EDUCATIONAL TECHNOLOGY & METHODS IN PHYSICAL EDUCATION

**UNIT-1**

***The Meaning and Definition of Education :-***

The imperative character of Education for individual growth and social development is now accepted by everyone. Investment in the education of its youth is considered as most vital by all modern Nations such an investment understandably acquires top priority in developing countries.

Education in one sense or another appears to be as old as the human race, though in course of time its meaning and objectives have inevitably undergone certain changes. The root meaning of education is given as bringing up or leading ort or making manifests the inherent potentialities in a pupil. Broadly speaking, education refers to any act or experience that has a formative effect on the personality of an in dividable. Such a view of education will include all of likes, experiences. However, education refers to be procaine by which society, through its different institutions. Deliberately Trans mitts its cultural heritage to its young – its accumulated values, knowledge and skills from the generation to another.

Education is often regarded as a synonymously with learning, as the acquired experience of any sort intellectual, emotional or sensorimotor. Education is a product of experience. It’s the process by which and through which the experience of the race I. e, knowledge, skills and attitudes are transmitted to the member of the community.

John Dewey speaks of education as that reconstruction or reorganization of experience which adds to the meaning of experience and which increase ability to direct the course of subsequent experiences, “Education proceeds from Birth to death and the school is not only the agency that imports education “ Through the school experts greater influence in education the child, other social agencies like home, religion, press, radio, library, cinema, Television, ete, supplements its work. Life involves a constant and continuous modification of experience. Ideas change, attitudes and skills undergo an alteration. Education is the process of helping the child to adjust these changing world. Such an adjustment is not a ‘some – how’ one but these superior adjustment. The best type of education is that which guides the immature child to live his life richly and abundantly, at the same time to contribute to social betterment.

The aim of education has varied from face to race and Generation to generation but the main point of emphasis has always been on the mental  physical growth of individual. Education adjustment of the child is contained by the nature  demands of society to which the child should be adopted and attuned, so what could pass for a few centuries ago will be valueless in the society of today. The most distinctive Feature of modern society is its science – based technology. It is this which has helped modern societies to increase their production spectacularly. Science based technology has important implications for social and cultural life. The changes that occur has a result of its impact are broadly described as modernization affects the likewise, professor B. F. skinners worse on learning and his emphasis on the importance of reinforcement in the learning situation has created a revolution in the field of educational technology. The relationship b/w the objectives of education and instructions and technology appears to be reciprocal. Developments in technology bring about changes and shifts in educational goals which in their turn, stimulate the emergence of rewer techniques. Education today aims at elevating itself to the level of a complete and comprehensive science with broader objectives. Now it attempts to relate itself not merely to pedagogy but is conceived as Andralogy, which accordingly to Pierre further, is the science of training mean though out his life span. Such an enlarged view of education would naturally involve greater and more sophisticated use of technology.

Man is highly enterprising being. He is always on the lookout for inventing new innovations in all walks in life. Human life is has improved tremendously as a result of the growth in science and technology. Education is a social institution that has also been influenced by technological developments. The impact of technology on educational has been so profound that a new branch in the field of education called “Educational technology” has been developed educational system also. There has been a great explosion of knowledge during the last few decades. In a traditional society, the stoke of knowledge was elicited and grew slowly. The main aim of education was interpreted to be the preservation to their accumulated treasure. But in modern society, knowledge in every subject is cumulative, so that as each year passes, there is move to be learnt one of the main tasks in education in a modern society is to keep pace with this advance knowledge. In such a society, knowledge cannot be received passively. The main account in education should be on the awaking of curiosity, the stimulation of creativity, the development of proper interest’s attitudes and values and the building of essential skills such as independent study and capacity to the use as judge for oneself.

The Indian education commission (1964-66) observes that education commission must serve as a “powerful instrument of social, economic and cultural transformation necessary for the relation of the National goods.” Dewey says education is the development of all those capacities in the individual which will enable him to control his environment and fulfill his responsibilities, Gandhi ji opined that education is the all round drawing out of the best in the child and man – body, wind and spirit. The all round development includes the Childs.

1. Individual growth and

2. Social development.

Aims of Education

Individual Growth

Social Development

* Physical Growth
* Mental Development
* Intellectual Growth
* Emotional Development
* Social Growth
* Culture
* Customs & Tradition
* Mores and folkways
* Food and habits
* value

Education is the tricolor process involving

A) Transmission / importing of knowledge

B) Development of skills.

C) Incitation of proper interests attitudes, values and life coping skills.

Education involves the teaching – learning process wherein the paradigm shift has been from teaching to learning. In older days the teacher was the kingpin who decided the various facts of teaching and the only method used was oral communication. The world of today is experiencing two explosions I e, population and knowledge explosion. These explosions have had a tremendous influence on education and the associated technology.

**Technology and Educational Technology :-**

Technology provides the necessary answer to all these problems. Technology of education is being developed with the aim not only of making education more wisely available but also of improving the quality of education which is already available. The nature of these emerging educational techniques has been influenced by modern psychology.

Definition and Meaning of Educational Technology :-

Education technology is made up of two words i. e, education and Technology.

**EDUCATION:-** It has been derived from Latin words educare, educo etc, meaning to train to instruct’, to red’, to draw out’ or acquiring and imparting knowledge, skills and attitudes. It refers to the technique as well as technical conveniences. It is a science of technique and methods of doing or getting things done, related to any art, science, or profession. Technology thus results in new designs and devices as also new ideas and processes.

Educational Technology is just not the sum of the two words. Earlier developments referred to the role of technology in education. Later developments recognized the concept of Technology of education.

**EXAMPLE;-**

Techniques and methodologies of the teaching learning process. Thus educational technology accepts into its fold both technology of education and technology in education.

->The NCERT define educational technology as the means of development, application and evaluation of three different ways.

1) Technique

2)system

3)Aids to improve the process of human learning.

=>The International commission on the development of education defined educational technology as, the intellectual and operational ettorts to rearrange, to regroup or to systematize applications of scientific methods for the organization of (scientific method0 equipment and material to optimize the learning process.

=>Thomas reves defines educational Technology as “using technology as tools to support teaching and learning- learning from, with and about onesia and technology.

=>The educational technology department of the San Diego state university defines educational technology with focus on the emerging technologies and behavior / learning theories as educational technology is the application of research, learning theory, emergent technologies and child and adult psychology to solve instructional and performance problems.

=> S.S. talkarni defines educational technology as the application of the laws as well as recent discoveries of science and technology to the process of education

=> In the opinion of B. P. lulla, educational technology is the application of scientific methods and techniques to education.

=> According to loller very clearly describes what is educational technology. He says educational technology is not about audiovisual aids. Educational technology he says is not electronic gadget or television. Education technology, he opines as wide education itself, it is concerned with the design and evolution of curriculum and learning experiences and with the problem of implementing and renovating them. He includes that it is essentially a relational problem solving approach to education, a way of thinking sequentially and systematically about teaching and learning

**Objectives of Educational Technology :-**

Educational technology in its goals perspective, includes the entire process of setting of goals, the try out of new methods and materials the evaluation of the system as the integrated whole and the resetting innovations. In this way educational technology to improve education by incorporating new ways of teaching – learning in the classrooms.

Hilary Jason has stated that following as major objectives of educational technology keeping the teacher in view.

* Transmitting information.
* Serving as role models.
* Assisting the practice of specific skills.
* Contributing to the provision of feedback.

Macro – level objectives of Educational technology:-

(Objectives in terms of broad educational technology)

* To identity the educational needs and aspirations of the community.
* To determine the aims, objectives and in general structure of educable.
* To develop an integrated curriculum of arts, science and lumen values.
* To identify and locate material resources and strategies for achieving the desired aims of education
* To develop specific models of teaching to bring about an improvement in the teaching – learning process.
* To design modify and develop appropriate equipment aids suitable and relevant to the educational process.
* To identify the latest environment constraints and means to tack is them.
* To assist in providing vocational opportunities to the needy and deserving.
* To manage the entire educational system encompassing planning, implementation and equalization phases.

**Micro – level objectives of Educational Technology:-**

(Objectives in terms of specific classroom teaching.)

* To identify the educational needs for the learner.
* To assess the characters tips of the students.
* To determine and formulate class room objectives in behavior tams.
* To identify the contents of instruction and organize them in proper sequence.
* To identify the necessary teaching – learning materials.
* To predates mine the nature of interaction between subsystems i.e, students, teachers, teaching – learning material content and methodology.
* To identify human resources – students and teachers.
* To plan out teaching strategies, models and methods as per the needs and objectives. To provide appropriate feedback to students, as well as teachers.
* To modify the teaching – learning process on the basis of feedback received.

**UNIT - 2**

**Teaching Techniques and Teaching Aids**

We are in the 21st century, which is reaping the benefits of the scientific and technological advancements of the late 20th century. We are witnessing the revolutionary break throughs in the field of space science and nuclear energy, marvels of the chip technology and breakthrough programmes of the computer technology, information technology and multimedia communications. To meet the challenges of the present day information and population explosion we need to have intellectually trained human resources.

Education, today is associated with 7R’s – i.e., Reading, Writing, Arithmetic (denoting school subjects) and Rights, Responsibilities, Relationships and Recreation (new requirements and ideals of a democratic set up).

Teaching is a pivotal aspect in the process of Education. In comparison to education, teaching is narrower in scope and is associated with only 3R’s i.e., Reading, Writing and Arithmetic. Most professionals who deal with children are concerned with some specialized aspect like – the pediatrician deals with the diseased body, the psychiatrist is concerned with the personality disorders whereas the teacher has to pay attention to the child as a whole. He is concerned with the whole child intellectually, emotionally, socially, spiritually and in some degree physically. Thus the modern teaching process takes into consideration the teacher, learner and the interaction between them.

**1. Meaning of Teaching**

B.O. Smith defines teaching as a system of actions involving an agent, an in view, and a situation including two sets of factors; those over which the agent has no control (class size, size of class room, physical characteristics of student’s etc) and those that he can modify (ways of asking questions about instruction and structuring of information or ideas gained). Thus Smith considers teaching to be a tripolar purpose involving.

i) An agent – the source, human or material that tries to produce learning.

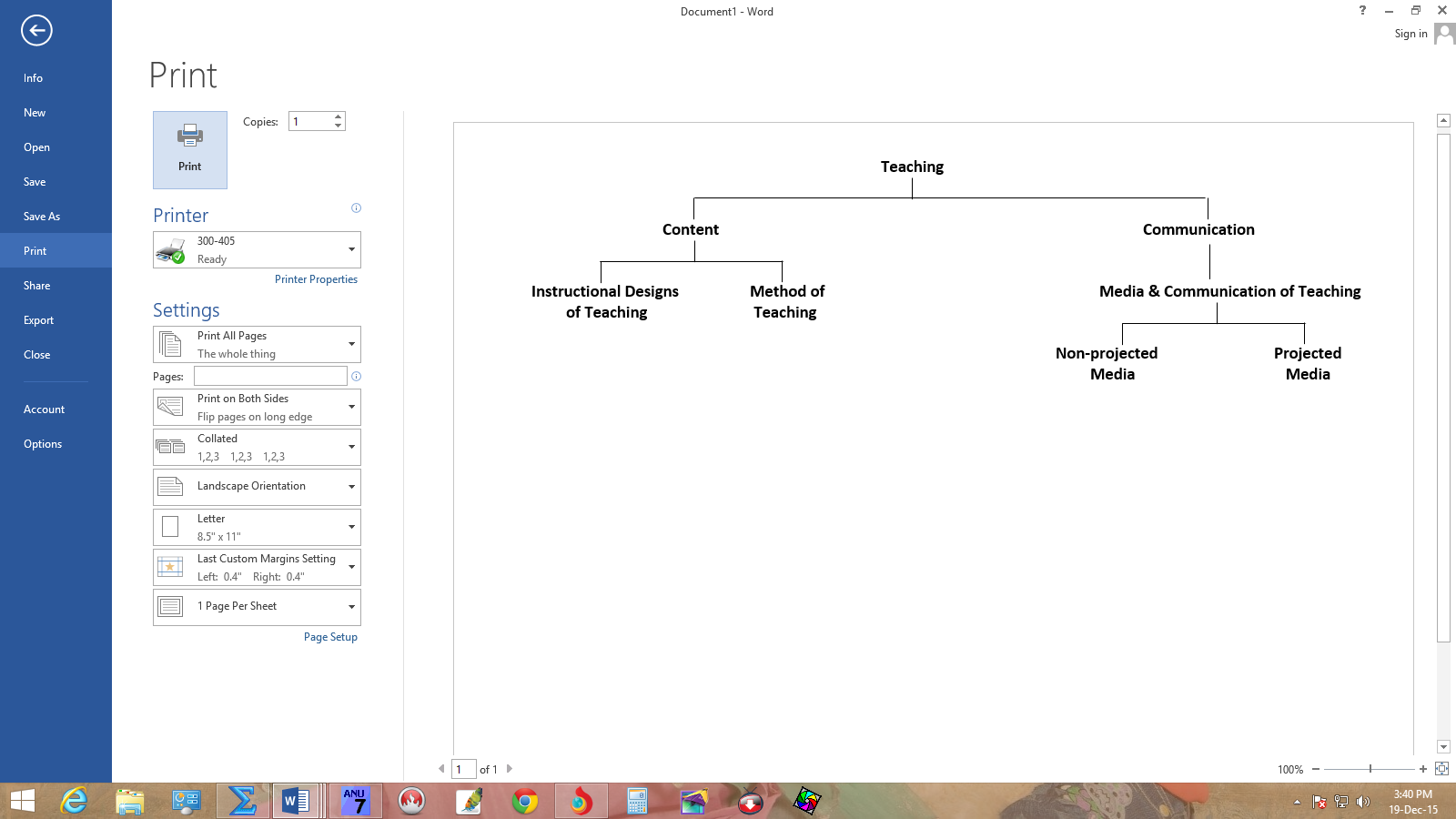
ii) a good or target that is to be achieved through the process of teaching and

iii) the intervening variable consisting of learning or teaching situation or environment. (human or material conditions and instructional methods)

**2.** Admiral Amidon defines teaching as an interactive process, primarily classroom talk, which takes place between a teacher and student and occurs during certain definable activities.

**Characteristics of Teaching**

The teaching process is represented below.



1 → Teaching is a complex social phenomenon

2 → Teaching is an art

3 → Teaching is a science

4 → Teaching is a profession

5 → Teaching is basically a communication process

6 → Teaching is amenable to scientific observation and analysis

7 → Teaching can take place through various forms.

Teaching methods have been based either upon the nature of the subject matter or the psychology of learning process, or merely because it has been observed that certain ways of presenting the lesson material attract the interest and hold the attention of the student. Teaching is an art. Who can develop this art from his potentialities can become a successful teacher. Democratic Philosophy of education can influence method. It is based on the principle of “Learning through activities”. Instead of becoming only passive listness, the students actively participate in the learning process.

Democratic method provides maximum freedom to the children to learn by their own efforts, experience and experiments. Some of the democratic methods followed in different democratic countries of the World are; Montessori method, Heruistic method, Laboratory plan, Dalton plan, Experimental method etc., while implementing these methods, the teacher works as a friend, a philosopher, and a guide for the students. These methods further develop insight and foresight of the students and make them confident and self-reliant.

Tagore once said “they only deserve to be teachers, who are patient and tolerant”. He further added. ‘Only he can tech, who can love. The greatest teachers of men have been lovers of mankind. The real teaching is a gift, it is a sacrifice, it is not a manufactured article of routine work and because it is a living thing, it is the fulfilment of knowledge of the teacher himself”. Thus the spoke about the role of the teachers in a democratic state. An ideal teacher in a democratic country should have three instruments – teaching, example and influence to make his teaching lively and effective. He should be devoted whole heartedly to the ideals and values, in knowledge of his subject and should have academic competence to enable the children develop mentally, spiritually, morally and physically. Whatever ideas he teaches in the class, should be reflected in his life; as a result of which, he can influence his students to follow the democratic ideals. He should be open minded and tolerant towards all ideas, beliefs and ways of life. He should have a sense of dedication to his duty. The system of education in the emerging Indian Society needs teachers, who can fulfill the qualities cited above and who can work as a friend, Philosopher, guide and social reformer.

Teaching is an art and it encompasses not only the good class room sittings and lengthy discussion but also all those situations in which the teacher comes into contact with the pupils anywhere in the world. In Physical Education, a teacher has to shoulder multifarious responsibilities, he teaches some skills, he supervises others, he conducts competitions and coaches the athletes and prayers individually for higher accomplishments. There also he uses one method or a technique to achieve the desired ends in his profession and discipline. Techniques and methods which he makes use of in all these situations broaden the meaning and scope of methods. A skilful teacher is easily distinguishable from the one who is unskilled. Moreover, the skill in teaching is something which cannot be easily learnt and applied. It is for extensive a job which is an outcome of long years of industry, endurance and patience.

**Distinction between a method and a technique:**

Most teachers in physical education have been using ‘Method’ in place to ‘technique’ and vice-versa without realizing that the two words reflect some what different processes, and that it is erroneous to use them as substitutes to each other. Basically a method of teaching is an approach - , a general way of guiding and learning experiences, are techniques applied by the teacher in handling the class.

Methods of teaching, in general, may be learnt and mattered during the pupil teacher’s training and yet may of the techniques of handling the subject matter and pupils of various age levels are learnt through the years of experience. Techniques of teaching are part and parcel of the individual teacher’s personality. Method may be universal and yet techniques are purely personal and individual skills of teaching.

**Types of Methods:**

Since a method is a general way of guiding and controlling learning experiences, we must say that the choice of method in Physical Education, for any teacher, depends upon his personal experience. A teacher must be fully aware of the qualities of his pupils so that. The method he adopts for teaching them, results into effective learning responses. The use of method from this point of view depends, to a great extent, upon the type of activity. There are activities like drill and marching where command has to be given and the pupils have to obey at all costs. There is no scope for any lecture or discussion in teaching drill. The basic types of methods are discussed here with their relative uses and draw backs.

**1. Lecture Method:** This method is very widely used in the field of Education especially in the class rooms where the teacher goes on speaking and the pupils go on listening to him. They may also ask the teacher questions at the end of the lecture if need be or if the teacher is prepared to give the answers. When the lecture has been carefully planned and is delivered in an interesting manner, children remain responsive but when lecture is poorly planned on there is no humour in it or that the teacher cannot keep the class wide awake, it becomes a purposeless activity; it becomes irritating and dull. Lecturing to younger children is good for nothing because they cannot concentrate much on the teacher. Every now and then the teacher has to wake them up from slumber.

Lecture in Physical Education is used in a limited way. It is used only at places where the information is to be passed on regarding the history of the same or where theoretical knowledge is to be imparted. Using lecture as a tool in teaching of physical activity is absurd because when children have been prepared for activity, activity should be immediately introduced. Short and desirable explanations may be given but only during the course a practical training. Lecture is a useful method only when it is combined with other methods of teaching otherwise it remains teacher or subject centered with no student participation.

**2. Command method:** It is a may by which the students are commanded to do an activity especially drill and marching or a start in athletics. In fact, command method itself is not a full fledged method because of the fact that an activity cannot be done or taught with command only unless it has been introduced, explained and demonstrated fairly well. This method is sometimes referred to as formal method. Making children do set drill by using whistle or clapping or beating of the drum falls within the techniques of the command method. There has always been a controversy as to which of the two methods – formal or informal should be stressed upon more in physical education and there is more inclination, at least theoretically, towards informal or free type of method yet command method serves best when a large number of students have to participate in rallies and demonstrations. It is one man’s commands which they have to follow. In this sense, this method is precise. Commands are given clearly and the activity is done accurately. In skill teaching, this method serves no purpose. Control of the morning assemblies, parades, march-past etc. Demand ample use of the command method and those physical education teachers who are poor at command, are often handicapped at organization of group activities like the ones mentioned above. Younger children in a large number are controlled not by any persuation but largely by command method.

This method useful to teacher formal activities are taught by command method words of command are used to obtain the required position. This is of two types 1) Response command R) Rhythmic command. To teach an exercise response command is used where each position of the exercise is to be held and the accuracy and the precision of the position are to be emphasized. The rhythmic command is used when the exercise already taught is to be repeated rhythmically for physiological results. Here emphasis is an movements and not on held positions.

**3. Demonstration Method:** This method is used when the students are to be prepared for the rallies or ceremonial demonstration of physical activities in a large number. The teacher might demonstrate a non-competitive activity like dumb-bells, wands, lezium, physical training exercises etc, while the students go on imitating. A class may demonstrate a set of exercises while the other classes are made to learn those exercises merely by imitation. Demonstration as a technique is highly valuable from the point of view of precision and directness. The better an activity is demonstrated by the teacher the better it is learnt by the students.

In many complicated skills and formations of display, the demonstration method will have to be used in combination with other methods also. At certain points discussion may be necessary and at others directed – practice may serve the purpose.

How to choose a method for a successful teaching – learning, depends upon teacher’s own understanding, learning, experience etc. However, no single method can wholly make teaching a happy affair. They have to be used in combination with each other.

The teacher will demonstrate the activity with a brief explanation. The students have to observe the teacher’s demonstration and then perform the activity on the command of the teacher.

**4. Imitation method:** This is adopted when an activity is one that was already taught or an activity which can be easily followed. In this case the teacher says “Follow me” or “Do as I do” when the teacher leads an activity and the changes the movements, the class perform the same by imitation.

**5. Part Method:** This is adopted whenever a particular activity is broken into its meaningful parts and taught. Eg. The teaching of the individual skills of a major game.

**6. Whole Method:** This method is adopted whenever an activity is to be taught a whole action without breaking it into its component parts. Eg. Teaching of an athletic event like High Jump which includes a series of movements (approach, take off, clearing the bars landing) are done by the method, even though each of these movements may be analysed and emphasized.

**7. Whole-part – Whole-method:**  In this method a full and clear conception of whole activity is given at the outset. Then this activity is divided into its meaningful parts and taught. After practicing these parts as separate skills they are put in a practice game situations. Thus initial practice is on the individual parts. Then the parts are combined into the whole activity. This method is highly recommended to teach a major game.

Eg:- Whole Activity Its meaningful parts

1) Game of Football kicking, dribbling etc.

2) Kicking the Football Approach, planting of the standing leg,

the swing of the kicking leg, proper contact with the ball, follow through.

**Presentation Technique:**

The immediate task before the teacher who is getting ready to face the class or a new teaching situation is anticipation, planning and preparation. These three indicate the duties done before the class begins. These duties assume that teacher already known the nature of the children, the things he will be teaching, the policies and regulations to be followed and the expectations of the community. Most of the preparation is based on the items that need careful planning on the part of the teacher. They are more general than the three main duties i.e., anticipation, planning and preparation. There are certain basic principles to guide the teacher, as he anticipates, plans and prepares.

Before the teacher has his first day of teaching he can get a good start if he knows the difference between a novice and an expert and has the ability to anticipate. No one is born with ability to anticipate. It comes with effort, noting the results and keeping oneself informed. The following principles will be helpful to guide a teacher in this respect.

In the beginning the teacher should lay more emphasis on discipline. The teacher should anticipate accidents, which might occur in the shower’s dressing rooms, fields, pools and on floor and should provide safety measures. The teacher should anticipate the need for motivation. This principle applies not only to the introduction of new activities but towards new learning whenever activity is taught. It is the duty of the teacher to motivate the student. So as to make the programme and activity more interesting.

The manner of artistic execution in presenting a subject matter is the presentation technique. A teacher must therefore make an analytical study of the subject matter, have a clear conception of it, and then deliver it to the pupils so that they can easily assimilate it.

The presentation technique may be studied under two heads, namely

(1) planning and (2) presentation

**1. Planning:** Planning is the next step after anticipation. It is better that the teacher must be married about the mistakes that may be there on his part being a novice. Hence there should be over planning in better professional work through proper planning. This may further be divided into (i) personal preparation, (ii) technical preparation.

**(1) Personal preparation:**

**Appearance:** The teacher should be prepared for each class from head to foot. This includes clean, neat, appropriate costumes, hair style etc., and such other factors as keep him well groomed up. Appearance is too frequently neglected by the teacher of physical education.

The modern physical education teacher should be careful about his dress and appearance on occasions other than in physical education classes. Clothes should be in appropriate style, shoes properly polished, shirts and blouses freshly laundered and headgear appropriately worn. Sometime a beginning teacher forgets these things. But it must be kept in mind that whatever the teacher is going to wear that will have an effect on the student.

The personality of the teacher goes along way for his successes in teaching. Hence he should always appear before the class well pressed and well prepared. A well-groomed appearance is always essential. He must have a commanding voice, pleasing manners and a sense of humour. He should avoid uncourthgestures and unnecessary mannerisms. He must be able to demonstrate the skills in a proper manner. In short, a teacher shall always set an example to the students and must be model to be followed.

**2. Technical Preparation:** The teacher must be prepared more than a lawyer, a physical or a surgeon. He must have the technical knowledge and skill which render quality to a professional service. Some of the guide lines that guide the physical educator, refer to the child, some to the school, to the department, the teaching learning process, the programme of physical education and the required facilities.

To begin with the teacher should know the nature of his students as well as the specific information about the individual in his class. The teacher should know the learning process, this includes the process for strength and weakness of the class he will be meeting next, the way activities are taught and the way the students are motivated for the activity.

The teacher must arrange the subject matter to be taught in a proper sequence. It is better for him to write the teaching notes or to have a clear mental picture of the subject to be taught. He must arrange for teaching aids, ground markings, essential equipment, proper safety measures etc. the formation of the class and the way in which it should be organized for the concerned activities must be pre-planned so that easy handling of the class takes place.

**Presentation:** Every one develops his own design for presenting the activities as there is no set pattern. The design is always to guide the students towards an activity. Methods and tools are used in various combinations depending upon the students, responses. Though they be differently designed, good presentations have common characteristics. Part-whole or whole part relationship is always to be clarified and established. Whatever is presented will be a part related to the other part. The relation of today’s presentation to yesterday’s is stated or demonstrated. Thus presentation is not only a means for achieving specific objectives but leading towards a longer goal.

After making all preparations for handling a class, a teacher must be able to present the subject matter in the best way possible. Though there is no one best way of presenting a subject matter, a teacher must bear in mind the common characteristic of good presentation.

**They are as follows:-**

1. Presentation must proceed from simple to complex and from known to unknown.
2. The presentation must be neither too fast nor very slow but must be adjusted to the pupil’s level of understanding and skills.
3. Problems and situations shall be presented to the students enable them to – think and act.
4. For the better learning of the students, the teacher should ways resort to improve techniques and tools.
5. Students must be made to realize the importance of the part to the whole activity.

Having noted the characteristics of good presentation, let us deal with the steps in the way of presenting an activity.

**Steps in the way of presentation**

**1. Orientation:-** This is initiating the students into the subject matter or an activity. Here a brief description of the origin, growth and development the activity is given.

**2. Verbal Explanation:-** This is explaining briefly the activity itself and the parts in which it can be divided and taught (Avoid lengthy sermon)

**3. Demonstration:-** This is the most important step in presenting an activity and the students have to observe carefully the demonstration. The demonstration should be a model. Along with demonstration adequate explanation should be given.

**4. Exploration:-** The students try to explore and experiment the activity they observed.

**5. Discussion:-** The teacher can assemble the students and have a group discussion. Here questions may be asked and answers elicited. Most of the problem and difficulties experienced by the pupils are brought forward and solutions suggested.

**6. Supervision:-** Students practice the activity and the teacher goes round observing and rectifying the mistakes, if any, committed by the students supervision also includes the teacher’s responsibility for the safety of the students during their practice.

**7. Evaluation:-** No presentation is complete without evaluation. It is necessary to find out the progress made by the students. After a series of presentation of a particular activity. The teacher must find out how far the students have improved their skills in that activity. This can be found out by means of testing and grading them. If evaluation shows that adequate progress is not made, regarous should be analysed and better procedures of teaching adopted.

**Command**

A drill consists of exercise and exercise are composed of movements and positions. These will have a definite physical function to perform. As a physical instructor, one can see the difficulty in securing a proper execution of the basic activity. There is a certainly the need for command. The exercise are carried out in obedience to command which results in good class control. A command tells the people what to do and gives them signal to begin. This puts uniformity in movements and paves the way for all alertness and quickness on the part of the students. Commands are the tools in the hands of the teachers for influencing the class towards good class management.

**Types of command:-** Generally, command is of two types: Response and Rhythmic.

**Response command consists of three parts –**

1. Explanatory or descriptive part
2. Pause part
3. Executive part

**(a) Explanatory or descriptive part:** This part of command is intended to convey the students what is required. It must be clear and concise to ensure what the people are supposed to do. At should be loud enough so the students have time to think about the next work, which they are to perform. This part must be clear as to how the exercise is to be done – either by number or rhythmically.

**(b) Pause Part:** It should be a longer one so that the students must know the movements they are to perform. The student keeps himself ready. It has the following qualities.

1. It is important between explanation and execution

2. Allow the children to realize what they have to do.

3. It is not a short one.

4. It should be longer when dealing with small children.

**(c) Executive Part:** It is a signal towards the start of the exercise. The words are spelled out sharply to start the exercise. It has the following qualities:

1. In this part of the command, the personality of the teacher is expressed.
2. It varies from teacher to teacher.
3. There is no monotonous commanding on the part of the teacher.
4. It is always better if there is variety in voice i.e., sometime loud and sometime louder.
5. Quick progression should be motto.

This command consists of 3 parts:

(1) Explanation, (2) Pause and (3) Execution

(Explanatory) (Pause) (Executive)

(a) Arms forward upward - Raise

(b) Raising arms forward upward - One

The explanatory part should consist of only essential words in order to give a clear mental picture of the movement to be done. This part should be uttered in a clear tone without any hesitation and should end with a falling inflexion of voice.

The pause gives sufficient time for the class to form a clear mental picture of the explanatory part so that the required movement may be done properly on the command of execution. The duration of the pause depends upon the simplicity or the complexity of the explanatory part.

The Executive part is the ultimate signal for the immediate performance of the required movement by the class. For this part, either a word or number will be used (as shown in example). This command of execution should be given in a sharp tone with inflexion of voice.

**Rhythmic Command:** This command is used when the exercise already taught is to be repeated rhythmically for physiological results: Here emphasis is on movements and not on held positions. This command normally consists of 5 parts. (1) Explanation, (2) Pause, (3) Execution, (4) Rhythmic counting and (5) Halting.

For example –

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Explanatory | Pause | Executive | Rhythmic counting | Halting |
| Continuously and rhythmically (raising arms forward upward and lowering arms forward downward class | --- | Begin | 1, 2, 3, 4  1, 2, 3, 4  1, 2, 3, 4  1, 2, class | Halt |

The details given for the parts of the response command are applicable to the first three parts of Rhythmic command. In the example, under the explanatory part of the rhythmic command, we have explained the exercise. When once the exercise taught is to be repeated immediately for physiological effects, there is no need to explain the exercise under the explanatory part. It is enough to give the following command, in the place of the first 3 parts.

“Continuously and rhythmically, class \_\_\_\_\_\_ Begin”.

Rhythmic counting starts immediately after the command “Begin”. The counting and the taking of the position must coincide whether the counting is to be slow or fast depends upon the nature of the exercise. But there should be proper rhythm in counting.

Whenever the exercise is to be brought to a half, the command “Class Halt” should be given instead of the last two counts.

The following are the various ways of counting and halting.

(a) 1, 2, 3, 4; 1, 2, 3, 4 etc. – 1, 2 Class – Halt

(b) 1, 2, 3, 4, 5, 6, 7, 8 1, 2, 3, 4, 5, 6, 7, 8 etc. \_\_\_\_\_\_\_

---------------------------- 1, 2, 3, 4, 5, 6 Class – Halt

(c) 1, 2, 3, 4, 5, 6, 7, 8; 8, 7, 6, 5, 4, 3 Class – Halt

(d) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 Class – Halt

of these above ways of counting, the first two (viz a & b) are desirable because the whole class is kept in suspense till coming to a halt.

**Note:-** There are many exercises involving movements on the left side as well on the right side. In case the exercise is to be changed from left to right during rhythmic counting, the command “Right - - - - change” is to be given instead of the last two counts of the exercise done on the left. Similarly to perform the exercise alternately on the left as well as on the right the command “Alternate” should be given instead of the last two courts of the exercise done on the right. Thus changing and alterna-ting from parts of rhythmic counting for the exercises that may involve movements on left and right.

Whenever series of exercise are done continuously and rhythmically, the change from one exercise to another exercise should be indicated by the command “Next – change” instead of the last two counts.

**Teachings Aids:** The appliances used by a teacher in the course of his presentation for the promotion of learning of the pupil’s are known as teaching aids. Teaching aid is “Something” visual that promotes learning. It represents a teaching method as well as an aid to the more effective use of other types of method. The quality and quantity of students learning should be increased by the use of the aids. Teaching aids are used for achieving objectives just as other materials and methods are used. The following are some of the teaching aids.

(1) community, (2) co-curricular activities, (3) audio – visual aids

**(1) Community:** Several facts can be taught by making the students to observe the community projects. Students can be taken to Dams, Bridges, Harbour, Aquarium, Zoo, Light House, Museum, Industries, Workshops, Botanical Gardens, Studios, Gymkhanas, Circus, National Tournaments, Meets etc., where they can gather lot of information.

**(2) Co-curricular Activities:** A part from the regular course of study there will be several branches of activities in an institutions (Eg) Scouting, N.C.C, Camping, Hiking, Students Association activities, Debates, Plays, Competitions, Citizenship training play festival, Demonstrations, Exhibitions, Health week etc. Lot of co-operative planning and group work in the above activities give opportunities, for the students to learn a variety of things.

**(3) Audio – Visual Aids:** Learning takes place through the senses. Learn by observation and audition.

“A good picture is worth of a thousand words”.

Audio – Visual Aids

(1) charts & diagrams, (2) still pictures (posters, photos, drawings, paintings, slides etc.,) (3) Motion pictures (films), (4) Models and exhibits, (5) Musical instruments, (6) Study resources (Books, Periodicals etc.,), (7) Radio, (8) Television, (9) Tape recorders and video tapes, (10) Multimedia projectors, (11) Overhead projectors.

Audio visual material serves valuable purpose when used for learning as the learner’s grasping is very much dependent on it. Audio – visual material includes a wide range of instrumental material and devices designed to provide imagery and subsequent experience. The various type of material used in physical education includes blackboard, bulletin boards, magnetic boards, pictures of all kinds, graphic devices such as posters, cartoons, maps, diagrams, side tables, sketches, drawings, charts, film-strips, film slides, motion picture, recordings, radio and television etc. Various kinds of material like radio, television, motion, picture, cartoon comic books develop interest amongst the readers. The aids show interrelationship of the whole complex. If a Hockey field is shown in a picture, the students will come to know where the players (22) stand. Thus they will have a clear understanding of the standing position of all the positions in the game.

**Teaching Aids**

**Importance of Teaching Aids in Physical Education**

1. → Teaching aids stimulate the auditory and visual processes.

2. → Teaching aids are the potential source of attentional control.

3. → They act as ergogenic aids i.e., performance enhancing devices.

4. → Teaching aids provide excellent medium of feed back (video films help

in analyzing one’s own movements, strategies of opponent etc.), for

monitoring defects/strength in performance.

5. → They provide detailed visual information on bio-dynamics body

positions etc., in the air during activity / movement, which is verbally

difficult.

6. → They stimulate more than one sense and increase the capacity of

learners to retain more impressions for a longer time period.

7. → They appeal to human senses and sustain the motivation of learners.

8. → Teaching aids help educate the audience, spectators and the supporting

staff in physical education and sports for smooth running of

instructional process.

**Types of Teaching Aids**

**or**

**Classification of Teaching Aids**

Teaching aids assist the physical education student to perceive the talk, to develop an appreciation for line performances and to apply theoretical principles to real situations. Audio – visual media is an important adjunct to other methods employed by coaches and teaches.

Classification of Teaching Aids

Audio Visual Audio-visual Real or Small New emerging

Simulated congregation medias

environment

verbal Non projected projected

**Importance of teaching aids:-** The following importance are suggested towards selection of audio-visual aids.

Audio-visual material may be considered as a method rather than product or subject because the aid serves to stimulate the learner. The aid is selected only after the objectives have been known. The aid should aim towards the purpose. It should not be used merely because it is available. If used as such it will contribute towards a better learning. The used material should be accurate and technically excellent. It should not detract from its effectiveness, rather variety of aids material be selected. It should not have anything against the prevailing rules and regulations of the institution.

Before presenting some of the uses of selected type of audio-visual material in teaching, physical education, basic steps which apply to the use of any of these devices are given below. The first step is the proper selection of the device. It is must on the part of the teacher to be quite familiar with the use of the device, and he also must be very clear about the appropriation of the material, for a particular lesson. A through check up of the device, to be used must be mode after preparation is done and the material to be used must be properly presented. The purpose of the device may be explained to the students. Proper follow up is needed after the successful use of the material. It is not necessary that the impression created by the device will be correct. A discussion as to what is seen and then through questions comments, the impression is cleared to the students, and finally the best use of audio-visual material is made in evaluation. It should be based upon the effectiveness of the device in contributing to the specific objective of the occasion.

Physical Education is concerned with the development of attitudes, appreciation and acquisition of information and understanding as well as learning of motor skills, all available devices should be used in the programme. The devices mentioned below have a major pertinency for physical education of teaching.

**Black – Boards**

They offer an effective means of producing information which all students can view at the same time. They can be used for diagramming, showing boundaries of the fields, introducing new rules, keeping scores, testing squad leaders and squad activities for the period, making simple announcements, advertising loss – and – found equipment or displaying other notes of all kinds. Pupils should be encouraged to make use of the black-board. While writing, emphasis should be on clear and neat writing. It is good to use coloured chalks to attract the attention of students. This will also indicate the different positions accurately and clearly to the students.

**Bulletin Boards**

Bulletin boards are essential for Physical Education programme. They serve as a medium of communication between the students and the authorities. They are appropriate for making available such information as routine messages, general administration policies and procedures, Intramural schedules, tournament dates, charts rule, for sports, squad lists, notice for various clubs, newspaper cuttings, and achievement standards.

The location of bulletin board should be at such a place where every student is able to read the displayed material. Use of attractive material such as coloured blocking, coloured mats assert to make the board decorative as well as informative. The board should be used for presenting information which supplements specific teaching purposes. Students should share the responsibility of maintaining the board.

**Magnetic Boards**

They are made up of sheet metal and come equipped with magnetized metal makers. They prove valuable for teaching formation – play orany other kind of movement in the series. Each player is represented by a metal disc which can be coloured and marked with number. Magnitic Board can be used to teach dance formation, mass drill formation, field marking, position of testing station or reference position. Generally magnetic board has a permanent marking such as football field, basketball court etc.

**Pictures**

Each physical education teacher should have a growing collection of pictures. They may be of Athletics, of different events, sports and dances. The pictures should be from magazines, news papers, books and art pictures. Pictures are important for teaching since they are easily procured.

**Graphic Devices**

This includes such media as cartoons, maps, diagrams, sketches and drawings. Their values are similar to those of pictures. Chart showing referee’s position and signals is very useful for teaching the concerned game which is represented on the chart. A considerable amount of time is needed to prepare a graphic device. It must be attractive, neat and readable. Lettering must be neat and vocabulary within the limit of the student. All sketches must be clear and must aim to explain the specific idea. They should depict the idea clearly for the use of all those looking at it.

**Illustrated Text Books**

These books are full of illustrations, pictures and diagrams. In using this source the teacher should carefully review all available school material, make selection on those which are most appropriate, and make further suggestive reading for students. Good illustrations considerably improve the value of physical education books for pupils.

**Models and Specimens**

They are useful in many ways for teaching Physical Education. A model of Gymnasium with all equipment is useful in laying out teaching for students, models of play ground are also very useful for the purpose of clear understanding. They can be instructional and interesting. Specimens of models are very helpful in selection of material during purchase.

**Projected Pictorial Devices**

These include opaque – projector material, lantern slides, and film slides. Film strips and motion pictures.

Opaque projectors are machines which permit projection of a flat picture or graphic device on a wall or a screen. It is used in projecting the diagram of playfield or play or match in progress.

Film slides and film strips are easily used for teaching the finer points of the athletic events. Through then the various teaching stages are taught to the students.

Motion pictures are also useful for the teaching in physical education programme. Recordings are particularly useful in dance room. In selecting recording the following points are taken into account.

Music which contributes to the taste of pupils should be qualitative. It should be according to the needs of the students and all recordings should be suitable to the occasion.

Availability of good record collection and adequate equipment represents one aspect of satisfactory use of music in physical education programme.

**Television**

Teachers of physical education should be help their students in improving their skill and understanding of various games through television. Teachers can improve the possibilities of pupils gaining an understanding and appreciation if they make some efforts to guide their viewing.

Audio visual material provides realistic imagery and substitute experiences to enrich curricular experiences of the pupils. Motor skill opportunity for the practice of the skill should be provided immediately after the visual model is set.

**Slides**

They bind themselves to ample discussion and can be readily made by most/any age groups as a project, or the leader can make his own slides. They are generally used for explaining positions in the air such as jumpers position on the high jump bar.

**Posters**

Through proper planning and care in preparation, poster can serve as a graphic visual aid. By leaving a poster up, for a prolonged period of time, at one side it loses much of its effectiveness for the thewer ceases to pay attention to it. Posters become very attractive when varied colours are used in making them.

**Charts**

Charts in series for various game skills like holding, dribbling, hitting, bowling etc., in ball games and positions in various other activities are useful visual devices in learning physical skills. Charts are readily available in the market. A teacher can takes the help of these charts to explain complicated positions.