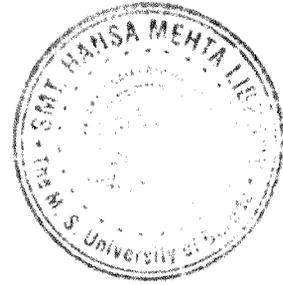


Chapter I

Conceptual Framework

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1.0 INTRODUCTION

Education has continued to evolve, to diversify and to extend its reach and coverage since the dawn of civilization. Every country develops its system of education to express and promote its unique social-cultural identity and also to meet the challenges of the times. The success of an educational system largely depends on the teachers available to it and the quality of teachers depends upon the quality of teacher education. The Education Commission (1966) (as cited in Lalitha, 2006) had echoed in their report when they said that a sound programme of professional education of teachers is essential for the qualitative improvement of education. Thus, the teacher education today is an integral part of any educational system. One of the essential aims of teacher education is to enable student-teachers to develop their knowledge and understanding of subject-matter, children, teaching strategies, and the school curriculum, and to help them draw upon this knowledge for effective teaching-learning in the classroom. The successful classroom teaching and learning relies on communication between the teacher and the students. So, in order to achieve the ultimate goal of education, teachers have to be a good communicators first. Communication is an essential device for teaching and learning. The better the communication, the better the teaching-learning process. The failure of communication is detrimental to the process of development of students. Classroom communication paves the ways to use communication to facilitate the learning process. All that happens in the classroom is created and sustained through the communication process.

Communication is composed of both the verbal and the non-verbal aspects. Research studies reveal that very less percent of interpersonal communication involves words, the remainder being made up of voice tone, sounds and a variety of devices such as kinesics, haptics, oculosics, proxemics, paralanguage and chronemics as well as posture, sound symbols and silence, which either replace or accompany words. Hence, when discussing the communication process, both the verbal and non-verbal aspects ought to be looked upon. But before going to the details of communication, the basic communication in the teaching must be explored.

1.1 BASIC COMMUNICATION IN TEACHING

Throughout history, the role of the teacher has changed. Early in history, the teachers' primary role was to broaden a child's knowledge. Frequently the parents learned basic reading and writing capabilities. Even though the child attended school, the parents spent the majority of the child's growing years instructing and providing a role model. Recently, our society has become less family oriented. Both husband and wife spend their time at workplace for earning, so the child's time is spent primarily without the parents and with the teacher serving as the primary role model. Certainly more time is spent with teachers than parents for students in secondary education and beyond. It can be concluded that teachers become the only source of extended personal contact for many students.

Given the above mentioned effect, teachers may have on students and their development, it is reasonable to suggest that all teachers need to evaluate the communication which occurs in their classrooms. In the teaching process, the communication techniques a teacher uses play a significant role in instructional delivery. After all, communication in the classroom defines the learning process, and

it is necessary to communicate in order to influence learning. 'Communication processes trigger stimuli which energize the emotions. Emotional activity engenders involvement and exercises the associative part of the mind. Vitalization of the emotions facilitates the absorption of factual data' (Keidar, 2005). Thus, communication has great influence on the absorption of the knowledge imparted to students through classroom transaction.

The discussion of classroom communication would be incomplete without examining factors affecting the effectiveness of classroom communication. Problems which affect classroom communication are often unique. It is different from other formalized communication as evaluation is integral to this form of classroom communication. Additionally, classroom communication is largely information sharing. Thus, it is principally interpersonal in nature. Here, meeting the needs and goals of the individual become more relevant than meeting the needs and goals of the group.

Effective classroom communication ensures learning. Hence, all the elements of communication, such as, verbal and non-verbal communication within the classroom setting should be observed. A good communicator should be able to express non-verbal cues appropriately. Lang, McBeath and Hebert (1995) indicate that basic non-verbal skills include the awareness of eye contact, facial expression, motion, gestures, physical contact and silence. Different gestures and expressions may indicate different meanings. Therefore, it is vital for teacher to possess knowledge and skills of both verbal and non-verbal communication to communicate better with students. It also helps to take charge of the class as a whole. The glance of the fundamentals of communication is foremost to understand the verbal and non-verbal aspects of communication.

1.2 THE FUNDAMENTALS OF COMMUNICATION

Communication is the process of sending information to oneself or another entity, usually via a language. Seeking to define 'communication' as a static word or unified discipline may not be as important as understanding communication as a family of resemblances with a plurality of definitions. Some definitions are broad, recognizing that animals can communicate, and some are narrower, only including human beings within the parameters of human symbolic interaction. Communication is a complex process.

Communication system is often categorized into six main components. Diagrammatically, the communication system can be shown as in figure 1.1. The six components and their public speaking analogs as identified from related literature are:

- Transmitter: Speaker
- Channels: Senses - speech, hearing, seeing, etc.
- Message: Speaker's topic
- Receiver: Audience
- Noise: Internal and external factors that affect message reception by audience:
e.g., daydreaming, traffic noise, etc.
- Feedback: Audience reaction

Of the six components listed, the speaker has immediate control over only three: self, the methods of communication chosen (visual, auditory, etc.), and the message itself. The speaker can influence, but not control, the last three components: the audience, distractions, and audience response. It is the speaker's role to focus attention on the audience to enhance the probability of the receipt of the message. This is done by selecting the type of communication pertinent to the message, establishing a point-of-view, and communicating its meaning to the receiver. Receiver

forms a feedback message and uses proper channel to transmit the message after decoding the message sent by the speaker. In the process of communication, noise hinders the reception of message. Noise can be due to external factors or internal factors as mentioned earlier. Internal factors responsible for noise include intelligence, interest, ego clashes, motivation, attention, relation between sender and receiver whereas external factors responsible for noise in the process of communication are related with physical environment like weather, sound of the surrounding where communication process takes place.

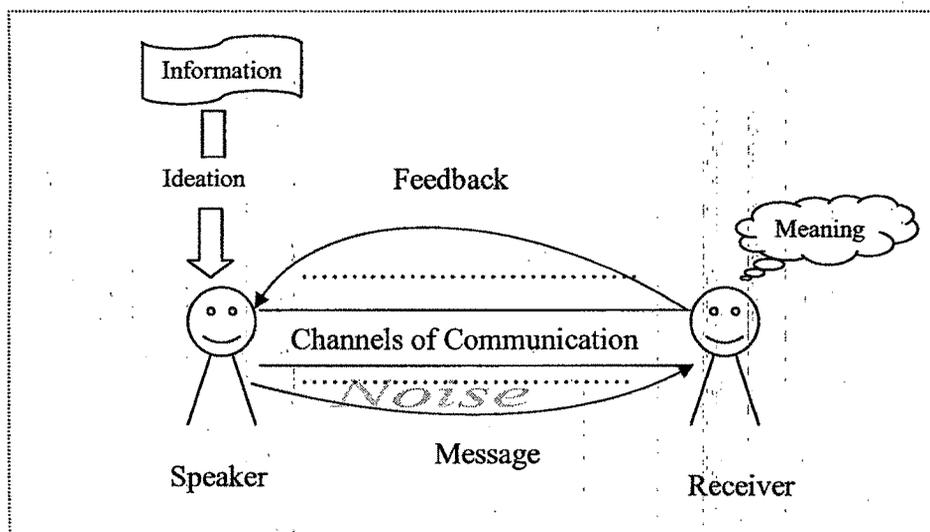


Figure 1.1 *Communication System*

To be effective, the speaker must consciously choose not only the subject matter of the presentation, but also the personal impression being made and the rhetorical tools being used. The impression of the speaker is formed by the receiver by interpreting both his verbal and non-verbal symbols. Hence, the speaker must assess his or her audience and decide how best to reach them both verbally and non-verbally. Appropriate use of non-verbal communication could also minimize the noise in the

process of communication to some extent. The speaker can interpret the non-verbal cues of audience to minimize noise, such as, their disinterest, discomfort and attention level. The speaker himself can emit motivating, reinforcing and attention catching non-verbal cues to maintain the interest of the audience. Thus, non-verbal communication could enhance the intensity of verbal communication. The concept and role of different components of non-verbal communication is discussed in detail in the succeeding sections.

1.3 NON-VERBAL COMMUNICATION

Although we usually identify communication with speech, communication is composed of two dimensions - verbal and non-verbal. Non-verbal communication includes behaviors in the form of eye contact, touching, voice tone, physical behaviors, and facial expressions. Within the behavior family, non-verbal communication also includes subtle communicators. For example, external appearance, posture, and distance between two people convey subtle communication. Ekman and Friesen (1969) (as cited in Susan, 2002) define communicative non-verbal behavior as "those acts which are clearly and consciously intended by the sender to transmit a specifiable message to the receiver". Non-verbal communication can have a powerful impact on many aspects of communication with others, including power, synchrony, and immediacy. Hence, the components of non-verbal communication are worth to be discussed in detail.

Components of Non-Verbal Communication

Non-verbal communication is a system consisting of a range of features often used together to aid expression. The combination of these features is often a subconscious choice made by native speakers or even sub-groups/sub-cultures within a language group. Some scholars have categorized non-verbal communication into four areas: proxemics, chronemics, kinesics, and paralinguistics (Denzin & Lincoln, 1994). Henely (1977) (as cited in Anderson, 2001) states that non-verbal cues include how we say things with body posture, movement, facial expressions, gestures, touching, eye contact, space, and distance. The components of non-verbal communication identified from review of related literature are shown in figure 1.2.

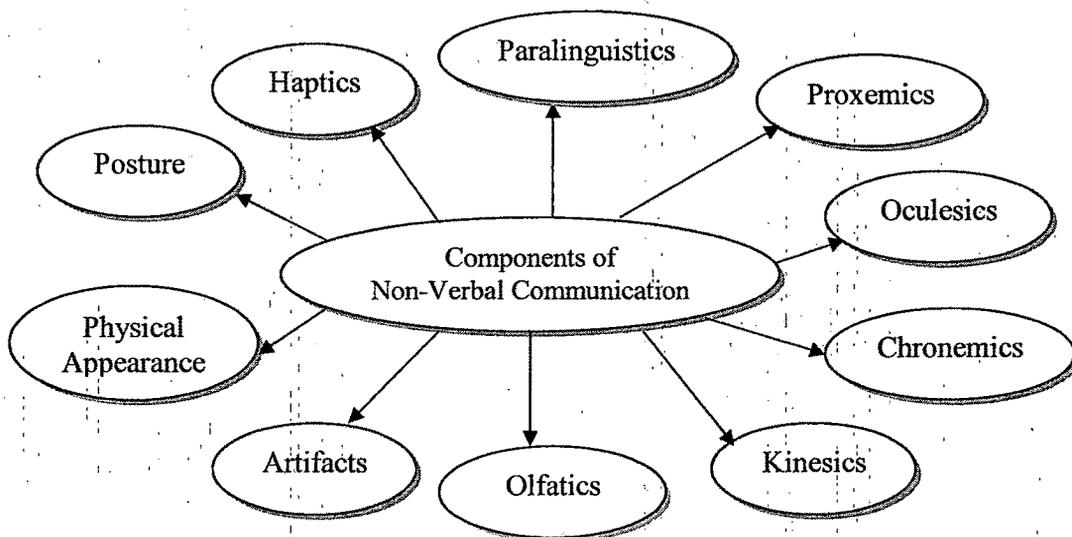


Figure 1.2 *Components of Non-Verbal Communication*

Table 1.1 *Description of the Terms of Non-Verbal Communication*

Term	Description
Kinesics	It is the interpretation of body language such as facial expressions and gestures - or, more formally, non-verbal behavior related to movement, either of any part of the body or the body as a whole.
Proxemics	This term was introduced by anthropologist Edward T. Hall (1966) (as cited in Anderson, 2001) to describe the set measurable distances between people as they interact.
Oculesics	It is a form of non-verbal communication which means eye contact - an event in which two people or animals look at each other's eyes at the same time.
Chronemics	It is the study of the use of time in communication process.
Paralanguistics	It refers to the non-verbal elements of communication used to modify meaning and convey emotion which includes the pitch, volume, timbre, intonation and pace of speech.
Artifacts	It is the form of non-verbal communication which describes the dress, clothing, jewellery worn by the individual and/or the setting of the room.
Posture	It is the position of the body. A person's bodily stance.
Haptics	It refers to the sense of touch.
Olfatics	It is the study of the sense of smell.
Physical Appearance	It includes height, stature, physical attractiveness of the individual are parts of physical appearance.

Importance of Non-Verbal Communication

Many people believe that communication involves language and, therefore, non-verbal communication is not a legitimate field of study. However, it is impossible to separate verbal and non-verbal communication. When one speaks, his/her gestures and facial expressions accentuate his/her words. Even when speaking on the phone, the tone of voice, rate, volume and inflection affects the meaning of the speaker.

Human beings use non-verbal communication because of the following points.

1. Words have limitations: There are numerous areas where non-verbal communication is more effective than verbal (when explaining the shape, directions, personalities, etc. these are expressed non-verbally).
2. Non-verbal signals are powerful: Non-verbal cues primarily express inner feelings (verbal messages deal basically with outside world).
3. Non-verbal messages are likely to be more genuine: This is because non-verbal behaviors cannot be controlled as easily as spoken words.
4. Non-verbal signals can express feelings that are inappropriate to state: Social etiquette limits what can be said, but non-verbal cues can communicate thoughts.
5. A separate communication channel is necessary to help send complex messages: A speaker can add enormously to the complexity of the verbal message through simple non-verbal signals.

Non-verbal communication has enormous potential to improve the communication. Added skillfully with the verbal communication, it can add more meaning in the communication process making the situation win-win for both the sender and the receiver. It has huge scope in the field of teaching and learning. Stated briefly, how something is expressed may carry more significance and weight than what is said, the words themselves.

Non – Verbal Communication in Teaching Learning Process

Given that non-verbal cues are such potent communicative tool, it makes sense that if we improve the way we use and read non-verbal signals, we will be better communicators. There is variety of non-verbal signals emitted from teacher in classroom which influence, to deepest levels, the classroom atmosphere, student's moods, perception, learning and eventually attitudes towards knowledge and school in general. On the other hand students also emit non-verbal signals. Teacher has powerful tool to identify what is actually going on with his class in general and each individual per se, without any word being said. This is extremely important in lecture like classes when teacher is primarily supposed to talk. The chart presented in figure 1.3, show the link of non-verbal communication to the teaching learning process.

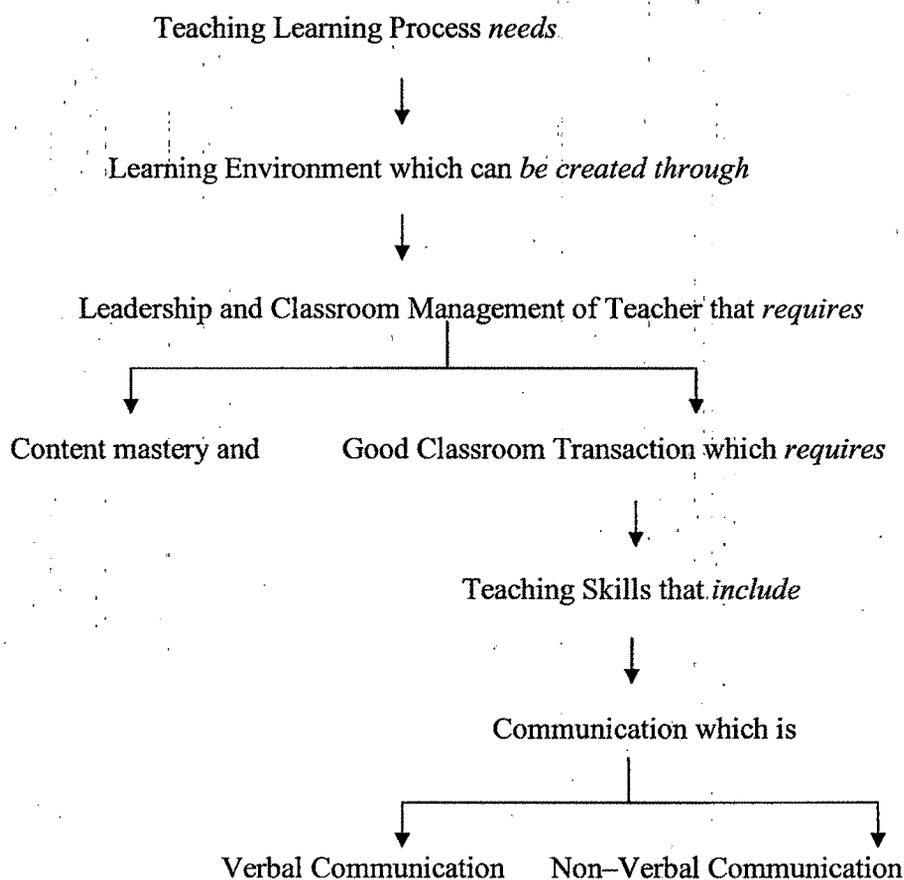


Figure 1.3 *Non-Verbal Communication in Teaching Learning Process*

Researches in communication suggest that many more feelings and intentions are sent and received non-verbally than verbally. Non-verbal communication in instruction incorporates behaviors that do not use words (O'Hair & Ropo, 1994). Voice tone, body posture, gestures, and eye contact are incorporated in a teacher's classroom message. Mehrabian (1967) suggested that only seven percent of message is sent through words, with remaining 93 percent sent through non-verbal expressions. According to some scholars, verbal part goes up to 35 percent in some specific type of communication process. Also a study on communication points out that contrary to intuition, the brunt of the impact of a speaker's presentation is through non-verbal communication; it has been estimated that the meaning received by the audience is derived from approximately one-third verbal reception and two-third non-verbal reception. When the verbal and non-verbal messages are contradictory, the observers believe the non-verbal message they are receiving and not the verbal one. Hence, the non-verbal messages, conscious or unconscious, that are being sent by the speaker through appearance, attitude, gesture, and dress, are crucial to the communication of ideas. In addition, the speaker's ability to read the audience and change speaking strategies accordingly will also impact the effectiveness of the transmission of the message.

Accompanied by a smile or a frown, said with a loud, scolding voice or a gentle, easy one, the contents of our communications are framed by our holistic perceptions of their context. Research has established that non-verbal cues play a significant role in classroom instruction (Arnold & Roach, 1989). Grant and Hennings' (1971) case study measuring non-verbal communication in the classroom and Henely's (1977) (as cited in Anderson, 2001) research into enhancing communication through non-verbal cues are just two studies that support the

important influence that non-verbal cues have in instructional delivery. According to the research of Petrie et al.'s (1998) (as cited Anderson, 2001), having an understanding of non-verbal cues is very helpful in classroom instruction. It helps the instructor become a better receiver of student messages and increases the instructor's ability to send positive non-verbal messages assisting in instructional reinforcement. Moreover, an understanding of non-verbal cues affords the instructor the ability to stay away from non-verbal cues that can hinder learning. Therefore, in classroom instruction, the teacher needs to understand non-verbal cues to accurately and effectively deliver information (Miller, 1978) (as cited in Anderson, 2001). The importance of non-verbal communication is quite significant in first language (native) classes to add specific meaning, feeling and environment to the content. Even it is also more important in second and third language (foreign) classes as many verbal components are not understood by a large number of students, mainly the classes following communicative approaches. Non-verbal communication by the teacher plays an important role in these classes. It has also a very significant role in the classes meant for differently able students especially for deaf and dumb students in an inclusive environment. Thus, the dominance of non-verbal communication is noteworthy in classroom transaction. Furthermore, role of different components of non-verbal communication in the classroom will throw more light in this concern.

Role of Different Components of Non-Verbal Communication in Classroom Transaction

The different components of non-verbal communication as identified from related literature are depicted in the figure 1.2. The description of each component of non-verbal communication is given in table 1.1. The role of each component of non-verbal communication in the classroom transaction is presented as follow.

- **Kinesics** : It is the study of body movements, facial expressions, and gestures. It was developed by anthropologist Ray L. Birdwhistell in 1950s (as cited in Anderson, 2001). Body motions such as, shrugs, foot tapping, drumming fingers, eye movements like, winking, gestures, and facial expressions come under these. Research conducted by O’Hair & Ropo (1994) suggests that students’ facial expressions are the most visible form of communication when trying to interpret their state of mind. Because the face has the ability to produce over 1,000 different expressions, it is instrumental in communicating a student’s state of mind (Ekman, Friesen, & Ellsworth, 1972) (as cited in Susan, 2002). The role of facial expressions and gestures in classroom communication is discussed in detail in the following section.

(i) **Facial Expressions**: The saying ‘a picture is worth a thousand words’ well describes the meaning of facial expression. Facial appearance - including wrinkles, muscle tone, skin coloration, and eye color offers enduring cues that reveal information about age, sex, race, ethnic origin, and status. Among the different facial expressions, smiling is a most powerful cue that transmits – happiness, friendliness, warmth, liking, and affiliation. Thus, if one smiles frequently he will be perceived as more likable, friendly, warm and approachable. Smiling is often contagious and students react favorably and learn more. Other examples of facial expressions are pensive, sad, warning, startled, amused, confused, anxious, sleepy, etc. as shown in figure 1.4. (Adapted from Introduction in Non-Verbal Communication, 2007).



Figure 1.4 *Varieties of Facial Expressions*

Some facial expressions are readily visible, while others are fleeting. Both types can positively or negatively reinforce the spoken word and convey cues concerning emotions and attitude. The primary source of information for determining an individual's internal feelings is his/her face.

Facial Expressions in the Classroom

All people and thus certainly teachers and students use facial expressions to form impressions on others. A cold hard stare (a kind of staring) has long been in the repertoire of teacher's weapons (as it can be used as a meaningful tool to control the notorious class or student). Similarly, a smile can be useful tool in reinforcing desired student behaviors (this time in affirmative way). A teacher can also use student's facial expressions as valuable sources of feedback. For example, while delivering a lecture, a teacher should use to observe student's expressions to determine whether or not to slow down, speed up, or in some other way modify his presentation. Facial expression involves some of the smallest body movements, but its impact in the classroom may be greater than any other body language the teacher exhibits. The teacher probably communicates more accidentally by his or her facial expression than by any other means. When teachers are responding to students, these changes in facial expression can serve as reinforces or as non-reinforcers to the student. Unfortunately, the teacher normally has very little control over such micro-momentary movements, but should be able to control more long-lasting expressions, such as, smiles or frowns. Especially the frowns as shown in figure 1.5 (Adapted from Introduction in Non-Verbal Communication, 2007) should be used carefully and with appropriate justification in classroom, else it may have negative impact on student for long time.



Figure 1.5 *Cartoon Depicting the Use of Frowns in the Classroom*

(ii) **Gestures:** A gesture is a non-vocal bodily movement intended to express meaning. They may be articulated with the hands, arms or body, and also include movements of the head, face and eyes, such as winking, nodding, or rolling ones' eyes. If one fails to use gesture while speaking, he may be perceived as boring, stiff and unanimated. A lively and animated teaching style captures students' attention, makes the material more interesting, facilitates learning and provides a bit of entertainment. Head nods, a form of gestures, communicate positive reinforcement to students indicates that the teacher is listening. There are many kinds of gestures - clenching fist, biting fingernails, rubbing chin, shaking a finger, tugging at hair, smoothing hair, pointing, squirming etc.

Gestures in the Classroom

Teachers use different gestures in the classroom like nodding, folding arms, waving, pointing to blackboard etc. One of the uses of gestures in classroom is depicted in figure 1.6 (Adapted from Introduction in Non-Verbal Communication, 2007). The variety of ways in which teacher and students walk, stand, or sit can all

affect interpersonal perception. The teacher who slouches or twitches when talking to students is not likely to be perceived as a composed person. Conversely, the teacher who always appears unruffled regardless of the circumstances is likely to be perceived as cold and withdrawn. Body postures and movements are frequently indicators of self-confidence, energy, fatigue, or status. In the classroom, students keen to receive body message of enthusiasm or boredom about the subject matter being taught can sense confidence or frustration from the unconscious behaviors of teachers.

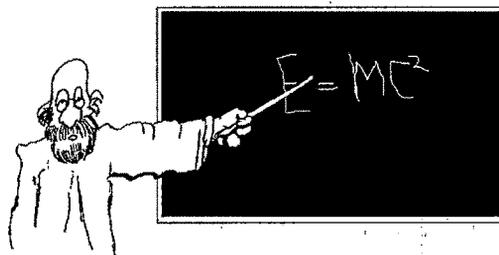


Figure 1.6 *Cartoon Depicting the Use of Gestures in the Classroom*

Observant teachers can also tell when students understand the content presented or when they have trouble grasping the major concepts. A student who is slouching in his seat sends a very different message than the student who leans forward or sits erect. Cognitively, gestures operate to clarify, contradict, or replace verbal messages. Gestures also serve an important function with regard to regulating the flow of conversation. For example, if a student is talking in class, single nod of the head from the teacher will likely cause that student to continue and perhaps elaborate.

- **Proxemics:** Leibman (1970) (as cited in Anderson, 2001) defined proxemics as personal space that moves and changes with the individual. Personal space is the core of the proxemics category, and there are different levels of space and distance.

Classroom transaction is influenced by the proximity between the teacher and student in the classroom.

Proxemics in the Classroom

In instruction, proxemics focuses on the teacher's use of distance, motion, classroom arrangement, and space (Couch, 1993). For example, the instructor controls classroom proxemics via fixed seating, or by placing the student chairs in a close circle. The physical arrangement affects class discussion and interaction among students and teacher.

Cultural norms dictate a comfortable distance for interaction with students. One should look for signals of discomfort caused by invading students' space. Typically, in large classes space invasion is not a problem. In fact, there is usually too much distance. To counteract this, moving around the classroom may increase interaction with students. Increasing proximity may enable the teacher to make better eye contact and may increase the opportunities for students to speak. Different distances are also intuitively assigned for situations involving intimate relations, ordinary personal relationships (e.g., friends), social relations (e.g., co-workers or salespeople), or in public places (e.g., in parks, restaurants, or on the street. Schwebel and Cherlin (1972) (as cited in Susan, 2002) found that elementary school children seated in the front row were attentive and were evaluated more positively by their teachers than were students who sat in the middle and back rows. Edward T. Hall's(1966) categories (as cited in Anderson, 2001) can lend insight. He specifies four distance zones which are commonly observed by North Americans.

(i) *Intimate distance* - from actual touching to eighteen inches. This zone is reserved for those with whom one is intimate. At this distance the physical presence of another

is overwhelming. Teachers who violate student's intimate space are likely to be perceived as intruders.

(ii) *Personal distance* - from eighteen inches to four feet. This is the distance of interaction of good friends. This would also seem to be most appropriate distance for teacher and student to discuss personal affairs such as grades, conduct, private problems, etc.

(iii) *Social distance* - exists from four to twelve feet. It seems to be an appropriate distance for casual friends and acquaintances to interact.

(iv) *Public distance* - outward from twelve feet a speaker becomes formal. Classes of teachers who maintain this distance between themselves and their students are generally formal, and some students may feel that the teacher is cold and distant.

Hall's system for the categorization of distance can constructively be used to lend insight into the nature of various student-teacher interactions. It should be noted, however, that appropriate distance is determined by a myriad of variables including the situation, the nature of the relationship, the topic of conversation, and the physical constraints, etc. which are present in the classroom situation as shown in figure 1.7 (Adapted from Introduction in Non-Verbal Communication, 2007).

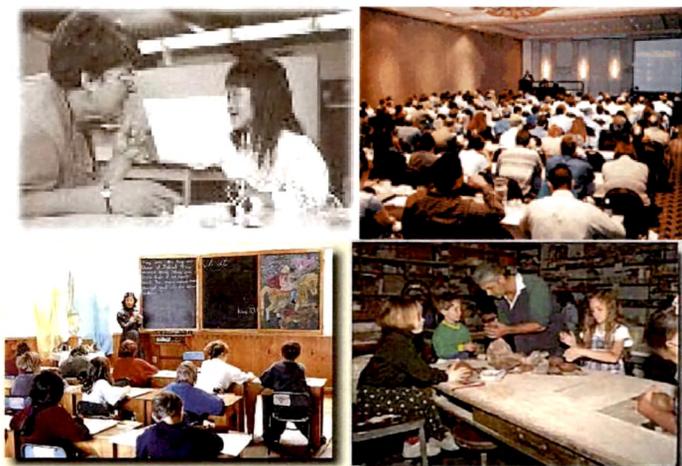


Figure 1.7 *Difference in Proxemics in Different Situations*

- **Haptics:** Haptics is the study of touching as non-verbal communication. Touches that can be defined as communication include handshakes, holding hands, back slapping, high fives, a pat on the shoulder, and brushing an arm. Throughout our lives, touching communication, or haptics, is a powerful tool. Physical cues projected by the instructor communicate a message to students (Kleinfeld, 1972). The way one person touches another communicates a great deal of information: whether a grip is gentle or firm, and whether one hold the other person on the back of the upper arm, on the shoulder, or in the middle of the back, whether the gesture is a push or a tug, whether the touch is closer to a pat, a rub, or a grabbing. People have different areas of personal intimacy, and this refers not only to the sexual dimension, but also the dimension of self control. Many adolescents are particularly sensitive to any touching that could be interpreted as patronizing or undue familiarity.

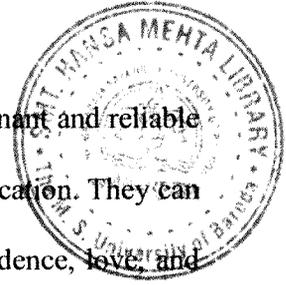
Haptics in the Classroom

Since teachers are considered superiors in the classroom, they often initiate touching behaviors. Teacher judgment is the best indicator. A teacher who grabs the arm or shoulder of an unruly student enters the student's space uninvited. Aside from embarrassment, the student may develop other negative feelings toward the teacher. More positively, however, touching can also be used as a reinforcer. At times, a teacher can develop a close relationship with students by invading their space. A simple pat on the back for a job well done is a much used and usually accepted form of praise. There is also some limited evidence that touching behaviors can actually increase learning. One recent investigation by Kleinfeld (1972) has shown that teachers employed such behaviors as smiling, touching, and close body distance, small children tended to learn significantly more. As children grow older, however,

these touching behaviors become less appropriate. Touch has different impacts in the classroom depending on the age and sex of the students. Still, with older students, hand shaking and an occasional pat on the back could prove effective. For younger children in the lower primary grades, touch plays an important developmental role. It can communicate a sense of belonging, security, and understanding to the child. Conversely, when a teacher withholds touch, a child may feel isolated and rejected, which can lead to the acquisition of negative attitudes toward school.

Children in the lower elementary grades also have a strong need to touch things around them. They learn this way about environment. It is not uncommon for small children to wish to touch the teacher's clothing or hair. They also touch one another a lot. The teacher must be very careful to interpret children's touching behavior on the basis of adult touching norms. The use of touch as a reward is appropriate in the elementary school. As children move into junior and senior high school, changes occur among them that require an alteration of teacher behavior. Awakening sexual interest in adolescents, results in adaptation to adult to touch terms. The use of the touch as a reward at this stage may be greatly misinterpreted, particularly by other people who observe them. Most male teachers of junior and high school students soon recognize that it is highly inappropriate to touch female students under almost any circumstance.

- **Oculesics:** This component of non-verbal communication highlights the importance of eye-contact in the communication process. Eye contact, an important channel of interpersonal communication, helps regulate the flow of communication. And it signals interest in others. Furthermore, eye contact with audiences increases the speaker's credibility. Teachers who make eye contact open the flow of communication



and convey interest, concern, warmth and credibility. The most dominant and reliable features of the face, the eyes, provide a constant channel of communication. They can be shifty and evasive; convey hate, fear, and guilt; or express confidence, love, and support. The eyes converse as much as tongues, with the advantage that the ocular dialect needs no dictionary, but is understood, the entire world over. When the eye say one thing, and the tongue another, a practiced man relies on eye. Except for extremely shy individuals, most people look for social acceptance by studying the eyes of others.

Eyes also can accurately indicate a positive or a negative relationship. People tend to look longer and more often at those, whom they trust, respect and care about than at those whom they doubt or dislike.

Oculesics in the Classroom

Eye behavior seems to be of particular importance and is generally used to indicate whether one is open to communication or not. This can be observed when a teacher asks the class a question: students who think they know the answer will generally look the teacher, while students who do not know the answer will usually try to avoid eye contact. Visual contact with the instructor appears related to student's comprehension. Jecker, Maccoby, and Breitrose (1965) (as cited in Susan, 2002) isolated visual cues given by students which seemed associated with comprehension of lecture content and reported that teachers trained to recognize such cues became more accurate in their judgment of student comprehension than did untrained teachers. Exline (1971) (as cited in Anderson, 2001) reports that, in responses to a questionnaire, college students said they thought that they would be more comfortable with another who, when speaking, listening, and sharing mutual silence, looked at them 50 percent of time as opposed to cent percent of the time or not at all.

Eye contact is often used to control an interpersonal interaction. When people do not wish to be interrupted, they will often glance away and continue talking. When they wish the other person to speak, they will pause, making direct eye contact. Teachers often use eye contact in the classroom to decide who is prepared to answer a question, or who has completed a homework assignment. Teachers can have individual eye contact with every student in the classroom. Attitudes of intimacy, aloofness, concern, or indifference can be inferred by the way a teacher looks or avoids looking at a student. Most experienced teachers are aware when students are bored with the subject matter being presented. Students' eyes often signal listening and non-listening behaviors, thus transmitting subtle messages about their lack of attentiveness. Students' who are constantly looking at the wall clock rather than watching and listening to the teacher may be indicating the need for a break, the dullness of the content, or a lack of teacher motivation and preparation.

- **Chronemics:** It is how we perceive and use time to define identities and relationships. Time perceptions include punctuality and willingness to wait, the speed of speech and how long people are willing to listen. The timing and frequency of an action as well as the tempo and rhythm of communications within an interaction contributes to the interpretation of non-verbal messages. Burgoon and Saine (1978) (as cited in Lane, n.d.) define chronemics as "how we perceive, structure, and react to time and . . . the messages we interpret from such usage." It also deals with the pacing of speech or the length of silence in the exchange.

Chronemics in the Classroom

In the classroom, it is important for a teacher to use meaningful pauses while explaining to convey appropriate meaning and while asking questions. Pauses can be meaningful, disorganized, shy, and hesitant. If teacher misses the appropriate pauses, he/she may not communicate the message properly and student may not understand properly the content.

- **Paralanguage:** Paralinguistics communication includes voice variations. More specifically, the elements of paralanguage are pitch, resonance, articulation, rate, volume, rhythm, pause and silence and sounds, such as, gaps and groans. No matter what we say, we may be seen as inappropriate if we don't have the right tone. This category includes a number of sub-categories viz. Inflection (rising, falling, flat...), Pacing (rapid, slow, measured, changing...), Intensity (loud, soft, breathy,...), Tone (nasal, operatic, growling, wheedling, whining...), Pitch (high, medium, low, changes...), Pauses (meaningful, disorganized, shy, hesitant...) etc.

Paralanguage in the Classroom

The teachers using this non-verbal cue philosophy know that yelling and projecting a high-pitched voice will excite rather than calm students. For maximum teaching effectiveness, learn to vary the six elements (as mentioned in the preceding paragraph) of your voice. One of the major criticisms is of instructors who speak in a monotone. Listeners perceive these instructors as boring and dull. Students tend to learn less and lose interest more quickly when listening to teachers who have not learned to modulate their voices.

This powerful non-verbal tool can readily affect student participation. Generally, to correct answers the teacher responds with positive verbal reinforcement enhanced by vocal pitch or tone, expressing the acceptance and liking of the students' answer (often accompanied by a smile or other forms of non-verbal approval). Opposite is the case when teacher do not like the response (or behavior in the same way). Some early studies, found that large variations of rate, force, pitch, and quality produced higher levels of retention than did messages delivered without these variations. For example mono-pitch reduces comprehension for both prose and poetry when compared with good intonation. There is distinction between a child's and adult's response to non-verbal behavior, particularly in terms of non-verbal vocal behavior. For example, varying the ways one can say that well-known story opener "Long, long ago in a place far, far away...", stretching out the words and inserting a pause: "Lonnng, lonnng ago (pause) in a place farr, farr away..." or using a different pitch for the first "long" versus the second "long" and the first "far" versus the second "far" will have different effects.

While the adult will almost universally accept the non-verbal vocal behavior as the correct cue when vocal behavior and verbal behavior are in conflict, young children often operate in the reverse manner. Therefore for the small child, conflicting verbal and non-verbal messages will cause considerable trouble. One of the best examples of this is the use of satire, which is for this reason, generally inappropriate means of communication with small children.

Vocal behavior is also capable of arousing stereotypes about either a teacher or a student. For example, a teacher who has a very nasal speaking voice is often perceived as having a variety of undesirable personal and physical characteristics. Female teachers with very tense voices are often perceived as being younger,

feminine, more emotional, easily upset, and less intelligent. Male teachers with the same vocal characteristics are often perceived as being older, more unyielding, and cantankerous. Many teachers would be shocked at students' imitations of them, often imitation mimicking the teacher's vocal pattern.

- **Posture:** It is the position of the body. We communicate numerous messages by the way we walk, talk, stand and sit. A person's bodily stance communicates a rich variety of messages. The following postures convey different emotional effect they seem to suggest: slouching, twisted, stiff, cringing, slumped, towering, crouching, kneeling, angle of head, shoulders forward, legs spread, general tightness, jaw thrust. Posture can be used to determine a participant's degree of attention or involvement, the difference in status between communicators, and the level of fondness a person has for the other communicator.

Posture in the Classroom

Standing erect, but not rigid, and leaning slightly forward may communicate to students that you are approachable, receptive and friendly. Furthermore, interpersonal closeness may result when you and your students face each other. Speaking with your back turned or looking at the floor or ceiling should be avoided; it communicates disinterest to your class. On the other hand, postures of students also communicate their attentiveness in the classroom. For example, students twisting to look out of the window, sitting straight and leaning slightly towards the teacher, sitting with drooped shoulders, bending their back and lying head down to desk, etc. communicate different meanings through these different postures.

- **Olfatics:** Olfatics is the study of smell in relation to human communication. Our body associates certain smells with different feelings and emotions. Smells are also powerful at triggering our memory, with certain smells being tied to different emotions, people, or events. We react to people based on their smell, body odor, use of too much perfume.

Olfatics in the Classroom

The body odor of teacher also influences students in the classroom. If a teacher sweats and stinks, the teacher may not be conscious about it but the learner gets distracted and feels discomfort. Similarly if teacher uses strong perfumes or deodorants, it again diverts the attention of the students.

- **Artifacts:** Yet another way we communicate is through personal objects, such as clothing, jewelry, eyeglasses. First artifacts announce professional identity. Our communications are also affected by a variety of variables, such as clothes, makeup, and accessories. These offer signals relating to context (e.g. formal vs. informal), status, and individuality. The ways people carry teaching aids, or relate to their belts, suspenders, or glasses also suggest different semiotic meanings. (Semiotics is the science of the emotional or psychological impact of signs, appearances—not words—that's "semantics"-- but of how things look.) Also, the setting up of a room or how one places oneself in that room is a powerfully suggestive action. Where one sits in the group is often useful in diagnosing that person's attitude toward the situation. The difference in setting of two rooms is depicted in figure 1.8 (Adapted from Introduction in Non-Verbal Communication, 2007).



Figure 1.8 *Difference in Artifacts of Two Rooms*

Also, despite of the fact that most people are only superficially aware of the wear of others, clothing does communicate. Often dictated by societal norms, clothing indicates a great amount of information about self. It identifies sex, age, socioeconomic class, status, role, group membership, personality or mood, physical climate, and time in history. Much empirical evidence supports the view that one who is well dressed is likely to be much better accepted by unknown people than if not well dressed thus increasing interpersonal effectiveness. In one early investigation (Hurlock, 1929) all of the men studied, believed that their estimate of a person was affected by his clothing and 97 percent of all subjects reported feelings of increased self-confidence when they were well dressed. But some authors contradict the opinion that a person should always strive to be 'well-dressed'. Gandhi is offered as an example of a leader who understands this point and who would successfully 'dress down' in order to better, relate to the masses he sought to influence.

Artifacts and Classroom Transaction

Consider the following variables and imagine how they might affect the interaction - amount and source of light, color of the lighting, obvious props, a

podium, blackboard, the size of the room, colors of the walls, floor, furniture, seating arrangements, number of people present, environmental sounds and temperature etc.

Clothing also affects self-confidence. Because clothing affects others' perception, people often dress to fit the part. These clothing cues, however have little effect on those with whom one is familiar. But opposite is true when regarding students' impression of teacher especially first one. In order to establish credibility, the teacher should strive to appear comfortable and at ease in the role, thus removing some of the typical teacher/student barriers. Although outward appearance does not, of course, indicate a person's knowledge, values, or philosophy, dress can communicate; but, in most cases, it is only an outward show.

Another aspect of this situation is that it seems that students form some lasting impressions of their instructors during the first few moments (around 30 seconds) of their contact. Allport (1937) has written: With briefest visual perception, a complex mental process is aroused, resulting within a very short time in judgment of the sex, age, size, nationality, profession and social caste of the stranger, together with some estimate with his temperament, his ascendance, friendliness, neatness, and even his trustworthiness and integrity. If the teacher dresses too heavily, such as, in case of female teachers, if she wears lot of bangles, long ear rings, heavy make-up, uncomfortable dresses, it may affect students' attention in comparison to teachers who dress professionally well. The students have different impact of male teachers who dress formally rather than informally.

- **Physical Appearance:** Height, attractiveness, body shape also accompany our communication. Body type communicates a variety of meanings, particularly as it relates to physical attractiveness. Three general types, each capable of arousing

several stereotypes about personality, can be identified. The first of these is the ectomorph. Ectomorphs are tall, thin, and fragile looking and are thought of as being tense, anxious, reticent, and self-conscious. Mesomorphs are bony, muscular, and athletic and are thought of as being dominant, energetic, and talkative. Endomorphs are described as soft, round, and fat and are thought of as complacent, warm, and sociable.

Physical Appearance and Classroom Interaction

Various studies have explored the effects of personal attractiveness and showed positive relationship between physical attractiveness and

- Effectiveness in influencing audience opinions
- Speakers' success
- In an educational context, a positive relationship was found between attractiveness and grade-point average

The physical attractiveness of students and teachers does serve to influence classroom interaction. This variable, however, is probably less deserving of attention than some others, since communicators do not easily manipulate it. Teachers must be very careful about the stereotypes. Intelligent students don't all look alike, they don't all wear glasses, and they are not all thin. Plump children are not all happy and contented and easy-going. Perhaps the most practical use of this research for educators lies in the admonition that they need to be aware of these tendencies and should strive to avoid favoring attractive students.

Of the above mentioned components of non-verbal communication, body language (particularly facial expressions and gestures), eye contact, use of time, proximity, paralanguage and posture are probably those which teachers most need to

be aware of in terms of conveying meaning, avoiding misunderstandings and fitting in with the target culture. In terms of skills development, non-verbal clues should not be underestimated when developing both the listening and speaking skills. In the classroom communication, different components of non-verbal communication play a noteworthy role as in preceding sections. The awareness and appropriate use of these non-verbal components in classroom could lead to better classroom transaction which in turn could improve the quality of school education. Hence, the present study on non-verbal communication has been undertaken with the rationale given as follow:

1.4 RATIONALE OF THE STUDY

Non-verbal communication has been a focus of attention for some time in areas, such as, the refinement of presentation skills, developing social skills, and even as a realistic alternative to the lie-detector test. Relatively little attention, however, has been given in teaching to non-verbal communication as a complement to spoken language.

Effective teaching requires that a lot of attention is paid to verbal teacher language, using carefully chosen words to help build a positive and productive classroom community. But the way in which these verbal messages are delivered may contribute more to students' understanding than the words themselves, particularly for children over the age of eight. 'Young children focus on the words that teachers use; older children tend to focus more on adults' non-verbal behaviors in their attempts to understand - What does s/he really expect from me?' (Mayo & La France 1978) (as cited in Susan, 2002). Non-verbal communication is a critical aspect of interpersonal communication in the classroom. The most credible messages teachers generate, as communication sources are non-verbal. Mehrabian's (1967) study (as cited in

Mehrabian, 1972) investigated the decoding of consistent and inconsistent communication of attitudes in facial and vocal channels. He found that within a two-channel communication process, 41.4 percent of the message was decoded via facial expression and 19.3 percent was decoded via vocal channels, supporting the theory that non-verbal—in this case, facial—messages have a stronger effect than vocal messages. Hennings' (1971) research revealed that 82 percent of communication by classroom instructors was non-verbal. In addition to the stated and other research findings, teachers should be aware of the dominance of non-verbal behavior in the classroom for two major reasons- (i) it makes teacher a better sender of signals that reinforce learning and (ii) it increases the degree of the perceived psychological closeness between teacher and student. Thus, it is crucial for teachers to be aware of the potential of non-verbal communication in the process of teaching and learning.

In a country like India, where many languages and dialects are used even in one state, there is a loss of large amount of messages mainly during the classroom transaction communicated through verbal communication. If the verbal communication could be added with sufficient and appropriate non-verbal communication which is language and dialect free, it could help in communicating the message of the teachers effectively to the students. It can be possible in analyzing non-verbal communication properly and adding those components in the teacher training programme.

'Flander has developed classroom interaction analysis technique, but non-verbal interaction has not been investigated so intensively and a very few techniques have been developed so far'. (Sharma, 2003). The present study has made an attempt to shed scientifically credible light on this aspect. This study is important because of the need to identify the non-verbal components being used in classroom teaching-

learning and their impact. Through observational analysis of teachers instructing in classroom, the guidance to the better use of components of non-verbal communication could be sought. Moreover findings of the researches in this direction make it hard to ignore the impact that non-verbal components have on instruction delivery. By identifying non-verbal cues used by teacher in the classroom, these can also be used to improve instructional delivery methods for teacher training.

The need to undertake the present study could effectively be summarized as an exploration of issues surrounding the three main foci – identification of components of non-verbal communication, training to use of non-verbal skills to B.Ed. student-teachers, impact of use of non-verbal skills by B.Ed. student-teachers on their classroom interaction. These issues are explored from a better classroom transaction perspective and these give rise to four inter-related areas of significance for educational research.

Firstly, the study makes the contribution to the literature base on the non-verbal communication in classroom transaction. Burgoon (1994) (as cited in Lane, n.d.) has identified seven components of non-verbal communication, while Henely (1977) (as cited in Anderson, 2001) in his study has mentioned some more components of non-verbal communication. The perusal of these studies reveal that some components are indicated in few studies while others are missing its mention in those studies. In the present study, the components of non-verbal communication are identified through extensive literature survey and by observing non-verbal behaviour of teachers in the real classroom.

Secondly, the present study investigates a new development of training programme to the use of non-verbal skills for classroom transaction by B.Ed. student-teachers. In order to conduct the present study, a training programme to orient B.Ed.

student-teachers to the use of non-verbal communication for classroom transaction has been developed. The study may have direct relevance to the implementation of training programme for B.Ed. student-teachers to use non-verbal communication in classroom transaction.

Thirdly, the present study explores the impact of use of non-verbal skills by B.Ed. student-teachers on classroom transaction. Researches in the field of non-verbal communication have been conducted proving the significance of non-verbal communication. It was very necessary to know whether the training on non-verbal communication can improve the classroom transaction by B.Ed. student-teachers.

Finally, the study can prove useful for the integration of non-verbal skills in B.Ed. teacher training programme which in turn can enrich the B.Ed. teacher training programme. Non-verbal communication in classroom can produce subtle influences particularly in affective domain. The inappropriate use of non-verbal skills intentionally or unintentionally may have negative effect on the affective domain of the learner which may distract him in the process of learning. This may take him mentally away from the classroom by developing negative feelings for the learning. Hence, an understanding of non-verbal cues may afford the instructor the ability to stay away from non-verbal cues that can hinder learning.

Furthermore, B.Ed. student-teachers are novice learners entering in the field of education with the goal of understanding the pedagogy of teaching – learning process. The awareness and conscious use of appropriate skills of non-verbal communication will help these neophyte trainees to make the classroom transaction interesting and an enjoyable experience for the students and for the teacher as well. A study by Suri (2007) reveals that the teacher trainees did not significantly improve upon the use of non-verbal communication after usual practice teaching programme.

Moreover, Smith (1977) has reported in his study that 'although reams of material are presented to student-teachers in our institutions as well as to our practicing teachers in our classroom, by way of our in-service meetings, most of it regards verbal presentation. There is little and in some cases no preparation in either cases of student-teachers or teachers with regards to non-verbal behaviour either in the recognition of cues in others (presumably students) or in the development of an effective vehicle for their own non-verbal behavior. In fact, the researcher was able to find no current college catalog stating the requirement of non-verbal training for prospective teachers'.

Considering all the discussed points, the present study has been conducted which may have wider implications for in-service and pre-service teacher education so that they can evaluate their non-verbal communication and can improve upon it to become better communicators. It could result in extremely useful pedagogical information. This can lead to effective classroom transaction which in turn can improve the quality of teaching-learning process. Also, the findings can be informative to researchers who study communication and teacher education. The findings can be informative to teacher educators in all fields who are interested in new methods for enhancing the communication behavior and, therefore, the effectiveness of future teachers. In the process of formulating the present research study and reviewing the related literature the research questions that came in the mind of the researcher are presented in the succeeding section.

1.5 RESEARCH QUESTIONS

The researcher has tried to get the answer of the research questions in the process of this research work which are as follow.

- Whether the skills of non-verbal communication could be used in the practice teaching for B.Ed. students?
- Whether the use of the non-verbal communication in classroom transaction of B.Ed. students will have impact?

1.6 STATEMENT OF THE PROBLEM

A Study of Impact of Non-Verbal Communication of B.Ed. Student-Teachers on Classroom their Transaction.

1.7 OBJECTIVES OF THE STUDY

The study was designed with the following objectives.

- (i) To identify the components of non-verbal communication used by teachers in classroom teaching learning process.
- (ii) To develop a programme on the skills of non-verbal communication for classroom transaction.
- (iii) To orient B.Ed. student-teachers on the skills of non-verbal communication for classroom transaction.
- (iv) To study the impact of the non-verbal communication used by B.Ed. student-teachers on their classroom transaction.

1.8 DEFINITION OF TERMS USED

Training Programme: Programme prepared for experimental group consisting of B.Ed. student-teachers for training on non-verbal communication.

Pre-Orientation Phase: Phase of study before training programme on non-verbal communication during which B.Ed. student-teachers gave lessons in simulated setting.

Post-Orientation Phase: Phase of study after training programme on non-verbal communication during which B.Ed. student-teachers gave lessons in real classroom teaching.

Non-Verbal Communication : The mode of communication by which a person expresses his thoughts or ideas consciously or sub-consciously other than his speech.

1.9 OPERATIONAL DEFINITION OF THE TERMS USED

Non-Verbal Communication : In the present study, non-verbal communication is defined as communication along with verbal communication including components like kinesics, oculusics, paralinguistics, proxemics, chronemics, facial expressions, posture and artifacts used in classroom transaction.

Impact : In the present study, impact is defined as effect of training program on use of non-verbal communication and classroom transaction.

1.10 DELIMITATIONS OF THE STUDY

The present study was delimited to pre-service graduate teacher training programme i.e. B.Ed.

1.11 SCHEME OF CHAPTERS

The purpose of this dissertation was to propose and investigate the impact of non-verbal communication of B.Ed. student-teachers on the classroom transaction. The results could be used in a practical construction of personified representation.

This thesis is organized with the following chapters for denoting the proposing method and its verification of personified expressions.

The first chapter deals with the backdrop of this study outlining the rationale, objectives and delimitations of the study along with the statement of the problem and research questions for the present study.

The second chapter gives an overview of studies related to non-verbal communication confirming the standpoint and perspective of this thesis.

The third chapter is devoted to description of the research design, methods used, the sample selection, thorough description of the procedures used to conduct the research and description of the tools used for data collection.

The fourth chapter presents the results of the study through analysis and interpretation of the collected data.

The fifth chapter concludes the dissertation with the discussions of findings, implications of the study, suggestions for further research and conclusions drawn from the present study.

The sixth chapter presents the summary of the entire study.