largest and thickest letters possible used as typewritten labels are not usually satisfactory. The names of the delegates should be correctly spelled as this is often a sensitive point.

Date, time, place and travelling instructions should all be included in the pamphlet, and care should be taken that they are correct. A small street map may be added showing how to get to the meeting place if participants are not familiar with the location.

If a large number of courses, conferences etc. have to be organized, a standard programme cover may be considered. This can incorporate the basic information that does not change in the short run: name of organization, officials, telephone numbers, address plus a map inside the back page. Then, in connection with each separate activity, an "insert" should be prepared and stapled inside the cover. It is a help to the participant if the document is immediately recognizable as a programme from a particular institute. It is also better publicity.

At the meeting

The impression must be given, right at the start, that the audience has been expected and arrangements made. This is not a question of efficiency, but of simple courtesy.

If the meeting room is in a large building, such as a university, the hall porter should know how to direct people as they arrive. If there is no hall porter, a notice should be placed in a prominent position inside the main entrance.

Adequate arrangements should be made for coats and lavatories, and notices put up if necessary.

The most comfortable chairs available should be obtained; concentration is diminished if the body is uncomfortable.

The organizer should not be afraid of telling the speaker exactly what is wanted of him. All too often speakers have simply been invited to "Come and talk about ...", with no further briefing.

Whether the speaker should smoke while lecturing is debatable. In the opinion of the writer, a speaker should not smoke while delivering a formal lecture. If he later sits down and conducts an informal discussion, and everyone else is smoking, then naturally he may smoke too. However, the custom of the country should always be considered.

The lecture room

Often there is no choice of lecture room. The organizer should get the best he can with the resources available. He should visit the room in advance and familiarize himself with its layout and such facilities as windows, cloakrooms, furniture, heating, lavatories, layout and power sockets.

He should plan how to use it.

In any hand-out on audio-visual aids there are detailed recommendations on how a room should be prepared for projection: the size, type and position of the screen, position of the projector and loudspeakers etc. The organizer should be familiar with these recommendations.

The chairs should be staggered so that they are not directly behind those of the row in front, and possibly arranged in curved rows rather than the traditional straight lines. For a formal training course with 10 or 20 participants, an open-square or a "V" formation may be preferred. The advantage of a centre aisle should be considered, especially if there is a projector.

The basic necessities should be available: lecterns, pointers, ashtrays etc., and the check lists, given below, show how to prepare a list of these items.

The platform should not be crowded with organizers and administrators. If there is to be a projection, the chairman will probably wish to leave the platform after introducing the speaker.

Any organizers who may have to leave during the lecture if an emergency arises should sit at the back near the door so that they can leave without creating a disturbance.

C. Check lists [4]

The check lists in this section are drawn to cover the organization of a fairly large and important conference. For this reason, not all the items listed will be needed for small conferences, but it is better to work from comprehensive lists and ignore any unwanted features than to use shorter lists with the risk of missing some essential items.

The check lists are presented in the order in which they will be required, starting with the preliminary planning stage and working through to after the conference stage. Many of the items occur more than once in the lists for the different stages; these are items that need checking more than once.

PRELIMINARY PLANNING

Check list No. 1

(12 weeks ahead)

Main subject of conference chosen

Purpose of conference defined

Topics for each session decided

Selection of speakers

Types of participant required decided

Method of selecting participants decided

Tentative date and reserve speakers selected

Chairman and inaugurator chosen, and reserves

Estimate of cost prepared

Venue selected

Duration and timing decided

Number of participants decided

Sponsors chosen

Invitation letter and/or brochure drafted

4/ Adapted from Operating Manual No. 2 of the National Productivity Council, New Delhi, India.

Check list No. 2

(10 weeks ahead)

Invitations to speakers, inaugurator and chairman sent

Tentative arrangements for meeting hall made

(8 weeks ahead)

Agreement of sponsor to all 14 items on check list No. 1

Agreement reached on who will work out details

Agreement reached on who will make arrangements

Agreement reached on who will send out invitations

Agreement reached on who will invite speakers and inaugurator

Fees decided

Arrangement for collecting fees decided

Outline of general arrangements decided

(6 weeks ahead)

Replies from speakers received, list finalized

Invitations to participants circulated

Speakers asked for details of any illustrations

Speakers asked to submit advance copies of lectures (if appropriate)

(4 weeks ahead)

Gauge response. If poor, initiate programme of personal contacts

Firm arrangements for meeting hall made (see check list No. 3)

Invitations to special invitees sent

Background displays and exhibitions decided

Films and projection equipment requisitioned

Initiate "other arrangements" (see check list No. 4)

(2 weeks ahead)

Bibliography prepared

Final timings decided, final brochure and programme drafted

Speakers' charts and illustrations in preparation

CONFERENCE HALL ARRANGEMENTS

Check list No. 3

Seating arrangements, comfortable chairs

Platform, platform seats

Ashtrays

Press bench

Lighting

Ventilation, fans

Projector stand, socket, voltage, current, blackout, screen

Drinking water arrangements

Toilet facilities

Clock in meeting hall

Arrangements for meals and refreshments

OTHER ARRANGEMENTS

Check list No. 4

Press representation

Microphones/loudspeakers and standby battery

Conference badges

Advance summaries of speakers' talks

Any other hand-outs

Direction signs, motorists' signals

Blackboard and accessories

Any other platform display apparatus

Charts and illustrations needed for speeches

Background displays, exhibitions, posters, photographs

Arrange secretarial desk

Notepaper, pencils

Transport arrangements

THE WEEK PRECEDING THE CONFERENCE

Check list No. 5

Send reminders/invitations/final programme to participants

Send reminders to press

Arrange advertisements in the press

Send reminders to inaugurators/chairman/speakers and special guests stating transport and accommodation arrangements

Check with manager of hall arrangements for conference room and refreshments

Check arrival of all literature

Check arrival of films and film equipment

Prepare any hand-outs/summaries/leaflets

Check arrival of conference badges

Make arrangements for secretarial desk

Prepare cards with speakers' names

Check availability of blackboard and display apparatus

Check any background displays/exhibitions/leaflet racks

Get a stock of inquiry forms

If response still poor, make personal contacts

Make transport arrangements

Check that microphone/loudspeaker arrangements are OK

Check and confirm accommodation arrangements

Check any factory visits or associated activities

Make arrangements for vote of thanks

Prepare standby address in case a speaker fails to arrive

Prepare a Who's Who

Prepare list of addresses, telephone numbers; get timetables

Make arrangements for photographs

Get First-Aid Box

Make arrangements for checking and approving press releases

DAY BEFORE THE CONFERENCE

Check list No. 6

Check:

Platform arrangements

Blackboard, chalk, duster, ruler

All charts/illustrations and methods of fixing

Press bench arrangements

Toilet facilities

Lighting, ventilation, fans, general noise level

All posters, exhibition material, leaflet racks, literature displays

Film arrangements, films, films previewed, projector, projectionist, projector spares, screen, loudspeakers, black-out, voltage, socket and plug, converter, if DC, are all tested

Arrangements for meals/refreshments

Arrangements for water

Arrangements for secretarial desk

List of addresses, telephone numbers, timetables

Arrangements for collecting fees

Make arrangements for:

Cleaning, emptying ashtrays during break

Welcoming inaugurator and special guests

Recording speeches, discussions

Check that:

Direction signs, motorists' signals have been arranged

First-Aid Box is available

Standby arrangements have been made in case a speaker fails to turn up

Conference badges are ready

Chairman's name-card is ready

Speakers' name-cards are ready

Notepaper and pencils are ready for participants

Pencil sharpening arrangements have been made

All transport arrangements have been made

All accommodation arrangements have been made

Press invitations have been issued

Vote of thanks has been arranged

Arrangements for taking photographs have been made

ON THE DAY

Check list No. 7

(Before the conference starts)

Check:

- Direction signs, motorists' signals
- Seating for arrangement, comfort
- Platform arrangements
- Blackboard, chalk, duster, ruler
- Any other platform display apparatus
- Posters, exhibition material
- All charts/illustrations to be used by speakers, and method of fixing
- Display of leaflets, booklets
- Press bench, enough chairs, pencils, cigarettes, ashtrays
- Lighting
- Ventilation, fans
- Water arrangements
- Secretarial desk, list of addresses, telephone numbers, inquiry forms, pencil sharpeners, stenotypists, timetables
- Arrangements for clearing up during breaks

Check that:

- Films, films previewed, projector, projectionist, projector spares, screen, loudspeakers, black-out, lights control, spare reel, voltage, socket and plug are all tested
- Speakers' name-cards are on hand
- Conference badges are on hand
- Literature for distribution to participants, advance copies of Who's Who, brochures, advance speech copies, pencils and notepaper are on hand
- Standby battery is provided
- Daily allowance money is ready, make arrangements for paying out
- Chairman's brief is at hand
- There are sufficient ashtrays
- Transport arrangements are working

Initiate arrangements for introducing speakers to each other

Initiate arrangements for recording names of participants

Initiate arrangements for issue

Arrange for attendant to expose charts

Test microphone/loudspeaker equipment

Arrange signalling system for volume control

Check list No. 8

(At the beginning of the conference)

Check that:

Reception arrangements are working well

Recording of names is working well

Issuance of badges if proceeding properly

Issuance of literature is OK

Hand brief to chairman

If small conference, prepare name and place schedule

Check list No. 9

(During the conference)

Check:

Refreshment arrangements

Clearing of ashtrays etc. during breaks

That all can hear, and that the volume of sound is controlled

Arrangements for typing and checking press reports

Functioning of ventilation

Proposer of vote of thanks has been briefed

At small conference, hand name and place schedule to chairman

Exhibit telegrams, messages

Check list No. 10

(At the end of the conference)

Check that transport arrangements for participants are OK

Farewell tea for speakers and main guests

Release of checked and approved reports same day to press

Return to safekeeping Centre's literature and all equipment

Check list No. 11

(After the conference)

Hold post-mortem; make notes

Write letters of thanks to speakers, chairman etc.

Send short report to headquarters

Edit speeches and points from discussions; prepare summaries

Publish selections for edited versions

Prepare list of participants

Send conference summaries to participants, if appropriate

Clear all bills; determine final cost

Prepare record file

Initiate follow-up action

The individual lesson

After the programme as a whole has been developed and specific themes and subjects allocated for presentation, it is necessary to consider the details of each session. In many respects, this requires as much or even more care than designing the overall programme. (Lesson plans 10 and 11 are given at the end of the section.)

The items taught, whether knowledge or skills, fall into three groups. In the first group are those items of such importance that the trainee could not do his job without them, for instance, the current situation in Nepal. These items must be included in the programme at all costs. If they include acquiring skills, then practice time must be incorporated in the lesson. For example, should interviewing be an essential skill then the participants must practise it. Only in this way can they appreciate the importance of the skill, and even more important, begin to acquire it.

In the second group are those items that should be included in the programme if practicable, such as elaboration of the basic items in the first class. If the programme has to be modified, any items to be omitted must come from either the third or second group, never the first.

In the third group are items that should only be taught if time permits. Such items are likely to be general as, for example, the history of the development of management training throughout the world.

particularly difficult aspect of lesson planning is the breakdown of the time available. This depends on the importance of each item and on the instructor's estimate of the learning time required by the participants. This estimate should be based on (a) the time required by the instructor to present, analyse, explain and demonstrate a particular point and (b) the time that participants require to understand the matter taught. On these bases, the instructor can decide how many items to include from the second and third groups once he is certain that all priority items can be adequately dealt with.

To plan a session, the instructor must first collect adequate teaching material including information, exercises (if required), problems, illustrations, visual aids, and demonstrations. He should then prepare his lesson plan. This consists of detailed instructions to himself on the procedure to be adopted during the lesson, the time to be allocated to each item, and the material to be used. The sequence should adhere to the principles of learning: from the simple to the complex; from known to unknown material; checks on learning progress, reinforcement and so on. The lesson plan may also include special instructions on the layout of the classroom or on other items such as work samples (in the case of operator training).

Before the session begins, the classroom arrangements must be checked so that the instructor is sure that all his teaching materials are available and that no problems arise that should have been foreseen. For example, if a film is to be shown then it should be ensured that the room can be blacked out.

Some notes on the actual operation of the lesson are as follows:

The group should be informed of the subject to be studied by either an oral or written announcement.

The subject should be related to the programme as a whole and, if pertinent, to what has gone before.

The introduction should be interesting and, if possible, should motivate the trainee to learn.

The lesson plan should be used as a guide.

Questions should be asked to check progress.

The group should be informed whether to take notes. Note-taking prevents undivided attention. On the other hand, if no notes are to be taken, hand-outs must be comprehensive enough to act as a reference sheet.

If reference will be made during the lesson to hand-outs, then they must be distributed before the class starts. If not, it is probably better to distribute them when the class finishes.

Repetition halps retention so progress should be reviewed, from time to time, and what has been done, summarized.

At the end of the lesson, the main items should be recapitulated, and whenever possible, comprehension checked by questions. When wrong answers reveal misunderstanding, the point should be repeated.

Questions and comments should be invited (for which the lesson plan should have made provision) and helpful answers given. If questions reveal misunderstanding, a recapitulation should be done without tactlessly revealing the lack of understanding.

After the lesson is over, the lesson plan should be reviewed to check its effectiveness and modifications made, if necessary.

LESSON PLAN No. 9

Subject: Course administration

Duration: 2 hours   Method: Group discussion interested with talks on main points

Step	Duration (Mins)	Description	Comments
1	5	Introduction	Tutor recalls that one of the essentials for successful training is good administration
2	45	Using the experience of participants in other training courses, both inside and outside Nepal, to establish what is meant by course administration	Establishing needs Recruitment Reception Facilities Programme planning Lesson development Visual aids Planning and control (charting etc.)
3	45	Individual responsibilities	Course director Recording Cleanliness Timekeeping
		Hand out check lists. Discuss possible use of speaker's check list	Check lists Procedural instructions Hand-outs Name-cards Visual aids Seating Photographs Ventilation Transport Evaluation Refreshments Stationery
4	10	Action after course/ conference	Evaluation conference Review material Letters
5	15	Summary and questions	Accounts Publicity Follow up

LESSON PLAN No. 10

Subject: The individual lesson

Duration: 2 hours

Method: Stage by stage presentation of development of individual lesson

Step	Duration (Mins)	Description	Comments
1	5	Introduction. Tutor introduces concept of learning to prepare an individual lesson by being conducted stage by stage through the various aspects of actual preparation	Use enlarged version of lesson plan
2		Three classifications of knowledge or skill	Must) have Should) or Helpful to) know
3		Collection of data under these heads	
4		"Must" items, include at all costs	Acquisition of skills needs time for practise Knowledge items need time for repetition and recapitulation
5		Decide on relative importance and time allocations	How long to present How long to learn/acquire Depend on instructor's skill, complexity, level of existing knowledge/skill
6		Decide on method. This depends on objective, subject, facilities, effectiveness etc.	
7		Draw up lesson plan	Include special instructions in comments column on visual aids: special requirements; layout
8		Check over teaching materials and ensure they are complete	
9		Check your approach against the notes given in the hand-out	Give exercise details Preparation of a lesson plan on one aspect of current job

LESSON PLAN No. 11

Subject: The individual lesson (exercise)

Duration: 2 hours Method: Individual participants present lesson plan

Step	Duration (Mins)	Description	Comments
1	5	Instructor describes procedure. Each participant presents details of the lesson plan he has drawn up for a particular aspect of his own job. He will specify method to be used; duration; visual aids etc. Group will review plan from points of view of suitability, potential etc. All contributions will be reviewed when all participants have presented their plans. Instructor will comment and review individually	
2	90	Participants present their proposed lesson plans and may be asked questions	
3	25	Group discussion on plans, difficulties experienced etc. Instructor will make general comments illustrated by examples in lesson plans presented	

IV. METHODS OF INSTRUCTION

A. The lecture

The lecture is one of the oldest and most direct methods of instruction and, for certain purposes, remains one of the most useful. It is essential, therefore, that it should be studied in any training course and practised as much as possible. (Lesson plans 12 and 13 are given at the end of the section.)

It has disadvantages, the major one being lack of audience participation, but a good lecture need not be dull. The lecturer must bear the responsibility if it is. A well-prepared, well-presented lecture that stimulates thought may be better than an uncertain presentation by other means that lacks relevance, acceptance, and involvement.

A lecture may be defined as a prepared presentation that has the object of instructing the hearer on data or the speaker's opinions. It may also be used to influence the hearer's opinions.

Principles

Four essential principles that, if properly combined, should help to make any lecture worth listening to, are given below.

First, the lecture must motivate group interest. It should not be assumed by a lecturer that the group he is facing is eager to assimilate what he has to say. From the outset he must ensure that the members of the group are motivated not only to listen to, but also to attempt to understand, what he has to say. Probably the best example of ensuring group motivation is that of an Air Force non-commissioned officer who opened his lecture with the following: "This is a new type of parachute that works differently from the usual model. It has never been used by a human being before. You men will each step out of an aircraft tomorrow morning wearing one of these parachutes. My job now is to explain it you". Immediately attention was focused on him. His every word was given maximum attention. The motivation was instant and urgent. Unfortunately, every lecturer cannot achieve such a high and continuing degree of motivation to learn, but from the beginning, he has to strive to build and sustain motivation.

Secondly, as the audience will not want to work too hard to follow the speaker, the lecturer must ensure that his points are stated clearly; arranged in an orderly sequence; and it must be possible to move from one to another with the minimum of effort.

Thirdly, development must be smooth and logical with due attention paid to individual listeners. If the subject is technical but the audience consists of laymen, then an attempt must be made to describe the technical concepts in non-technical language. Examples may have to be quoted and visual aids used.

Fourthly, the presentation must be right, which requires thorough preparation. As a general rule, the larger the room and audience are the slower should be the delivery. Delivery should be variable, the pace as well as the pitch, and the lecturer should try to establish a rapport with the audience. He must be alert for feedback that may guide him as to the interest, understanding, pleasure, or rejection of the audience. Such feedback should be used to modify the lecture, perhaps to repeat some portion in different words, to introduce pertinent and timely references, or to change the method of delivery from the conversational to the didactic or from oratory to a more normal presentation.

Presentation

Preparation for a lecture falls into five parts:

Identify the learning group and requirements

Set the objectives

Establish the main areas to be covered and research them

Organize the points to be made, and the methods and materials to be used

Develop the outline points

The first step is to identify the group to receive the lecture and establish their training needs. It is, therefore, necessary to establish their present knowledge of the subject and their keenness, or lack of it, to acquire further knowledge.

The second step is to set the objectives. What is the exact purpose that the lecture is to serve? Is it to provide sufficient background data on a company to orientate new recruits? Is it intended to be an introduction to a greater in-depth study of the subject? This must be established.

Based on the information already collected, it should be possible to identify the major areas to be covered. These may be, say, the development of industry in Nepal or ISC services for industrial development. The scope of the subject has also to be defined. The lecturer should then research his subject to ensure that his lecture is correct and satisfies the conditions laid down earlier. Having collected his data, he should organize them under appropriate subject headings. He also has to prepare any special training material he may want to use. Lastly, he has to prepare arguments to develop and support the points he has selected.

In trying to perfect the outline of the lecture, it will probably be necessary to revise and regroup until satisfied that the basic requirements in content are met without losing sight of the components of a good lecture: motivation to learn, clear organization, and good development and presentation.

The basic requirements of the introduction are to gain attention and motivate interest. A good starting point would be to relate the subject to something that is known to be of interest to the audience.

A suggested outline is given below.

OUTLINE

Lecture topic:	Title
Specific objective:	(One sentence)
Information on audience:	(Number; background; common areas; diversity; personal information; voluntary/or involuntary attendance; range of jobs and interests etc.)

<u>Introduction</u>

Gain attention:	Interesting, stimulating opening words
Common ground:	Relation of topic and purposes to group interest

<u>Body of lecture</u>

Initial statement of purpose; summary of main points

Visual aids

Statistics (where relevant)

<u>Main topic</u>

General statement

Development of individual aspects of main topic

Visual aids

Examples etc.

Conclusion

Summary

Implications

Visual aids

The spoken word is probably the most ineffective means of learning, if used by itself. But if it is accompanied by other sensory stimuli the effects are increased in almost geometrical progression. Hence the wide use of training aids, particularly visual ones (lesson plan No. 14 is given at the end of the section).

Graphic reinforcement of the spoken word has been practised for a long time. The most common way probably being the blackboard. Despite its long history, the simple rules for optimum use of this aid are often broken even by people with wide experience. These rules include:

Talk to the class, not the board

Move away when you have finished writing

Use signs, letters etc. large enough to be seen

Complex work should be prepared in advance but not revealed till required, unless it can be developed step by step

Keep the board clean

Use the top half of the board whenever possible

Consider whether coloured chalk would give clarity as well as variety

The flip chart, or easel pad, is a good substitute for a blackboard and has advantages in that the information put in it has some degree of permanency. When one page has been used it can be turned over the top of the easel and a fresh surface revealed. It is also possible to prepare much of the written material in advance and show it as required. This can improve the presentation.

Flannel boards are useful to build up a presentation item by item. Simple material - card with a strip of sandpaper attached - can be used. The stickers must show a plain surface to the audience and the sandpaper easily adheres to the flannel. An old blanket can be used in an emergency.

Like the flannel board, the magnetic board allows point-by-point build up and the possibility of representing animation. The material used in both cases can be developed to draw specific attention to particular concepts and shapes and can be specifically designed.

Other illustrative material includes posters, charts, graphs, maps, illustrations and models, some of which can be used in conjuction with the flannel board. Models have the advantage of being three dimensional; they can be made from expanded polysterene.

The cork board is useful for more permanent displays. It usually requires pins to attach the display to the board, there is, however, a reusable adhesive, Blu-tack, which can be used on cork and other surfaces and can be removed without causing damage. It is useful for mounting models.

The visual aids already described are simple, cheap, but nevertheless effective. Other more advanced, sophisticated, but unfortunately, more costly aids are also available.

The slide projector is one of the most versatile devices used to supplement training. There are two sizes: the most common shows the 2 x 2 cm slides but can also show slides made from 35 mm pictures. The transparencies are usually mounted in cardboard holders though plastic mounts are available at increased cost. They can also be mounted between glass plates, but this is considerably more expensive. The slide projectors can be fed with single slides, with 50 slides in a rectangular magazine or with up to 100 slides in a rotary magazine. There is remote control slide change and the presentation can be put into reverse. The advantages of the slide projector are the permanency of the display material and ease of control. It requires a black-out of the room.

Films are used in training. There are problems at times in ensuring they are appropriate to the objectives, therefore, it is essential for them to be previewed before presentation to record the key lessons they convey, and to ensure that their condition is satisfactory. The room must be blacked out. They must always be followed by a discussion. There is no film projector in ISC, and the supply of training films appears restricted.

The overhead projector is a useful device since it allows the instructor to remain facing his group. Images are projected either from 7 in.^{2} transparencies, which have a cardboard mount, or from images drawn on or applied to clear film drawn across a glass screen by a windlass device. The lecturer can add to what is shown by a grease pencil or felt pen or he can use a pointer to draw attention to a specific part of the display. The tranparencies can be used either to build up a complex presentation or to do a breakdown or analysis by taking them away one by one. The glass screen must be kept absolutely clean and free from dust, otherwise the picture will be marred. The screen onto which the image is projected must be tilted forward at the top to avoid distorting the picture.

The Episcope is similar to the overhead projector but can deal with opaque objects such as book illustrations. It is very useful for making larger reproductions of small illustrations.

Filmstrips can also be useful. They use similar material to that used for slides but instead of the frames being separately mounted they are left in a strip. The ends may be joined and the frames used as a loop. Some machines have a linked tape recorder with a prerecorded text that can be played repeatedly.

It cannot be over-emphasized that all visual aids must be carefully selected and prepared. A thoughtful blackboard or feltboard presentation can often be much more effective than an ill-chosen film.

Questions

In dealing with questions after a lecture the following should be noted:

(a) If questions are not asked immediately, the lecturer should have some prepared;

(b) The group should be addressed at all times, not just the questioners;

(c) Questions should be obtained from everybody, not confined to a few people;

(d) The question should be repeated in a modified form to ensure it is the right one;

(e) The question should be analysed to decide whether the reply calls for information or the adoption or support of an attitude;

(f) Answers should be as accurate and honest as possible. If the lecturer cannot answer, he should say that he will look it up and answer later - and he should do so;

(g) The questioning should be curtailed before interest lapses, unless the questions must be answered and there are no problems of delaying anything scheduled.

LESSON PLAN No. 12

Subject: The lecture

Duration: 2 hours

Method: Lecture, discussion and allocation of individual tasks

Step	Duration (Mins)	Description	Comments
1	5	Introduction: nature and importance of the lecture method	
2	5	Limitations and disadvantages	Mainly lack of participation and hence useless in skills transfer Also lack of retention of spoken word
3	5	Place of repetition in a lecture	The trilogy "Tell them what you intend to tell them" "Tell them" "Tell them what you have told them"
4	10	Four essentials of a good lecture: Motivation of interest Well organized, specific material Smooth and logical development Proper presentation suited to the audience	List on blackboard
5	5	Note on slowing delivery if room is large, and needs a distinct, clear and audible voice	
6	10	Five steps in preparation	Feltboard and signs Identify the group needs Set objective Set main points and study them carefully Organize points to be made and material to be used Develop each point
7	10	Idendification of group needs	How much do they know about the subject? How keen are they to learn?

8	10	Establish the objectives	Background knowledge Introduction Additional, more detailed instruction Goal of audience?
9	10	Identify the scope. What are the major areas to be covered? What sources are available on them?	Organization of material by paper ruled in columns with each column headed by an area Set down data as collected
10	10	Establish likely pattern of presentation	Allocate priorities to subjects Prepare explanatory material: visual aids; demonstration models etc.
11	10	Develop detail on each point	
12	5	Prepare summary and conclusion	
13	10	Practise presentation Aids to establish timing Aids to identify weak points Aids to give confidence	Before a mirror to ensure bad habits are eradicated
14	10	Question time. If questions are to be allowed after the lecture, this should be prepared for	7 hints on question time are included in hand-out. Emphasize these
15	5	Allocate individual projects for practice session	Each participant to prepare a 15-minute lecture with aids on any one aspect of their own work at ISC

LESSON PLAN No. 13

Subject: The lecture - practical session

Duration: 2 x 2 hours

Method: Each participant presents a lecture on one aspect of his present job

Step	Duration (Mins)	Description	Comments
1	5	Tutor introduces session and acts as chairman to each presentation	Tutor ensures that participants who wish to use visual aids have required facilities
2		Each participant presents lecture and answers questions	
3		Discussion on lectures presented including tutor's comments and hints	

LESSON PLAN No. 14

Subject: Visual aids

Duration: 60 minutes

Method: Introductory talk and demonstration

Step	Duration (Mins)	Description	Comments
1	5	Introduction to more sophisticated visual aids	Slide projector Film projector Film loop projector with recorded lesson
2	10	Slide projector: Uses Operation	Epidiascope Overhead projector
3	10	Film projector - problems of finding the right film and the supply of films in general. Sources. Films must be previewed and note made of important points to be emphasized during discussion	Aspects to be considered: Content Presentation Condition Language Length Film "visual aids" could be used if available along with a suitable projector
4	10	Overhead projector. Possibility of building up composite picture by use of super-imposed transparencies. Speaker not tied down - can continue to face audience and can add material to transparency by felt pen. Note that screen top must be tilted forward to avoid distorting the picture	Demonstration if materials available Refer to 3M booklet "OPART" presented to library for detailed instructions on making picture
5	10	Episcope. Projects opaque material, hence books etc. can be used. Produces enlarged diagrams from small illustrations. Good black-out is essential	

6	5	Slides. Can be made by means of camera, in black and white or colour	Camera in store
7	5	Filmstrips and sound filmstrips. Items are usually retained in strip form and fed through in a loop. In the case of sound, tape recording may be synchronized with the frames. Special projector needed	
8	5	Summary. Need for preparation and decision on appropriate aid. Black-out, ventilation etc.	

B. Group discussion

A group, in training terms, involves people who meet for a common purpose, normally to solve problems. They pool ideas, examine facts, consider the potential effects of modifications to action and behaviour patterns, make assumptions from the data presented, test them, and draw conclusions.

A conference is similar, but is usually attended by more people who, at times, may be divided up into groups for the examination of certain aspects of the main theme of the conference.

Social scientists have investigated group meetings or conferences as a training mechanism, and have established certain conditions without which effectiveness of groups is poor. These are given below.

The group must have a qualified leader, that is, someone who has worked out a plan of presentation and procedure. His role will be described in more detail below.

Membership of the group must be carefully planned. A haphazard group will work but will not be as effective as one in which the members have been carefully selected in the light of a particular objective or theme.

The ideal size of the group is 10-12 people although it is impossible to lay down a hard and fast rule. If there are more than 20, there is a tendency to split up into subgroups, and if there are too few, the interplay of ideas and comments is limited.

The meeting must have a definite duration, format, purpose and outline. The group in training is intended to provide its members with opportunities of greater knowledge, more practise in self-expression or more experience in human relations.

The group must have suitable facilities in which and with which to work. This includes the location of the meeting, the methods of displaying, recording or presenting data and the furniture in use. Adequate time must be allowed.

The group should also have a well-prepared base from which to work, which should include any information needed before the group can function. It is the group leader's responsibility to ensure that the information is well selected, well prepared and as complete as possible. This initial sharing of information is essential.

The group leader

The group leader is the person on whom the successful outcome of the group activity ultimately depends. (Lesson plan No. 15 is given at the end of the section.) His task is not to lecture or instruct, but to encourage the group to function properly by:

(a) Helping to define the problem to be tackled, and to ensure that each group member is fully aware of its nature. The leader should seek only to describe it in terms on which all can agree, but the ideal is for all members of the group to help to isolate and then define their objective;

(b) Guiding and controlling the discussion. This does not mean that the leader will at the outset have made up his own mind on the decision the group must come to. What it does mean is that he should ensure that discussion does not stray from the point under review and that, if it does, he should bring it back by, say, interpolating a question designed to do this. He will also control the discussion by, for example, limiting the amount of time given to each individual to present views, ensuring that individuals do not continually make reference to their own pet concepts (which may not have anything to do with the subject under discussion), and avoiding a situation in which two members may get into a private argument (even if connected directly with the theme) to the detriment of general contributions;

(c) Stimulating discussion by interpolating questions or stating, in fairly provocative terms, a new slant on the whole theme;

(d) Encouraging contributions, details of experiences, opinions etc. This calls for considerable skill in encouraging the shyer members of the group to contribute, and at the same time, tactfully holding in check the more exuberant talkers who tend, if they are allowed, to take up the whole time and attention. Sometimes this may call for a question to be directed individually to a member and care must be taken in phrasing the question to ensure it cannot be answered by a simple yes or no;

(e) Analysing the progress of the discussion from time to time and summarizing points of view that have met with general agreement.

To fulfil these tasks, the group leader must study the subject of the group meeting very thoroughly and consider it from all angles to be able to plan how the objective can be met. Then he must prepare a plan. A checklist for such a plan is given below:

Check that the materials required by the plan are available. If, for example, it calls for the group to read a particular chapter of a book, report or article, it must be ensured that such material is supplied to them in time.

Check the facilities. The checklist already given in connection with the lecture can be used, but may need modification.

Become thoroughly acquainted with the members' history, background and experience in order to decide the best approach to the group and to each individual.

Try to anticipate problems and situations. This means considering points that might be controversial, identifying personalities that might be abrasive and so on, and also trying to draw up contingency action plans for any problems that may arise.

Prepare ways of arousing interest so that they can be used as soon as a problem arises.

A checklist for the group leader's preparation is given below.

Have you fixed the objectives to be attained?	YES/NO
Have you obtained or prepared and made yourself familiar with visual aids/demonstrations/special materials etc.?	YES/NO
Have you prepared your introduction?	YES/NO
Do you know the important points in your outline?	YES/NO
Have you prepared material to be used for emphasis?	YES/NO
When will summaries etc. be made?	
Have your worked out ideas for stimulation of participation etc.?	YES/NO
Have you prepared a detailed timetable?	YES/NO
Is everyone advised of the meeting?	YES/NO
Have the physical requirements been checked?	YES/NO

The preparation ladder for group leadership contains eight steps:

1. Draw up an outline: determine objectives; identify topics to be discussed; list key points.

2. Plan the procedure: the approach to be used; how to introduce topics; how to control and encourage discussion; what to say; how to say it.

3. Have everything ready: prepare background information; materials to be used; case histories; incidents; charts; diagrams; other visual aids.

4. Arrange the meeting place: seating; lighting; writing materials; place to write on; heating/cooling; freedom from distractions/interruptions etc.

5. Open the meeting: appropriate introduction to set the atmosphere; state objectives; review background; announce theme and describe procedure e.g. questions, comments, whether formal/informal etc.

6. Present the problem or topic: state the facts; ask questions; state an opinion or demonstrate.

7. Conduct the discussion: keep it focused on the theme; control the situation to avoid personal clashes etc.; avoid monopoly participation and arguments.

8. Summarize the position: select and describe highlights; evaluate opinions; comment on suggestions and experiences; describe what the meeting decided or achieved; and where necessary, draw up a plan of action to deal with group proposals and recommendations.

Full participation can be achieved by:

Carefully planned and phrased questions

The use of selected material relevant to the problem

Asking for individual contributions on specific items/aspects

Assembling data from the group and showing them

Evaluating the usefulness of facts

Listing advantages and disadvantages

Asking for examples of particular events etc.

Human relations

The test of any management development programme is that it should improve the way the manager deals with others. However, no lasting improvement can be expected by applying new techniques, however revolutionary, unless the manager improves his understanding of people. (Lesson plan 16 is given at the end of the section.)

One of the most difficult problems of leadership is to persuade people to work together. Usually, this requires greater efforts from them than working individually, although the satisfaction obtained is also greater.

Experiments have been carried out in small (training or sensitivity) groups on the problem of stimulating and reproducing behavioural responses. However, special training would be required by anyone wishing to establish such a group, and it may be a long time before such a technique becomes suitable for the situation in Nepal.

LESSON PLAN No. 15

Subject: Group leadership

Duration: 2 hours Method: Group discussion

Step	Duration (Mins)	Description	Comments
1	10	Introduction by instructor to session approach. Using group technique participants will be encouraged to answer various questions	
2	15	(a) What do we mean by group technique?	(a) Group: pools ideas: examines shared facts; examines shared ideas; draws conclusions from facts etc.; tests these conclusions by their own combined knowledge and experience;
3	10	(b) What attributes have all groups in training got in common?	(b) Experience; knowledge of subject (either their own or provided by leader); ability to analyse data; ability to reason together; ability to assimilate new concepts;
4	10	(c) What other requirements do they need?	(c) An objective or objectives; information sources; accepted procedure; limitation in numbers; a leader;
5	15	(d) What should the leader seek to achieve?	(d) Guide group thinking; ensure information is shared; encourage free discussion; avoid personal squables or personality problems; assemble, select and evaluate facts;

			get group decisions; if required, develop action plans and see they are executed;
6	15	(e) What personal qualities are required?	(e) Ability to gain respect; ability to stimulate ideas; sympathy; ability to ask right questions; speed of thought; tact; patience; firmness;
7	20	(f) What preparation must a leader carry out?	(f) Acquire thorough understanding of subject; prepare plan and learn its use; check materials he will use; check facilities; study group members to decide approach; anticipate situations or problems that might arise (have solution ready if they cannot be avoided);
8	15	(g) How should a leader control the group?	(g) Prepare a plan of action to cover: Objectives Data to be presented Opening talk Important points Planned examples Stimulation of discussion Need for summaries Time schedule Environment and facilities
9	10	Summary of discussion	Decisions etc. hand-out on conference leadership and step-by-step approach

LESSON PLAN No. 16

Subject: Human relations

Duration: 55 minutes   Method: Lecture with visual aids

Step	Duration (Mins)	Description	Comments
1	5	Introduction to the problem of motivation and the need for all managers, especially instructors and consultants, to be skilled in human relations	Visual aid motivation
2	15	Objective of management development - to assist individuals to make optimum use of their resources and particularly to bring about some improvement in behaviour patterns	Objective of management development. Use of questions designed to make group arrive at definition desired, especially change in behaviour
3	15	The place of the group in motivation: unofficial group and group leaders	Reference to Hawthorne experiments. Restricting factor of group
4	15	Solicit participants' views on how to change behaviour	Record ideas on flip chart
5	5	Introduction to experimental approach to T (training) or sensitivity groups	Definition to be displayed "An attempt to design a total learning experience in which knowledge and theory are integrated with experience and practice."

C. Case studies

The case study method is not intended to acquaint participants with the latest business practices. It may do so as a by-product, but its main purpose is to teach them managerial skills in analysing a situation, formulating pertinent questions, discovering the answers and making decisions.

In the case study method, the trainee or participant is placed in a similar situation to the manager who has to make a decision without all the relevant facts and before they can be obtained. The conflict between time taken up in acquiring information and the necessity to have that information on which he has to base his decisions as complete as possible, prepares him to vigorously examine any real situation in which he may find himself.

Researchers in management education have classified case studies into different groups, all of which have different approaches and different effects on participants. This course will be confined to the type of case study most suited to the Nepalese situation. This should present facts and opinions related to an authentic management problem with accuracy and realism. There should be no attempt to evaluate the correctness of decisions made or actions taken; there is no right decision and no right answer.

The realism of national case studies drawn from actual events helps many managers to relate the course to their own situations. Case studies are, however, time consuming for both practising managers and the students who have to collect and collate data, prepare them for presentation and have them reproduced.

Complicated problems cannot be dismissed as of no consequence, yet it takes time to unravel them. This is particularly so with younger participants, whose background and experience may be very limited. The interrelationships between various aspects of management may add complications, yet it is seldom that a case study can be confined to only one managerial area. If the evidence in the case is already classified and presented logically, the trainees may be given a false impression of the real situation in which they will almost certainly find themselves. At such a time, real causes may be bidden beneath too obvious indicators that must be put aside to allow the real situation to show itself.

A case study has five phases. The first phase is for each member of the group to study the details. Two major questions are (a) What is happening or has happened?, and (b) What additional data are essential for clarification?

The second phase consists of the collection and organization of additional facts. Group members can ask for more details from the discussion leader. When items are collected, they need to be organized with particular reference to their applicability to decision-making.

In the third phase, the group as a whole must consider what the problem is for the organization and what the correct way is to phrase the critical question at this stage.

The fourth phase has four parts:

(a) Each member of the group writes down his own answers to the questions, How would I handle the incident? and How would I support my decision? The signed answers are collected by the discussion leader;

(b) If there have been differences in written decisions, smaller groups should be made up of people who have taken the same view. Their task is to present the strongest argument possible to support their joint decision. A spokesman puts forward their case;

(c) Decisions are then tested. This can be by debate or, say, role playing. Subgroup decisions are appraised;

(d) The discussion leader then describes the actual decision on the incident, and if possible, how the decision worked out. There is no class solution.

The final phase is to try to learn from the case as a whole. For example, in reviewing the sequence of events and behaviour, is it possible to isolate what caused difficulties or achievements? How could the process and the decision have been made easier? How could more have been achieved? Are there major issues that need to be tackled if objectives are to be achieved?

It has been mentioned that there are several types of case study, all of which have the same elements. A case report may be given in outline or in detail, written, filmed or presented orally. It must be realistic with some first-hand knowledge. There should be no opinions expressed as fact. It should be possible to derive more material than it immediately contains. It should show human relationships when these are involved, but there should be clues to inward feelings that motivate behaviour. It should not be static - more like a film than a snapshot. Care should be taken to describe the limitations of the material. There is bound to be a subjective bias even in the selection of facts and the words to describe them. The danger of seeing the case report as something extraneous is strong. A manager who has to deal with cases is necessarily involved directly in them or their effects, but in a case report there is no real personal involvement.

All types include case analysis. If the analysis is to result in modified attitudes or behaviour, it must:

(a) At least approximate reality. This includes identifying difficulties; trying to see how they developed, and who and what caused them; setting priorities; and disentangling confused situations and information;

(b) Entail a reasonably systematic, comprehensive review rather than the cursory inspection most people give to data prior to taking decisions. This should result in a request for further details on the behaviour of the people involved, the methods and equipment used, and the space and time available;

(c) Be flexible. No fixed series of questions is suitable for all case analyses, variety and mental alertness are called for;

(d) Always result in some long-term action, or rather the consideration of such, on valid principles and with objectives.

The limitations from which case analyses suffer are likely to include (a) a built-in bias, since the presenter cannot avoid a subjective approach, and (b) a mistaken approach. The participant expects to get the only valid opinion, that is, the trainer's, and thinks he need only give cursory attention to the data.

Discussion should be focused on one item at a time with the purpose of getting information or expressing views on the same subject. There should be a team spirit. The leader should aim at discussion that is candid, but at the same time, explores the subject thoroughly. Difficult as it may appear, discussion can be spontaneous and informal and yet take shape according to a plan to cover all aspects of the subject.

To summarize, a case study should have a basis in reality. There should be more to it than the initial description shows. This information needs to be sought. Part of the benefit of the method is the need to decide what data are needed and how they can be obtained. Discussion should always be centred on one particular aspect, but seek to cover all aspects of the case. The method can be time-consuming both in preparation and application. There is never one perfect answer. It is helpful to managers, giving them experience of sorting out the right questions to ask and establishing the right services from which to gather their information. It also shows the need for a manager to decide on the right time to take a decision even if all information is not available, since time by itself can change the nature of the problem to be dealt with.

D. The In-basket exercise 5/

Preparation

Developed as a measure of aptitude for administration, the In-basket exercise is a simulation of a manager's workload on a typical day. The name is derived from the wire baskets placed on a desk to hold mail and papers. (Lesson plan No. 17 is given at the end of the section.) There are many ways in which this exercise can be used. Its essence is that every man is on his own, but it can still be used with a group. Some suggestions are given here; the alert trainer can adapt these methods and develop his own.

The material for the In-basket exercise (a sample of which is given in annex III) consists of three parts:

(a) Background material. This instructs the player on just what the circumstances are: his position in the business, who has died, why his superiors are out of reach, who the persons are whose requests, letters etc. are found in his basket. It may include such items as financial statements, organizational charts, job descriptions, formal position papers, informal items, such as descriptions of the personalities and performance of other characters in the test situation, and all other items necessary to set the stage and put him in the position, as nearly as possible, of a man sitting down for the day's work;

(b) Contents of the In-basket. These should be realistic and should include different sizes, types and colours of paper as would be the case with such a mixed collection in a real situation. Office memoranda should look real, written or typed on paper headed "MEMO". Where several items are handwritten, originating from more than one person, they should be written on the stencil by different persons.

5/ Prepared by the United Nations Institute for Training and Research (UNITAR).

Account forms and letterheads are more difficult unless the material is being prepared by offset or photographic process. This is usually too expensive for short runs unless the instructor has access to a modern photocopying machine. If he has, then it is worth borrowing some letterheads, or even having them handset by a job printer. Account forms can sometimes be bought in a suitable form from ordinary stationery suppliers, though the colour should be chosen carefully if they are to be photocopied; they can be drawn on a stencil without much difficulty.

The red herring, the intriguing love letter, is often written on coloured paper and sealed in a matching envelope. The sealed envelope introduces not only realism, but also indecision - what should be done with it, especially if the person to whom it is addressed is dead or away for six months.

A thumbprint on printer's proofs requiring approval; some poor typing with mistakes and overstamping; inked corrections on a document; misspellings or grammatical inaccuracies from a worker who is employed for his mechanical skills, not for his education - these should be introduced to add reality to the appearance of the documents in the In-basket;

(c) Guidance notes for the person conducting the exercise.

If there is more than one player, each players should have his own set of the material described in (a) and (b) above.

Methodology

Participants, or a participant, assume the role of an executive or supervisor in a hypothetical situation and are presented with the background material.

Time should be allowed for this to be read, then the trainer should ask for questions to make sure the participants are clear about their instructions. Someone may want to know whether the situation arises in winter or summer, how many employees the company has, whether the product is sold to retail consumers or industrial users. Now, if such matters are of real importance to the decision-making, they ought to be covered in the instructions. If the answer is not there, it will rarely be important and the instructor should give an answer that seems relevant and realistic.

Having settled any such queries, the contents of the basket, one set for each person, should be handed out. Each man is now on his own. Some will want more information - it is not available. This is a really important feature of the whole exercise and is deliberately built into it so that it will be as realistic as possible. It is exactly what happens in real life - people have to make decisions every day without having as much information as they would like. It is essential, therefore, that this slight element of frustration be preserved.

Unlike some other types of exercise in which a participant merely tells what he would do, the In-basket player must actually write all his notes and memoranda, write down the contents of his conversations and his telephone calls etc. Thus, at the end of the exercise, there will be a full written record of each participant's activities.

An important factor of the In-basket exercise is pressure: the work must be accomplished during a specific period. At the end of that period, for example, the participant may be scheduled, as part of the exercise, to attend a crucial meeting or conference at which at least some of the items in his In-basket will be discussed. In order to be prepared for this conference, he is forced to scan many items calling for different actions and deal with them by (a) setting priorities, and (b) delegating certain items to his subordinates for handling.

Whatever time is considered reasonable for the exercise should be allowed: half an hour may be enough for some exercises or some groups. Flexibility is essential and the instructor must make his own judgements about this depending on his students. The time allotted should be announced at the beginning or, it can be built into the instructions, for example "It is now 9 a.m. and you are required to present your report to the managing director at 9.45 a.m.".

When the time has expired, the action taken by participants can be reviewed individually with the instructor or the whole thing turned into a group discussion of the issues involved. Leading questions start it off, for example: "Well, what is the big issue here?". A good discussion leader will be able to keep the ball rolling and encourage each person to express his views, pitting one view against another and bringing out for discussion the main teaching points. These are suggested in part C of the exercise, but again, there is room for adaptation to the special needs of the group.

Having made decisions in the "on your own" session, the players have the opportunity to support their decisions with reasoned argument or to rebut the ideas of others who think differently, or even to recognize that certain decisions were not well taken in their private exercise. In any case, the point of the exercise is not to present a neat solution to the problem, but to give the participants an opportunity to try out their decisions, and then to have the group discussion either show where they went astray or confirm their wisdom, or even a little of both.

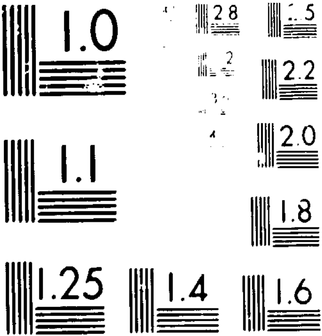
Effectiveness

The exercise shows the potential or competency of a participant - he handles problems under pressure. It helps the trainee identify areas in planning, organization and administration in which his skills need improvement, and gives him feedback on his performance as he practises those skills.

One of the advantages of the In-basket is that it can be designed to focus on either the general activities of all executive positions or specific aspects of performance. For instance, if the objective is to develop or improve human relations skills, the In-basket material can be weighted heavily with interpersonal conflicts, other responsibilities being held to a minimum. The In-basket can also be adapted to the level of the position for which training is required. If first line supervisors are participating, the problems can be constructed to emphasize such factors as providing staff services, supervising work, and the technical aspects of production. If it is desired to train higher-level executives, the problems may be related to such activities as long-range planning diversification and decentralization.

Some disadvantages are that its effects are difficult to score or measure, and since it is a form of role-playing, it may, in spite of all efforts, become unrealistic. This may stem from the fact that the In-basket is essentially an individual device; although each participant plays the game, he plays it by himself, and with his own materials. Except for the post-game review period, there is little opportunity for interaction between participants. Decisions are made without the advantage of consultation. The In-basket exercise thus provides little training for management responsibilities.

The effectiveness of the technique clearly depends upon the adequacy of the materials developed. They must demand a realistic sample of managerial performance of a broad variety of relevant tasks. To avoid superficiality, as is the case in other simulations, it must be carefully planned and guided



MICROCOPY RESOLUTION TEST CHART

by the training director. In contrast with more complete simulation games, however, In-basket should only be used together with other management training techniques.

Evaluation

It is important to acknowledge that performance evaluation is not a test of the trainee but of the effectiveness of the teaching. If the trainee shows an ability to understand the problem and shows some capacity in applying the skills taught, it is a tribute to good teaching. This perhaps overstates the position, since one trainee may come to tuition rather more advanced or with more innate capacity for analysis and decision; but especially for developing countries, where the trainees are likely to be sensitive and unwilling to lose face in a test, it is worth stressing the testing of the method of teaching rather than of the trainee.

The trainee should be evaluated according to his ability to classify and deal with the papers. He should be able to sort out minor items and discard or delegate them in order to concentrate on those of primary importance. The instructor should judge him not on whether he is right but on the development of his skills.

As a selection technique

With the In-basket exercise, the leader or instructor has the opportunity to observe how the players react, what factors they take into consideration in making decisions, and how they justify their own ideas and consider those of others that may be contrary to their own. They will reveal aspects of character and attitudes unconsciously that would be difficult to assess, or even to detect, in an ordinary interview. Where the members of the group are all considered possible contenders for the position or promotion, they can be compared in performance in a situation that has some reality in the exercise and a great deal of reality in the follow-up discussions. Of course, a great deal depends on the leader, both in promoting the discussion and in assessing the spontaneous performance.

This technique is not by itself sufficient in selecting whom to promote, but it is a useful auxiliary guide.

<u>To decide on training needs</u>

A well conducted In-basket session will reveal to an alert trainer the way players think, their understanding and their development in diagnostic and decision-making skills. thereby enabling him to plan the training and development of executives in accordance with their needs. For example, it is common for important public relations features of an In-basket situation to be completely overlooked. If so, the participants require training in public relations. Or some of the group will say that there is insufficient information for them to make a decision and others will insist that the responsibility required of them in the situation really belongs to a more senior person in the company; this reveals that these persons avoid decision-making and require development in that area.

LESSON PLAN No. 17

Subject: In-basket exercise

Duration: 2 hours

Method: Introduction; In-basket exercise; discussion

Step	Duration (Mins)	Description	Comments
1	10	Introduction to the concept of the In-basket exercise. Simulation of actual situation. Participants adopt role of an individual whose background circumstances are carefully detailed. They are then presented with materials with which they have to deal in the circumstances described to them	
2	10	Tutor issues background papers entitled "Instructions to the Players". Each participant studies the information given	The time allotted to this private study may have to be increased since the tutor must make sure all participants are clear about the situation. This may need a short question and answer session
3	60	Tutor issues contents of the "In-basket" and individual participants work on them	Tutor patrols to ensure participants have no problems in interpreting what they have to do
4	25	Working from the Instructor's Notes, tutor conducts the discussion session	
5	5	Distribution of Notes in evaluating the performance	
6	5	In this internal course only distribute Notes for the Instructor	
7	5	Review of participant's reactions (this course only)	

E. Programmed instruction

The material in programmed instruction is presented in carefully planned steps from the simple to the complex, from the known to the unknown. At each step, the student must make a response before proceeding to the next step. Each step is small to minimize the risk of error. The student is actively involved; he answers questions, solves problems and completes exercises. He proceeds at his own pace, which is important when there is a wide range of ability within the group. He gets immediate feedback on the correctness of his responses, which reinforces his learning, and tends to make him repeat the behaviour that earned the confirmation.

This method is based on what is known of the learning process. It comes as close as possible to the personal tutorial approach. Illustrations can be combined with instructions in a preplanned programme.

Lesson plan 18 is given at the end of the section and a programmed course on programmed instruction is given in annex IV. It serves two purposes: first, to help instructors learn about programmed instruction; second, to give instructors a chance to work through such a programme.

LESSON PLAN No. 18

Subject: Programmed instruction

Duration: 60 minutes

Method: Programmed course on programmed instruction

Step	Duration (Mins)	Description	Comments
1	10	Introduction - definition of programmed instruction and distribution of programme on programmed instruction	The objectives are: (a) To acquaint the participants with programmed instruction as a training technique; (b) To provide the opportunity for the participants to learn about the technique by working through a programme designed for this purpose
2	40	Participants work through the programme at their own rate	
3		Tutor ensures each individual is carrying out the programme properly. (Simultaneously with step 2)	
4	15	When all participants have completed the programme a general discussion follows	Individual reactions are canvassed. Advantages are isolated. Adherence to concepts already dealt with under learning theory are stressed

F. Role playing

Role playing is a technique that can be used for training in decision-making, management skills, interviewing, sales, and in any circumstances that call for human relationships. (Lesson plans 19 and 20 are given at the end of the section and sample exercises in annex V.)

There are several definitions of role playing; common to all is the concept that it involves action and practice. The role player learns by doing, by acting out, usually, an imaginary role in what may have been a real situation. The participants apply themselves to doing something about a problem rather than merely talking about it.

The basic theory underlying the technique includes at least four main concepts of learning, which are:

(a) Learning by doing. The players are given opportunity for practice, repetition, and trial and error learning in a situation that does not involve any real risk from faulty or poor decisions. It does, however, offer the opportunity during the consequent discussion of the performance of considering the probable results;

(b) Learning by imitation. The players can see how others handle problems, and can see the value of some approaches and the dangers of others. They can assess how these approaches might be adapted to suit their own personalities and can be encouraged to apply these adaptive concepts when faced with a similar situation or problem;

(c) Learning by observation and feedback. An essential part of the method is the review session that follows each role-playing episode when individual group members can express their views on the way the role players treat the problem and benefit by their reactions to the comments;

(d) Learning by analysis. Role playing provides the opportunity for ideas, skills and approaches to the problem to be tested.

There are two main varieties of role playing: the structured situation and the spontaneous role allotment. In the first, the specific problem is carefully documented. Guidance is given to the players on the attitudes they are to adopt and on their reactions to the protaganist. Some participants may be assigned specific observer roles to help them analyse the players' actions. The instructor (who may also be playing a role) takes an active part in drawing analyses and judgements from the group. The emphasis, in a structured situation, is on analyses, reviews and comments to improve the players' performance.

The spontaneous type of role playing encourages experimentation and is said to reduce players' feelings of self-consciousness. The participant is encouraged to discover for himself, rather than as a result of comments and reactions from members of the group, the results of changes in his behaviour pattern as a result of new concepts, approaches and experimentation. The role of critical comment is less emphasized though still present after the scene has been played.

The situation in which the roles are played may be imaginary, conceived only for training purposes, or real. It may even be an incident that happens while the group is in session. In any case, to be successful the role players must really believe in their role and have real feelings and reactions, otherwise the very purpose of role playing is ignored.

Normally, no prepared script is provided for role planning. At most there may be background information describing the personality engaged. Each player will have detailed information about himself. His knowledge of the others will be confined to what it could be expected to be in the actual situation.

Analysis and feedback are needed and can be offered privately or in general discussion. The method depends largely on the people concerned and the purposes for which the role playing is performed.

Both types of role playing require a frame of reference, such as:

(a) A general problem area should be identified that could include delegation of authority, selection interviewing, disciplinary investigations, grievance handling and promotion counselling;

(b) Data should be collected relating to the area identified such as typical happenings, specific situations and problems, and results of action taken, if available;

(c) A specific objective should be decided upon. This is necessary otherwise the incidents used may not be suitable for the purpose;

(d) The situation should be written up including background information and details of the setting in which the incident took place. Individual briefings must also be prepared for each role player that will include sufficient detail to help them play their role appropriately. Specific data, such as employment history in the case of a selection interview, must be provided;

(e) Notes should be drawn up on aspects of the action that will help observing group members to analyse the situation;

(f) Notes should be made of discussion points to be introduced at the review session.

The sequence to be followed begins with a general description by the instructor of the area to be covered. Usually, some discussion to clarify various points is required. Instruction notes may then be distributed (if not done previously), and the enactment begins. Role players are urged to stay "in role" during the whole enactment. A general discussion follows at which group members express their comments and reactions, role players contribute their views, and the group as a whole analyses the problems, issues and relationships that have been revealed. Principles of relationships may or may not be developed, but the group members will certainly become more aware of the importance of behaviour in forming, modifying and destroying these.

Role playing has an almost unlimited range of applications where individuals or groups have concern for increasing their personal effectiveness in dealing with others. In the range can be included: interviewing, grievance handling, leadership training, contract negotiations, job instruction, induction training, performance review, salesmanship, conference or group leadership, objective setting, delegation of authority, and safety training.

LESSON PLAN No. 19

Subject: Role play and interview

Duration: 60 minutes   Method: Lecture with aids

Step	Duration (Mins)	Description	Comments
1	5	Introduction: description and definition of role playing	
2	10	Uses and characteristics of role playing	Uses: Decision-making management skills See also interviewing, sales, disciplinary etc. Characteristics: Learning by doing Learning by invitation Feedback/observation Determination of principles from events
3	5	Structured role playing	Careful documentation Attitudes described Reactions expected
4	5	The instructor's role in structured role play	
5	5	Spontaneous role play	No prepared script Some background data
6	5	Method of use	
7	10	The specialized roles in interviewing	
8	10	Preparatory steps	Environment. Freedom from information. Interruption
9	5	Review of actual practice session for role play	

LESSON PLAN No. 20

Subject: Role play and interview practice

Duration: 2 hours

Method: Individual participants play roles allotted, group discussion

Step	Duration (Mins)	Description	Comments
1	15	Instructor outlines procedure. Participants will be given instruction sheets covering the roles they are to play. They will have about 5-10 minutes to decide their approach	Three incidents have been prepared:
2	25	Role 1	Role 1A - General Manager; 1B - his accountant, who thinks he has uncovered some stock shortages and accuses the warehouse supervisor of being responsible, though he has no proof
3	25	Role 2	Role 2A - Division Chief; 2B senior officer. This deals with a disciplinary problem with undertones of personnel problems
4	25	Role 3	Role 3A - General Manager of supply Co. 3B - Managing Director of major customer, who has grievance concerning his treatment in respect of materials in short supply. Management decisions and customer relations are the themes
5	30	Group discussion and comments from instructor. Attempt not only to deal with training aspect of role playing, but also to show how other aspects can be clearly dealt with by role playing	

G. The Business Game

The Business Game has been defined as a Dynamic Sequential Management Decision Simulation Exercise, and while this is a frightening title it is fully explanatory. The full title shall be returned to later, but in these notes the shorter name of Business Game shall be used. (A sample Business Game is given in annex VI.)

The Business Game is perhaps the most effective teaching technique available, and is a logical step in the development of teaching techniques that started with the lecture. (Lesson plan No. 21 is given at the end of the section.)

The main disadvantage of the lecture is that students must, for the most part, adopt a passive role. A break-through in teaching methods came with the use of the case study, when students are forced into a more active role as exchanges take place in three directions: lecturer to student; student to lecturer; student to student. Variants on the case study theme followed in the form of In-basket exercises, Role Playing and the Incident Process, each of these variants being designed to increase the participation of the student while bringing realism and practice into the classroom. An important aspect of the case method and its variants is that it puts the student into a decision-making situation, and so gives him practice in the management field, which is so difficult to teach by more traditional methods.

A disadvantage of the case method and its variants is that while students learn to make a decision, they do so in a static environment, which falls short of reality. At the end of a case study, a student may make his decisions, and sit back and praise himself for having done a good job. In practice, he will find out by experience, and only in retrospect, whether the decision was good or bad. Moreover, he must frequently reach his decision under a severe time constraint and while the situation is changing hourly. The Business Game attempts to bring these practical elements into the classroom by requiring the student to make a decision in a given situation; the outcome of this decision affects the situation, and the student is then called on to make further decisions in sequence in a continually developing situation. Hence the full title "Dynamic Sequential Management Decision Simulation Exercise."

A short history

Business Games clearly have their roots in War Games, which were devised to train serving officers in the strategy of warfare by simulation of military situations. The War Game (Kriegsspiel) was developed in the Federal Republic of Germany; it journeyed westward to England (the Tactical Exercise Without Troops), and eventually reached the United States of America where, on a visit to the United States Naval Academy, a member of the American Management Association (AMA) witnessed a war game and realized its implications for management training.

Thus, in the late 1950s the AMA published their "Top Management Decision Simulation", which was the first Business Game and which the AMA hoped would lead to the formation of a "war college" for business managers. Shortly afterwards G.R. Andlinger of McKinsey and Company had his article "Business Games - Play One" published in the Harvard Business Review and the "Andlinger Game", the prototype of many, was borne.

Classification

Business Games deal with every facet of business activity; the following classification is suggested:

By coverage

(a) Company game (or total enterprise of top management). Links different functions in the simulated company so that participants are able to see how these functions are integrated when making decisions affecting total company policy;

(b) Functional game. Covers one specific function in the simulated company so that participants may experience problems of that function, e.g. production control, inventory control and sales promotion;

(c) Other specialist areas. For example, government economic policy.

By competitive element

(a) Interacting game. The fortunes of a team of participants are affected not only by its own decisions, but also by the decisions of its competitors;

(b) Non-interacting game. While still competitive, each team is largely in command of its own performance, which is affected only by its own decisions.

By processing of results

(a) Computer game. This is more complex because more variables can be built into the underlying mathematical model;

(b) Non-computer (or manual) game. As the calculations are performed with simple calculating aids, this is less complex than a computer game though more flexible and far less costly to run.

Games can also be classified by the nature of the model (abstract or realistic) and by purpose (training or research).

Construction

It is difficult to present any formal rules for the writing of a business game because it is, to a certain extent, a creative process. This section must therefore be regarded as descriptive rather than instructive.

It is necessary to have some object in mind when a game is constructed, i.e. the principal lesson or lessons to be taught by the game. (Participants will always learn, in addition, some other lesson peculiar to their own needs. This is one of the bonuses that come with the use of this teaching method.) For example, a game that intends to instruct the use of a technique is relatively simple, whereas a game designed to test reactions is more complex, embracing several functional responsibilities.

The core of a business game is a mathematical model of a business environment. In this model the interrelationships between the functional areas of a business are translated into mathematical relationships, and it is therefore possible to evaluate activity in one area in terms of its impact upon another area. The number of functional interrelationships that can be built into a game is controlled by the computational facilities available. However, it must be stressed that no matter how complex the mathematical model, a game will always be an over-simplification of a real-life situation.

The model may be completely deterministic (i.e., react only to decisions by participants) or stochastic (i.e., react also to some outside influences in a completely random manner). A stochastic model can cause bitterness among participants but the element of chance does enter into real-life business situations and therefore must be faced.

It is customary to give certain relationships within the model as rules of the Business Game; however, the larger part of the model will clearly be hidden from participants. One of their objectives in playing the game is to discover what makes the underlying model react the way it does.

Operation

A typical presentation is given below.

Introduction and briefing

The first part of the exercise must never be hurried. Participants must fully understand all that is expected of them before the Game starts, or confusion will result. It is a good idea for the umpire to read through the instructions with participants to ensure that all matters are understood. It should also be insured that participants understand how to fill up any forms that must be completed and, if necessary, a demonstration or practice run should be arranged.

First decision by participants

The participants should not be hurried with their first decision because they are feeling their way in a strange situation.

Feedback

The umpire must make his calculations and feed back the first results as quickly as possible in order to maintain the tempo. He will be wise to have at hand whatever charts, tables, ready reckoners or other computational devices will speed up his calculations.

Publication of information on results achieved

There may be time delays in the publication of certain information in an attempt to reproduce real-life circumstances. (Some information may be available for "sale" to participants.) This aspect of a game helps to generate a spirit of competition, but should also test the ability of participants to handle and interpret published information.

Repeat of the second, third and fourth moves for a series of simulated time periods

Participants should be encouraged to adhere to a strict timetable, which, for inter-acting games, is essential for the completion of the umpire's calculations. It is only after the repeat that pressure should be brought to bear on participants as the pace is speeded up.

End of the game

To avoid "end-game" tactics it is advisable not to give advance warning of the end of a game. Announce the end as final results are returned to participants.

When should the Game end? How long should it last? These are difficult questions to answer, but generally speaking a halt should be called when the purpose of the Game has been fulfilled; a game should not continue to the boredom of the participants, nor should they play with no educational interest. If participants plead that they have now got the measure of the thing and if only there were another decision they would demonstrate their success, then the umpire has chosen his time well to close. At the end of the Game, participants may be required to perform certain concluding tasks - it is wise to give instructions on such tasks at this stage rather than in the introduction.

Evaluation

The evaluation is most important because it is here that the umpire brings out the lessons learned. It should never be hurried or skimped. If time is short, the actual running of the Game should be shortened rather than the evaluation.

A business game is a time-consuming operation and should not be contemplated unless the time is available. However, the teaching value is so high that it is worth making time available at the expense of something else.

The layout of the room is an important factor in the [illegible]essful operation of a game. Participants will normally operate in teams, and each team should have its own adequate working area. Teams should be located so as to permit quiet discussion between team members without being overheard by other teams, but a separate room for each team is a luxury not a necessity. The umpire should have an adequate working area, and it is imperative that participants are not permitted access to this area or they may discover the mysteries of the underlying mathematical model. Visual aids should be available.

Role of the umpire

It cannot be over-emphasized that the conduct of a business game is not an excuse for not teaching. The Business Game is a teaching technique, and must be used seriously for teaching a preplanned lesson. In fact, far from the umpire having an easy time, he may work harder in a game than in a lecture or case study. However, the pressure of work in a game is erratic. The umpire must be prepared to work quickly and accurately under extreme pressure for brief spells, and at other times hold a watching brief. At the end of the Game, when perhaps he is tiring, he must conduct an evaluation session which is the most important part of the whole Game.

There are two causes for this pressure on the umpire: (a) the backwash of pressure that he places on the participants; and (b) the involvement of participants and their all-consuming interest in the situation.

Point (b) requires further comment. Of all teaching techniques, without doubt a business game generates the greatest involvement and enjoyment on the part of students. Even if they approach the Game feeling frivolous or apathetic, their mood quickly changes as the effects of competition make themselves apparent. A game quickly becomes real, decisions are made in a very serious mood, and each participant is keen to become personally involved in every aspect of the Game. Moreover, participants enjoy the experience (which may be new to them) of learning by actually doing something in the classroom. The umpire therefore finds himself in charge of a tremendously enthusiastic, interested and deeply involved group of students. He must share and reflect this involvement, and keep up the pace if he is not to send students away angry and frustrated.

The following notes for the umpire will help him in this task:

(a) He must fully understand the Game and be familiar with the situation and constraints so that he can both deal immediately with any question raised and carry out his calculations promptly. It is advisable for the umpire to have a practice run of a new game with a few colleagues, before using it with students, as the surest way of understanding it;

(b) He must take pains to ensure the participants understand the Game before it gets under way. Not to do so is to court confusion;

(c) He must constantly be prepared for the unexpected and so be able to handle any new development quickly and calmly. It is impossible to foresee every question and action of participants in this type of situation, but if the umpire has prepared himself, he will be able to handle new developments;

(d) He must maintain momentum by feeding back results quickly. Participants should be kept busy throughout the Game. It is death to a game to have participants sitting around while the umpire makes his calculations;

(e) He must have a planned timetable for the conduct of the Game itself, and a clear plan for conducting the evaluation session;

(f) He must demonstrate confidence and be seen to be in complete command of the dynamic situation that is certain to ensue.

Evaluation

Frequent reference has been made in these notes to the importance of the evaluation session. This is the denouement, long awaited by participants, when acknowledgement can be given to lessons learned. There will be no lack of audience participation in this session, the main problems of the umpire will be giving everyone a fair hearing and steering the discussion into the most profitable channels.

An evaluation session might usefully begin with a review of the final results of each team in the light of the policies and objectives that the team set for itself. (With advanced groups it is interesting to ask for a written policy statement before the first decision is made.) What must be avoided is an attempt to declare a winner. The winner is he who has learned most from the exercise - and this is only in the minds of the participants. There is a parallel here that should be developed; how is economic performance assessed in real life and how are winners declared? Is it by share of market, profits, size of assets, cash balance, ability to continue trading, or customer satisfaction? Some of these measures may be inconsistent, thus a company with a large share of the market may have low profits.

Whenever possible, comparisons must be made with real-life situations because the Game is an over-simplification and must embrace certain unrealities and artificialities. These artificialities are certain to be seized on by unsuccessful participants, and at first sight might appear to be a disadvantage of the Game technique. However, this can be turned to advantage. First, it should be explained that this is the only way in which no one participant has the advantage of having experienced the situation before - all decisions must therefore be empirical. Then the participant who raised the matter should be invited to lead a discussion on how the situation would develop in real life without the artificiality, and how he would deal with the situation. Other participants may have a different view of what happens in real life.

Patterns of behaviour within teams; difficulties of establishing a working organization and in reaching a co-ordinated decision at the right time; problems of delegation and responsibility - these are topics that must feature in an evaluation. (If the umpire wishes to make a special feature of team behaviour, he should use large teams and present a lot of information for digestion by each team.)

The form and context of any records maintained, besides the necessary decision forms, might be discussed with advantage. The application of any technique recently discussed in the teaching programme should also be pursued, e.g. statistical forecasting, costing of charting techniques.

At some stage during the evaluation session, participants will expect the umpire to reveal how he computed the results of their decisions. It is not advisable for the umpire to discuss in detail the mathematical relationships that have been built into the model, as this might steer discussion in a difficult and unnecessary direction. Rather he should explain in general terms how the model reacts to decisions and the constraints underlying the model, which is all that is necessary to enable participants to evaluate their performance.

The actual content of any evaluation will be determined by the teaching objectives of the Business Game and the stage of development of the participants. The same Business Game will not give rise to the same pattern of evaluation after each use. The Game should be used as a springboard from which an evaluation session can be developed to any depth desired. Towards the end of an evaluation session, it may be interesting to ask participants what lessons they have learned, and to compare their answers with the teaching objectives of the Game. It is not unusual to find that participants have learned valuable lessons that the umpire did not have in mind.

Educational use

It should be stressed that the Business Game must find its place in a teaching programme alongside of other techniques. The Game is another weapon in the teacher's armoury, and in no way completely replaces other teaching techniques. A well-designed teaching programme will make use of all techniques in their place. Perhaps the Game particularly comes into its own to demonstrate a functional technique or the problem of interrelationships.

Business Games have their disadvantages. Among these are artificiality - participants may feel they have learned a lesson that is universally applicable, when perhaps it is applicable only to the simulated economic environment of the particular Game - and the acquisition of bad habits as well as good, which is inherent in any learning-by-doing situation. These disadvantages must be guarded against by careful supervision by the umpire.

It is impossible to say how effective the Business Game is as a teaching technique, or how effective any teaching is, for that matter. Those who have participated in Business Games claim that they have found the experience stimulating, and that it is a first-class environment in which to learn. Perhaps more than this cannot be claimed until further research is carried out into controlled group reactions.

Perhaps a final advantage that can be claimed for Business Games is their versatility. With a little experience, the enthusiastic teacher will be able to adapt and develop any game to meet the differing requirements of disparate groups of students. Some refinements and developments are mentioned in the Umpires Instructions in the individual games in this series, but these should not be regarded as exhaustive. An enthusiastic teacher will take the germ of an idea from a game, develop this to his own requirements, and then use it to his personal satisfaction and success and those of his students.

LESSON PLAN No. 21

Subject: Business Game

Duration: 3 hours (2+1) 2+ on Game, remainder on review

Method: Actual participation in Business Game plus discussion

Step	Duration (Mins)	Description	Comments
1	5	Introduction to Business Games (The Business Game used can be played either individually or by teams, tutor must instruct participants on whether they play individually or not. Team play has some advantages for trainers who are playing.)	
2	5	Distribute instructions and decision sheets to all participants.	
3	10	Go through instructions item by item and ensure that everyone understands	The game must not start until everyone understands what it is all about
4	5	Demonstrate use of decision sheet	Either chalkboard or flip chart ruled like decision sheet. Start with basic items in Game and work through two months. Show plus and carry over etc.
5	10	Announce start of Game. Participants to decide on what they will do in month 1 and work out decision sheet as far as Item D	Walk round and check each decision sheet correctly completed
6		Announce demand for month 10	First figure of first year in annex VI
7	15	Instruct participants to complete column 1 and bring forward closing stock/ shortage to column 2	Walk round and check for correct completion
8		Have participants make decision on month 2, and complete column 2 to line D	Check all are ready
9		Announce demand for month 2	
10	70 to 80	Continue 7 , 8 and 9 until 12 months are complete	Note: Time will decrease with practice; make sure demand figures are ticked off as announced

11	5	At end of Game summarize information as per Umpire's Instruction Sheet	Note that participants may feel they would like to continue for another 12-month period. If so repeat steps as required and make comparison of figures for each participant or team for the two years
12	40	Conduct evaluation session	See Notes on Umpire's Instruction Sheet
13	5	Summarize use of Business Games. Obtain participants' reactions	

Annex I

INDUSTRIAL SERVICES CENTRE
COMPANY DATA FILE AND TRAINING AND CONSULTANCY
NEEDS ASSESSMENT QUESTIONNAIRE

ORGANIZATIONAL DATA		ISC COMMENTS
1. Organization and history		
Name:		
Address:		
Telephone No.	Telex No.	
Telegraphic address:		
Type of company:	Public/private/limited/ corporation/	Owner/managed?
Date established:		
Date of start up:		
Capital structure:		Who provided capital?
Nominal:		
Subscribed:		Were there problems?
Loaned:		What were they?
Debentures:		
Article/Memorandum of Association:		
Board of directors:		Links with other organizations
Chairman		How appointed?
Chief executive		Duration?
Members		
Organizational structure (Insert small sketch.):		Who appoints managers?
		For how long?
		Do managers have a stake in company?
		What arrangements are there for management development?

Numbers employed

Department	Adults M	Adults F	Juveniles M	Juveniles F

Is detailed breakdown available? (e.g. based on skills direct/indirect labour : supervisory managerial level etc.)

Hours of work

Summer

Winter

Shifts

Other

Seasonality (of demand, raw materals etc.)

2. Company results

Check if results are easily available. Start with current or most recent results and work back

Profits/losses

Year	Actual	Budget/target

Capacity utilization

Year	Actual	Budget/target

Start with current year and work back

3. Objectives

Has the company got objectives?

Are they clearly defined?

In writing?

Are they understood?

To what level?

Are they feasible?

Are they attainable?

Are they realistic?

Do management consider it necessary to define objectives to all employees and to make sure they understand them?

4. Forward plans

Does the company have plans for the future?

Has the company got the resources to carry them out?

Do they involve expansion?

Are they well thought out?

Are they realistic?

Do they involve changes in structure?

Will they require extra management or supervisory staff?

Will they require any changes in managerial attitude or thinking?

Do they require extra technical or technological skill?

What sort of changes?

Has any action been taken to plan for these aspects?

Do they involve new investment?

Has there been a feasibility study?

By whom?

Is the study available?

What are the terms?

For what period have the plans been made?

How fixed/flexible are they?

Does management see any possibility of problems?

Can ISC assist?

What sort of problems?

In what way?

Is planning a separate activity?
If so, describe

What training have planners had?

5. Production

Management

Manager's name:

Personal details:

How long with company?

Age

How long manager?

Length of service

Training?

Education

Technical Training

Education?

Experience other employment if any)

Experience

Who reports to him?

Is there a structure?

Are there supervisors?

Are there job descriptions?

What training have they had?

Is training provided?

Products

Product or group	Description	Weekly Number Unit	Production value ex factory

If possible obtain also selling price for each product or product group

Machinery and equipment

Department	Description	Made by	Number off	Date of Installation	Capacity	Utilization %

ISC Comments on above: Stopped time in hr/min? As % of capacity?

Information of cost? Availability of standards?

Personnel skills etc. analysis

Department/ section	Number employed					
	Supervisors	Technicians	Machine operators	Trainees/ apprentices	Service operators	Labourers

Biological data for supervisors

Training arrangements:

Numbers

Facilities

Complexity

Raw materials

Description	Sources	Annual value	Volume

Storage
Handling
Stocktaking
Turnround
Seasonality

Inventory management/warehousing:

Methods: — Effectiveness

Volume: — Variations

Storage: — Raw materials

Handling: — Finished products

Security:

Have personnel been trained? If so, how?

Production planning and control:

Is there a separate unit? — Is there a supervisor in charge?

How is it organized? — To whom does it report?

Is it complex or simple? — Has it got specialized equipment? What type?

What are the problems? — Is the system too cumbersome? Are delays caused by it?

How effective is the system?

Effects of production changes? — How often? Are they necessary? Can they be avoided?

Are personnel trained? If so, how?

Industrial engineering etc.

Is there an Industrial engineering or work study section? — How long?

What are its responsibilities? — How staffed? Where trained?

How well trained/skilled are the personnel? | Is regular training provided?

How effective is the section? | In what way?

Is it used for:

- Solving problems?
- Method design?
- Incentives design?
- Establishing work loads?
- Any other purpose?

Maintenance

Is there a separate section?

How staffed?

How controlled?

How is maintenance-done?

- On breakdown?
- On planned preventive basis?

Is there a maintenance manager or supervisor?

- How was he trained?
- How long with company?

Is there a maintenance workshop? | Details of equipment

- How well equipped?
- How well-trained are personnel?
- How are they trained?
- Have they got all operating data on machinery etc.?
- How are spares obtained?
- How are they stored and issued?
- Are there problems associated with the procurement of spares?

Quality control

What arrangements are there for quality control? | Scope

Is there a separate section? | Location

How staffed? | Importance

Raw materials

Work in progress (WIP)

To whom is it responsible? | Finished products

Are its responsibilities clear cut and documented? | Rejection rate

Rejection %

Is its authority clear and accepted? | Repairs %

What training has supervisor had? | Scrap

What training is provided for personnel?

6. Finance and accounting

Current capital position:

Are balance sheets available? If so, try to get them for past five years

Is accounting manual or machine?

Machine type: Number: In use from:

Are clerical staff trained? If so, how? | Is training continuous?

Where?

Are machine staff trained? If so, how? | How?

How many?

Is there an accountant? | Stages?

Is he qualified? Where?

What qualifications?

If not qualified, has he had training?

Where? How?

Is it continuing?

How do they control the costs? | Do they have any knowledge of excess costs?

Do they understand marginal costing and how it could be applied? | Would marginal costing be useful? e.g. for export pricing

Do they use budgets? What sort?

Do they use budgetary control (BC)? | Do they understand what BC is?

And how it can be used?

What type and frequency of management information is provided? | Obtain specimens if possible

How useful are they?

Production data: bottlenecks etc.

Costs and excesses

Sales figures

Trading situation and results: profit and loss

Cash flow

Raw material stocks and purchases

WIP levels

Production plans

Finished product inventory

Customs credit or payment

Wages payments

What are their arrangements for credit control and negotiations?

How do they control payments, e.g. to suppliers?

7. Marketing and sales

Is there a separate marketing function?

How is it staffed?

How is it supervised?

To whom is it responsible?

Are there any specific training arrangements in marketing and sales?

Has the supervisor been trained?

Where?

How?

Have the personnel been trained?

Where?

How?

Are any still untrained?

Analysis of sales

Products/types	Home Quantity	Home Value	Export Quantity	Export Value

If more room is required, use a separate sheet

What is the sales organization's home base?

What are export sales arrangements?

What method is used for price fixing?

Is it effective?

Does it bear any relationship to costs?

Are there external constraints?

Do prices vary between home and export?

Is market research carried out? Training of personnel?

Into new markets?

How?

Into consumer reaction? Training of personnel?

How?

Packaging/design Special experience and training?

How?

8. Personnel administration

Is there a separate department dealing with personnel administration?

How is it supervised?

How is it staffed?

To whom is it responsible?

Has the manager/supervisor received functional training?

Where?

How?

Have the staff received any training

Where?

How?

Is there a written statement of personnel policy?

Does it cover :

Recruitment?

Selection?

Training?

Transfer?

Promotion?

Discipline?

Wages?

Incentives?

Holidays?

Motivation?

Stability?

Termination?

Safety?

Transport?

Time keeping?

Health?

Facilities?

Water

Toilets

Education

Legal responsibilities?

Wages negotiations?

Employee benefits e.g. Insurance?

Protective clothing?

Service rewards?

Fire?

Any other item?

9. Layout and methods

Is the layout well planned?

How necessary is a flow chart?

What is relationship of raw material stores to operating departments?

In the same building?

For building read location if necessary since some material etc. may be outside

Distance (approximately)

In adjoining building?

Distance (approximately)

In separate building?

Distance (approximately)

What are handling methods?

Porterage

Truck

Power truck etc.

Are sequential operations properly and closely related?

Are there adequate tools and fixtures etc.

What arrangements are there for supply of raw materials?

How is WIP moved from one operation to the next?

How is waste disposed of?

At each stage where waste is produced:

What is percentage?

What is volume?

What is value?

Can it be recovered?

Can it be sold?

Can it be used for other purposes?

How are finished products transferred to warehouse?

How effective are methods?

How good is housekeeping?

Deal with this section by section. Consider cleanliness, spoilage, hazards, condition of machinery, condition of stillages trucks, containers etc. Consider also the potential damage to finished products.

Department/section	Comments

10. Other relevant factors

(If any aspect of the organization has not been specified above, identify it and make comments that could be useful in assessing either training or consultancy assistance needed.)

Annex II

SAMPLE TRAINING EVALUATION FORMS

A. Assessment of the programme by participants

Title of programme:

Held at: From: To:

To help ISC improve future programmes, we should like you to complete this training evaluation form. It is not necessary to sign it, though you may do so if you wish, but we should be grateful for your assessment of the following items. We have left space at the end for your comments. Please tick the appropriate box for each question.

Programme content

1. How relevant was the content to your needs?

   Not at all ☐ A little ☐ Mainly ☐ Wholly ☐

2. Did you think the level of the programme was:

   Just right ☐ Too elementary ☐ Too advanced ☐

3. The range of subjects was:

   Just right ☐ Too narrow ☐ Too wide ☐

   If you have ticked either too wide or too narrow, please list below the subjects you would have included or omitted.

4. Suggestions for improvement:

Presentation

5. The duration of the course was:

   Just right ☐ Too short ☐ Too long ☐

6. The ratio of lectures to demonstrations or participation was:

   Just right ☐ Too many lectures ☐ Too much participation ☐

7. The visual aids were:

Relevant and effective ☐ Relevant ☐

Effective ☐ Neither ☐

8. How involved were you in the training?

A little ☐ Not at all ☐

Very much ☐ Too much ☐

9. Did you find any of the training methods more effective than others?

Yes ☐ No ☐

If yes, please identify them

10. Was the documentation:

Useful? ☐ Superfluous? ☐ Insufficient? ☐

11. How would you improve the presentation?

Administrative arrangements

12. Was the location satisfactory? Yes ☐ No ☐

If not, in what way was it unsatisfactory?

13. Was the organization satisfactory in the following respects:

Transport: Yes ☐ No ☐ If no, what improvements do you suggest?

Accommodation: Yes ☐ No ☐ If no, what improvements do you suggest?

Timing: Yes /__/ No /__/ If no, what improvements do you suggest?

Documentation: Yes /__/ No /__/ If no, what improvements do you suggest?

Comments

14. Which parts of the programme did you find most useful?

15. Which parts of the programme do you recommend to be replaced?

16. Any other comments:

You do not have to sign the evaluation form, but it would be useful for ISC if any of your comments or suggestions require to be followed up for further information

____

B. Assessment of individual lessons by the participants

Course title:

Held at: From: To:

Subject:

Date: At:

Instructor:

Please tick the appropriate box for each question.

Content

1. How relevant was the content to your needs?

   Completely ☐ Mainly ☐
   Not much ☐ Not at all ☐

2. The ratio of practical work to theory was:

   Sufficient ☐ Not enough ☐ Too much ☐

3. The level of instruction was:

   Too high ☐ Too low ☐ Just right ☐

Presentation

4. The presentation was:

   Just right ☐ Too detailed ☐ Too sketchy ☐

5. Did you find it:

   Thoroughly interesting? ☐ Boring at times? ☐
   Not at all interesting? ☐

6. Visual aids were:

   Relevant ☐ Well selected ☐ Irrelevant ☐
   Irritating ☐

7. The hand-outs were:

   Useful and well prepared ☐ Sketchy ☐
   Useless or irrelevant ☐

8. The instruction was understandable and clear:

Throughout ☐ Part of the time ☐ Not at all ☐

Comments

9. What changes or improvements do you suggest?

10. Were any problems unresolved: Yes ☐ No ☐

If yes, please explain.

You do not have to identify yourself, but in case we would like to follow up any of your suggestions it would be helpful to be able to discuss them with you.

____

C. Assessment of the instructor by the programme director

Instructo :

Subject:

Course title:

Held at: From: To:

Date: At:

Content

1. How relevant was the content to your needs?

   Completely ☐ Mainly ☐ Not at all ☐

   Little ☐

2. Was the instruction level:

   Correct? ☐ Too low? ☐ Too high? ☐

3. Was material:

   Thoroughly prepared? ☐ Sketchy? ☐

   Not prepared? ☐

4. Was coverage:

   Adequate? ☐ Complete? ☐ Slight? ☐

Presentation

5. How effective was the method of presentation?

   It maintained constant interest. ☐ It maintained interest most of the time. ☐

   It did not maintain interest. ☐

6. Were visual aids used:

   Effectively? ☐ Too much? ☐ Not enough? ☐

7. Was the group involved:

   Very much? ☐ To some extent? ☐ Not enough? ☐

8. How prepared was the instructor?

   Satisfactorily /_7 In some respects /_7 Not well enough /_7

9. Was the ratio of practical work to theory:

   Satisfactory? /_7 Too much theory? /_7 Not enough theory? /_7

10. Had the instructor any mannerism that affected his performance?

    Yes /_7 No /_7 If yes, what were they?

    In what way did they affect his performance?

11. Was there sufficient opportunity for review summary and questions?

    Yes /_7 No /_7

<u>Comments</u>

12. What improvements do you suggest? (e.g. time allocation; programme sequence; methods of instruction; methods; hand-outs)

Annex III

SAMPLE IN-BASKET EXERCISE[a]

A. Background material

You are a member of a management consultant firm. The head of your firm has been called in on a consultant job, which he has allocated to you after conducting the initial interview with the client. He has given you the attached confidential file with the following explanations.

Your client is Mme Phan Boon Tran who is the widow of the proprietor of a chain of three retail stores supported by a small metal manufacturing plant. Most of the products this plant manufactures are sold through the retail stores, but some products are manufactured there to meet government orders. These orders are normally obtained by tender. Your client's husband died four months ago and the widow has been trying to carry on the business with the assistance of her late husband's executives.

These executives are: the Managing Director, Alexander Boom, who has held this position with the company for almost four years; the Plant Manager, Morgan; and the managers of the three retail stores, Morales, Allen and Ang Soong. All of them have been with the organization for some years.

Your client understands and speaks English well, and this is the language in which most of the business of the organization is conducted. However, she does not read or write English and therefore has difficulty in understanding the books and documents

a/ Extracted from In-Basket Exercises for Management Development, Management Development Manual No. 28 (Geneva, International Labour Office, 1968).

of the company. In particular, she cannot understand the contents of the confidential file that has been handed to you. She found it, locked, among her husband's papers after his death. She has tried to read it but without any success and she does not trust Boom, so she has not discussed it with him.

Since her husband's death, she has been living on money available from his estate, and when she has asked Boom about the profits of the company, he says the organization is losing money. She has asked him for the accounts, but he has put her off, saying that she will have to wait for the six-month audit to be completed. In any case, she knows she will not be able to understand them.

You do not know your client and you did not know her husband, but the head of your firm was well acquainted with them both for some years during the husband's lifetime. He is not able to add anything to the details of the organization you are to investigate, as the late Mr. Tran never talked about his business.

It was rumoured that he had trouble with the authorities over not revealing his total income. He had lived well and was reported to be wealthy, but whether as a result of his business or from successful gambling on his string of horses, no one ever knew.

The head of your firm says he thinks it likely that the business was never properly incorporated but carried on without any structure other than the owner's personal control. Consequently, Boom's title is likely to be no more than a courtesy one, without legal significance.

At this stage you are not to discuss anything with Boom or the store managers and your investigation is entirely confidential. What your client wants to know is: What are the significant contents of the confidential file? and what do you recommend as a result of studying the file?

Since your client knows nothing about this business she cannot help you with any further information, but she has reached the point where she wants to have a showdown with Boom so that she can find out exactly where the business stands.

As a final bombshell, the head of your company says that the whole question has suddenly become very urgent. The client has just telephoned him to say that Boom wants to see her urgently this very afternoon. She wants your company's representative to be present at the interview as her business adviser. Your boss adds that he wants your report in just one hour. He says he knows this is unreasonable, but that's how it is.

Summing up: Within one hour, with no other information than you have, you are to examine in detail the contents of the confidential file and report on your findings, make recommendations on what should be done and (your boss adds) decide whether you should attend the meeting with Boom later in the day.

B. Contents of the In-basket

Sheet 1

COPY

3 March 1964

Mr. Alexander Boom

Dear Boom,

We agreed today that you would be the Managing Director of my enterprises and that you would be paid a salary of £2,000 a year, which I would review each year according to the profits.

In addition to this, you will have the free use of a car belonging to the enterprises, and the costs of running it, up to £700 annually, can be charged to the firm's account.

This is just a note so that we are both in agreement on what was decided.

Phan Boon Tran

Sheet 2

Profit and Loss Account
(Consolidated)

	1964	1965		1964	1965
Stock B/F	247 312	229 716	Sales	690 912	673 418
Purchases	542 519	598 218	Stock C/F	229 716	211 419
Gross profit	130 787	65 903			
	920 628	844 837	TAX 50 000	920 628	884 837
Salaries and wages	27 619	28 217	Gross profit	130 787	65 903
Stationery	950	922			
Rent	4 000	4 000			
Advertg.	2 060	1 997			
Repairs	190	220			
Bad Debts	226	184			
Net profit	95 742	30 363			
TAX 50 000	130 787	65 903		130 787	65 903

Note to instructor: This should be rather roughly typed, as above. Do not imitate it exactly, but make a few errors in alignment and some overstamping, although not bad enough to be obscure. The idea is to suggest that it has been typed by a poor typist, which adds to the realism of the document. Add the inked changes as above.

Sheet 3

Government department contacts

Public Works	Aressa Mobutu
Post and Telegraphs	Arnold Warne
Finance	Alwyn Moores
Taxation	George Chan
Customs	Oris Tran
Harbours and Ports....................	T. B. Shuon
Agriculture	Art Sawne
Education	Ellis George
Police	Aitken (Capt.)
Water and Irrigation	Amos Conn

Sheet 4

Mr. Isan,

The staff of the factory is getting a bit restless because they think we are making a big profit.

Their wages are the same as they were two years ago but food costs have gone way up in that time.

What do you think we ought to do?

Alexander Boom

Sheet 5

1966

Profit and Loss Account

(Consolidated)

Stock B/F	211,419	Sales	706,432
Purchases	690,316	Stock C/F	229,519
	935,951		935,951
Salaries and wages	28,919	Gross Profit	34,216
Stationery	818		
Rent	4,000		
Advtg.	1,219		
Repairs	—		
Bad Debts	198		938
	35,154		35,154

Note to instructor: The instructions given on sheet 2 apply here.

DEPARTMENT OF TAXATION AND REVENUE

P. O. Box 5570

Bangaloops

5th March 1967

Mr. Phan Boon Tran,

P. O. Box 33D,

Bangaloops

Dear Sir:

Further to the discussion in your office today, the Department will drop all investigation of your returns for tax purposes if you forward within seven days your cheque for £ 3,200 in full settlement of the Department's claims.

Kindly note that proceedings will be taken after seven days if this letter refers only to your income up to the end of the year 1965.

Yours faithfully,

W. Q. Shan

Commissioner

Sheet 7

You ought to be telled that your wife is not what you think she is. She is carrying on a affair with your managing director. And this isn't the first time she has been playing about while you are busy with your factory and bizness.

I won't tell you anymore or who I am but I'm just telling you so you know.

Argus, Springfield and Phoon

Solicitors and Business Agents

November 3rd 1966

Phan Boon Tran Esq.,

My dear Tran,

We have fully discussed with our client the proposal to buy your business.

Assuming that your accounts for 1965 and 1964 can be verified by our auditors, and that you will undertake not to start a similar business within ten miles of present sites, our clients are interested in discussing a firm price.

They consider that your valuation of £500,000 is too high, but this could be affected by the value of the stock. They suggest that a price of £200,000 plus actual value of stock, as assessed by an independent valuer appointed by them but at your expense, would be reasonable, always assuming the above provisos.

Will you let us know if this proposition is acceptable in principle. If it is, we will prepare an agreement to be signed by both parties.

Sincerely yours,

Argus, Springfield and Phoon

Sheet 9

Tran:

The government will give every encouragement to any manufacturer, you or anybody else, who provides work and goods. You cannot be protected from competitors starting up unless you can get the government to declare you a pioneer industry. This will give you tax exemptions, customs duties to keep out imports and no one will get any licences to import goods that compete with you, or machinery to make them.

If you want this, you will have to start a new factory, or produce a new range of goods. As the law stands, it is only for new industries, so you will have to do something more than just carry on as you have been doing. If you do this, there's a good chance you can get the special status above.

If you don't someone else might. Of course, this helps you too but if you want to dominate the market you will have to get in before your competitors and you might scare them off. Once you are started and given the status, I think we can see to it that new competitors don't have a chance to bring in plant or machinery, so you would be a lot better off.

Why don't have a drink on Friday and talk it over?

Yours,

Al

Sheet 10

To whom it is of concern:

This is my last will which I write while of sound mind and full knowledge of what I am doing.

I wish that all my goods and possessions, whatever they are, should be given to my daughter Ariadne Lew Tsan and used for her education and welfare. I do not wish that my wife should receive anything because I have well provided for her in my life.

Phan Boon Tran

First January 1966.

Sheet 11

SUN WONG AND SIMPSON

CONSULTANTS

P. O. Box 173L

Bangaloops

17th April 1966

Confidential

Mr. Phan Boon Tran:

You have asked us to look into the affairs of your business quietly and to make recommendations on its future development. You will find a great deal of detail in the pages of our Report which follows, but this is a summary as we see the position.

1. Your factory produces goods for which there is an increasing need in this country and we think you ought to keep it going and consider expanding your output sometime within the next year. If you don't, the market will get bigger, you will be unable to supply all requirements and competitors will start.

2. Your retail stores are located in the right places and you should consider starting another one at Rodcase where there is a big workers' estate being started.

3. The methods in your stores are out of date. They should be painted in light colours, inside and out.
Shelving must be cleaned and painted and kept clean.
Your service counters should be covered with light coloured plastic or something of that kind. If you brighten up everything it will help to attract more customers and sell more goods. In the same way, you should brighten your staff - give them bright-coloured uniforms and make sure they keep them clean and tidy.

4. Your accounts show that profits are declining. You should examine all expenses and see where you can cut them down. This is the best way to increase your profit.

5. We think your managers are all O K, but you might try giving them a bonus on results so that they will try to work harder and make more sales.

In the main Report all these items are discussed in full. If you take our advice, we think your problems will soon disappear.

Yours faithfully,

Sun, Wong and Simpson

Consultants

C. Instructor's notes

The papers consist of three groups:

(a) The accounts of the business:

(b) Other business matters;

(c) Personal matters.

The accounts

Sheets 2 and 5. Any trainee ought to be able to note that the net profit has been falling. The important point, however, is that the gross profit has been falling, during the period of the accounts, while sales have been going up. Probably this would be picked up only by accountants or students of accountancy. Therefore, either the exercise should be confined to people with this interest, or the non-accountants should not be expected to notice this point.

Suppose the group merely picks up the fall in net profit, the question that should be asked is, Why is it falling? The obvious answer is that expenses are going up. But are they? Examination of the expenses after the gross profit is determined (in the second part of each statement) will show that these costs are tending down, not up. Why then are profits falling? This leads to an examination of the gross profit. It is falling. Why? Are sales down? No, they are up. What about stock carry-over each year? Not much change across the period. Purchases? Yes, they are going up. So what is the conclusion?

Most likely that either the costs of individual items purchased have been creeping up, that is, the firm has been paying rising prices for the same goods, or that sales prices have not been high enough. This may include too many items sacrificed at sales or allowed to become dirty or damaged so that they have to be sold at a discount. Somehow, volume has been sacrificed to profit. Turnover is up, gross profit on the turnover is down. Something is clearly wrong with either the buying policy or the pricing policy, or both.

With an accounting group, a lively discussion can be provoked on this. With a non-accounting group, the accounts analysis gives the chance to talk about the folly of going for turnover only - a company can go broke even while its sales are buoyant.

The notes in ink on the accounts show that Tran has been understating profit by a stock undervaluation or reserve. This is common enough and of no importance in revealing conditions in the business.

Other business matters (Sheets 3, 4, 6, 8, 9, 11)

Sheet 3. This is a list of Government department contacts, which is a perfectly legitimate list. Every businessman needs this type of contact. Some trainees might want to suggest corruption, but that is not necessarily so.

Sheet 4. This shows little of importance; it indicates that costs are not rising at the factory, but that there may be a bit of bother ahead. It is not known whether Tran did anything about the problem. Did he raise wages? What do the accounts reveal? On the other hand, the sheet suggests something about Boom, who signed it. He is the Managing Director. He ought at least to be making a recommendation, not asking for advice. This could lead to a discussion of the need for strong managers willing to tackle problems or at least recommend solutions.

Sheet 6. This is a red herring, of no importance. It does confirm that Tran had some difficulties with the tax people, but it is settled, and in any case, tells nothing about the present state of the firm.

Sheet 8. Is this a way out for the widow? Should she get in touch with this company and re-open discussions. It is not known what happened from this letter. Would the company be willing to offer the same price now? (See the continued fall in profit to a loss after the letter was written.) Incidentally, are the ideas on independent valuation of stock and the suggested contract to keep out of a similar business in the locality good ideas?

Sheet 9. Here is another possibility, to expand the manufacturing side. If the fall in gross profit is due to higher cost per unit buying, it might be good business for the company to manufacture its own units in greater quantity and so control the buying price. But there is another trap here. The gross profit includes profits from the sale of goods manufactured. It might be that they have been sold at too low a price and so have lifted turnover, but cut the profit. So the factory and the shops need separate investigation. Anyway, this is a proposition which is worth considering as a solution to the firm's difficulties.

By the way, "Al" can be identified as the contact man at the Finance Department of the Government, so his advice should be reliable.

Sheet 11.

Item 1 of the summary report supports the idea of expansion.

Item 2 writes off one possible cause of loss - bad locations.

Item 3 seems sound and sensible enough.

Item 4 is wrong and should undermine confidence in this consulting firm. Expenses are down, not up; the cause of the losses lies elsewhere, as has been shown above. Then the consultants have just recommended increased costs - painting and so on. Finally, is cost cutting really the best way to increase profits? This reveals a negative attitude. The best way to increase profits is more turnover at profitable levels. If this consultant's advice is followed and expenses are cut, the root of the problem is still not reached because the gross profit is down and no cost cutting later will do much about that.

Item 5 suggests a bonus on results. What results? This is a question for discussion. Clearly, in the present result-of-business position, a bonus on increased sales might merely add to the loss - higher turnover in this company has been accompanied by falling profits. So a bonus is needed on profit results. This is a good type of bonus for management at all times. A salesman may get a bonus on sales, since he is instructed on what his price is to be. Managers, though, must manage, not just sell.

On this sheet, the last question for discussion is, If the consultant's advice were followed, would the firm's difficulties be solved?

Personal matters (Sheets 1, 7 and 10)

Sheet 1. This is of no importance. It records an agreement that has no present effect on the situation. Boom may, of course, want his annual rise considered. Should he get it?

Sheet 7. A red herring; best destroyed

Sheet 10. This is something of a bombshell, but it ought not to divert attention from the main business in hand. The trainee has been asked to report on the apparent state of the business and what ought to be done about it. He should go ahead with this and carry out his instruction. It is not his affair whether the widow owns the business or not. However, he cannot ignore it. Top treatment would be to report on it separately to his own boss raising the question of whether he, the boss, should tell the widow about the will and advise her to get legal advice on whether it is valid and where she stands.

Comments

The best performance will be by those who quickly eliminate the unimportant items, dispose of the will by calling it to the attention of the boss, and then get down to analysing the firm's situation. There are three possibilities: expand, try to sell, or set the present business on its feet.

In any case, it will be necessary to get out separate accounts for the manufacturing side of the business and see what contribution it is making to the total position.

In view of the doubt about the widow's legal position, the boss might be advised to suggest she tell Boom that she cannot give him time as requested for discussion and make an appointment for a couple of days later. This will give a breathing space for a more leisurely examination of, and report on, the accounts etc. But the trainee must not rely on this. He can recommend it, but he must still come up with his report and analysis, even if an interim one.

Annex V

SAMPLE OF PROGRAMMED INSTRUCTION

1. At one time or another you may have heard or read something about "programmed instruction" and "teaching machines". If you feel you would like to learn more about the basic principles of programmed instruction, what a teaching machine is, or what constitutes a programme, go to question 2

2. That you might more fully appreciate the principles involved, the following items will present you with information in much the same way that programmed instruction would. As you proceed you will be asked to supply the missing word or words for each number. So that this paper may be used again, please write all your answers on a piece of paper. Please number your answers.

3. Remember as you work that this is not a test. Each blank can be filled in from the information given in the frame. If you have difficulty answering, re-read the whole frame. After you have written the word or words of your choice, check your answer against the programme answer to the right of the question. Perhaps you will find it better to cover these correct answers with a piece of paper until the right time comes to reveal them.

If your answer is correct, proceed to the next item. If you make an error, draw a line through the incorrect answer and write the correct answer above it.

4. For example:

After you have studied all of the information on a given page write your ____________ on the sheet provided.

You now have enough information to write the word "answer" on your paper.

Now check yourself by looking to the right and reading the correct word.

4. answer

Note: Answers that are the equivalent in meaning to the suggested answers should be taken as correct

5. No doubt you have read something since 1961 that has described a new technology of education called "programmed instruction". However, a careful study into its early development would reveal that programmed instruction is not really as new as some authors have implied.

Under the direction of Prof. B. F. Skinner, psychologists at Harvard University began their research on programmed instruction over 30 years ago (i.e. about 1933). The principles of programmed instruction that you are about to learn are the applications of learning principles established in Skinner's laboratories.

6. By working with pigeons and later with their own students, the Harvard psychologists concluded: The most efficient and permanent learning takes place when the student:

(a) Proceeds through a course by a number of small steps;

(b) Actively responds at each step;

(c) Receives immediate confirmation or correction of his response;

(d) Proceeds at his own rate.

7. Let's examine each of these four principles separately. First, the principle of small steps.

Psychologists have taught pigeons to walk through a complicated tango (dance) step by teaching it as though it were a series of smaller, less difficult_________.

7. steps

8. The practice of teaching a skill or subject by breaking it down into smaller, less difficult parts or steps is not new. An old law of mathematics tends to support this method of teaching.

Try to complete it
"The whole is equal to the sum of its ______________.

8. parts

9. Laboratory experiments with pigeons have shown that they can be taught complex forms of behaviour by leading them through a carefully planned series of very ________ ________.

9. small steps. For example, pigeons have been taught to distinguish between colours, recognize shapes, and play ping pong.

10. As we develop principles 2, 3 and 4 you will begin to understand the values of the first principle of instruction, namely ________.

10. small steps

11. The second principle is that of active responding. This principle may remind you of the statement "We learn by doing". When we are actively responding we are learning by ________.

11. doing

12. When reading a book or watching a film, the student can remain passive: in working through a programme, however, the student must ________ respond at each step.

12. actively

13. The writing out of your answers as you are now doing would be one method of actively ________.

13. responding

14. Selecting the correct answer from a set of alternatives, such as is found at the end of a multiple-choice type question, would be another example of ________________________.

14. actively responding

15. Remember the most efficient learning takes place when every step of a programme demands some type of ________ ___________. This is the second principle of programmed instruction. The first was that of ______________ _______________.

15. active responding or response

small steps

16. The third principle is that of immediate confirmation.

Skinner found that his animals learned best if they were first starved and then rewarded with _________________ every time they performed correctly.

16. food

17. Food would not be an adequate reward to an animal with a full stomach.

If you have ever taught a pet a few tricks, perhaps you, like Skinner, used food as a ___________.

17. reward

18. The psychologists call this type of reward "reinforcement"

To reinforce is to ______________ for a correct response.

18. reward

19. A synonym for "reinforce" is strengthen. Something that is known to strengthen a given behaviour can be said to ________________________ (technical term) that behaviour.

19. reinforce

20 To a hungry animal, food serves as adequate _____________.

20. reinforcement

21. The studies at Harva[illegible] revealed that all organisms, including [illegible]ans, tend to reproduce any behaviour that is adequately __________________________ (technical term)

21. reinforced

22. For the most efficient learning to take place, reinforcement should follow immediately the correct response has been given.

A time lapse of more than a few seconds will begin to affect the amount of learning that takes place.

For best results, reinforcement should follow the response__________ .

22. immediately

23. It should now be easier for you to understand how psychologists can develop complex behaviours in pigeons.

Using the principle of __________ reinforcement, they can continue any number of ________ ____________ into a desired behaviour.

23. immediate
small steps

24. You may be wondering why we refer to the third principle as "immediate confirmation" rather than "immediate reinforcement".

In order to be immediately reinforced the student must first receive immediate ______________ that his response is correct.

24. confirmation

25. As you check each of your responses, you either receive ________________ ________________________ that your choice is correct or you find out you have made an error.

25. immediate confirmation

26. When you make an error, you are not ____________ (technical term).

An individual has no tendency to repeat a response that has not been __________ (technical term).

26. reinforced
reinforced

27. People like to answer questions correctly. It is this feeling of success that acts as ____________ (technical term).

27. reinforcement

28. An individual properly reinforced for correctly responding to a given situation will tend to ____________ in a like manner when confronted with a similar situation.

28. respond

29. Remember, answers must be confirmed before reinforcement takes place.

This is why we refer to the third principle as __________ __________ rather than immediate reinforcement.

29. immediate confirmation

30. The principles of programmed instruction are applications of sound principles of learning first discovered in psychology laboratories.

The first three are:

1. ____________ ____________
2. ____________ responding
3. ____________ ____________

30. small steps
active
immediate confirmation

31. Since you are working through this programme without supervision. You can more along at a rate that seems natural and comfortable to you.

This illustrates the fourth principle of programmed instruction - the principle of proceeding at your own ____________________.

31. rate

32. If a student stops to think while listening to a lecture or watching a film, he may miss part of what is being presented.

While working on a programme, however, the student can stop and think whenever he wishes to do so without ________________ part of the instruction.

32. missing

33. Programmed instruction is a self-tutoring technique that allows the student to proceed at his own___ ______.

33. rate

34. The fourth principle of programmed instruction can be remembered as three words.

Student's ______ ___________.

34. own rate

35. Each of these items represents one step in the programme.

Another name for a step in the programme is a frame.

Therefore, each item represents one ____________________.

35. frame

36. By looking at any framein this programme you are reminded of each of the ___________ (number) principles we have discussed.

36. four (4)

37. First, each frame presents a ______________ amount of new information.	37. small
Principle 1 ________ __________.	small steps
38. Second, each frame asks you to ______________ in some manner.	38. respond
Principle 2 __________ ________.	active responding
39. Third, at the right of each page you will find the correct answer, which will ______________ your response.	39. confirm
Principle 3 ____________________ ____________________.	immediate confirmation
40. Fourth, each frame can be read at a ________ _______ that is comfortable to you, as the student.	40. rate
Principle 4 Student's __________ ____________	own rate
41. With these principles in mind, see if you can complete the following statement.	41. small steps actively responds immediate confirmation his own rate

The most efficient and permanent learning takes place when the student:

1. Proceeds through the course by a number of __________ _________.
2. ______________ ____________ at each step.
3. Receives ____________________ ______________ at each step.
4. Proceeds at _______ ______ ______.

42. Two styles of programme are in common use. The first, developed by Skinner, is called "linear" programming. Other less commonly used names for a linear type programme are Skinnerian, sequential, constructed response, and extrinsic. For our purposes we will use only ____________________. 42, linear

43. A linear programme presents frames to the student in a definite sequence. 43. linear

This programme would, therefore, be a ____________________ type programme.

44. There is no jumping around from frame to frame in a linear programme. Every student reads the same material in the same order or ____________________. 44. sequence

45. The second style of programming is called "branching". It was developed by Norman Crowder. Other names for it include: Crowderian and intrinsic programming. 45. branches

From its name, one might suspect that a branching type programme, like a tree, is made up of many separate ____________________.

46. Here is how a branching programme works. A student reads a small amount of new material and answers a question about it. If he answers correctly, he moves on. If incorrectly, he is

directed to a branch of the programme that will tell him why he made the error and review the material he did not grasp. He will then be required to answer correctly the original question or a similar one before moving on.

From the list below, select the best answer to complete the following statement:

When using a branching programme, the student who answers each question correctly will read _______________ frames than the student who misses one now and again.

46. Go to the frame suggested opposite the number of your choice.

(more)	go to frame 47
(less)	go to frame 49
(the same number of)	go to frame 48

47. Based on the information given you have answered incorrectly: however, you may have been correct if you were thinking of a non-remedial type branch. A non-remedial type branch is one that is written specially for the student who seeks additional information on a subject over and above that which is required by the average learner for completion of the course.

For purposes of this comparison, however, let's just consider those branches that are *introduced to correct the student's thinking* when he makes the incorrect response.

48. Go back to frame 46 and select another answer.

49. You are correct. The student who proceeds without error reads the minimum number of frames.

At this point in a branching programme, the student would be presented with new material and asked a question about it. However, we will now move back to the linear style. (Note: If you want to see how wrong responses are handled read frames 47 and 48).

50. The two basic styles of programming are:

1.
2.

50. linear
branching

Programmes are not limited to either style. In fact, some of the more interesting ones use a combination of both.

51. A programme can be published in several accepted forms. This one, for example, could be changed for presentation on a teaching machine.

51. machine

A mechanical device that presents programmed material to the student one frame at a time is called a teaching ______________.

52. There is a variety of teaching machines on the market.

Most of them have a lever, button, or knob which the student pushes or turns to expose the right answer. Thus the student gets immediate ______________ that his answer is correct and is, therefore, ____________ (technical term)

52. confirmation
reinforced

53. Some _____ ______________ machines require the learner to construct his answers on a paper tape. The tape advances automatically with each new frame.

53. teaching

54. There are several teaching machines on the market that use film rather than paper to carry the programmed material. The advantage here is that more information can be stored on a roll of ____________ than on a similar amount of paper.

54. film

55. By way of review:

We have studied two styles of programming. Can you name them?

1. ______________________

2. ______________________

Both styles can be presented in a book or on a _________ ________________ ______________________.

55. linear
branching
teaching machine

56. Now that you understand how programmed instruction works, let's sum up by telling you something about its capabilities. Compared with other forms of teaching, programmed instruction would rank second only to the tutorial method. It is unique in that it makes possible the combination of the advantages of the tutorial method with the economies of disseminating information through printing. Many of the characteristics that make the tutorial method the ultimate in teaching are the inherent principles of programmed instruction. For instance, a tutor guides his students through a carefully planned series of small steps, asks questions at regular intervals to test comprehension, immediately confirms or corrects all responses, and moves forward at a rate that is comfortable to the student. The similarities of the two teaching techniques are obvious. Is it any wonder that there is so much interest in this new method of teaching?

All programmes go through a period of testing prior to publication. Out of this testing phase comes a superior pre-evaluated programme guaranteed to accomplish the objectives. Such a programme makes the fundamental concepts of the material so clear and evident to the learner that it becomes very easy for him to apply his newly acquired knowledge back on the job.

You have just completed a course on programmed instruction. We hope that it has been interesting and informative and that you now have a knowledge of how it works and what it can do for you.

Annex V

SAMPLE ROLE PLAYING EXERCISES

Role player 1A

You are Badri Lal Manandhar.

You are the General Manager of Thapathali Textiles Ltd., which is a public enterprise set up ten years ago, employing 65 people in the manufacture of textiles mainly used as apparel.

Your accountant, Padma Ratna Shakya, has reported to you, based on the information he collects daily, that lengths of cloth disappear regularly from your warehouse.

He has been unable to find out who is responsible, but thinks that it is the warehouse supervisor, Navra Chandra Shah, who is working with one of the drivers employed by one of your biggest customers. He thinks they are removing cloth from the warehouse along with cloth that is intended for the customer. The extra pieces are unloaded somewhere on the way and find their way onto the market.

Before reporting the matter to the police you decide to make some inquiries yourself, and accordingly you have Mr. Shakya in your office. It will depend on the result of your investigation what you do next.

Prepare yourself for your talk with Mr. Shakya and show us what you would do.

Your should bear in mind that Mr. Shakya and Mr. Shah have had difficult relations with each other for the past three years. You do not know why, but wonder whether this can have affected Mr. Shakya's suggestion about Mr. Shah being responsible.

Role player 1B

Your name is Padma Ratna Shakya.

You have been employed for six years as accountant by Thapathali Textiles Ltd., a public enterprise employing 65 people and manufacturing textiles used for clothing.

You have noticed from your records that several lengths of cloth have been disappearing from the warehouse at fairly regular intervals. You have made some inquiries but have been unable to find out anything definite, but most of the cloth seems to disappear when one of the company's biggest customers is collecting cloth for its own use. You know the driver of this wagon is very friendly with Navra Chandra Shah, the warehouse supervisor, and they seem to spend a considerable amount of time together.

About three years ago, Mr. Shah and you had a serious difference of opinion about the stock, and relations between you are still difficult. Your opinion was not accepted by the management.

You report the situation to Badri Ial Manandhar, the manager of the company. He has told you he wants to make further investigations and has called you to his office.

You may be called on to justify your claim that Mr. Shah and the customer's wagon driver are working together and are responsible for the disappearance of the cloth. Mr. Manandhar has indicated that he may have to call in the police to make inquiries.

Role player 2A

You are Megha Krishna Singh.

You are the Extension Services Division Chief at ISC.

Swayambhu Binod Pradhan, Chief of the Training Branch, has informed you of disciplinary problems in the Branch.

Although you and he have agreed that the work of the Branch must be very carefully planned and controlled in order to make the best use of all the Branch resources, including manpower, equipment and facilities, one of the senior officers, Rasendra Shrestha, refuses to complete a weekly planning schedule of the work he expects to do compared to the work he actually does.

It seems that Mr. Shrestha also leaves Balaju without informing anyone where he is going, and from time to time, he appears to be engaged in work about which neither you nor Mr. Pradhan know anything.

There have been several other incidents that you know of where Mr. Shrestha has not followed instructions, but no action has been taken as far as you are aware.

You have, therefore, called Mr. Shrestha to meet you in your office in 15 minutes. This will give you time to decide on your approach to dealing with the problem.

Role player 2B

You are Resendra Shrestha, senior officer in the Training Branch of ISC.

Your branch chief, Mr. Swayambhu Binod Pradhan, was appointed to the post about 12 months ago. He has less service with ISC than you, and you have been in the Training Branch for two and half years. You expected to be promoted to branch chief but this did not happen.

You are an independent man. Rules and regulations are guides to you rather than instructions, and you consider that you can often find better ways of achieving results than simply obeying the regulations.

A few weeks ago, the branch chief introduced a new planning chart for each officer in the branch. He said it had been agreed with Megha Krishna Singh your division chief, but it did not seem to you to serve any useful purpose. If anything, it would prevent you from moving around freely and being as flexible in your approach, so you have not bothered to complete it or to give your reasons for not doing.

If you are given a job to do you like to go ahead on your own without consulting any one else at ISC. After all, you are the most experienced officer in the Branch.

You are now advised that Mr. Singh wants to see you in his office in 15 minutes. What are you going to do and say?

Role player 3A

You, Narayan Bhattarai, are the General Manager in the Nepal Central Trading Company (NCTC).

You have just been informed that Maniharsha Gautam, the Managing Director of one of your biggest customers, is waiting to see you.

He has written to you explaining that his company had placed an order with you for 25 tons of cement - which is in short supply - and had been informed that this would be available within one month from the date of order. The order was placed four months ago, but no deliveries have been made. This has interfered with Mr. Gautam's company's expansion programme and has caused a loss.

More than that, however, Mr. Gautam has learned that one of his competitors, the Lainchaur Exploration Company, has had cement delivered to them within two weeks of placing their order. This order was not received by NCTC until after Mr Gautem's.

You have about 10 minutes to decide how to handle the interview.

Role player 3B

Your name is Maniharsha Gautam. You are the Managing Director of Lal Durbar Minerals Ltd., one of the biggest private groups of companies in Nepal.

You have been a customer of the Nepal Central Trading Company (NCTC) for many years and you are probably among the biggest five.

Relations have usually been good, and you have gradually accepted their promises as being firm.

About four months ago, your company ordered 25 tons of cement, which is in short supply, from NCTC and were promised delivery in one month.

No deliveries have yet been made, but you have learned that the Lainchaur Exploration Company, one of your biggest competitors, has had cement delivered to it by NCTC. This delivery was made within two weeks of the company placing its order.

You have written to Narayan Bhattarai, DGM of NCTC, setting out the facts, and you have an appointment to meet him in 10 minutes.

How are you going to approach this problem?

Annex VI

SAMPLE BUSINESS GAME

A. Instructions to participants

1. Situation

You are now to assume that you are in charge of a factory that produces only one product - the Ilo.

In your assumed capacity, you will have to make a series of decisions concerning the number of Ilos to be produced each month. Your task has been simplified because you can also assume that:

(a) Once you decide on the number to produce, it has immediate effect, i.e. there is no time lag between making your decision and bringing machines into production;

(b) Ilos are immediately available for sale in the month in which they are produced;

(c) There is unlimited production capacity and storage space.

Your factory receives orders for Ilos in the demand pattern outlined in section 2 below. Normal trading terms are such that the customer expects his order to be met from stock. All prices and costs are expressed in a mythical currency unit, the UN.

2. Demand pattern

The following information is available concerning potential demand, i.e. the orders you can expect to receive in the coming year:

(a) There is no seasonal pattern;

(b) Demand fluctuates but appears to average around 200,000 units per month;

(c) The highest demand in any one month over the past few years was 260,000 units, while the lowest was 140,000 units. However, these extremes were experienced not more than once or twice per year - for well over half the time, demand varied between 160,000 and 240,000 per month.

As stated above, the customer expects his order to be met from stock. However, demand which cannot be met due to shortage of stock can be carried forward and receives priority for delivery as soon as sufficient stock is available, but additional cost is incurred should the customer be inconvenienced in this way. (See section 5 below.)

3. Production level

You are to assume that at the commencement of the exercise your factory is producing at the rate of 200,000 units per month. You may decide to alter this, up or down, in the first or any subsequent month. However, the production process is such that production level can only be changed in steps of 10,000 units.

Once you have made a decision on a level of production, your factory will continue to produce at this level each month until you change the level by a subsequent decision.

4. Stock level

You commence the exercise with 50,000 units of finished Ilos in stock. The amount available for sale in the first month will thus be this figure plus whatever you decide to produce in the first month.

5. Costs

The following costs will be incurred as a direct result of the decisions you make each month:

(a) UN 100 for every 10,000-unit step up or down in production level;

(b) UN 3 for every 1,000 units in stock at the end of each month;

(c) UN 25 for every 1,000 units of Ilos that cannot be delivered in any month due to shortage of stock - this is payable to the customer as compensation for inconvenience caused.

You may, if you wish, keep a cumulative total of costs incurred each month, but in any case, these costs will be computed in total at the end of the year.

6. Sequence of operation

This sample Business Game will adopt the following sequence:

(a) You will decide your production level for month 1, and record this on lines A and B in month 1 on the decision sheet. This will automatically determine the amount available for sale in month 1, having taken into account the opening stock of 50,000 units. Month 1 on the decision sheet is thus completed as far as line D;

(b) As soon as each participant has completed line D, the umpire will announce the demand for month 1, this you will record on line E of the decision sheet;

(c) You are now in a position to calculate your closing stock at the end of month 1 - or your stock shortage as the case may be; record this on line F or G of the decision sheet and carry forward to line C of month 2;

(d) You will now decide your production level for month 2 and record this on lines A and B in month 2 on the decision sheet. An adjustment of the opening stock or stock shortage, as the case may be, will again enable you to determine the amount available for sale - month 2 is now completed as far as line D;

(e) As soon as each participant has completed line D the umpire will announce the demand for month 2, this you will record on line E of the decision sheet;

(f) Sequence (c), (d) and (e) is repeated until the end of the year;

(g) At the end of the year, you will compute the grand total costs incurred as a result of your decisions in accordance with section 5 - this will be recorded at the right-hand side of the decision sheet;

(h) The exercise concludes with an evaluation session when points brought out by this Business Game will be discussed.

DECISION SHEET

Line	Item	Source	Number of units (thousands)													Cost	
			Month														
			1	2	3	4	5	6	7	8	9	10	11	12	Total	per 1,000 units	Total
A	Increase (+) or decrease (-) in production level (10,000-unit steps)	Decision														10	
B	New production level	Last month B Amended by this month A															
C	Add opening stock or deduct stock shortage	Last month F	+50														
D	Available for sale	Combine B and C															
E	Sales demand	Given by umpire															
F	Closing stock surplus (+)	D - E														3	
G	Closing stock shortage (-)	E - D negative														25	

Grand total cost UN

B. Instructions to umpires

(Not to be distributed to participants)

Outline of Game

This is a non-interacting Business Game. Participants must plan production into stock to meet a fluctuating demand from customers, there is a penal charge for inability to meet demand from stock, but there is also a cost penalty every time the level of production is changed or stock is carried over from one decision to the next. The Game is designed to bring home the problem of operating production, stock and sales policies within a minimum cost structure.

The product - Ilb - is fictitious.

Organization and timing

Due to its simplicity and speed, participants may operate individually rather than in teams for this Game. The umpire has little to do, and therefore there is no limitation on numbers.

The whole exercise, including evaluation, can be completed in from one to two hours.

Equipment required by each participant

Participants' instructions

A decision sheet

A sheet of notepaper

A pen or pencil

Equipment required by the umpire

A set of participants' instructions and decision sheet

Blackboard or other visual aid

Notepaper and pen or pencil

Instructions to umpires, particularly the table.

Detailed operating instructions

1. Hand-out participants' instructions and decision sheet, read through the instructions with the participants, amplifying and explaining, if necessary: the Game must not be started until each participant fully understands what it is all about.

2. Ensure that participants understand how to use the decision sheet - draw up and demonstrate its use on the blackboard, for example:

	Month			
	1	2	3	4
A	+10	-10		
B	210	200		
C	+50	+40	-10	
D	260	240		
E	220	250		
F	40			
G		-10		

3. Announce the start of the Game and instruct participants to make their first decision and complete month 1 on the decision sheet as far as line D. Walk around and quickly inspect each decision sheet to ensure that each participant has completed it correctly.

4. When satisfied on item 3, announce the demand for month 1 by reading the first figure of the table, first year.

5. Instruct participants how to complete the month 1 column of the decision sheet and bring forward the closing stock or shortage, as the case may be, to line C of month 2. Walk round and quickly inspect each decision sheet again to ensure that each participant has completed it correctly. If there is no problem at this stage, the rest of the Game can follow quickly as each participant clearly understands the routine.

6. Instruct participants how to make their decision for month 2, and complete the month 2 column to line D again. When all are ready announce the demand for month 2 from the table.

7. Continue in this manner through to month 12, announcing each month's demand when all participants are ready. Clearly the speed will be governed by the slowest participant. It is advisable to score a pencil line through each demand figure as it is announced to avoid any error when announcing a subsequent figure.

8. On conclusion of twelve months, instruct participants to compute their grand total cost by adding across lines A, F and G and carrying out the necessary calculations. Note that in adding across line A it is the total number of 10,000-unit steps, irrespective of whether these are plus or minus, that form the basis of the calculation. Impress this upon participants.

9. An evaluation session is now carried out (see below). However, participants may claim that they have just got the feel of the situation and may wish to run a second year, which will take very little time. If so, hand out further decision sheets, but this time ask participants to substitute their own opening stock (or shortage) for the 50,000 units at line C, month 1. The "second year" figures in the table are for each second year.

Publication of information during the Game

None.

Summary of information on conclusion of the Game

The following information is useful during the evaluation session and should be tabulated on the blackboard either for each participant or for a selected range only. If two years have been simulated, the figures for each year should be ranged in adjacent columns to demonstrate any improvement:

Grand total cost
Number of production changes
Number of times out of stock
The maximum and minimum stock balances

Individual groups or umpires may feel that other information is useful as a basis for discussion.

Evaluation session - suggested points for discussion

Review summary of information and observe if there is any improvement, if two years have been simulated. What were the actions that produced the highest and lowest grand total cost figures?

What policy of control was adopted by each participant? In balancing the conflicting objectives of different subsystems, one item must always be left to take up the slack - it is not possible to control or stabilize every one. Was stock or production allowed to fluctuate?

How did participants interpret the demand pattern? In section 2 of the participants' instructions is the description of a random incidence but with a normal distribution. If this statistical fact had been established, the decisions would have been easier. (A low grand total cost will be incurred if no change is made to production level.)

Were participants able to forecast demand? Because the distribution is normal, it becomes easier to forecast on a cumulative basis as the months pass by.

Discussion on the realism of the Game. In reality, such a situation becomes infinitely more complex because there are many more variables to balance, and the whole is overlaid with other human and technical problems. However, this is a practical problem in any industry. The Game demonstrates that here is an area of decision-making that has its direct effect on the cost structure of the organization.

While the Game is simple, it can be used as a springboard from which to develop a series of later lectures, discussions or readings, such as:

(a) The use in industry of various statistical techniques in the area covered by this Game;

(b) Practical problems in planning and control and the balancing of subsystems;

(c) The problem of carrying buffer stocks at various stages in a production process; who makes the decision; the costs incurred.

For the much wider implications of this type of problem, i.e. the field of industrial dynamics, see, for example, Management Controls: New Directions in Basic Research, edited by Bonini, Jaedicke and Wagner.

Possible developments

The umpire may wish to further develop the Game to meet particular requirements. Some suggestions are noted below.

The Game could be played with teams rather than individuals to observe how a planning policy was evolved within a team.

A time lag could be introduced, e.g. a decision on production level made in month N can only be implemented in month N + 3 owing to the problems of arranging a labour force.

Stock could be made perishable, say, valueless if unsold within two months of completion.

The demand could be made seasonal and put onto a rising or falling pattern instead of the static pattern of this Game.

Customer demand for Ilos

Month	First year	Second year
1	216,000	172,000
2	146,000	140,000
3	172,000	236,000
4	234,000	200,000
5	156,000	148,000
6	206,000	172,000
7	144,000	238,000
8	184,000	144,000

9	260,000	250,000
10	224,000	190.000
11	180,000	176,000
12	192,000	238,000
	2,416,000	2,404,000
Average per month	201,333	200,333