

Methods and Materials in Vocational Training

*Prof. M.C.Reddeppa Reddy

*Director, Dept. of Adult & Continuing Education, Sri Venkateswara University, Tirupati-2.

Introduction

Vocational training has been considered as system because of continued progress in science and technology, the use of electronics and various audio-visual instruments in vocational training. The meaning of the systematization of vocational training can be gleaned from two points of view. The first is to consider vocational training as a system, referring to the elements which compose it. Considering vocational training as a group of elements and the manner in which their relationship is achieved, vocational training is necessarily a system. However, vocational training has never been considered a system until recently. Because of continued progress in science and technology, the use of electronics and various audio-visual instruments has been introduced in vocational training. As a result, vocational training has become more complicated and requires more than ever systematization and greater planning. The development of educational technology is one of the factors that have promoted the systematization. The second point of view is to make vocational training more effective-to combine the elements that compose it in a way that would improve efficiency in terms of time and cost, as well as to enhance its effectiveness

Vocational guidance covers curriculum guidance, practical guidance, etc. The general process of vocational training comprises eight steps (Yoshida, H.1986, and P.99). They include: Training starts with the formulating the training objectives - that is, based on the needs, ability and readiness of the trainee, contents and standard of training. The second step is to select a guidance strategy to maximize the trainee's learning ability. The third and fourth steps are the training site and arrangement of its surroundings, and the selection of training materials and instruments, especially audio-visual aids respectively. The fifth step concerns the manner in which training proceeds and conforming each instructor's role.

Following these steps, the training plan is established and instructors are engaged and training starts. But the training extends to the checking and evaluation of results, adjustments and improvements made in training. In a sense, vocational training comprises eight steps, each being equally important. Now, the focus is on the systematization of training, emphasizing two steps, which are the second and fourth i.e., Methods and Materials. Thus, in the present chapter, an attempt has been made to present various training methods for vocational education, selection of method of training, conditions necessary for effective training, instructional materials in vocational training and precautions in using audio-visual materials.

Training Methods for Vocational Education

Vocational guidance is an important part of vocational training. The methods of vocational training which have been carried out up to the present are presented hereunder:

1. Production of goods: The most primitive form of vocational training is goods manufacture. In the old system of apprenticeship, technology was transmitted from the patron to the apprentice by learning through observation and imitating the work of the patron (Yoshida, 1986, p.100). Such a system began with easy technology, gradually including more complicated and difficult ones. The learning had to be done at a workplace with the actual manufacture of goods and having the goods themselves serve as training materials. In this method the patron who was the instructor played an important role, although the actual acquisition of technology remained largely with the apprentice (trainee).

2. Process operation (Demonstration): This method of training aims at teaching different task elements (operation) through an analysis of the production process. Training is carried out for each operation separately through demonstration. The trainer shows the trainee(s) how

a specific procedure is undertaken and then they are expected to emulate the trainer. Demonstration is a method of training in which the trainer gives an oral presentation of subject matter while showing objects, actions, and occurrences to which the subject matter refers. It is a method of communication for teaching groups rather than individuals. It is a triple involvement of trainees, demonstrator and explanatory material (Reddy, VLN and Reddy, MCR, 1984). A good demonstration requires a lot of time, involves much hard work and adequate preparation. Belbin and Belbin (1972:44-5) suggest that if a skill is broken down into a number of discrete stages and that in both the demonstration and in the subsequent practice sessions, each sequence is initially performed slowly it is possible for the learners to acquire new skills fairly and rapidly.

3. Production of goods and actual operation: This method is a combination of actual operation and goods manufacture. This is also called as I S (Instruction Sheet) system. In this system, basic training is first carried out for task elements commonly used in production. Basic training is extended to a representative job covering these elements. Training proceeds to the more complicated representative jobs. This method of training was studied and developed in the United States after World War I. It has been adopted as a short-term training system for beginners. The following is an outline of this method, based on the works of Flickland, one of the three famous authorities on this method.

- i) An area of a special kind of job is divided into blocks. Example: Machining is divided into blocks of lathe turning, drilling and milling.
- ii) The task elements (operation) from each block are selected. Example: Set bits, decide on cutting speed and feed, insert both centres. These are task elements in lathe turning.
- iii) A representative job, which can be completed in each block, is selected. Example: Ring, bolt, nut, cylinder, collar are each a representative job in lathe turning.
- iv) Arrange as shown in List 1, the task elements found in each representative job and mark with 0.
- v) Rearrange, putting the task elements with more 0 marks along the upper part of the list, followed by those with fewer 0 marks.
- vi) Rearrange, putting representative jobs with fewer 0 marks on the left and those with more 0 marks on the right.

This method of analysis considers external action only and not the internal action and rationale behind production. Also, it is a passive system of training for the trainees.

4. Practical instruction: It is sometimes necessary for the trainer/instructor to show the trainees what they should learn. For example, how to use equipment and materials at workshops. This practical instruction has several merits. First, it involves more than the two senses of seeing and hearing. Trainees are able to see and hear techniques and operations done by the trainer/instructor and at same time carry away their impressions of them. Anyone can understand anything if he is given carefully prepared practical instruction. Moreover, practical instruction attracts and sustains the attention of the trainees. Both data and materials are presented in practical instruction, making it an excellent method for participants to learn techniques, operations, procedures etc., (ILO, 1984, p.64).

Good practical instruction not only helps the trainees understand but also stimulates them. Because of these merits, it should be widely used in classrooms and workshops. It can be used for both individual and group instruction and is even more interesting when combined with lectures, practical training, discussion, etc.

5. Practice and exercise: Practice and exercise enable the trainees to learn while practicing skills under the trainer/instructor, who guides them during their work. Participants should repeat operations until they can do them well.

Sometimes accidents happen in the course of training. Practical training can be most effective if the trainees practice on actual machines and production lines with actual data. The trainees should take tests according to the work standards because they have to do actual work at some stage. In this way, they will learn quickly. This is the best method to arouse their interest and is also important in developing self-confidence. The work done by the trainees can be carefully observed and the final results examined (ILO, 1984, p.68).

6. Project Method: Taking up small projects in the field is another profitable training method. The project method is significant for the training of trainees. The project method (also called planning method) aims at creative technology by allowing activities in which the trainees plan and produce themselves (Yoshida, 1986, p.102). This method came into common use as problem-solving and was first carried out at Columbia University. It aims at improving the ability to acquire knowledge and skill to solve problems on hand. Project involves participants in work according to their own capacities and pace of work, and thus makes use of their skills and experiences for the benefit of the group. The instructor's role is limited to giving directions and answering questions. In this process they are expected to venture out to seek information, collect from the local people, the raw material which is to be systematized into the learning content and seek their assistance in the task. This method can be described as active training as against passive training. It is adopted in many countries in vocational education. It is also essential to ensure that the projects can be successfully carried out by trainees, in order to build up their confidence and that it has the good will and support of the host community and institution. It helps the trainee acquire knowledge and develop his creative ability because learning activities are carried out independently. Projects provide ample opportunities for learning by doing and investigating. They are also a way for the individual to learn within the group, and the group to learn from the community. The trainees can learn more by project method and they get the feeling of themselves being involved. However, there are a few problems. The trainee must show interest and have a certain measure of knowledge and skill.

7. Case Study Method: The case study method is also one of the variants of group discussion techniques and is widely used in training programmes particularly when the objective is to acquaint the trainees through analytical approach. It is an activity based method and learning by doing is the prime purpose. A case study is the process whereby a problem-solving capacity can be developed by analysing the past and present facts and by devising a solution for decision-making as well as applying the basic approach, principles, rules, methods and management techniques to workshops (ILO, 1984 P. 42). It is a typical way of learning through problems, and discussion is one way of solving problems. A case is a factual description of a real life situation. It does not include views and comments. It is a collection of bare facts and provides for a learning situation to discuss, interpret and find a solution through critical thinking of group co-operation and cohesiveness (Reddy, VLN and Reddy MCR, 1984).

Various kinds of case studies as described by ILO (1984) are:

- a. There are many kinds of case studies, ranging from simple ones which briefly describe the problem to complex ones which involve detailed information.
- b. Some case studies are intended for the learning and application of the basic approach, principles, rules, methods and techniques of management; others are intended to develop problem-solving capabilities.
- c. Case studies can be divided into directive and nondirective. In the directive kind, the leader guides the discussion actively; in the nondirective kind, he guides the discussion but does not indicate it openly.
- d. In the Harvard case-study method, the leader provides direction on complex cases involving detailed descriptions. The Harvard method involves both directive and nondirective

cases. One more method concerns simple cases which are directly guided by the leader; another is a compact method combining both kinds.

8. Role-playing: Role-playing is an effective method of learning when combined with the case-study method. Role-play is an action training technique directed towards self-education process through exploration, correlation, contrast and comparison. Role-playing is a learning method whereby “actual” or “possible” problems are defined and the causes, background and the views of the relevant persons are analysed and understood as each role is freely played (using various attitudes and ways of speaking) in order to find possible solutions or areas of improvement. It is also acquired by applying the principles and techniques taught in lectures and discussions. Role-playing is mainly used for training salesmen and supervisors. Both salesmen and administrative supervisors have people (i.e. clients or subordinates) as the object of their effort. Their success depends on how much they understand the other party. “Understanding the other party” sounds a simple thing to do, but this isn’t so. To “understand” the other party, one must think like it. This approach forms the basis of role-playing (ILO, 1984, P46).

Role Playing can be used to help learners understand their own situation better and identify the forces which operate in the situations. In addition to its active realism the value of simulation lies in developing social skills, such as co-operating within a group to solve problems, accepting other people’s solutions, their contribution and their right to disagree.

9. Programmed learning: Programmed learning has been developed especially for primary and middle schools. Since it is effective, it is now used in vocational training which has become diversified in subject and in standard, not to mention the increased number of students to be trained (Yoshida, H. 1986, p.102). Programmed Learning (PL) aims at individualized learning and is a method which reaches its target action through small steps and following the individual pace of the trainee. That is, the trainee works on a subject himself, confirms the results by himself and advances to the next steps. While in training through actual operation, the analysis is made only of external action, programmed learning analyses internal action and the accompanying mental activity. Programmed learning has been studied and put into practice in the United States, as well as in the Socialist countries, such as the Soviet Union and East Germany, where it has been developed more than audio-visual technology. Programmed learning includes many types. They include: 1) Direct line system – (a) Step system (Skinner system, answer inscription system) and Multiple choice system (Pressey system, selecting answer system); 2) Crowder system; and 3) Reverse tournament style.

(a) Under the Step system, the Item refers to a unit in the contents of learning, step to a unit in the contents of presentation.

(b) *Multiple choice system - selecting answer system.* More than two answers are provided for each question. Trainees who answer correctly go to the next question. If the answer is wrong, they try again until they get the correct answer.

(c) Crowder system has four types – (i) Programme with branches (ii) Reversion programme, (iii) Forwarding programme and (d) Skip programme.

(d) Reverse tournament style – Theory is developed by answering questions one by one with “yes” or “no” until a conclusion is reached.

10. Coaching: Coaching is the guidance given by the trainer/instructor to the trainees individually, with the former correcting the latter. This method is widely used at workshops. The merits of coaching are that it can be given at workshops and that it fosters close relationship between the trainer/instructor and the learner (ILO, 1984 P.70).

Although coaching is usually done individually, it can be used for larger numbers of people. Trainees can be divided into groups of two after the practical training has been correctly

conducted. One person should play the trainer/instructor and the other the trainee. The roles can be exchanged during practice. In this method, the coach should keep in mind where he/she are able to sustain the interest and motivation in the trainee for the desired goal. For this the efficient coaching includes the method of motivational speaking where the coach is a motivational speaker, and makes speeches professionally, intending to inspire and motivate his trainee. In order to speak efficiently, the coach should know about the trainee completely (Reddy, M.C.Reddeppa, 2012).

Coaching methods includes both theoretical and practical sections. The motivational speeches are done theoretically but the workshop, seminars come under practical methods. Hence, the method of training is decided depending on the need of the trainees. Coaching should always be systematic.

11. Apprenticeship: Apprenticeship is a system of training and a new generation of practitioners of a skill. Apprentices (or in early modern usage "prentices") or protégés build their careers from apprenticeships. The most of their training is done on the job while working for an employer who helps the apprentices learn their trade, in exchange for their continuing labour for an agreed period after they become skilled. Theoretical knowledge may also be imparted, informally via the workplace and/or by attending vocational schools while still being paid by the employer (Reddy, M.C.Reddeppa, 2011).

An apprentice receives training from the experienced trainer. As learning is an individual process, the individual contacts with the trainer is necessary to acquire the skills or to improve the capabilities. The apprentice must observe the master trainer to imbibe the skills and to mould himself to suit the profession. The trainer helps the apprentice to learn his trade or craft. A master craftsman engages the individuals as an inexpensive form of labor in exchange for providing food, lodging and formal training in the craft. The apprentices would live in the master craftsman's household or his firm. The individual methods include: work in the home or firm, letters or correspondence with each other, consulting over telephone etc., (Reddy, M C Reddeppa, 2012).

Selection of the method of training

The selection of the method of training depends also on the contents of training and the ability of the trainees. To train a skilled labourer, who has both skill and brain and not one having only a knack, is a big challenge to vocational training at present as well as in the future. Programmed learning and the ABB system are effective for this purpose.

Conditions Necessary for Effective Training

Three conditions are indispensable to effective training. The first is motivation, the need to arouse the interest of the trainee. The second is the order in which training is carried out. The contents of training must follow the right order so that they can be easily learnt by the trainee rather than that they can be easily taught by the instructor. The third is the relevance of training. Technical knowledge should not be taught in small, unrelated pieces, but should be presented showing the relationship between different points, as well as their relationship with specific manufactured products and the works carried out in a workplace.

Instructional materials in Vocational Training

The methods that are advocated for vocational training depend upon the size and nature of clientele group, pace and time, course content and objectives of learning. The methods such as Practical Instruction, Demonstration, Practice and exercise, programmed learning, case study, role-playing, etc., are appropriate for vocational training. These methods would be able to stimulate the interest and facilitate the trainees' understanding. The methods would also be able to constantly attract new learners. By using relevant apparatus, aids and equipment, we can make the training methods more attractive and effective ones. The aids and apparatus

when used often with learning methods help the adults to gain full educational value. Audio-visual aids form an effective means to attract learners, promote participation and increase the rate of learning and retention. The aids can also serve to add to the learners' experience, skill, perception, understanding and cognitive awareness.

The introduction of audio-visual technology has improved vocational training. This doesn't imply that audio-visual media have never been used before in training, but that the remarkable change is in the introduction of various sets of audio-visual hardware and instructional materials, such as textbooks, manuals for instructors, audio-visual aids, etc. A typical example is the **ABB** system. **ABB** is the abbreviation of Arbeitstelle für Betriebliche Berufsausbildung (Labour Office of Vocational Training in Enterprise), and the training system it evolved is now called the **ABB** system. This system developed from combined training through actual operation and goods manufacture. It has been studied in Japan, where several systems have been put to the test (Yoshida, H. 1986, p.104)

Audio-visual aids aim to promote individual and group learning. The usefulness of audio—visual materials depends on the use of suitable audio-visual aids, clarity of the message and quality of presentation. The aids and equipment play an important role in learning situation. There are different types of apparatus, aids and equipment. Some of them which are used in vocational training settings are described hereunder:

Wall charts

Wall charts are effective visual training materials that are easy to use. Training instructions that are only heard are hard to understand without the use of visual aids. Understanding the content of the training programme will be easier if the main points to be learnt are illustrated on wall charts. Wall charts are also effective in sustaining the trainees' interest. They are useful in presenting the subject matter, in emphasizing the important points, in comparing two points, and in depicting graphically (ILO, 1984, pp.19-20).

Sheets

Sheets are an aid to effective training in various ways. Training sheets can be classified into two types according to their functions. They are (i) Information sheets, and (ii) Work sheets. Most sheets are information sheets but some take fairly long to read. Most, however, are one or two pages. The summary of important points should be remembered. Trainees should use any knowledge or experience they have through training or otherwise should fill in any work sheets as instructed. Use as many work sheets as possible since they are very useful in increasing the functional and practical understanding of the trainees.

Sheets can be used as training aids in the three ways. Sheets can be used to give advance notice of introduction. Some sheets are used to explain the development part of training. Further, the sheets have the purpose of summing up when they are used in the concluding stages of a training session (ILO, 1984, p.23).

Chart pads

A chart pad consists of a basic and a board on which sheets are mounted. These pads are used to write on or to draw the pictures needed for training. Such drawing is done with felt pens, crayons, colored chalks, etc. Chart pads combine the functions of the black-board and the wall chart. White Kent paper of medium thickness should be used.

Chart pads have the following merits over black boards as a training aid (ILO, 1984, p.25):

- i) Things written or drawn on white paper appear more natural.
- ii) When a statement is written down, the speaker feels as if he himself is writing it on paper.
- iii) The paper can be pasted on the wall after it is completed.
- iv) The paper can be preserved for as long as necessary.

v) If a rough pencil sketch is provided in advance, then even the trainer/instructor untrained in drawing can produce good pictures or cartoons by simply tracing them with a felt pen while conducting the training.

Chart pads are thus very useful as a training aid if they are used according to a well-prepared training plan.

1. Models

Scale models are those made larger or smaller than the actual object they represent. Three types of scale models are used in training.

- a. Reduced scale models which are most effective for training in mechanical matters
- b. Enlarged scale models are used for training in operation and are not frequently used.
- c. Reduced-scale plant layout models are used to improve the plant layout or to examine flow charts.

2. Mockups

Mockups are models built to scale for training. They are built in such a way that some sections can be taken apart or removed to allow explanation. The difference between a mockup and an actual object is that the sections of the object which are not necessary for training can be omitted. For instance, a mockup aircraft cabin is used to train stewardesses in serving meals. However, the exterior does not need to be like that of an aircraft. Neither is the undercarriage or wings necessary.

Proportional models are useful when giving training in mechanical matters, but are seldom used for training in a work process or in actual operation.

3. Cross-sectional charts

Cross-sectional charts exclude the sections of the exterior and show internal movements of interiors for training purposes.

4. Display boards

These are flat boards on which items can be displayed along with their explanations. Display boards can be made in any size according to the need. Handling, transportation and storage should be considered when making display boards.

5. Simulators

Simulators are training aids made to resemble the actual object as closely as possible. They are used to simulate an activity, such as driving. Their disadvantage is that the equipment is expensive and difficult to maintain.

6. Tape recorders

Tape recorders can be an effective training aid when used with films and slides. Their use is limited, however, because they stimulate only the auditory sense, which is less effective than the visual sense.

Tape recorders are by far the best training aid for speech training. They can be used to record the trainees' speech and provide examples for imitation. There is that spoken words, which are destined to disappear, can be recorded and reproduced, and repeated use can be made of the tapes.

Audio Tapes and Cassettes are very useful for repeated instruction. Recorded lectures by experts can make instruction authentic, enhance student motivation and reduce monotony. Plays, dialogues, group discussions, speeches, interviews, songs, etc. can be recorded and used in different learning situations.

7. Public Address Equipment: Public Address System can be used with large audiences for making announcements, teaching, conducting meetings, playing recordings, etc. It is used to amplify and reinforce sound. The trainer/instructor can lecture to a large number of trainees with the use of an amplifier. Amplifiers stimulate the auditory sense and are suitable for speech training.

8. Projected Aids: Projected aids assist the training programme at every level and in a great variety of ways. These aids are Film, Filmstrip, Slide, OHP Transparencies, The epidiascope etc.

i) **Film** is the most popular medium in day-to-day life and is advantageous in presenting the subject-matter realistically, whether for orientation, skill training or theoretical study. The film can show how industry uses the principles studied in the chemistry or physics lesson in the service of man. It can also show the correct method of performing a job, while presenting cases of industrial accidents, injuries and other unfavorable effects resulting from technical errors and lack of technical experience. Through effective, films that are too dramatically composed can distract attention away from the point of the training. Depending on their content, they produce diverse effects.

ii) **Filmstrips** are easy to use and are good substitutes for films. Filmstrip is a series of frames which when projected depicts a complete theme. It enables the learner to view the frame as long as necessary. It is possible to revert back to the frame if necessary, particularly for recalling earlier discussions.

iii) **Slides** may contain photographic representations of real objects or illustrations of the objects. Slides may be used for the objects which cannot be seen from their outward appearance or which are invisible to the naked eye e.g. the structure, cross-section and interior of machinery; some physical and chemical processes.

iv) **Overhead Transparencies:** The use of educational films and slides depends on the study and practice of their use as instructional materials prepared by other people; that of the overhead projector and transparency, on the instructor's lesson plan as well as his instructional goals. When projecting a transparency in its entirety, it helps to establish audience attention by flashing the picture repeatedly making use of the on-and-off switch of the projector.

v) **The epidiascope** is used to enlarge the necessary details of the object. Unlike the overhead projector, it takes much less time, because the real objects to be projected need not be converted into transparencies. It also projects small opaque images, maps, etc. with translucent materials onto a screen as enlargements.

9. Modern Educational Technology: They are Television, Video-disc and video text, Computer - Assisted Learning (CAL) and Teaching Machines (TM) are amply used in vocational training.

i) **Television** transmits sound as doe's radio and has the quality of sound motion pictures, in that it adds sight and motion to sound. But, Television goes further, instantaneously it can bring scenes and events from a distance to the audience. o, it creates a lively atmosphere and stimulates interest among the learning group.

ii) **Video-disc and video text** are new media that increase the capacity of the Television set. Video disc carries both audio and video through conventional television set. Video text allows the home television set to function like a computer terminal and retrieve text information and graphics form a remote data.

iii) **Computer Assisted Learning (CAL):** Computers can be used as a medium of teaching and learning in a range of subject areas. It can cope with the needs of thousands of students simultaneously and meet their needs. Computer Assisted Learning (CAL) allows students to learn at their own rate and pace. It increases the educational flexibility, eliminate duplication of effort and increase learner motivation (Reddy, M.C.Reddeppa, 1991). As the computer

becomes more commonplace, so more learning packages will become available and it will be easier for the educators to employ this approach. It facilitates instant access to information with infinite patience and accuracy, and it provides opportunity for systematically organised learning for all learners. The experts claim that the use of CAL is in education and training because no human teacher even born no method or media yet tried, can match the computer's capabilities. The increasing amount of information and lack of qualified teachers necessitate its use. In this, the learner can learn at his own pace, receive immediate personalized feedback and freely choose the content, sequencing and degree of difficulty of instruction. The dynamic interaction between the student and instructional programme is not possible to be secured in any other medium. With CAL, we would completely individualize the instruction materials (Reddy, M.C.Reddeppa, 2009).

iv) **The Teaching Machine (TM)** provides stimulation and some type of reaction of feedback to the student, while learning is undertaken based on the theory of programmed learning. The teaching machine is used to: 1) Provide stimulation (questions), 2) present a structure by which to respond to questions, 3) provide correction or feedback, 4) indicate the next direction based on the correctness or wrongness of response, and 5) enable learners to study at their own pace.

Selection and Use of Audio-visuals in Vocational Training

We have a wide variety of aids and equipment in training of vocational trainees. With wise selection and use of a variety of audio-visual aids and equipment, experiences can be derived which will develop understanding and enhance thinking. Selection of audio-visual aids depends on the factors such as: 1) The objectives of teaching/learning, 2) The nature and type of learners, 3) The preferences and competencies of learners, 4) The suitability to the content, 5) The Availability of aids, 6) Familiarity of the aid, 7) Cost of the aid, 8) Facilities for presentation, 9) The method and type of education and 10) The Teaching/learning situation where the aid is going to be used.

Precautions in using audio visual materials: The following points should be observed to make the best use of audio-visuals (Yoshida, 1985, p.44).

1. The selection of audiovisuals should consider the objectives and contents of training.
2. When using audiovisuals for the first time, the instructor should study them thoroughly beforehand to determine the best way of presenting them.
3. To enhance the effectiveness of audiovisuals, the instructor should look over audio-visual facilities and apparatus. For example, he should check the darkness of the classroom.
4. As for movies, slides and videotapes, which take a longer time to be shown, the trainee should be sufficiently informed about the outline of the audiovisual and the important points to be taken up in the presentation.
5. A discussion period should follow the presentation to enable the trainee to ask questions and express his views and impressions.
6. To carry out (4) and (5), it is desirable to limit an audio-visual show to 30 minutes for every unit of instruction lasting 45 to 50 minutes.
7. When more than two types of instructional materials are used within the same unit of instruction, the relationship between the materials should be explained.
8. After use, audiovisuals should be kept in a permanent storage place for use by other instructors.
9. The advantages of using audiovisuals should be examined on the basis of the comments of other instructors and trainees. Thus, the selection and method of presentation can be improved, ensuring that audio visuals fulfill the objectives of training.

References

- Belbin,C and Belbin, R.M. (1972). Problems in Adult Retraining. Heinemann, London.
- Reddy M.C.Reddeppa (1991). Use of Audio-Visual Aids in Continuing Education, Conference proceedings of National Conference on Continuing Education, October 4-5, 1991, Department of Continuing Education, University of Roorkee, Roorkee (U.P), pp:122-132.
- Reddy M.C.Reddeppa (2009). Strategies and Methods of Teaching Learning Process (e-content), Educational Multimedia Research Centre, Osmania University, Hyderabad , 2009.
- Reddy M.C.Reddeppa (2011). Practice of Apprenticeship for Skill Development, Paper presented in the International Seminar on 'Lifelong Learning and Skill Development' held on 17-18 October, 2011 at NEHU, Shillang (Meghalaya).
- Reddy M.C.Reddeppa (2012). Career Guidance and Counseling in Educational Institutions, Paper presented in the National Seminar on Career guidance and counseling programmes in higher educational institutions held at DACE, Sri Venkateswara University, Tirupati .
- Reddy, V.L.N. and Reddy M.C.Reddeppa (1984). Training Techniques for Functionaries in Adult Education in Project Officers Training Report, Banaras Hindu University, Varanasi, 1984.
- Yoshida, H. (1985). Use of Audiovisuals in Vocational Training, Chapter -3 in C.Hosomi, S. Nakata, K.Matsumaru, G.Munekata, T.Nakamura, M.Kubota (Edt.) New Approach to Vocational Training, Volume – 1 (Translated from the Japanese by N. Tagaya in collaboration with the Human Resources Development Bureau, Ministry of Labour, Japan), Asia and Pacific Skill Development Programme, International Labour Office, Islamabad, Pakistan, 1985 pp.42-46.
- Yoshida, H. (1986). Systematizing Vocational Training (Chapter – 2), in C.Hosomi, S. Nakata, K.Matsumaru, G.Munekata, T.Nakamura, M.Kubota (Edt.), New Approach to Vocational Training, Volume – 2 (Translated from the Japanese by N. Tagaya in collaboration with the Human Resources Development Bureau, Ministry of Labour, Japan), Asia and Pacific Skill Development Programme, International Labour Office, Islamabad, Pakistan, 1986 pp.98-107.
- ILO (1984). Application of Training Materials (Chapter-4) in Manual of Training Methods (Japan Industrial Training Association, Inc. International Labour Office, Asian and Pacific Skill Development Programme, Islamabad, Pakistan, 1984 pp.17-29.
- ILO (1984). Case Study: Role-Playing (Chapter-7) in Manual of Training Methods (Japan Industrial Training Association, Inc. International Labour Office, Asian and Pacific Skill Development Programme, Islamabad, Pakistan, 1984 pp.42-49.
- ILO (1984). Guidance for Training (Chapter - 10) in Manual of Training Methods, Japan Industrial Training Association, Inc., International Labour Office, Asian and Pacific Skill Development Programme, Islamabad, Pakistan, 1984, pp.64-70.