UNIT: IV
COMMUNICATION

MEANING OF COMMUNICATION

- The word ‘Communication’ has been derived from the latin word-‘communis’ means ‘common’.
- Hence communication is having common experiences with other people.
- Communication means transfer of ideas, opinions, feelings, facts etc, from one person to another.
- Communication can be defined as the process through which two or more persons come to exchange ideas and understanding among themselves.

DEFINITION OF COMMUNICATION

1. “Communication is the process of passing information and understanding from one person to another” – Keith Davis
2. “Communication is the process of transmitting information from one person to another”. – Ricky W. Griffin
3. “Communication is the intercourse by words, letters or messages, intercourse of thoughts or opinions. It is the act of making one’s ideas and opinions known to other”. – Fred G. Meyer.

CHARACTERISTICS OF COMMUNICATION

1. It involves at least two persons:
   - It involves at least two persons, a sender and a receiver.
   - The sender is called ‘communicator’ and the receiver of the message is known as ‘communicate’.
   - A person who speaks, writes or issues some instructions is the ‘sender/communicator’ and the person who receives the message is the ‘receiver/communicate’.
2. In Communication messages is the must
   - A message is the subject-matter of communication, (eg.) The contents of the letter or speech, order, instructions or the suggestions. A communication must convey some message.
3. Communication is written, oral or gestural
   - It is generally understood as spoken or written words.
   - But in reality communication is more than speaking and writing.
   - It includes everything that may be used to convey meaning from one person to another. (eg) movement of lips, or the wink of an eye or the wave of hands.

4. Communication is a two way process
   - It involves both information and understanding.
   - Communication is not complete unless the receiver has understood the message properly and his reaction or response is known to the sender.

5. Its primary purpose is to motivate a response
   - The primary purpose of communication is to motivate a response or influence human behaviour.

6. Communication is formal or informal
   - Formal Communication follows the formal channels provided in the organization structure.
   - Informal channels of communication which are not provided in the organization structure.
   - These channels develop among members because of personal contacts through working with each other.

7. Communication flows up and down and also from side to side
   - Communication flows downward from a superior to subordinates and upward from subordinate to a superior.

8. Communication is an integral part of the process of exchange
   - It refers to the exchange of ideas, feelings, emotions and knowledge and informations between two or more persons.

COMMUNICATION CYCLE
   - Communication process/Cycle involves the following elements.

1. Sender
   - Sender is the source of Communication
   - All Communication requires a source.
   - Any communication starts from the source or sender.
   - Sender has some thought, idea, need or information that he wishes to transmit to another person.
2. **Message**
   - This is the subject-matter of communication
   - This may be opinions, attitudes, feelings, views, suggestions, order etc.

3. **Encoding**
   - The sender uses certain symbols such as words, actions; pictures etc (or) the ideas are translated into a code or a set of symbols especially in the form of language.
   - Conversion of the subject-matter into these symbols is the process of encoding.

4. **Channel**
   - These symbols are transmitted through certain channels.
   - For example, radio, telephone, letter, face to face talk, depending upon the situation of the two parties namely ‘sender’ and ‘receiver’ (or) It is the link that connects the sender and the receiver.

5. **Receiver**
   - A person who receives and interprets the message (student)

6. **Decoding**
   - It means translating the message into words for the purpose of understanding.

7. **Feedback**
   - It refers to the reaction, reply or the response sent by the receiver to the sender.
   - Or
   - It is the response the receiver gives to the sender as a result of sender’s message.
TYPES OF COMMUNICATION

Communication may be of the following types:

1. **Oral Communication**
   - It takes place in face to face conversation, group discussions, etc. Spoken words are used to direct, instruct, and share experiences.

2. **Written Communication**
   - Putting in writing includes letters, reports, notes etc. The written words are used to transmit one’s expectations, likes and dislikes.

3. **Vertical Communication**
   - Vertical communication is the one that flows both up and down the organization, usually along with formal reporting lines.
   - It consists of two types namely upward communication & downward Communication.
     - 1. **Upward Communication**: It consists of messages from subordinates to superiors. The message may be in the form of requests, responses, suggestions, complaints etc.
     - 2. **Downward Communication**: It occurs when information flows down the hierarchy from superiors to subordinates. The message may be in the form of directions, assignments, performance, feedback etc.

4. **Horizontal Communication**
   - This communication occurs among colleagues and peers of the same level in an organization.

5. **Grapevine Communication**
   - In every organization, there is an informal channel of communication called the grapevine.
   - It is quite natural for a group of people working together to be interested in one another and talk about appointments, promotions, retirements or even domestic affairs.
   - The grapevine is basically a channel of horizontal communication because workers of the same status can informally communicate with one another with perfect ease.

6. **Object Communication**
   - The most common form of object communication is clothing. Clothes determine one’s personality traits. A good example of clothing as object communication is the uniform.
Also the body adornments such as wedding rings, bindis as marital status, tatoos, and brands. Also, anything used a status symbol comes under the category of object communication.

7. **Intra-Personal Communication**
   - This can be defined as a process through which one communicates with himself.
   - This means the communication is within the self and to the self.
   - For example, thinking, working out a problem, writing diaries, etc.

8. **Inter-Personal Communication**
   - Inter-personal communication may be defined as a process of interaction between two people, generally face-to-face talk.
   - For example, interaction between teacher and student in the classroom, a telephone conversation, interview etc.
   - The emphasis is on speech, non-verbal forms of communication.

*Difference between inter-personal and intra-personal communication:*
   - Intra-personal communication takes place when a student, without the help from anyone, solves a mathematical problem.
   - Inter-personal communication occurs when his friend helps him in solving the same mathematical problem at every stage.

9. **Group Communication**
   - It refers to the process of interaction within groups of people and by groups of people to others.
   - The groups may be small or large. E.g. A family and committee meeting.

10. **Mass Communication**
    - Mass communication takes place when the communication is received by large number of people.
    - For example, open-air concert for a thousand people, radio, and postal systems, etc.
FLANDER’S INTERACTION ANALYSIS CATEGORIES
SYSTEM (FIACS)

WHAT IS INTERACTION?

Ned. A. Flanders defines, “Teaching as an interactive process. Interaction means participation of teacher and students in the process of teaching. In this process, teacher influences the students; students also interact with the teacher. Interaction takes place among the students themselves also. It means, in the process of teaching, everybody interacts with every other person involved in the process.

Teacher influences students through lecture, ask questions, criticizing, giving directions etc.
Student’s reacted to the teacher’s lecture and questions, they give responses.
It is interaction between teachers and students.

WHAT IS INTERACTION ANALYSIS?

Interaction analysis is a process of encoding and decoding a pattern of interaction between the communicator and the receiver.
Encoding helps in recording the events in a meaningful way and decoding is used to arrange the data in a useful way and then analyzing the behaviours and interactions in the classroom interaction.
There are four important techniques to observe the interaction systematically. These are:
1. Flander’s Interaction Analysis Categories System (FIACS)
2. Reciprocal Category System (RCS)
3. Equivalent Talk Categories (ETC)
4. Verbal Interaction Category System (VICS)
Flanders Interaction Analysis Technique is most suitable and widely used technique in the field of research all over the world.

CHARACTERISTICS OF INTERACTION ANALYSIS

1. The classroom verbal interaction can be made more effective.
2. The teacher can increase student participation in his teaching.
3. The direct behaviour of teacher may be shifted to indirect behaviour, which is more suitable in democratic way of life.
4. The tape recorder and videotape can be used for recording the classroom events. The trainee can encode and decode his own behaviour.
5. This technique can also be combined with other feedback device such as microteaching and simulated teaching.

**FLANDER’S INTERACTION ANALYSIS CATEGORY SYSTEM (FIACS)**

- Ned. A. Flanders developed a system of interaction analysis to study what is happening in a classroom when a teacher teaches. It is known as Flanders Interaction Analysis Categories System (FIACS).
- Flanders and others developed this system at the University of Minnesota, U.S.A. between 1955 and 1960.
- Flanders classified total verbal behaviour into 10 categories. Verbal behaviour comprises teacher talk, student talk and silence or confusion.
- The ten categories are mentioned as under:
  1. Teacher Talk – 7 categories
  2. Pupil Talk – 2 categories
  3. Silence or Confusion - 1 category

Thus, the first seven categories include teacher talk. Next two categories include pupil talk. The last tenth category includes the small spans of silence or pause or confusion.

- The first 7 categories or teacher talk has been bifurcated into a) indirect talk, b) direct talk.

<table>
<thead>
<tr>
<th>Category</th>
<th>Teacher’s Talk</th>
<th>A) Indirect Talk</th>
<th>B) Direct Talk</th>
</tr>
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<tbody>
<tr>
<td>1. Accepts Feelings</td>
<td>5. Lecture</td>
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<tr>
<td>2. Praise or Encouragement</td>
<td>6. Giving Directions</td>
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<tr>
<td>3. Accepts or Uses ideas of Pupils</td>
<td>7. Criticizing or Justifying Authority</td>
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<td>4. Asking Questions</td>
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<table>
<thead>
<tr>
<th>Category</th>
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<th>-2 Categories</th>
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<tr>
<th>Category</th>
<th>Neither Teacher Talk nor Pupil Talk</th>
<th>-1 Category</th>
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<tbody>
<tr>
<td>10. Silence or Pause or Confusion</td>
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</table>

**MEANING OF VARIOUS CATEGORIES**

1. Teacher Talk (7 Categories)

   A) *Indirect Talk*

   In this method of analysis, the first four categories represent the teacher’s indirect influence.
Category 1: Accepts Feelings

- In this category, teacher accepts the feelings of the pupils.
- He feels himself that the pupils should not be punished for exhibiting his feelings.
- Feelings may be positive or negative.

Category 2: Praise or Encouragement

- Teacher praises or encourages student action or behaviour.
- When a student gives answer to the question asked by the teacher, the teacher gives positive reinforcement by saying words like ‘good’, ‘very good’, ‘better’, ‘correct’, ‘excellent’, ‘carry on’, etc.

Category 3: Accepts or Uses ideas of Pupils

- It is just like 1st category. But in this category, the pupils ideas are accepted only and not his feelings.
- If a pupil passes on some suggestions, then the teacher may repeat in nutshell in his own style or words.
- The teacher can say, ‘I understand what you mean’ etc. Or the teacher clarifies, builds or develops ideas or suggestions given by a student.

Category 4: Asking Questions

- Asking question about content or procedures, based on the teacher ideas and expecting an answer from the pupil.
- Sometimes, teacher asks the question but he carries on his lecture without receiving any answer. Such questions are not included in this category.

B) Direct Talk

Next 5th to 7th categories represent the teacher’s direct influence.

Category 5: Lecturing /Lecture

- Giving facts or opinions about content or procedure expression of his own ideas, giving his own explanation or citing an authority other than a pupil.

Category 6: Giving Directions

- The teacher gives directions, commands or orders or initiation with which a pupil/student is expected to comply with,
  - Open your books.
  - Stand up on the benches.
  - Solve 4th sum of exercise 5.3.

Category 7: Criticizing or Justifying Authority

- When the teacher asks the pupils not to interrupt with foolish questions, then this behaviour is included in this category.
Teacher’s ‘what’ and ‘why’ also come under this category.

2. Pupil Talk (2 Categories)

Category 8: Pupil Talk Response

- It includes the pupils talk in response to teacher’s talk
- Teacher asks question, student gives answer to the question.

Category 9: Pupil Talk Initiation

- Talk by pupils that they initiate.
- Expressing own ideas; initiating a new topic; freedom to develop opinions and a line of thought like asking thoughtful questions; going beyond the existing structure.

3. Silence or Pause or Confusion (1 category)

Category 10: Silence or Pause or Confusion

- Pauses, short periods of silence and period of confusion in which communication cannot be understood by the observer.

PROCEDURE OF OBSERVATION / ENCODING PROCEDURE

- The observer sits in the classroom in the best position to hear and see the participants.
- At the end of every three seconds he decides which category best represents the communication events just completed. Thus the time involves in coding one tally for every 3 seconds, is 20 tallies in one minute, 100 tallies in 5 minutes and 1200 tallies in one hour.
- In this process only the serial numbers of the categories are recorded.
- The serial number of that category is recorded on the data sheet by the observer.
- When the observation is over, the observer shifts to some other room and prepares the details on the basis of those serial numbers of the categories.
- In this observation process, the writing of serial numbers of the categories is known as ENCODING.
- Writing details of behaviour on the basis of these categories is known as DECODING.
- The observers should remember the serial numbers of these categories.

RULES FOR OBSERVATION / RULES FOR RECORDING OR DECODING

- Flanders category method has many rules for observation without following which the observation is not possible. The observer must remember these rules. These rules help in maintaining consistency and making observations uniform. These rules are as follows:

Rule 1: If more than one type of category occurs during a 3 second period, the observer should choose the category that is numerically farther from category 5 (but not category 10). Suppose the observer is in doubt whether the category is 2 or 3; he should write 2 categories.

Rule 2: The observer should not involve his personal viewpoint.
**Rule 3:** If more than one category is active in a span of 3 seconds, and then all the categories should be recorded. If after 3 seconds, no category changes, then the same serial number should be repeated in the next 3 seconds.

**Rule 4:** If the time period of silence exceeds 3 seconds, it should be recorded under the category No.10.

**Rule 5:** When teacher calls a child by name, the observer is supposed to record a 4th category.

**Rule 6:** When the teacher repeats the student’s answer and the answer is a correct, that is recorded as a category No. 2. This tells the student that he has the right answer and therefore functions as praise or encouragement.

**Rule 7:** When a teacher listens to a pupil and accepts his ideas for a discussion, then this behaviour belongs to category No. 3.

**Rule 8:** The words ‘All is ok’, ‘yes’, ‘yah’, ‘hum’, ‘alright’ etc belong to the category No. 2. (Encouragement)

**Rule 9:** If a teacher jokes without aiming at any pupil, this behaviour belongs to the category No. 2. But if he makes any joke aiming at some particular pupil, then it belongs to the category No. 7.

**Rule 10:** When all the pupils respond to a very small question collectively, then the serial number of category-8 is recorded.

**CONSTRUCTING INTERACTION MATRIX**

- After encoding or observation procedure of interaction, the coded behaviours are written in 10 x 10 table. This 10 (rows) x 10 (columns) table is known as a matrix.
- The category numbers of the record sheet the tabulated in the matrix table. Each number is entered in the form of sequence pairs, being used twice, first as the first numbers and second as second number.
- The row of the matrix represent the first number and the columns the second number.
- For example an observation recorded is 6, 10, 7, 5, 1, 4, 8, 4
- Hence, the beginning and end of the coding should have the same number of the categories.
- It is the tradition of adding number 10 in the beginning and at the end. Hence the above number will be written in this way 10, 6, 10, 7, 5, 1, 4, 8, 4, 10.
Sequence of the pair: (10, 6), (6, 10), (10, 7), (7, 5), (5, 1), (1, 4), (4, 8), (8, 4), (4, 10)

While preparing matrices, one pair is marked at a time.

The matrices have rows and columns.

The first number of the pair represents ‘row’ and second number of the pair represents ‘column’.

For example, in the first pair (10, 6), the number 10 represents row and the number 6 represents column.

Every pair overlaps the other pair. Total tallies of the matrices (N).

In the matrices (N-1) i.e. one less number is marked. In the above example, N=10, (N-1) i.e. 9 numbers will be marked.

Each matrix has 100 cells.

INTERACTION MATRIX TABLE

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Prof. S. Arockiasamy, SXCE
INTERPRETATION OF INTERACTION MATRIX

1. **Teacher Talk Ratio / Percentage of Teacher Talk (TT)**
   The tallies of first seven categories are added and divided by the total tallies of the matrices (N) and hence the percentage can be calculated.
   \[
   TT = \frac{C_1 + C_2 + C_3 + C_4 + C_5 + C_6 + C_7}{N} \times 100
   \]

2. **Indirect Teacher Talk Ratio (ITT)**
   - It indicates teacher actions in encouraging and supporting pupil’s participation.
   - Its percentage can be calculated by adding the tallies of the first four categories and dividing by the total tallies of the matrix (N).
   \[
   ITT = \frac{C_1 + C_2 + C_3 + C_4}{N} \times 100
   \]

3. **Direct Teacher Talk Ratio (DTT)**
   - It indicates the teacher actions restricting student participation.
   - In this ratio, the tallies of 5th, 6th and 7th categories are added and divided by ‘N’ to calculate the percentage.
   \[
   DTT = \frac{C_5 + C_6 + C_7}{N} \times 100
   \]

4. **Pupil’s Talk Ratio/Percentage of Pupil Talk (PT)**
   - It indicates verbal activities of pupils in response to the teacher.
   - In this ratio, the tallies of 8th and 9th categories are added and divided by ‘N’ to calculate the percentage.
   \[
   PT = \frac{C_8 + C_9}{N} \times 100
   \]

5. **Silence or Confusion Ratio (SC)**
   \[
   SC = \frac{C_{10}}{N} \times 100
   \]

6. **Indirect and Direct Ratio (I/D)**
   \[
   \frac{I}{D} = \frac{C_1 + C_2 + C_3 + C_4}{C_5 + C_6 + C_7} \times 100
   \]

**ADVANTAGES OF FIACS**
1. It is an effective tool/instrument to measure the social-emotional climate in the classroom.
2. It is also used for in-service teachers.
3. It provides feedback to the pupil-teachers.
4. It is an objective and reliable method for observation of classroom teaching.
5. It is mostly teacher talk oriented.
6. It is used to compare the behaviour of teachers at different age levels, gender, subject etc.
7. It is much useful in team teaching and microteaching.

**LIMITATIONS OF FIACS**
1. It consumes much time in preparing 10 x 10 matrix without which, interpretation is not possible.
2. Less attention has been paid towards pupil-talk.
3. The observers have to be trained in order to code correctly.
4. Classroom interaction of pupil-pupil type is not considered here.
5. The system of coding and decoding procedure very difficult and expensive.