Multi-sensory Instruction for Thinking Class

Senses are said to be the gateway of knowledge. In accordance with this well-known maxims of teaching and learning, it is always better to employ as many senses as possible in the process of instruction for the best possible outcomes. Moreover, the experiments and researches in the field of teaching-learning has established that teaching – learning process is best organized and facilitated through the use of multi-senses or multimedia instead of a single or routine type of media or techniques. For example, in case a teacher, while lecturing, makes use of the audio-visual aids, charts and maps, writes on the blackboard, demonstrate on the demonstration table and asks his students to respond in a theoretical as well as practical way, he is surely to communicate well instead of a teacher who is simply resorting to lecturing or demonstrating.

In multi-sensory or multimedia approach, the teaching-learning process is carried out through a number of media by using them in such a planned and organized combination with reference to the available teaching-learning situation that leads to their utmost utilization for achieving the desired ends in a quite effective way.

Characteristics of multi-sensory Instruction

1. Multimedia or sensory approach is the contribution and net result of the researches and experiments going on the subject of educational technology for improving the process and product of the act of teaching-learning.
2. Multi-sensory or multimedia approach calls for the use of number of media, devices and techniques for teaching-learning.
3. The variety of media involving multiple sense are carefully selected which becomes quite effective in providing desirable learning experiences to the learner for achieving the predetermined teaching-learning objectives.
4. In multimedia or multi-sensory approach, several media and techniques can be effectively used as appropriate vehicles for the needed communication of idea in the process of teaching-learning.
5. The multiple-senses and multimedia are not used haphazardly, merely to increase the size and number of media for being named as multimedia or multi-sensory or multimedia approach, it is taken care of that the presence of one must increase the effect of others in the realization of the set teaching-learning objectives with reference to a particular teaching-learning situation
6. While selecting different media for adopting multi-sensory or multimedia approach, it is taken care of that the presence of one most increase the effect of others in the realization of the set teaching-learning objectives with reference to a particular teaching-learning situation.

The Steps and Procedures for Adopting Multi-sensory Approach

Multi-sensory or multimedia approach facilitates the tasks of attaining the desired teaching-learning objectives on the path of the teaching-learning in an effective way.

It asks for the judicious use of several media in relation to the existing teaching-learning situation in such a combination that result in the attainment of the predetermined teaching-learning objectives in the best possible way. In multi-sensory or multimedia approach, it is very difficult to prescribe a uniform pattern or instructional procedure to be followed by the teacher and learners. Every teaching-learning situation is a unique opportunity which demands a set of a teacher and students with regard to the adoption of multimedia approach. However, there may lie common points of agreements if we try to analyze the very nature and goals of multi-sensory approach mentioned as follows:

- The teaching learning objectives are to be effectively realized.
- The learning experience should be organized in such a way that students learn mostly through self effort and active participation and involvement in the learning activities.
- The media selected for the teaching activities should be such that these may be coordinated and combined in relation to a particular teaching-learning situation resulting in the effective realization of the set objectives.
- Teacher must be helped to plan and organize his teaching activities as effectively as possible
- Teaching-learning activities need to be organized in such way tht helps the teacher in making the total unite of learning quite clear to his students. It should also help the students in acquiring all the learning experiences in a wide way through independent effort and cooperative planning

Keeping in view the above cited nature and demands for the use of multi-sensory or multimedia approach, we can follow, in general, a particular pattern in the form of the following stages and steps for the organization of the instructional activities with reference to different teaching-learning situations:

Step One

At this stage, the teaching-learning activities should be initiated by the teacher. A well prepared lesson on a learning unit may be delivered by the teacher by keeping in view the set teaching-learning objectives. Here he may use different media. The learning contents may be covered in a global way through lecture, question-answer or lecture-cum-demonstration method. He may make use of the blackboard, charts, pictures, graphs, models, slides, audio and video tapes, exhibit actual objects and demonstrate experiments for the clarity of the contents of the learning unit depending on the teaching-learning situation.

Step Two

It is the stage for the demonstration of specific and specialized unit. This information may be provided to the learner through certain well-prepared programmed learning materials, tapes

and video recorded material, learning guides and workbooks.

Step Three

At this stage, the learner is provided with the essential help and individual guidance for the clarity of the steps and activities undertaken by him for proceeding on the path of his independent learning. The activities for the purpose may be listed as follows:

1. Interaction and discussion with teacher or the fellow students.

2. The extra help and individual guidance rendered by the teacher or the subject expert.

3. Observation of experiments and work activities performed by the teacher, expert or fellow students.

4. Observation of the recorded material.

Step Four

This stage meant for carrying out the leaning activities on the part of the learner in details, as well as depth on intensive basis. Here the students may be asked to do study in library with necessary reference material or to have detailed study with the help of programmed textbooks, teaching machines and computer assisted instructions.

Step Five

This stage is well meant for the integration of the theory with practice and learning practical use of the curricular experiences. For this purpose, students may be asked to engage themselves in useful laboratory work, manual work, field work, workshop experiences, productive and creative activities, depending upon the nature of the learning unit, subject and availability of the resources.

Step Six

At this fnal stage, the teaching-learning activities are arranged on a much superior level (called reflective level, cooperative group learning or living etc.). The activities of the learning at this stage may therefore be of the nature such as:

1. Group discussion and exchange of ideas through seminar, symposium, panel discussion and conferences.

2. Critical thinking and analysis n the basis of independent writing, evaluation and creative work.

3. Critical evaluation of one's own achievement or putting views on the accomplishment of others in a constructive way.

In this way different media can be utilized in combination at the subsequent stages and steps of the teaching-learning activities carried out for the instruction of a particular learning unit.

Multi-sensory or multimedia approach has its strong appeal and applicability to almost all the teaching-learning situation for the teaching and learning and learning f the different curricular or non-curricular subject material. It is beneficial for all types of learners, i.e. average, sub-average or above-average. On one hand, it can very much be used in diagnostic and remedial teaching for the educationally backward and slow learners, while on the other hand, it may be equally planned for the organization of teaching-learning activities for the gifted and creative genius. The media and techniques used for adopting multimedia approach for creative children may be outlined as follows:

- Guidebooks and workbooks for the use of teachers and students, for instance, Guide to Creative Action and Creative Action Workbooks.
- Idea books that include exercises for developing intellectual skills involved in creative thinking like: Can you imagine? Invitation to thinking and doing puzzles and plays etc.
- Carefully prepared instructional material consisting of recorded, planned sequences of creative thinking activities such as great moment of discovery, great moment moments in invention, etc.
- Use of large variety of audio-visual material available for creative teaching and learning in the form of recorded audio and video tapes, colored slides with accompanying tape-script, films, computer assisted instruction material, etc.
- Use of packaged teaching-learning programs consisting of material such as instructor's manual, volumes written on different aspects of creative teaching, posters, pictures and photographs sets, tapes of audio and video cassettes helpful n teaching and learning, teaching-learning strategies materials and evaluation material, etc.
- Use of audio-instructional programmes specially meant for creative education such as sets of creative problems in the form of detective mysteries presented in a suitable self-instructional format or programmed text and computer assisted learning material prepared on different phases of creative process.
- Use of different techniques like attribute listening, brainstorming, morphological analysis, and psycho-dramatic approaches like role playing, inquiry training, word association, etc.

REFERENCES

Dale, E., The Cone of experiences, chapter 4 in *Audio-visual Methods in Teaching,* Revised ed., New York: The Dryden Press, 1946

Packiam, S., *Curriculum Innovation and Educational Technology,* Delhi: Doaba House, 1986.

Mangal, S.K. & Uma, *Essential of Educational Technology,*New Delhi, Connaught Circus, 2009.

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