

**Presentation skills and Dale's cone experiences**

**Objectives:** At the end of this lesson you shall be able to

- explain presentation of skills
- explain elements of skills
- explain dale's cone experiences.

**Presentation skills**

If you want to be an effective speaker you must have any innate ability. It is an art to stand before the audience and deliver a lecture. You will appreciate that this myth needs to be exploded because art of learning to become a better speaker or writer or reader or listener requires additional practice.

**Effective presentation**

You always want to be at your best when you make formal presentations before audiences. There are a number of occasions when you have to make formal presentations. These occasions include: appearance before an interview committee, participation in a group discussion or a seminar, presentation of a lecture before audience and such other activities.

It is true that you are naturally worried before making any formal presentation. Everyone undergoes some kind of stress before any formal presentation. And you don't need to feel anxious. Perhaps, if you are a little cautious, you can overcome the problems very easily. After dealing with your psychological problem, namely anxiety, you have to:

- Plan and organise your presentation
- Analyse the available details
- Prepare well for your presentation
- Gather supporting evidence for your presentation
- Develop your ideas and prepare visual aid for presentation and finally
- Deliver your presentation

**Oral presentation**

Voice modulation is another important factor we normally tend to ignore. You must pitch your voice appropriately so that everyone in the audience group is able to make sense of your presentation. You must be aware of some of the problems normally associated with your voice.

A monotonous voice can quite distract the listener's attention and prove to be boring to them. The volume of your voice when pitched inappropriately either soft or too loud can prove cumbersome in the process of listener's comprehension. The inappropriate rate of utterance either speaking too fast or too slow; will affect listeners ability to comprehend the details of the presentation.

For receiving questions from the audience, interpreting and responding to them after, formal presentation, a speaker is normally allowed 10 minutes or 15 minutes

When you make a presentation on any topic, the members of the audience may want to seek some more details or clarification from you. You must encourage the audience to ask questions. You must raise your hands and welcome questions. Allow sufficient time to make the listeners think and ask questions.

Make sure the question is heard by everyone. If you think that the question is not understood by the members of the audience, repeat the question or even rephrase it in such a way that it is understood by everyone. The audience will perhaps now come forward to ask some questions.

When the questioner asks a question, do allow him to complete the question. Do not interrupt. Listen intently to the questioner. Be enthusiastic and listen to him.

Then start answering every aspect of the question. You must display a lot of enthusiasm while answering the questions. You must have prepare well and it should be possible for your to answer the question with a lot of ease.

The following are the presentation of skills in Teaching Practice:

**Lack of Continuity**

- Break in sequence of ideas or information
- When statement is not logically related to previous
- There is no sequence of place and time.
- Statements are irrelevant.

**Lack of fluency**

- When teacher does not speak clearly
- Incomplete and half sentence.

**Use of vague words and phrases**

- Do not give explicit idea about concept
- Hinders students understanding
- For eg. May, actually, you know, somewhat.

### Skill of stimulus variation

- The skill of stimulus variation involves deliberate change in attention drawing behaviour of the teacher in order to secure and sustain student's attention to what is being taught.
- Attention tends to shift from one stimulus to other stimulus very quickly.
- A teacher should deliberately change their attention drawing behaviour in class.
- According to Sneha Joshi, "what to change, when to change and how to change requires a skill on the part of the teacher for securing and sustaining attention at high level. Such a skill is named as skill of stimulus variation.
- There are number of factors which have bearing on students attention:
  - a Intensity
  - b Contrast
  - c Movement
  - d Extensity or size
  - e Novelty
  - f Change
  - g Striking or unusual quality
  - h Self activity
  - i Systematic and definite form
  - j Audio visual aids
  - k Teacher personal behaviour

### Components

- **Movements**
  - a Move in class
  - b To check activities
  - c Avoid aimless wandering
- **Gestures**
  - a Movements of the parts of the body to direct attention
  - b Emphasizing on shape, size etc.,
- **Change in speech pattern**
  - a Change in tone, volume, speed
  - b Voice modulation
- **Focussing**
  - a Direct students attention towards a point
  - b Verbal, gestural, verbal cum gestural

### Change in interaction styles

- a When two or more communicate with each other
- b T-T, T-P, P-P

### Pausing

- a Deliberate silence during talk
- b Neither too short nor too long
- c Give time for answer

### Change in sensory focus

- a When teacher changes sensory channel
- b Oral to visual switching, oral to oral-visual, visual to oral-visual

### Physical involvement of students

- a In experiments, dramatization, writing on blackboard

### Skill of illustrating with Examples

- It involves describing an idea, concept, principle or generalizations by using various types of examples
- The skill is defined as the art of judicious selection and proper presentation of the suitable examples in order to generalize a concept, idea or principle with a views of its understanding and proper application.

### Components

- **Formulating relevant examples**
  - a Relevant to topic
  - b Irrelevant examples will create confusion
- **Formulating simple examples**
  - a Are those which are bases on previous knowledge
- **Formulating interesting examples**
  - a Attracts attention and curiosity
  - b Acc to age maturity
- **Using appropriate media for examples**
  - a Non –verbal media of presentation-concrete materials, models, maps, charts, graphs, diagrams on blackboard, pictures
  - b Verbal media of presentation-telling stories, anecdotes, analogies
- **Using examples of inductive-deductive approach**
  - a Inductive approach- examples to inferences
  - b Deductive approach- concept, idea or principle to examples

### Suggestions for teaching through illustrations

- Use of simple illustrations
- Relevant illustrations

- Exact and accurate illustration
- Avoid use of too many illustrations
- Proper handling
- Interesting illustration
- Avoid technical language
- Well prepared illustrations
- Timely presentation

### Structuring of questions

- Questioning is a very important technique which every teacher should know thoroughly
- Questions are used to help students to recall facts, exercise their reasoning ability
- Questioning is a logical procedure of problem solving
- The teacher encourages the learners to seek more than one answer for a question
- The teacher uses questioning to achieve learning objectives
- To assess students understanding
- It's a critical skill that can be used in any subject and any grade.

### Purpose of Questioning

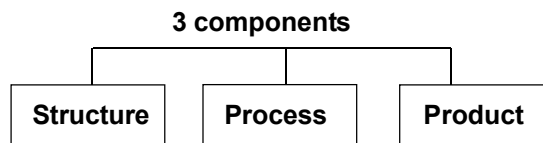
- Help the students display/test their knowledge
- Elicit desired information from students
- Develop subject matter in the class
- Enable students to analyze problems related to the topic being taught
- Enable students to apply their knowledge to a specific new situation
- Help students to evaluate for themselves their understanding of the concepts
- Motivate students to participate in the teaching learning process

### Order of Questioning

- There are four types of questions
  - Lower ordering Questions** - Limited to memory level of thinking, merely deals with mode of expression
  - Middle order questions** - Involve interpretation of concepts by comparison or explanation, application type questions
  - Higher order questions** - Encourages children to think, to reason, to analyze, produce new ideas- analysis synthesis & evaluation

### Skill of fluency in questioning

- Rate of meaningful questions put per unit time by the teacher is called fluency of questioning
- Meaningful questions are those which are relevant to the concept being taught



- **Structural questions** - A technique of formulation of questions for the content and language used are important. Content means subject matter and language part refers to 5 aspects-
  - Grammatical correctness**- use grammar correct, unambiguous and simple language.
  - Conciseness**- refers to the minimal but essential length of question should be direct and straight forward.
  - Relevancy**- question which are not related to content being taught is irrelevant, suit mental level of student.
  - Specificity** – specific to content and should call for single answer.
  - Clarity**- in terms of content and language. It increases fluency.
- **Process** - process of formulating and asking question has more than one aspect-
  - Speed of asking questions**- not asked at low speed, in pieces and hurriedly
  - Voice of the teacher** – should be audible and clear, in raised voice
  - Pause** – defined as the time or the period of silence given by the teacher just after delivery of question
  - Style** - properly modulated in pleasant tone and friendly manner.
- **Product**- students answer, depends on various factors-
  - Not intelligent to understand the question
  - Language may be difficult
  - Not taking interest
  - Inattentive in class
  - Lack of rapport
  - Lack of previous knowledge

### Questioning that should be avoided

- **Yes or no type questions**- they encourage guess work

- **Elliptical questions-** are those which require completion to get answer
- **Echo or Suggestive questions-** are based on concepts or facts just taught. Not have useful purpose to encourage thinking
- **Leading questions** – supplies own answer
- **Rhetorical questions-** which emphasize over a particular point

### Skill of probing questions/ response management

- Probing refers to going deep in the matter in hand.
- When teacher asks question there can be 5 possibilities-
- No response, Wrong response, partially correct response, incomplete response and correct response.
- Probing question is a skill of going deep into the pupil's responses by asking series of questions which lead pupil's towards the correct response or higher level of understanding.
- According to Jangira and associates, “ the skill of probing questions may be defined as the art of response management comprising a set of behaviours or techniques for going deep into pupil's responses with a view to elicit the desired response. On account of its emphasis on the ways and means of response management, the skill of probing questioning has been named as the skill of response management.

### Components

- **Prompting-** means giving clues or hints to students.
  - a Leading from incorrect or no response to correct response.
  - b It consist of series of question which help to develop correct response.
  - c Can help students for-self confidence, long retention, encouragement and clean understanding.
- **Seeking further information** - this is used when a partially correct or incomplete response is given to elicit more information  
This is to supply additional information to desired response
- **Refocussing** – it is used in a correct response to strengthen the response  
Teacher compares one situation to other and for implication of response to more complex and novel situations.
- **Redirection-** when teacher puts same question to several other students for desired response  
Used in case of no response, incorrect and incomplete response.

- **Increasing critical awareness-** used in completely correct response for increasing critical awareness of pupils'. The pupil justify his response rationally.

### Skill of reinforcement feedback skill

- It is a type of conditioning in which reward or punishment reinforces the behavior.
- It should come after the response.
- According to Skinner, “ if the occurrence of an operant (response) is followed by the presentation of reinforcing stimulus, by the presentation of a reinforcing stimulus, the strength is increased.”
- If response is not reinforced it will be extinct.
- **Two types of reinforcement**
  - a **Positive-** which strengthens the response
  - b **Negative-** whose withdrawal strengthens the behavior.
- According to Joshi, “ the skill of reinforcement can be defined as the art of learning the judicious and effective use of reinforcers by a teacher for influencing the pupil's behaviour in the desired direction directed towards pupil's maximum participation for realizing the better results in the teaching learning process.”

### Desirable

- **Use of positive verbal reinforcers**
  - a Use of praise words
  - b Use of statements accepting pupils feelings
  - c Repeating and rephrasing pupil's response
- **Use of positive and non - verbal reinforcers**
  - a Writing pupil's response on black board
  - b Use of non- verbal actions
- **Use of extra verbal reinforcers**

### Undesirable

- **Use of negative verbal reinforcers**
  - a Use of discouraging words
  - b Use of discouraging cues and voice tones
  - c Use of discouraging statements
- **Use of negative and non - verbal reinforcers**
- **Wrong use of reinforcement**

### Skill of using blackboard

- BB or chalkboard is real asset in class teaching as it's service is to make direct appeal to child's senses and strengthen the retention.
- The way of using blackboard is called skill of using BB.

- Its importance is because of-
  - a Clarity
  - b Motivation
  - c Wholistic picture
  - d Variety

### Components

- **Legibility** – when there is maximum ease in reading, following characteristics-
  - a Distinctness
  - b Spacing
  - c Slantness
  - d Size of the letters
  - e Size of the capital letters
  - f Size of the capital and small letters
  - g Thickness of the lines
- **Neatness in the blackboard work**
  - a Straightness of the lines
  - b Spacing between the lines
  - c No overwriting
  - d Focusing the relevant matter
- **Appropriateness of the written work on the blackboard-**
  - a Continuity in the points
  - b Brevity and simplicity
  - c Drawing attention and focusing
  - d Illustrations and diagrams

### Suggestions for using BB

- Judicious use
- Accuracy
- Checking the condition
- Check the lighting
- Checking cleaning
- Chalks, duster
- Use of pointer
- Pressing the chalk
- To speak while writing
- Not to cover
- Erasing

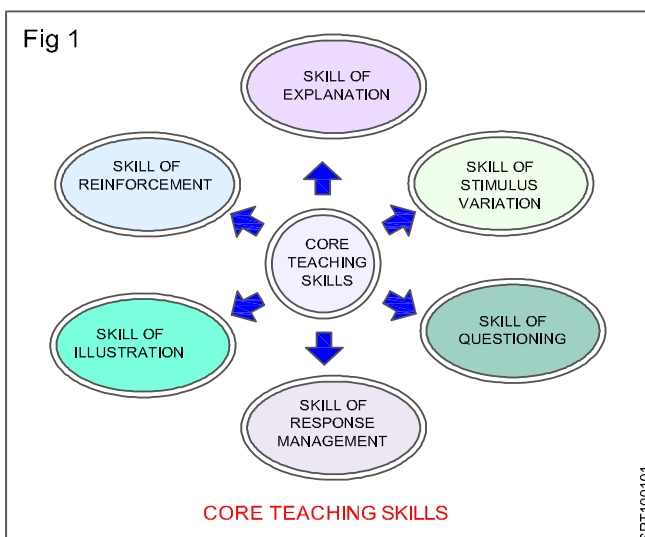
### Skill of closure

- The skill is complementary to set induction. It is attained when major purposes, principles and constructs of a lesson or a portion of the lesson are judged to have been learnt and the pupils are able to relate new knowledge with the best. It is more than quick summary of the portions covered. Can use closure by drawing attention to the major points accomplished upto that point.

### Components of teaching skills

- Teaching skill is a set of strictly overt behaviours of the teacher (verbal and non-verbal) that can be observed, measured and modified. Its 3 components-
- **Perception-** teaching skill have a perceptual component for observing and receiving feedback.
- **Cognition** – it refers to the behavior or experience of knowing in which there is some degree of awareness, as in thinking and problem solving.
- **Action** – teaching skills demand every teacher to actually practice his/her perceived and acquired knowledge in an effective manner in the classroom

Fig 1



### Core of teaching skills

#### Skill of introducing a lesson/set induction

- The skill of introducing involves establishing rapport with the learners, promoting their attention, and exposing them to essential content.
- Learning a new lesson is influenced by the process in which the lesson is introduced.
- **Components**
  - a Maximum utilization of previous knowledge of pupils of the subject
  - b General awareness

- c Devices and techniques of exploring
- d Link between previous and new knowledge
- e Creating situations.
- **Using appropriate devices-**
  - a Examples, questioning, lecturing, audio-visual aids, demonstration, role playing
  - b According to maturity level
- **Maintenance of continuity-**
  - a Sequence of ideals
  - b Logical
  - c Related to students response
  - d Linked with teachers statement
- **Relevancy of verbal or non-verbal behaviour-by**
  - a Testing previous knowledge
  - b Utilizing past experiences
  - c Establish in rapport
  - d Pin point aim of lesson
  - e Need & importance of lesson
- **Arouse interest-**
  - a Introducing a surprise
  - b Telling a story
  - c Showing enthusiasm

### Skill of explaining

- Explaining is an activity which shows the relationships among various concepts, ideas, events, or phenomenon
- During teaching in a classroom, an explanation is a set of interrelated statements elaborating a concept being taught or learnt.
- The skill of explaining is defined as an act of bringing about an understanding in some one about a concept, a principle or a phenomenon.
- Explaining is essential as a verbal skill and has two main aspects-selection of appropriate statements, Interrelating and using the selected statements.

### Categories of explanation

- Interpretive explanation- to make clear the meaning of terms, statements, situation, concepts etc.  
What?
- Descriptive explanation- descriptions of objects, phenomena, structures, processes  
How?
- Reason giving explanation- principles and generalizations AND CAUSES  
Why?

### Components of explaining skill

- **Desirable Behaviours**
  - a Introductory statement
  - b Concluding statement
  - c Use of explaining links
  - d Use of visual techniques
  - e Interesting to the students
  - f Defining technical words
  - g Testing students understanding
- **Undesirable Behaviours**
  - a Irrelevant statement
  - b lack of continuity
  - c lack of fluency
  - d Vague works & phrases

### Desirable behaviour

- **Introductory statement**
  - a To draw and maintain students –attention
  - b Give clue for the explanation
  - c Gives overall picture of explanation
- **Concluding statement**
  - a Towards the end to summarize
  - b Present consolidate picture
  - c To draw logical inference
- **Use of explaining links**
  - a Certain linking words and phrases
  - b Bringing continuity in statements
  - c Generally conjunctions or prepositions et. As a result of, because, hence, therefore etc.
- **Use of visual techniques**
  - a “One picture is worth ten thousand words”
  - b Blackboard, charts, model, pictures etc.
- **Technical words defined**
  - a Properly defined
  - b If not explanation becomes difficult
- **Interesting to students**
  - a By giving examples from daily life
  - b Use simple sentences
  - c Different media of communication
- **Testing students understanding**
  - a Asking appropriate questions
  - b Few simple questions



## Undesirable behaviour

- **Irrelevant statements**
  - a When not related to the concept
  - b Creates confusion, distraction

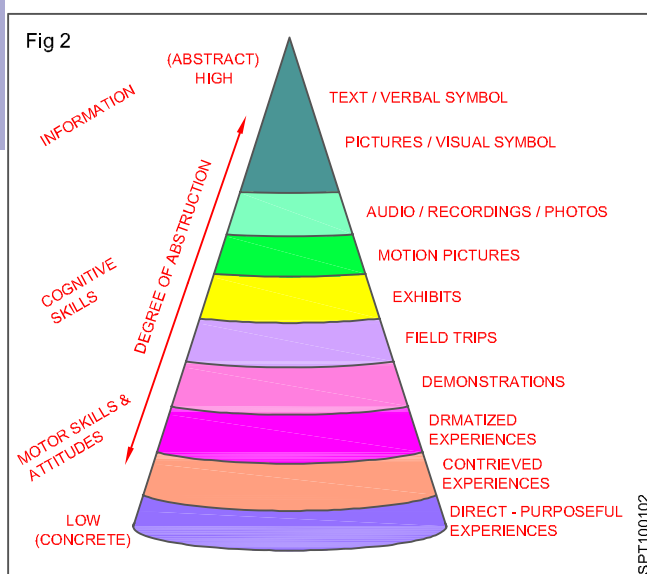
## Dale's Cone of Experience

Dale's Cone of Experience is a model that incorporates several theories related to instruction design and learning process.

During the 1960s, "Edgar Dale theorized that learners retain more information by what they 'do' as opposed to what is 'heard', 'read', or 'observed'.

His research led to the development of the Cone of Experience. Today, this 'learning by doing' has become known as 'experiential learning' or 'action learning'.

Dales Cone of experience is a visual model that is comprised of various stages starting from concrete experiences at the bottom of the cone and then it becomes more and more abstract as it reach the peak of the cone. (Fig 2)



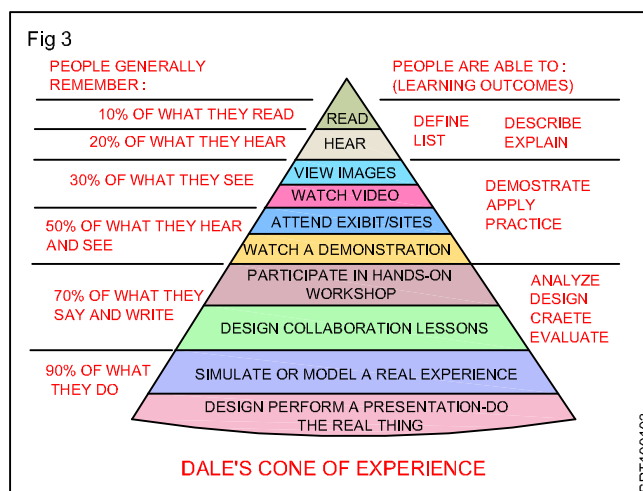
Further the arrangement in the cone is not based on its difficulties but based on obstruction and on number of senses involved.

One of the principles is the selection and teaching more senses that are involved in learning, the more and better the learning will be but it does not mean that the concrete experiences is the only effective experience that educators should use in transforming still to the learner. The experiences in each stages can be mixed and are interrelated.

We should try deeper in each of components of the cone, since education teaches what basically resolves around the cone of experience.

Dale's Cone of Experience is a model that incorporates several theories related to instructional design and learning processes. During the 1960's Edgar Dale theorized that learners retain more information by what they 'do' as opposed to what is 'heard', 'read', or 'observed'. His research led to the development of the Cone of Experience. The Cone was originally developed in 1946 and was intended as a way to describe various learning experiences. Essentially, the Cone show the progression of experiences from the most concrete (at the bottom of the cone) to the most abstract (at the top of the cone).

## Edgar Dales cone/ pyramid of experience (Fig 3)



## Direct Purposeful Experiences

These are first hand experiences which serve as the foundation of learning. In this level, more senses are used in order to build up the knowledge. Also, in this level, the learner learns by doing things by him/herself. Learning happens through actual hands-on experiences. This level explains and proves one of the principles in the selection and use of teaching strategies, the more senses that are involved in learning, the more and the better the learning will be. This level also proves that educational technology is not limited to the modern gadgets and software that are commercially available nowadays. This shows that even the simple opportunity that you give to each child could help them learn.

## The Contrived Experiences

In this level, representative models and mock-ups of reality are being used in order to provide an experience that as close as reality. This level is very practical and it makes learning experience more accessible to the learner. In this stage, it provides more concrete experiences, even if not as concrete as direct experiences, that allows visualization that fosters better understanding of the concept.

## The Dramatized experiences

In this level, learners can participate in a reconstructed experiences that could give them better understanding of the event or of a concept. Through dramatized experiences, learners become familiar with the concept as they emerge themselves to the 'as-if' situation.

## The Demonstrations

It is a visualize explanations of important fact, idea, or process through the use of pictures, drawings, film and other types of media in order to facilitate clear and effective learning. In this level things are shown based on how they are done.

## The Study Trips

This level extends the learning experience through excursions and visits on the different places that are not available inside the classroom. Through this level, the learning experience will not be limited to the classroom setting but rather extended in a more complex environment.

## The Exhibits

This level of study trips is followed by exhibits. It is a somewhat a combination of some of the first levels in the cone. Actually, exhibits are combination of several mock ups and models. Most of the time, exhibits are experiences that is 'for your eyes' only but some exhibits includes sensory experiences which could be related to direct purposeful experiences. In this level, meaningful ideas are presented to the learners in a more abstract manner. This experience allows student to see the meaning and relevance of things based on the different pictures and representations presented.

## The television and motion pictures etc.

The next levels would be the level of television and motion pictures still pictures, recordings, and Radio. For television and motion pictures, it implies values and messages through television and films.

## The visual symbolic and Verbal symbolic

The last two levels would be the Visual symbolic and Verbal symbolic. These two level are the most complex and abstract among all the components of the Cone of Experience. In the visual symbolic level, charts, maps, graphs, and diagrams are used for abstract representations. On the other hand, the verbal symbolic level does not involve visual representation or clues to their meanings. Mostly, the things involved in this level are words, ideas, principles, formula, and the likes.

After going through the different components of the Cone of Experience, it could be said that in facilitating learning, we can use variety of materials and medium in order to

maximize the learning experience. One medium is not enough so there's nothing wrong with trying to combine several medium for as long as it could benefit the learners.

Through understanding each component of the Cone of Experience, it could be said that Educational Technology is not limited to the modern gadgets that we have right now but rather it is a broad concept that includes all the media that we can use to attain balance as we facilitate effective and meaningful learning.

To understand more the Cone of Experience, you may refer to this picture: (Fig 3)

## Modes of learning in Cone of Experience.

In Edgar Dale introduced the Cone of Experience demonstrate a progression from direct, first-hand experience to pictorial representation and on to purely abstract, symbolic expression.

## The Cone of Experience corresponds with three major modes of learning:

- **Enactive (direct experience)** – Enactive or direct experience involves practicing with objects (the student actually ties a knot to learn knot- tying). Enactive experience involves concrete, immediate action and use of the senses and body.
- **Iconic (pictorial experience)** – Iconic experience involves interpreting images and drawings (the student looks at drawings, pictures or films to learn to tie knots). Iconic experience is once removed from the physical realm and limited to two or three senses.
- **Symbolic (highly abstract experience)** – Symbolic experience involves reading or hearing symbols (the student reads or hears the word 'knot' and forms an image in the mind). In symbolic experience, action is removed nearly altogether and the experience is limited to thoughts and ideas.

## Some theorists prefer to be more specific and refer to these possible modes of learning

- **Conditioned-** Conditioning refers to learning by pre-design or control via a series of punishments and rewards.
- **Imitative** – Imitation refers to learning tasks by observation or modeling.
- **Trial and error** – Trial and error refers to learning via a series of successful and unsuccessful trials and deliberations.
- **Investigative** – Investigation refers to learning via a series of informed hypotheses and inquiries into problems
- **Expansive learning** – Refers to the questioning of the validity of tasks and problems of a given context to the transformation of the context itself.



## Passive and Active Aspects of the Cone of Experience

Although no experience is fully passive, iconic and symbolic experiences are generally more passive than direct experiences. Dale proposed that active and passive modes of participation can be contrasted by assigning a percentage of what we tend to remember after two weeks after our experience.

## The concrete and abstract aspects in the Cone of Experience

The Cone of Experience invokes a bi-directional movement from the concrete to abstract and from the abstract to concrete. To fully empower teachers with a theory of practice in technology studies, technologies and physical settings have to play a more active role in cognition, emotion and action.

## Learning and Experiences

### A step model based on Dale Cone of Experience. (Fig 3)

When Dale researched learning and teaching methods he found that much of what we found to be true of direct and indirect (and of concrete and abstract) experience could be summarized in a pyramid or 'pictorial device'

Dale points out that it would be a dangerous mistake to regard the bands on the cone as rigid, inflexible, divisions. He said "The cone device is a visual metaphor of learning experiences, in which the various types of audio-visual materials are arranged in the order of increasing abstractness as one proceeds from direct experiences."

In true sense the bands of the (Edgar Dale's) cone are not only the types of audiovisual materials but different experiences are also included. In fact the upper four bands like verbal symbols, visual symbols, Radio, Recordings, and still pictures, and motion pictures are more related with Audiovisual materials but the later six bands of the cone like Exhibits, Field Trips, Demonstrations, Dramatic Participation, are the strategies of teaching-learning.

Based on experience of teaching at different levels it was felt that, there are many experiences and audiovisual materials which are missing in dale's cone and to be included by making a new model of experiences which is present in the following Step Learning Experience model.

The base of the step learning experience model is a direct and purposeful experience which is always preferable for any new learned and any kind of learning concept and gives firsthand experience which in turn leads to the permanent learning. At the top of the cone is verbal or text these are the least effective ways to introduce new content to students. The step learning experience model includes 17 different experiences.

## Verbal symbols

Verbal symbols are words, sentences, sounds, or other utterances that are said aloud in order to convey some meaning. The verbal symbol may be a word, an idea, concept, a scientific principle, a formula, a philosophic aphorism or any other representation of experience that has been classified in some verbal symbolism.

## Olfactory Experience

It is also called Aroma Experience; Aroma is a quality that can be perceived by the olfactory sense. It is a type of Experience where the learner can have the concrete idea of the abstract thing through the sense of smell.

## Gustatory Experience

Gustatory is an adjective that refers to tasting or the sense of taste, Gustatory has its roots in the Latin Gustare, meaning "to taste," It is a type of Experience where the learner can have the concrete idea of the thing or object or concept through the sense of taste.

## Tactile-kinesthetic Experience

It is a type of Experience where the learner can have the idea or the concept of the thing or object through the sense of touch and feel; it is learning through a hands-on approach and learners will be physically involved. Kinesthetic Learning Experience refers to one of the modalities that learners use in order to approach and absorb new information.

Kinesthetic-tactile refers to a pupil who learns by movement and by touching. This type of experience can be given through hands-on activities, manipulating objects or flash cards, working problems or re-typing notes.

## Visual symbols

Visual symbol may be a picture or shape that has a particular meaning or represents a particular process or idea. Something visible by association or convention represents something that is invisible; and represents or stands for something else, usually by association or used to represent something abstract. Visual experience has a rich predictive structure.

## Still Pictures, Radio, and Recordings

This stage includes a number of devices that might be classified roughly as "one dimensional aids" because they use only one sense organ that is either eye (seeing) or ear (hearing).

## Motion pictures, Television and computers

These can eliminate the unnecessary and unimportant material and concentrate upon only selected points. The important processes can be watched with slow motion and vital content and issues can be repeated number of times. The pupils are mere spectators and are distant from the experiences like touching, tasting, handling and feeling from directly experiencing.

Television's influence on language habits, vocabulary, consumer patterns, cultural values and behavior patterns should not be underestimated.

The present day computers are not only compact, extremely powerful and versatile, commonly accessible and easy to use. The computer has, indeed become an integral part of our teaching process and daily life. Students then simulate the entire lab experience using the CAI, which saves times, resources.

### Exhibits

In education normally the arranged working models are exhibited in a meaningful way. Sometimes they may be series of photographs or of photographs mixed with models and charts. The opportunity to handle the materials by the participant makes the way to use more sense organs and Learning by doing always helpful for meaningful or concrete learning.

### Demonstrations

A demonstration is another means whereby pupils can see how certain things are done. Demonstration may require nothing more than observation on the part of the pupil or observer. It is the act of showing or making evidence or circumstance of proving or being proved conclusively as by reasoning. It may be description or explanation of a process and illustrated by examples, specimens and it also includes the act of exhibiting the operation or use of a device, machine, process and product.

### Dramatization

There are many things we cannot possibly experience at first hand and we cannot experience directly of something that has already happened.

Furthermore some matters cannot be reduced to contrived experience and some ideas must be of necessary representation abstract and symbolic.

Dramatic participation can help us get close as possible to certain realities that we cannot reach at first hand.

## Contrived Experiences (Artificial Experience)

A contrived experience is editing of reality, an editing which makes the reality easier to grasp. It may be illustrated by working model and it differs from the original either in size or complexity; contrived experiences lead to a suspension of disbelief. In other words, during the period of experience, the learner believes in the reality of the experience.

### Virtual learning experience

Though the virtual experience can be called as contrived experience but the pupils level of experience may differ and the kind of joy and level of understanding may be high at virtual than the contrived experiences which include models mock ups and cut-away as we can consider them as hardware. A virtual learning experience involves a set of teaching and learning tools designed to enhance a student's learning experience by including computers and the Internet in the learning process. The representation of the learning environment ranges from text-based interfaces to the most complex 3D graphical output.

Smart boards are the best examples for virtual experience where students can conduct science experiments in simulated way. In virtual experience pupil can see and hear but not use the senses of touch and smell. We can bring reality in the classroom which is more than contrived experience and as near as the real experience.

### Four-Dimensional Experiences

Four-Dimensional Experiences that describes a presentation system combining a Three Dimensional film with Physical effects in the theater, which occurs in synchronization with the film.

### Ubiquitous learning Experience

Ubiquitous means "pervasive, omnipresent, ever present, and everywhere". A ubiquitous learning experience is any setting of the environment in which students can become totally immersed in the learning process. To define, it is a kind of experience where learning is happening all around the student but the student may not even be conscious of the learning process.

The Ubiquitous learning Environment includes an ubiquitous computing technology-equipped system supplies users with timely information and relevant services by automatically sensing users' various context data and smartly generating proper results.

### Direct Real Experience

Direct real experience can give greater experience in learning for the students than virtual or contrived experiences. The pupil will have an opportunity to observe and study directly. Hence its impact may be high on learning than the other earlier experiences. It is also an alternative experience to the direct purposeful experience. When teachers are unable to provide direct purposeful experience, they may only have the best option of direct real experience.

### Direct Purposeful Experience

The Base of the Step Learning Experiences that Model represents direct reality itself as we experience it at first hand. It is the rich full bodied experience that is the base of education. It is the purposeful experience that is seen, handled, tasted, felt, touched, and smelled. It is the experience of life and we get it by living. Some of our richest, most vivid sense impressions are those which involve our feelings and perceptions in an eager exploration of the world.

### Critical Appraisal

The cone of experience given by Edgar dale has rightly said that it is not offered as a perfect or mechanically flaw less picture to be taken with absolute literalness in its simplified form. It is merely a visual aid to explain the interrelationships of various types of audiovisual materials, as well as their individual positions in learning process.

The use of audio-visual materials in teaching does not depend primarily upon reading to convey their meaning. It is based upon the principle that all teaching can be greatly improved by the use of such materials because they can help make the learning experience memorable we do not mean that sensory materials must be introduced into every teaching situation.

### Practicability of Learning Pyramid

In order for students to develop meaningful knowledge, feelings and skills, their direct experiences must be “associated with abstractions” as Dale noted. Language and expression are essential; to skill acquisition.

Beyond its sketchy background, the learning pyramid should raise concerns:

- What kind of research results end up in such tidy percentages, all multiples of 10?
- How would one even develop a method for testing such broad claims?
- Do we really believe a learner can remember 90% of anything?
- Can an activity be separated from its content and be given credit for learning?

Many distinguished authors have gutter the pyramid's claims. Educational expert Daniel Willingham was against the pyramid related to oversimplification; providing an optimal learning experience does not boil down to the instruction method. There are may different variables that impact learning.

Looking at Dale's cone of Experience, one can realize that there can be numbers of model that can be used by the teacher to reach the learner depending on the learners need. Despite the pyramid having been debunked in many venues for decades, it continues to show up in educational presentations and literature.

To conclude, the Cone of Experience is essentially visual metaphor for the idea that learning activities can be placed in broad categories based on the extent to which they convey the concrete referents of real-life experiences.