CURRICULUM DEVELOPMENT
FOR
ADULT LEARNING

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COOPERATIVE ALLIANCE

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Congress held in London in 1895, it now has affiliates in 66
countries, serving over 340 million members at the primary
level. It is the only international organisation entirely and ex-
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of the world.

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there are three regional offices, viz., the Regional Office & Edu-
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the office in Moshi in 1968, and the West African Regional
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The main tasks of the Regional Office & Education Centre
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INTERNATIONAL COOPERATIVE ALLIANCE

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Introduction

Adult educators today are faced with a dilemma to keep up with the times and to accommodate changes in the education field. The field of educational technology is influenced by other behavioural sciences such as psychology and management. Change agents are pressing for changes in the curriculum as well as training strategies. While some groups criticise educational planners for being academic and outdated in approaches to human development others criticise them as radicals or as threats to social systems. However, it is a heavy responsibility of and a formidable challenge to educators to adopt other technological developments into the field of education and to keep on updating the methodologies and the content part of curriculum.

Present day education planners in developing countries have to face the problems not only of their social systems but also in the philosophy and methodology in adult learning. The existing systems have been there as an integrated component of a social system throughout history where the teacher was looked upon as a sacred cow. Teacher domination has not been questioned but nurtured. The earlier role of a teacher to become a second parent to a child got distorted due to the influence of early British system of education where a teacher was to become an autocratic administrator of the education process. The education systems were created to accommodate the convenience of the teacher and these were not to be questioned. Eventually even adult education systems adopted this pedagogy of child education and became teacher centred. The result is the gap between the actual problem and the teaching.

The training programmes in the cooperative sector in

particular have been subjected to criticism on the following grounds:

1. The training programmes do not cater to actual needs.
2. The societies have to bear heavy costs for training without visible results.

The criticism is mainly on the curriculum and the methodology of training. Very often it is said that the curriculum does not provide learning sessions in concrete terms to become meaningful to a trainee. The subject matter and the theory is emphasised. Normally the history of subject matter is given in lecture form excluding behavioural objectives. Classes are conducted within a specific time frame. When the trainee finds a curriculum meaningless naturally evaluation of the learning experience becomes meaningless too.

Therefore it is necessary to review the existing ideologies behind curriculum of adult education programmes and the curriculum development methods in order to identify a strategy to meet the present day needs of the adult trainee in cooperative organisations.

Scope

There are two types of educational ideologies that have been identified in relation to target groups:

1. Pedagogy—science of teaching children.
2. Andragogy—science of teaching adults*

The identification of these two types has been accepted recently due to the findings of distinctly different features between child and adult behavioural needs. Th econcept of andragogy has been developed on the basis of the acceptance of the change of basic aims of education from one of

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*For further definitions see "The modern practice of Audult education" by Malcolm Knowles—(1976 Associated Press).

transmittal of knowledge to that of helping a person to achieve the status of a fully functioning human being.

The scope of this paper will be limited to the process of helping adults to achieve self-actualization through learning experiences in job situations.

The paper would briefly try to analyse the historical process of curriculum models in terms of roles of students and teachers, emphasis and situations. It will also try to identify specific characteristics of the latest approaches in curriculum development: i.e. the Self Actualizing Approach.

Thus it would become necessary to understand the philosophy behind the learner centred approach to occupational training.

The subject of the paper is confined to two types of training strategies in occupational training:

1. Institutional training (off the job training).
2. On-the-job training.

This broad classification is identified in order to analyse the methodology used in curriculum development. It is not intended in anyway to seperate the integration of the two types into a comprehensive learning system developed for a given organisational structure. It is accepted that there are many models tried out in many countries in developing curriculum for job related training.This paper will be confined to one or two models and strategies which have been tried in some situations in Sri Lanka and in Western Europe. It does not mean that they are the best. It is also necessary to mention that in adapting any strategy the socio-economic environment of any country or coperative system should be taken into consideration.

Historical Perspectives of Curriculum Development in Adult Learning

It is necessary to take an overview of the history of learning theories in relation to curriculum development in order to understand the stage of development in the technology of developing a curriculum.

Most of the early theories of learning were drawn from the experiments undertaken on animals and children. Early theories were centred around transmitting knowledge. This ideology was used in history upto a point where the timespan of change became shorter than the lifespan of an individual. The behaviourists and humanists made revolutionary change in the field of psychology during the twentieth century simultaneously with the technological developments which influenced the goals and needs of human beings and the aims of education. Ultimately the aim of education became the ideal of self actualization (Maslow)* or fully functioning person (Carl Rogers)*. These theories have influenced the development of learning systems or curriculum. The basic evolution has been the change of importance in a learning situation from the teacher to the learner.

Historically there are four broad categories of curriculum development models in adult education:

1. Information model.
2. Problem solving model.
3. Projective model.
4. Self actualizing model.

Information model:

The transmittal of knowledge was the main aim in this model. The curriculum development strategies and the training methods are centred around the teacher. He im arts information and even skills by lectures which are structured systematically. These lectures contain all the subject matter contents. The learners role in this situation is to absorb the knowledge as far as possible as from a book. They are expected to master the subject.

The curriculum has teachers objectives with a logically structured package.

1*. A.H. Maslow—Motivation & Personality—Happer & Brothers. N.Y. (1954).
2*. Carl Rogers—Freedom to learn.

Problem solving model:

The learning strategy contains more visual stimulus which generates discussion on a given topic or an issue. This stimulus is a sketch of a broad concept, which needs more data for understanding through someone's experiences.

The learner tries in this situation to give meanings to the stimuli and tries to analyse the issue or the problems, their causes and effects and decides a course of action which needs, the application of his skills. The main focus of this model is problem solving.

Projective model:

The projective curriculum model has a project bias. Here the trainer presents a broad visual project of a complex situation for discussion and analysis. The attitudes and skills of the learner are given greater importance in this approach.

The issue is treated on a wider background of socio-economic and psychological phenomena. The learner groups participate in an experience with interactions among trainers, trainees and even outside persons.

The learners are encouraged to match the behaviour of the characters involved and reflect on their own feelings, beliefs etc. through which the change is achieved.

Self-actualizing model :

The facilitator presents raw materials for learning experiences of learners according to the learners needs. The learning system is not normally pre-designed as in the case of the information model. In fact it is the opposite. Sometimes the learners themselves provide material from their experiences on a given topic. The learning sessions are not structured but gather with the momentum and direction and meaning sudden emergence of ideas, interactions and experiences.

The subjects or stimulus are always with a human background in order to transfer ideas, feelings and values. The

learner groups normally engage in discussions, role plays
and even creative experiments.

.The interaction among the learner group members
becomes the mode of learning rather than using the teacher.
As a consequence the creativity and potentialities of lear-
ners are uncovered in order to · create a new product of
knowledge, attitudes, and skills.

Theoretical Foundations for Curriculum Development

Methodologies em .loyed for developing curriculum
differ distinctively according to the philosophical ideas ad-
vocated by the educationists. The participation by the tar-
get groups, in the process may also differ. The training
strategy and the teaching methods may also differ consi-
derably. Therefore it is necessary to consider briefly the
various learning theories of the different schools of thought
in order to treat the subject in depth.

The Information Model belongs to the classical school
of psychological thought who believed in theory X. The
assumption here is that a human being has an inherent dis-
like towards work and that he should be coerced, controll-
ed and directed to get him to work to achieve objectives.

The behaviourists and humanists who advocated theory Y
believed in the potentialities of human beings for initiating
work to be as natural as play or fest[1]. According to them
man will exercise self-direction and self-control in the
service of objectives to which he is committed. They also
believed that the commitment to objectives is a function
of the rewards associated with their achievement.

The average human being learns under proper condi-
tions not only to accept but to seek responsibility. The pro-
jective models of curriculum development for adult learning
have been based on these ideas.

The non-formal educationists adapted the ideas of be-
haviourists into the education field and tried to introduce
several ways. of developing education programmes. Ivan
Illich and Paulo Friere were influential in designing effective

Douglas Megregor—The Human .side of Enterprise, McGrawhill,
New York.—1960.

programmes. They call for cultural revolution and Freire has gone further to advocate even political revolution. Illich advocated learner 'involvement' in the environment and the establishing of new relations and the right to choose what he wants to learn.

Freire is more intrinsic in his approach and suggests that education must first be capable of helping man to become more aware of and responsible for himself and his world through a process of reflection followed by action and further reflection. He advocated the concept of what is called conscientization.[1] He believes in the possibility of arousing man's positive self-concept in relation to his environment and society through liberating education which treats learners as subjects and not as objects (passive recipients). His models have been adapted in Africa, Philippines, and Bangladesh.

Skinner saw human behaviour as a product of interaction with environment. His technology of behaviour shifts the responsibility for conduct and achievement from the individual to the environment. In this technology the positive and negative forces must be designed and used with precision.[2] Later these techniques have been adapted by psychologists for behaviour modification for mental patients. According to Skinner's theories behaviour is explicitly controlled by stimuli in the environment and behaviour could be modified by externally controlling the stimuli. He rejects free wheeling autonomy or permissive practices in education saying that their advantages are an illusion. He argues that to refuse to control is to leave control not to the person and himself but to other parts of the social and non-social environment.

The UNESCO report titled 'Learning to be' which has become a treatise on modern education has drawn extensively from the humanists. The theories adopted by Rogers are non-directive learning in order to achieve self awareness. He and Gestalt psychologists were greatly influenced by existentialists. Maslow who belongs to the same school uses the term 'self-actualization" as the ultimate goal of a

1. Paulo Frtheire—Pedagogy of Oppressed.
.2B.F. Skinner—Beyond Freedom and Dignity—Alfred Knofle.

human being. He emphasizes the expansion of self including the releases of inner nature or tendancy for good; a steady increase in understanding of people of the universe and of self; increase in self acceptance, use of talents; awareness of minor growth increase in autonomy and power to shape and alter the environment.

These psychological and educational thoughts had great influence on the subject of curriculum development in recent times. Behaviourists contributed towards the strategy of defining objectives clearly stated in specific and measurable behavioural terms and providing structured framework for the presentation of contents through materials. Freire sharpened the use of stimuli in coded form for better understanding existential situations and environment with greater initiation by the learner. Carl Rogers uncovered the ways and means of self appropriating experiences through' learner initiation and freedom to choose experiences for creation of self awareness. He was more intrinsic in approach. Malcolm Knowles was able to go further by integrating humanist approach to adult education with septious approach developed by management thinkers. He sees the learner as having a deep psychological need not only for self direction but also to be perceived by others as being self-directing. He found a synthesis between the trainer and the learner through a joint process of developing a model for expected behaviour and work towards it. The trainer would provide the necessary curriculum and help the learner to go through the learning experiences. Eventually, the learner takes the responsibility of learning.*

Several models of curriculum have been developed in several countries on the above ideas. Some have gone to the extreme of problem solving technology and others have gone to the extreme of creating intrinsic motivation for self awareness. These approaches have implications in curriculum planning and programme implementation.

However, one could see a vast accumulation of training strategies and techniques from which a Curriculum Planner "could select". Brain storming, human relations training,

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* Malcolm Knowles—The Modern Practice of Adult Education—Association Press—New York. 1976.

simulation, games and synetics are some of them. They supplement the traditionally accepted training methods such as lectures, case studies, role plays and in tray exercises.

Based on the above discussion, possible guiding principles of developing a curriculum for job training could be identified as follows:

1. The curriculum should provide opportunities to the learner to achieve his ultimate objective of self-awareness and self-actualization while synthesizing his personal objectives with organisational objectives.
2. Technology of developing a curriculum should provide equal opportunities for the planner and the learner to participate in the process.
3. The curriculum should represent the needs of the actual target group.
4. The learning outcomes should be measurable in behavioural terms.
5. The content matter should be drawn and developed on the experience familiar to the target group by simulating them.
6. Training strategies and the methods should not be alien to the target group although they should be apropriate to achieve the learning objectives.
7. The curriculum should be flexible enough to accommodate change at any point as demanded by the learner.
8. The structure of curriculum should be flexible enough for the learner to decide on the entry point for learning.
9. As far as possible the curriculum and the methodology of training should be individualized to accommodate and take advantage of individual differences in adult learners.
10. The curriculum should be a system where the evaluaation and feed back process helps to improve and update the system at any time.
11. The curriculum should consider as far as possible the individuality of persons and should plan the training designs accordingly.
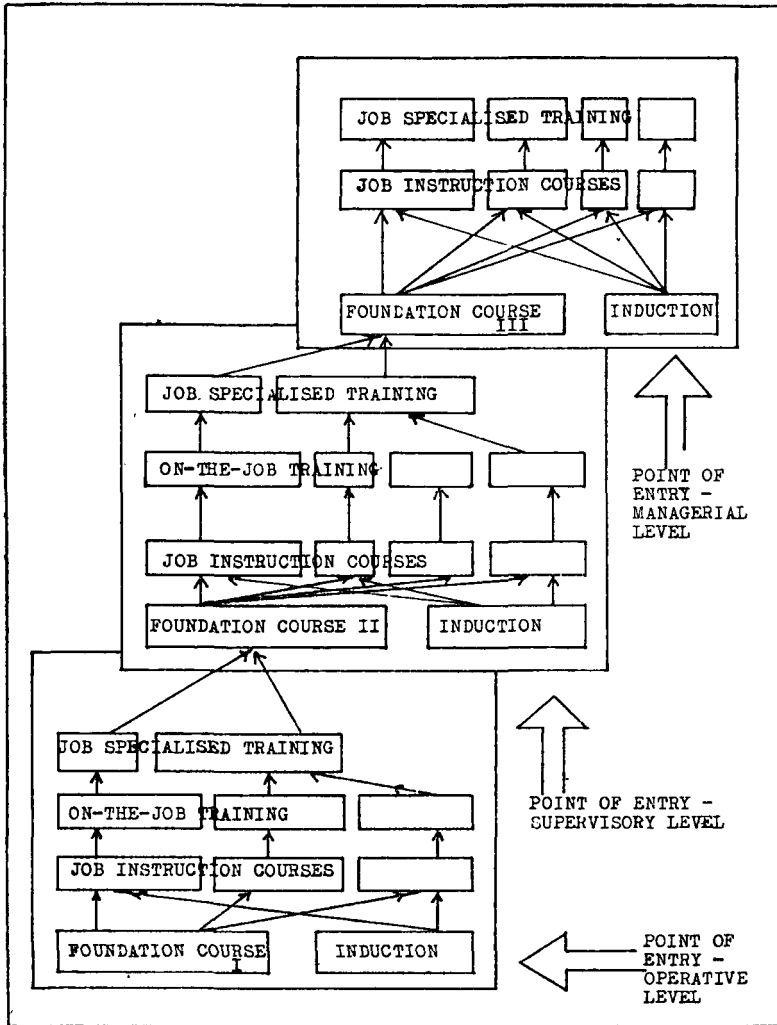
Methodologies of Curriculum Development

The subject of Curriculum Development has to be considered in relation to a total learning system of an organisation. A comprehensive learning system is created in order to develop the manpower within the organisation to achieve

the organisational objectives. Various instructional methods form components of the total learning system. For example some job instructions are given individually on-the-job and some are given off the job on group basis. These strategies have to be logically and systematically planned to form a learning system. It is also necessary to mention that various forms of training such as induction or orientation are used depending on the nature of the target groups of the organisation. simple diagram could illustrate a Learning System.

A Systems Approach provides the basic guidance to create such a learning system. A system is considered as a sum total of components working independently and working together to achieve required outcomes based on needs.
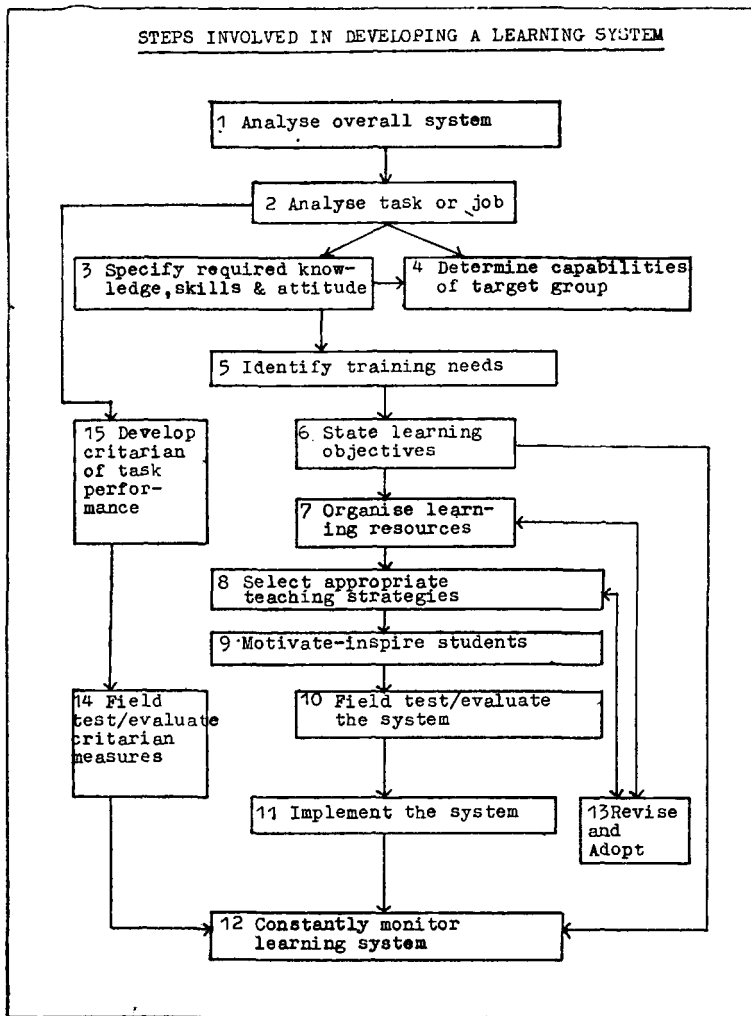
The other trend in educational technology is to treat the learning process as a management system. The trainer is considered to be either managing the learning resources or operate themselves as a resource. Developing a curriculum involves a management operation. The management functions such as planning, organizing leading, and controlling are integrated in the process. Hence, it becomes a management process. The recent emphasis given to the concept of management by objectives has already been adopted by teacher managers in developing learning systems of curriculum. Davis indicates that the MBO approach which leads to think about an organisation as a total system could be applied to education and training for the same reason. He says that this is important due to the following requirements for effective learning:

1. He (the learner) must know exactly what is expected of him.
2. He must be given an opportunity to learn.
3. He must know what progress he is making.

There are several models of curriculum development evolved by various educationists and training agencies based on systems approach. There are models which give emphasis to organisational objectives. Some are comprehensive enough to identify the areas in which the technical solutions have to found rather than training solutions. Some are ex-

tended to absorb personnel management functions too.
However, the basic fact remains that the curriculum should
be looked upon as a means to achieve organisational objec-
tives and is determined by various functions concerning the
actual target groups and the resources available.

Ivor Davis has introduced the following strategy of deve-
loping a learning system.

STEPS INVOLVED IN DEVELOPING A LEARNING SYSTEM

1 Analyse overall system

2 Analyse task or job

3 Specify required know-
ledge, skills & attitude

4 Determine capabilities
of target group

5 Identify training needs

15 Develop
critarian
of task
perfor-
mance

6 State learning
objectives

7 Organise learn-
ing resources

8 Select appropriate
teaching strategies

9 Motivate-inspire students

14 Field
test/evaluate
critarian
measures

10 Field test/evaluate
the system

11 Implement the system

13 Revise
and
Adopt

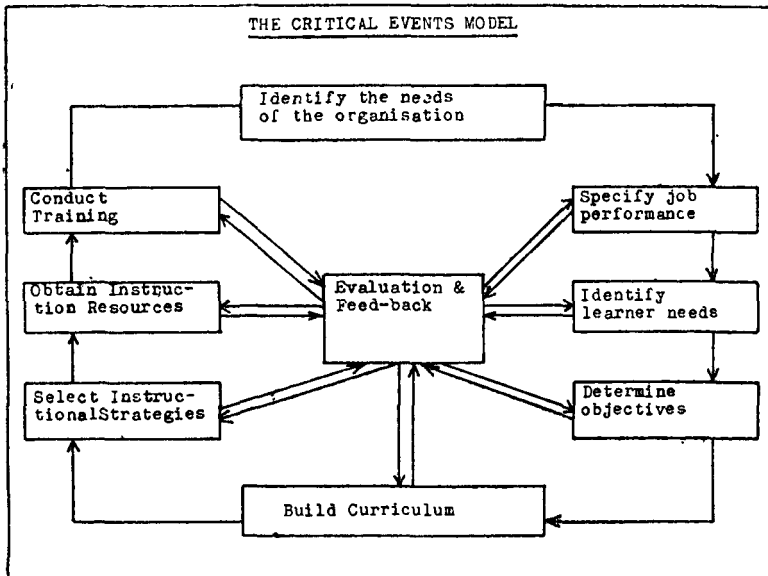12 Constantly monitor
learning system

The steps in actual curriculum development on this model are as follows:

1. Analyse overall system.
2. Analyse task or job.
3. Specify required knowledge, skills, and attitudes.
4. Determine capabilities of target population.
5. Identify the training need.
6. State learning objectives.
7. Field test and evaluate criterion measures.
8. Develop criterion measures of task proficiency.

. These steps represent the actual planning function of education management.

Another widely used Learning System, Development Model is illustrated as follows:

THE CRITICAL EVENTS MODEL

Identify the needs of the organisation

Conduct Training

Specify job performance

Obtain Instruction Resources

Evaluation & Feed-back

Identify learner needs

Select Instructional Strategies

Determine objectives

Build Curriculum

The following steps are involved in the development of curriculum in this model.

1. Identify the needs of the organisation.

2. Specify job performance.
3. Identify learner needs.
4. Build curriculum.
5. Determine objectives.
6. Evaluation of Feed back.

The model on page 15 represents a strategy of developing a curriculum in a more complex company situation taking all aspects of a performance problem into consideration.

However this model is specifically meant for a business organisation. The Cooperative Society being an·organisation with social aspects the development of a learning system has to deal with social skills of members and leaders. Therefore, it is necessary to adopt certain broad aspects of adult learning strategies advocated by Freire and Knowles. The Cooperative Society as an organisation not only has economic objectives but also social objectives. Any curriculum if it is comprehensive enough to achieve organisational objective should deal with social aspects, too.

Based on the above models an attempt would be made to illustrate a common approach to curriculum Development adhering to systems approach and learner centred methodology.
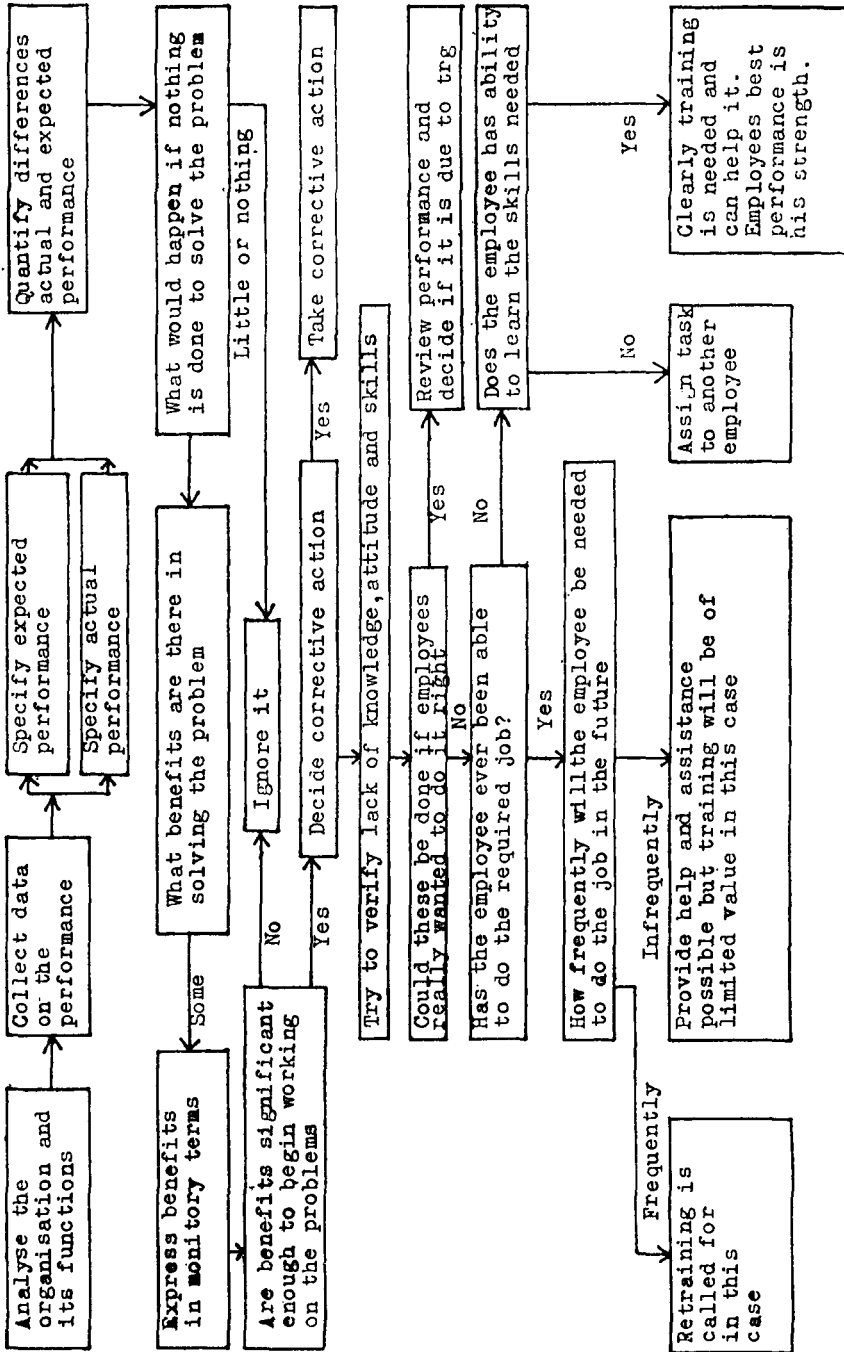
Organisational Analysis

The first step of developing a curriculum is the analysis of organisational objectives. Some planners use the term mission analysis which is interpreted as a determination of where we are going and 'how we know when we have arrived' and what the major steps are to get from here to there'*.

In this step the organisational objectives and the organisational plans (profiles) are considered. It is assumed that the organisations review their objectives and plans ˉoften so that needs may arise to change the structure and to train personnel on the new strategies while retaining basic training systems for job orientation.

In some cases this step is modified to performance

*"Education Systems Planning—Roger A Kaufman—Prentice Hall Englewood Cliffs, N.J., USA.

Analyse the organisation and its functions

Collect data on the performance

Specify expected performance

Specify actual performance

Quantify differences actual and expected performance

What would happen if nothing is done to solve the problem

Little or nothing

Take corrective action

What benefits are there in solving the problem

Some

Express benefits in monitory terms

Are benefits significant enough to begin working on the problems

Yes

No — Ignore it

Decide corrective action

Try to verify lack of knowledge, attitude and skills

Could these be done if employees really wanted to do it right

Yes — Review performance and decide if it is due to trg

No

Has the employee ever been able to do the required job?

Yes — Does the employee has ability to learn the skills needed

Yes — Clearly training is needed and can help it. Employees best performance is his strength.

No — Assign task to another employee

How frequently will the employee be needed to do the job in the future

Frequently — Retraining is called for in this case

Infrequently — Provide help and assistance possible but training will be of limited value in this case

analysis in relation to the organisation and its personnel. This activity involves only the performance of a given situation or a given time duration. Therefore, very often it may not involve the analysis of total performance in relation to total goals of the organisation which would ultimately mean reviewing the organisational goals and updating them. Performance problem analysis is very often confined to functions and individual performance.

The organisation should have performance objectives that specify outcomes in measurable terms. Such an objective should start the following conditions:

1. What is to be done to demonstrate completion?
2. By whom it is to be done; that is who will display the outcome?
3. Under what conditions is the outcome to be demonstrated?
4. What criteria will be used to determine if the outcome has been achieved?

e.g. The objectives of the Cooperative Society is to start a desiccated coconut mill which by June 30 will process 500 kg of coconuts per day which will allow the society to pay members for their coconuts at prices which are at least as high as those that are available today and which will also cover its cost including those of the capital employed and earn a surplus for redistribution and strengthening resources.

These objectives are updated by the managers considering the trends in business and social requirements. These changes reflect on the functions and the tasks of the organisation which ultimately demand different job behaviour of job holders.

The next component of organisational analysis is function analysis. The functions which lead to achievement of organisational objectives are analysed in order to assess the interrelated sub-functions and functions that are necessary to be performed to solve problems. Following questions are asked:

—What has to be done?
—In·what order must it be done?
—What component functions compose each higher level function?
—What are the relations between the functions?

Function analysis actually starts with the organisational profile. The analysis is done in terms of outcomes or performance requirements for accomplishing a given function in measurable terms.

Task analysis is the primary level of a systems analysis. It is a logical and integrated component of the total system. The task is normally analysed in relation to a task holder. The task is also described as a job. Task or job analysis is done through identification and breaking down or the elements required to accomplish an organisational objective.

The hierarchy of organisational analysis can be illustrated as follows:

ORGANISATIONAL GOAL ANALYSIS

FUNCTION ANALYSIS

TASK/JOB ANALYSIS

ACTIVITY ANALYSIS
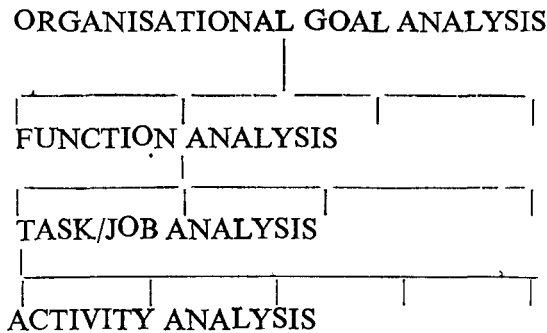
The job analysis would be on the basis of a properly written job description. Such a job description should explain the function and the objectives of the job in clear and specific behavioural terms. The description should also specify the authority and the frame-work in which the job is performed. It should also specify the measure of performance.

The next stage of analysis is the job specification. Job specification is an extended definition of job behaviours and the relevant competence in terms of knowledge, skills and

attitudes. The measures of performance or the standards are also given in the specification.

This detailed account provides the basis for further development of the curriculum; or rather curriculum development starts from this point:

A check list for undertaking a competancy analysis is as follows:

1. What actions does the experienced worker perform at each stage or activity in the job?
2. What information does he obtain via his five senses at each of these stages?
3. How does he use this information to determine and control those bodily movements that are necessary for skilled performance?

Training Needs Analysis

Analysis of training needs has to be undertaken taking many aspects into consideration:

—There may be new employees who need training.
—Training is necessary for improving performance on new developments in the staff and the organisation.
—Some operational problems should be dealt by training.
—There are people in the organisation who are likely to be promoted or made leaders.

There are many methods used for developing a curriculum depending on the categories mentioned above.

Training new employees is undertaken immediately after recruitment by having a systematic induction by a supervision or a training officer. Some organisations use self instructional material or programmed learning material for this pupose. This process may start with basic orientation which is integrated with other components such as apprenticeship, on the job instruction, class-room briefing and constant evaluation and feed back. However deveopment of a systematic curriculum is very important.

Performance improvement becomes essential due to

several factors:

—Introduction of new systems, procedures and activities
and equipment.
—Cutting down of staff or transfers to another position
may demand additional training.
—High error rate of employees.
—Desire for specialisation.

Sickness in operations causes problems in achieving
organisational objectives. Symptoms may occur as follows:

—Excessive over time needed to do the tasks.
—Constant application for transfers.
—Output is decreasing.
—Employees are reluctant to assume further responsi-
bility.

It is necessary to analyse the performance of an organi-
sation in order to identify the problems. The analysis is
always based on the organisational objectives, functions,
tasks described above.
There are several techniques advocated by educationists
and management experts for this purpose:

—Job ranking.
—Work flow analysis.
—Performance audit.
—Performance appraisal.

These techniques are widely used in the organisations.
However, the input by the actual job holder or the pros-
pective trainee in the identification of training needs is not
that much significant. Recently developed other models such
as DACUM (Develop a Curriculum) and CAP (Compe-
tency Analysis Profile), provide more weightage to the job
holder in the development of curriculum. These models are
widely used in America and Canada. However there had
been criticism on these models indicating that DACUM
process is biased towards knowledge while CAP model is

biased towards skills. There had been attempts made to deve-
lop another model which is more balanced. However it is
worthwhile to discuss the strategy adopted in the process as
these models heavily rely on the potentiality of job holders
and the others who influence the jobs.

Analysis of a given job or the preparation of a profile
is the first step in the development of curriculum. In this
process, a job related training chart is developed on the basis
of job and task analysis.

It is assumed that the role of a job holder in an organi-
sation is determined by the policymakers, executives, inter-
mediaries and even subordinates entering the organisations.
Therefore the services of a committee containing these
categories with a coordinator who is an experienced curri-
culum planner and a trainer is used for the analysis of the
job. This is broken down to various components:
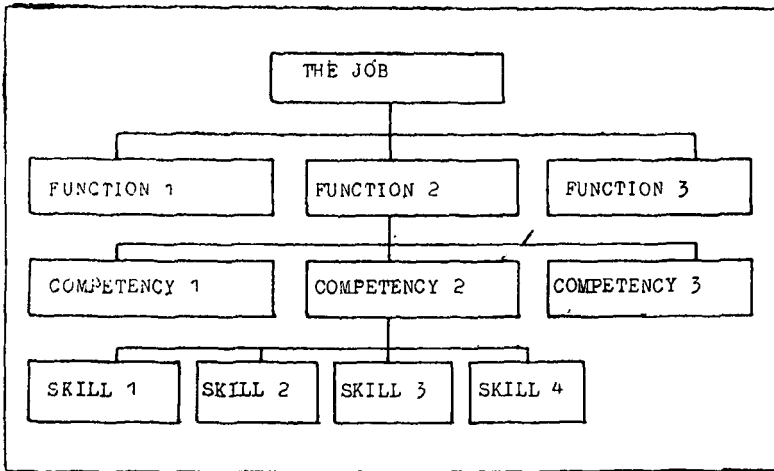
Identification of functions, competencies and skills is
done through interviews with actual job holders who are
accepted as best, immediate supervisors, executives and even
the policy makers. The interviewer takes the role of an equal
or identifies himself with the group by using dialogue as a
medium of communication as defined by Paulo Freire. This
analysis differs from the traditional method in the following
manner.

—Only job behaviour is identified. Knowledge is suppor-
tive only.

—Skills are stated as identified by the job holder but not
as assumed by an outsider.

—The analysis is conducted by the actual users of the
programme.

—Skill definition encompass more activity than a typical
teacher specified skill definition.

—The analysis is conducted by means of dynamic group
activity.

—The analysis results in a format that is directly appli-
cable as a curriculum.

The opinions of groups involved is placed before the
plenary. A profile of functions and competencies is deve-
loped. Tabulation and analysing data are difficult activities
in this process, Mager's definition of measurable objectives
is used and only the actions and active verbs are used.

Physical arrangements are made preserving the identity
of groups and for easy movements and card indication. The
exercise takes the form of a real workshop.

The coordinator or planner has a difficult role. He is
not allowed to influence the groups. He should be able to
summarise discussions, help to write skills etc. He also should
act as the Secretary of the group. He should help the brain
storming seminars of the group.

The occupational analysis begins with the analysis of
functions. The functions are again split into competencies
and in turn into skills.

A sample of a chart is given on page 22.

Preparation of Objectives

After developing the training chart the preparation of
learning objectives and learning activities start. The objec-
tives always refer to performances, tasks which could be
visible and measurable.

In order to do this every competency has to be split into
various related activities and skills.

JOB RELATED TRAINING CHART FOR RETAIL SHOP MANAGERS
OF A MULTIPURPOSE COOPERATIVE SOCIETY

1	Planning and Progress Control
2	Procurement of Goods
3	Stock Control
4	Display of Goods and Sales
5	Keeping Accounts
6	Cash Control
7	Members Activities
8	Supervision of Staff
9	Public Relations
10	Security

4.1 Clean premises and the shop — 1 2 3 4 5

4.2 Arrange furni- and fitting — 1 2 3 4 5

4.3 Arrange commo-dities — 1 2 3 4 5

4.4 Mark Prices — 1 2 3 4 5

4.5 In-quire from cus-tomer — 1 2 3 4 5

4.6 Issue Bills — 1 ? 3

4.7 Acce-pt money — 1 2 3 4

4.8 Issue goods — 1 2 3 4

4.9 Check with staff — 1 2 3 4 5

eg:

Compctency 4.4 Arrange Furniture and Fittings according to available space in shop.

SKILL	RELATED ACTIVITY
1. Estimate space available in the shop	—measure the floor area of the shop. —measure the area of walls leaving out windows and doors.
2. Reserve Room for necessary sections.	—analyse the nature of commercial activities in the shop —Estimate the kinds of commodities in the shop. —Estimate the strength of consumers etc.

Content Analysis

It is difficult to isolate content from the learning activity in this model. One could hardly see a subject matter being taught other than performing a certain activity. This is based on the concept of learning by doing. Behaviourists and Humanists have given emphasis to the human aspects of creativity.

Example:

SKILL 4.2.1 Estimate Space Available in the Shop

Proposed learning activities	Learning aids.
1. Visit the shop with the trainees and measure its space area in terms of floor, and the walls without taking into account the doors and windows and ceiling.	—Plan of the shop. —Tapes, rulers and felt pens. —Large white paper.
2. Space available for planning commodities and furniture should be estimated in terms of floor, walls and ceiling.	

3. Get the trainees to draw up a
   plan. Mark directions as the shop
   location.

However programmed learning material is used occasionally. These lessons contain reading material too. This would depend on the nature of the trainee.

Trainee Analysis

Probable target population is taken into account at the time of drawing the training chart itself. This is because the chart is developed by selected job holders themselves. However, the learning activities are designed on the chart by the trainers by taking many aspects into consideration: nature of trainees, facilities available, existing practices.

Learning activities are ultimately selected by the actual target group. Therefore the activities should be realistic and could be practiced at the workplace itself.

Learning Session Design

. The learning strategy that should be followed is decided on the basis of the skills that may need to be developed based on the related activities. This specific task is given to the trainer more than the job holder. However, he is consulted on the present practices in early learning activities. He may also consider the training literature available on the subject. However, he should be able to design imaginative and stimulating learning experience for the trainees.

There are several categories of learning activity designs:

1. *Directly applied or transferred work activities*
   There are some specific work activities that could be transferred as learning experiences when broken down into steps. This is applied basically in industries and machinery.

2. *Directly applied components of work activities*
   Sometimes the skill is complex and it would be diffi-

cult to visualise the entire work process. Some components could be directly transferred whereas others have to be dealt with through simulation.

3. *Simulated Activities*

Some skills demand simulated activities. They are basically of behavioural nature. This is designed by using visual aids, role plays, and models etc.

4. *Project work*

The skills or competencies which are of a complex nature could- be handled through project work. Sometimes the trainees are given lab projects depending on the skill they have to master.

Evaluation and Feed Back

The occupational curriculum model described above has an in built achievement measurement component commonly agreed by the management. Measurement is done at the performance level. The trainer does not use any other tool other than organisational standards for the activity. This arrangement has a direct influence on the output side which results in better return for the investment on training. The learning activity has hardly any measuring device at the immediate reaction level.
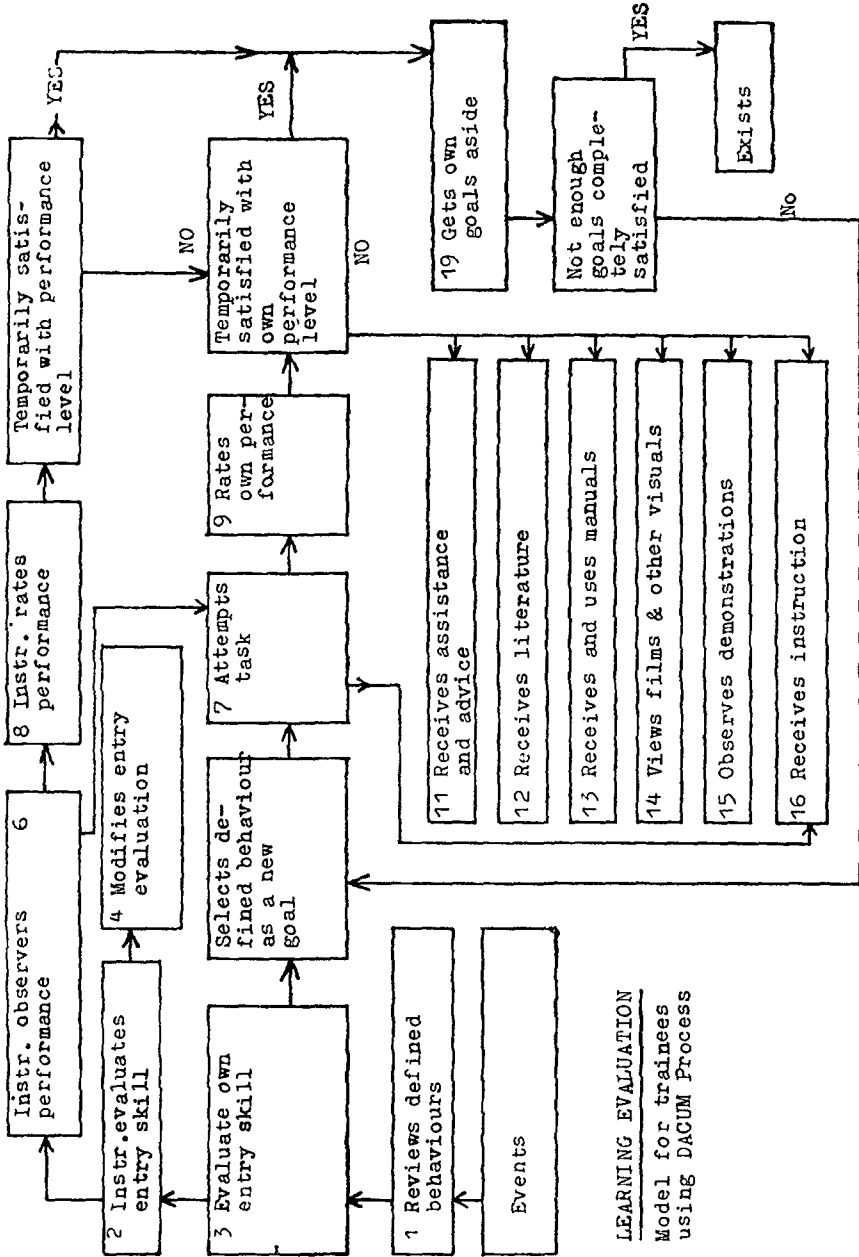
Example:
SKILL 4.2.1 Estimate-space available in the shop.

Organisational standard : Following results will be seen in the shop after the trainees practice this skill:

1. Sufficient light will come into the shop and shop will be more airy.
2. There will be no wasted space in the shop.

Any other type of tests or appraisals is not used to assess the outcome of training.
Feed back on this kind of learning experience is spontaneous. The trainee will be able to judge the relevance and the

Temporarily satis-
fied with performance
level

YES

NO

Instr. observers
performance

6 Instr. rates
performance

8 Instr. evaluates
entry skill

2 Instr. evaluates
entry skill

4 Modifies entry
evaluation

3 Evaluate own
entry skill

Selects de-
fined behaviour
as a new
goal

7 Attempts
task

9 Rates
own per-
formance

Temporarily
satisfied with
own
performance
level

YES

NO

19 Gets own
goals aside

Not enough
goals comple-
tely
satisfied

YES

Exists

No

1 Reviews defined
behaviours

Events

11 Receives assistance
and advice

12 Receives literature

13 Receives and uses manuals

14 Views films & other visuals

15 Observes demonstrations

16 Receives instruction

LEARNING EVALUATION

Model for trainees
using DACUM Process

validity of such experiences. The curriculum is further developed depending on the developments in the work environment.

One distinct feature of this model is the learner centred approach built into the programme. The learner is encouraged to self evaluation by using the training chart as a tool. He is allowed to enter into the programme any time and select any element he likes. This self evaluation is maintained all throughout the programme. Malcolm Knowles has introduced a system of self-diagnosis of training need through questionnaires and interviewers but did not use it all the time. Such technique has limitations of its own.

The self evaluation model introduced by the DACUM learners is shown on p. 26.

The evaluation of performance basically done by the trainee himself on the basis of the chart. Each trainee is given a training chart as a programme controlling chart. Each competency is taken separately with the skills involved. An illustration of an extract from the chart is given below:
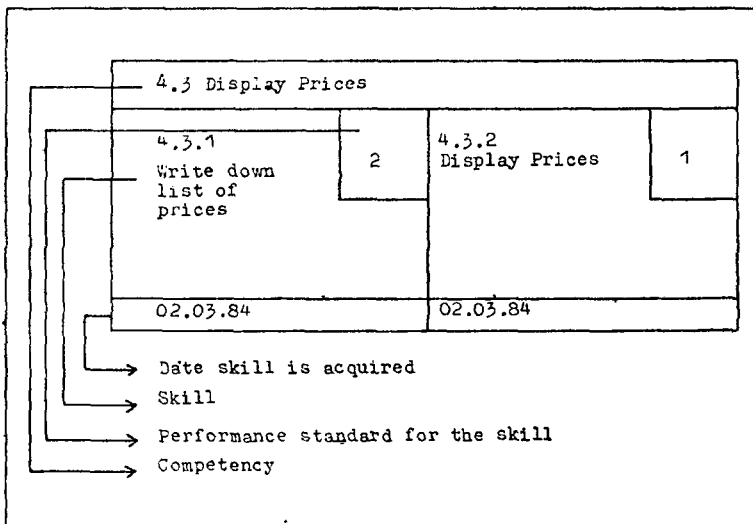
Normally the degree of performance standards are indicated as follows:

1. Has completed the training relevant to skill
2. Can perform the skill with assistance.
3. Can perform the skill without assistance.
4. Can direct others in performing the skill.

Some planners use the value of standards from 0 to 6 keeping 3 as the median. The employee who achieves standard 6 is considered for the next promotion.

With the help of the training chart the employee is expected to use the model described in the flow chart on Evaluation. (Learning Evaluation Model). The trainee could easily evaluate when the organisational standard is used on any skill as the measuring criteria. He also could obtain assistance from the instructor as indicated in the flow chart. The trainee could decide for himself where he should begin the training if he has acquired any skill or competency earlier. He does not need to repeat it again unless he wants to achieve high performance standard.

This model has achieved very high degree of acceptance as an ideal self actualising model in curriculum development. Following features are visible:

—The learner participates in the process of developing the curriculum.

—The learning activities are action oriented and they learn by doing.

—The learner could decide the entry point in the training programme.

—The learner could undertake self-evaluation.

—The learner could decide on the performance standard he wants to reach.

—The instructor acts as a facilitator only.

—The learning activity is flexible enough to allow the imagination and creativity of a learner to be developed.

—The total responsibility of the training process is in the hands of the learner.

—The learning outcome is measurable and can even be quantified.

The theories of self-actualization (Maslow) and fully

functioning person (Rogers) are put into practice in this model.

Our experiences have shown the following limitations in this Curriculum Development model.

—The Curriculum Development Process is time, money and human resources consuming:

—As the ideal job standard and practices are drawn from the actual experience the quality of learning activities and management practices becomes inferior unless the organisation or the system has at least few highly skilled job holders.

—The learner is given absolute freedom to assess himself and select the training he needs. Due to this problem may arise in achieving the targets of the organisation unless the learners are really motivated.

—The practice of this model becomes problematic in an organisation where the management is not adequately efficient.

—The training is individual based.

—The training is done at the job level only.

The model described earlier is more suitable to be used for the development of individual job holders. However it demands continuous updating, based on the changes in the industry or management practices. Normally this is done by a curriculum committee which consists of trainers, managers and policy makers of the organisation.

It is necessary here to discuss the other designs briefly along with instructional strategies that are used for session designs.

As explained earlier session designs may differ depending on the needs for training.

—New employees.

—Performance improvement.

—Operational problems.

—Employee development.

Training objectives are written on the basis of the per-

formance objectives. The objectives should be written in a way which would become measurable in terms of results and the quality due to the following reasons:

—They provide a means to keep the training on the right track.
—They provide comparative standards before and after training.
—They provide a basis for evaluation.

If the objective is written properly it should be easy to measure it by quantity and quality.

Following are the steps of writing an objective:

1. Begin by writing down the nature of the job or task. Use action words.
   eg : *Type correspondence letters.*
2. Include the quantity standard which will be achieved through training.
   eg: Type an average of 6 *correspondence letters per hour.*
3. Include the quality standard that must be attained by the end of training.
   eg: Type an average of 6 correspondence letters per hour *with no more than 3 typographical errors per day in the final copy.*
4. Add to the objective any procedures and equipment criteria that are needed.
   eg: *in the standard company format using an electric typewriter* with no more than 3 typographical errors per day in the final copy.
5. Allow the objective as required to provide time for practice to reinforce learning and for performance to improve beyond the level which will be reached through training above.
   eg: At the end of the customer service training programme the employee will answer an average of 8 customers' complaints per hour with no more than 4% of the customers feeling that they have not received adequate consideration of the complaint.

Proper terminology:
Within 30 days of the completion of training the employee will answer an average of 10 complaints per hour by telephone with no more than 3% of the customers feeling that they did not receive adequate consideration.

6. Review the objectives: are they realistic for the employee to be trained?
7. In the case of performance problems, consider whether or not the desired amount of improvement can be attained through training.

Selecting an Appropriate Training Strategy

There are several instructional methods that are available to be selected depending on the nature of training a planner is making efforts to plan.

1. Individual on the job instruction.
2. Group instruction.
3. Personal coaching.
4. Written instructions.
5. Package training programmes.

Universal Training Systems Co. has identified the suitable conditions under which these methods could be used.*

The training strategy has to be selected carefully because wrong strategy will not bring expected learning outcome.

Training strategy embodies many training methods and techniques. These methods are used for appropriate learning activities. The nature of learning objective such as cognitive effect or psychomotor effect is the main criteria used for selecting a suitable training method. For example, lectures, programmed learning and computer assisted learning methods are suitable for cognitive objectives whereas role play is the best method for psychomotor objectives.

These methods have either high degree of teacher cont-

* Successful in-company Training Programme"—The Dartncll Ccı pcıation, Chicago, USA—1974, P. 212.

TRAINING METHOD SELECTOR

Method	When to use	Example
1. Individual Job instruction	To teach make or break parts of the job or complicated parts of the job.	Running billing machine.
1A. Demonstrations.	Clarify basic manual skills, show product operations and procedures.	Proper means to use office Equipment.
2. Group instruction.		
2A. Training Conferences.	To teach small (8-10) groups specific skills or procedures, explain policies, or give important information.	Teaching sales techniques, Explain customer service procedures.
2B. Lectures.	Provide basic or general information, serve as background for on-job training.	Teaching product information policies and procedures.
3. Personal coaching.	Improving on-the job performance Building motivation, correcting poor habits or characteristics.	Employee development planning, Correcting errors.
4. Written instructions	Permanent instructions needed. When employee knows the general facts needs reference materials for specific task or methods.	Standard practice instructions compensation administration.
5. Prepackaged materials.	When trainers not available Time permits self-paced learning. Very large groups of learners to be trained.	Interpersonal techniques Telephone skills.

rol or student control. For example, the lecture method has a high degree of teacher control whereas games and case studies have high degree of student control.

Therefore, the trainer should be well versed and experienced in using different training strategies and training methods in order to select appropriate strategies and methods. However, it is necessary to indicate that the learner control programmes always demand strategies which help trainee motivation and creativity.

The curriculum is not complete without measurement of learning outcome. There are four types of trainee evaluation:

—Immediate re-action level.
—Knowledge level.
—Behaviour level.
—Results level.

The curriculum should indicate the evaluation criteria format.

Immediate reaction level is dealt by questionaires or interviews. The questions are structured or unstructured.

Knowledge could be assessed through subjective or objective types of structured tests. Traditional testing devices are used for this purpose. Sometimes, this is done through pre-tests and post tests. Very often the memory is tested more than knowledge.

Job behaviour is evaluated through observation of behaviour. The performers attitudinal changes are observed, in matters like how he perceives a problem, how he analyses and reacts to stimuli etc. The standards set by the organisation could also be used for this purpose.

Evaluation of results is also done on the job. Normally the organisational standards are embodied in the curriculum for this purpose. They are set according to the following criteria.

—Quantity.
—Quality.
—Time taken.

—Amount of wastage.
—Safety measures followed.
—Proper sequence followed.

These standards should be realistic and attainable. They should also be written in measurable terms.

Constant feed back and updating the curriculum completes the process of curriculum development.

Conclusion

The Cooperative Movements in developing countries are faced with the problem of keeping pace with other technological developments and changing business strategies. The existing curriculum for occupational training to a great extent does not meet the requirements of the cooperative organisations. The management committees and even executives treat the present day training as an academic exercise without any connection with reality. On the other hand the trainees are also frustrated due to the teacher dominated training programmes which do not reflect on their actual job situations and do not promote self-directed learning.

Therefore, it is vital to look for alternative models of learner control curriculum development models. However it is imperative to integrate such curriculum with comprehensive learning systems in the Cooperative Sector. It is also necessary to identify new ideologies of adult education as the philosophical base for developing curriculum. There is a vast experience accumulated in the development of curriculum for adult learning. The planners should critically evaluate these models matching them to their socio-economic environment and select what is appropriate for them.

Once curriculum models are adopted they should create a mechanism of updating them with the changes in the organisations.

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