# Chapter V

Discussions & Conclusions

# **CHAPTER V**

# DICSUSSIONS AND CONCLUSIONS

# 5.0 INTRODUCTION

The present research was designed to study the impact of non-verbal communication on classroom transaction of B.Ed. student teachers. In relation to this, the analysis of data collected lead to certain important findings. Based on these findings, conclusions of the study and suggestions for further researches are summarized in this chapter under the following heads:

- Discussion
- Implications of the study
- Suggestions for further research
- Conclusion

# **5.1 DISCUSSION**

In pursuance of the objectives of the present study, the data were organized to accomplish the objectives. After the analysis of data answers were sought to the research questions of the study. The findings arrived at are discussed in brief as follow.

# **Components of Non-Verbal Communication**

The components of non-verbal communication as identified from literature review included oculesics, kinesics, paralinguistics, facial expressions, proxemics, chronemics, olfatics, haptics, artifacts, posture and physical appearance. The nonverbal components were also identified after observation of lessons of good secondary school teachers. The components identified by observation of its use by good school teachers of secondary section in classroom transaction were oculesics, kinesics, paralinguistics, facial expressions, proxemics, chronemics, artifacts and posture. These teachers did not use haptics component. It may be due to the reason of misinterpretation of use of this component by students or their parents. As secondary school students are in the adolescent age, the use of haptics can be misinterpreted by the students of both the genders. Therefore haptics component of non-verbal communication was not included in the study. It was not feasible to observe and interpret the olfatics component of non-verbal communication which indicates the body odor or the smell of the teacher; hence this component was also not included in the present study. The manipulation of 'physical appearance' component of nonverbal communication is not practicable separable. Therefore, the manipulation of looks as per the teaching profession was limited to only artifacts of the teachers. Thus, based on the findings in relation to identification of components of non-verbal communication and feasibility of observation, oculesics, kinesics, paralinguistics, facial expressions, proxemics, chronemics, artifacts and posture components of nonverbal communication were included in the present study.

Although the use of above-mentioned non-verbal components was found in the classroom transaction by good teachers, it was observed that the use of these components by teachers was not the best and still there was scope for improvement in the use of these components for classroom transaction. Also, it was not the deliberate effort by these teachers to use non-verbal communication for better classroom transaction. If this was the condition of the 'good teachers' then other teachers may not be even aware of the use and impact of their non-verbal communication on the

ĺ

students and classroom transaction. Teacher education is a programme which shapes the teachers for good classroom transaction. Hence the use of these components of non-verbal communication by a group of student-teachers was studied.

### Use of Components of Non-Verbal Communication

The use of different components of non-verbal communication by experimental group and control group was studied. The findings revealed that in the pre-orientation phase in which student-teachers practiced lessons in simulated settings, the control group was better in comparison to experimental group in terms of use of oculesics, paralinguistics, proxemics and facial-expressions, whereas, the experimental group was better in comparison to control group in terms of use of kinesics, chronemics, artifacts and posture component of non-verbal communication. This could be by chance as a part of their conscious or sub-conscious general non-verbal behaviour along with their verbal behaviour which may not be a purposeful effort by any group for their classroom transaction.

The findings also suggested that there was difference in the use of non-verbal communication by both the groups in the first block of post-orientation phase in comparison to pre-orientation phase. In post-orientation phase, the teaching practice was carried out in the real classroom while teaching practice was carried out in simulated settings in pre-orientation phase. In the pre-orientation phase, the student-teachers practiced teaching in simulated settings, wherein, their peer group played the role of students and researcher along with the trained observer observed their lessons. The student-teachers were familiar with all the observers, the peer group and the environment in which they were practicing lessons, whereas, in post-orientation phase, the student-teachers practiced lessons in the real classroom and the observers

included their supervisor and the class teacher of the class in which they were teaching. Although students were familiar with the supervisor but they were not much familiar with the class teacher and the students of the class. The student-teachers had not yet settled in the new environment in which they were teaching. It can be said that the difference in the use of non-verbal communication might be because of the difference in the settings in which practice teaching was carried out. It can also be interpreted that the practice of skills of non-verbal communication is not sufficient in simulated settings. The skills of non-verbal communication should be practiced in real classroom setting for better shaping.

The findings also communicate that although both the experimental and control groups deteriorated in the use of non-verbal communication in the first block of post-orientation phase, the experimental group was better in comparison to control group in terms of use of all the components of non-verbal communication. Also, the control group declined in the use of almost all components of non-verbal communication in the first block of teaching, whereas, the experimental group improved in the use of oculesics, facial expressions, kinesics and chronemics components of non-verbal communication and declined slightly in the use of paralinguistics, artifacts and posture components of non-verbal communication. Moreover, the experimental group was found better in comparison to the control group in terms of use of all components of non-verbal communication throughout the post-orientation phase of practice teaching. This positive difference in the use of non-verbal communication by experimental group in comparison to control group may be because of training programme on non-verbal communication to which they were exposed before post-orientation phase. In the training programme, experimental group

was given training in the use of non-verbal communication for good classroom transaction.

## Use of Non-Verbal Communication in Different Stages of Teaching

The findings in relation to stage-wise use of non-verbal communication by experimental group and control group suggested that the use of non-verbal communication by control group was better in comparison to experimental group in the introduction stage and presentation stage of the pre-orientation phase of teaching. It was also found that the use of non-verbal communication by control group and experimental group was same in the revision stage of the pre-orientation phase of teaching. However there was decline in the use of non-verbal communication by control group in all the three stages in first block of post-orientation phase, whereas, the use of non-verbal communication by experimental group was same in the introduction stage and there was improvement in the use of presentation and revision stage in the first block of post-orientation phase. Thus, it was observed that when settings of practicing the lesson were changed, i.e., from simulated setting to real classroom teaching, the performance of the control group deteriorated in all the stages of teaching for first block, whereas, the performance of experimental group remained same for introduction stage and improved in presentation and revision stage. This positive difference in the use of non-verbal communication by experimental group even on changing the settings i.e., from simulated setting to real classroom teaching may be due to training programme on non-verbal communication to which they were exposed before changing the settings. Also, the findings related to overall use of nonverbal communication for all the stages of teaching and for all the components of teaching suggested that the use of non-verbal communication by experimental group

was better than the use of non-verbal communication by control group. The better use of non-verbal communication by experimental group in comparison to control group might be because of the training programme on non-verbal communication to the experimental group. Thus, training programme on non-verbal communication can help the student-teachers to improve their classroom transaction. These findings are supported by the results of the study conducted by Aloiso & Klinzing (2006) and Vandivere (2008).

# Classroom Transaction of Experimental Group and Control Group

The classroom transaction of experimental group and control group was studied in terms of maintenance of discipline, classroom interaction, attention of students, interest of students and classroom environment. The findings are discussed as follow.

# MAINTENANCE OF DISCIPLINE

The findings in relation to the maintenance of discipline suggested that the maintenance of discipline by experimental group and control group deteriorated in the post-orientation phase in comparison to pre-orientation phase. This may be because of change of settings in both the phases. In the pre-orientation phase, student-teachers practiced lessons in simulated settings where they taught to their peer group consisting of ten to fifteen peers. It might be easier for them to maintain discipline while teaching peers but in the post-orientation phase, they practiced lesson in real classroom settings. It might be difficult for student-teachers to maintain discipline in the real classroom with the real students. Hence, the maintenance of discipline by both the groups was better in pre-orientation phase in comparison to post-orientation

phase. The findings also suggested that although the maintenance of discipline was better by control group in comparison to experimental group in the pre-orientation phase, the maintenance of discipline was better by experimental group in comparison to control group in the first block of post-orientation phase. Also, the maintenance of discipline by experimental group for all blocks was better than control group in post-orientation phase. This might be because of the fact that the student-teachers of experimental group used appropriately the different components of non-verbal communication to maintain discipline in the classroom like, appropriate use of eye-contact, facial expressions, gestures, posture etc. which they learnt in the training programme on non-verbal communication for classroom transaction before going for real classroom teaching.

#### ATTENTION OF STUDENTS

The findings in relation to attention of students during classroom transaction suggested that both the experimental group and control group were equally able to catch the attention of students in the classroom in the pre-orientation phase where they practiced lessons in simulated settings. However, students were not much attentive in the first block of practice teaching during classroom transaction by experimental group and control group in comparison to the attentiveness of students during classroom transaction by experimental group and control group in the pre-orientation phase. Again, this may be due to the change in settings i.e. from simulated settings to real classroom. It was easy to catch the attention of peer group of ten to fifteen peers in simulated setting in comparison to catching the attention of students in real classroom. The findings also revealed that although the students were equally attentive by experimental group and control group in pre-orientation phase, in the

post-orientation phase, the students were more attentive during classroom transaction by experimental group in comparison to control group in the first block of post-orientation phase. The findings revealed the same results for all the blocks of post-orientation phase i.e., the students were more attentive during classroom transaction by experimental group in comparison to control group. This might be because of the fact that student-teachers of experimental groups made appropriate use of non-verbal communication to catch the attention of students like variation in tone, pitch as per the explanation in lesson, appropriate eye-contact, appropriate gestures, meaningful pauses and keeping appropriate distance between students and student-teachers while explaining, while asking questions etc. The experimental group was trained in the training programme on non-verbal communication to make proper use of these and more components of non-verbal communication to catch attention of students during classroom transaction.

#### **CLASSROOM INTERACTION**

The findings in relation to classroom interaction during classroom transaction suggested that the classroom interaction by control group was better than the classroom interaction by experimental group, in the pre-orientation phase where they practiced lessons in simulated setting, but the classroom interaction of both groups declined in the first block of post-orientation phase. This may be due to the change in settings i.e. from simulated settings to real classroom. However, the findings also suggested that the classroom interaction by experimental group was better than the control group in the first block of post-orientation phase. The findings revealed the same results for all the blocks of post-orientation phase i.e., the classroom interaction during classroom transaction by experimental group was better in comparison to

control group. This positive difference in the classroom interaction might be because of the fact that the experimental group was better in catching the attention of students which in turn lead to better classroom interaction between students and student-teacher in the classroom transaction. Also, experimental group was trained in the training programme on non-verbal communication to use appropriate reinforcing facial expressions and gestures to motivate students for interaction during classroom transaction.

#### INTEREST OF STUDENTS

The findings in relation to interest of students during classroom transaction suggested that the interest of students in the classroom transaction was more when taught by control group in comparison to experimental group, in the pre-orientation phase where they practiced lessons in simulated setting but the interest of the students declined during classroom transaction by both groups in the first block of postorientation phase. This may be due to the change in settings i.e. from simulated settings to real classroom. It might be easier for student-teachers to catch attention of peer group in simulated settings than the actual students in real classroom. However, the findings also suggested that the students were more interested in the classroom transaction by experimental group in comparison to control group in the first block of post-orientation phase. The findings indicated the same results for all the blocks of post-orientation phase i.e., the experimental group was better in maintaining interest of students during classroom transaction than the control group. This might be because of the fact that the experimental group was better in catching the attention of students and was better in improving classroom interaction. The attention of students and improved classroom interaction lead to the development of interest in the students

during classroom transaction. Since students were attentive and interacting in the class, they did not get bore in the class rather took much interest in the development of lesson when taught by experimental group in comparison to control group.

#### CLASSROOM ENVIRONMENT

The findings in relation to classroom environment suggested that the classroom environment was slightly better during classroom transaction by control group in comparison to experimental group, in the pre-orientation phase where they practiced lessons in simulated setting but the classroom environment deteriorated during classroom transaction by both groups in the first block of post-orientation phase. This may be due to the change in settings i.e. from simulated settings to real classroom. It might be easier for student-teachers to maintain better classroom environment when they taught peer group in simulated settings than the actual students in real classroom. However, the findings also suggested that the classroom environment was better during classroom transaction by experimental group in comparison to control group in the first block of post-orientation phase. The findings, revealed the same results for all the blocks of post-orientation phase i.e., classroom environment was better during classroom transaction by experimental group in comparison to control group. The better classroom environment during classroom transaction by experimental group might be because the fact that the class was disciplined, students were attentive, interactive and they took interest in the development of lesson when taught by experimental group. Also, experimental group used reinforcing facial expressions, gestures, posture and appropriate combination of other non-verbal components to make classroom environment lively, to make learning

an enjoyable and joyful experience which they learnt in the training programme on non-verbal communication.

# Impact of Non-Verbal Communication on Classroom Transaction

The findings of the study indicated that there was difference in the use of nonverbal communication and in the classroom transaction by control group and experimental group. This difference was positive in the sense that experimental group was better than the control group in the use of non-verbal communication and in the classroom transaction. The experimental group used appropriate combination of components of non-verbal communication to improve their classroom transaction like, they consciously read the non-verbal cues emitted by students throughout the classroom transaction and used it as immediate feedback to their teaching. They tried to identify the inattentive students during classroom transaction and without ignoring these students, they tried to catch their attention and create interest in them in the teaching-learning process. The student-teachers of experimental group also consciously worked on the non-verbal cues which were hindrance to teachinglearning and tried to avoid these cues. They emitted the non-verbal cues which reinforced learning throughout the classroom transaction. Thus, the student-teachers made a purposeful attempt to use and interpret the non-verbal cues emitted by students and to use appropriate non-verbal communication for good classroom transaction. The experimental group was trained for the appropriate use of non-verbal communication for classroom transaction. The impact of the deliberate efforts of experimental group to use proper non-verbal communication lead to the better maintenance of discipline in the classroom, better classroom interaction, proper attention and interest of students in the classroom transaction and better classroom

environment as compared to control group. These findings indicated that the better use of non-verbal communication of B.Ed. student teachers have the positive and significant impact on their classroom transaction. These findings are supported by the study conducted by Love & Roderick (1971) and Galloway (1972).

The appropriate use of non-verbal communication for classroom transaction can help in maintenance of discipline, making classroom transaction interactive, catching attention of students, sustaining their attention throughout the class which in turn can help in creating interest of students in teaching-learning process and thus making classroom environment lively. It helps student-teachers to understand the psychology of students, to read the non-verbal cues of students to decide whether students are attentive or not and whether they are taking interest in the class or not. The teacher can interpret the non-verbal behaviour of students and use it as immediate feedback; teacher can consciously select the non-verbal behaviour conducive to learning. Thus, the appropriate use of non-verbal communication can help the teacher to understand minute details of classroom teaching-learning process to enhance classroom transaction.

# Reaction of B.Ed. Student-Teachers of Experimental Group Towards Training Programme on Non-Verbal Communication

The findings related to the reaction of students on the training programme on non-verbal communication indicated that the student-teachers of experimental group had positive reaction towards the programme. The reactions of student-teachers of experimental group showed that the training on non-verbal communication created awareness in them about the appropriate use of non-verbal skills which in turn helped them in better classroom management, to make classroom transaction livelier, to stay

away from non-verbal cues which hinder learning and to use the non-verbal cues which enhance learning. Because of the awareness of non-verbal communication, student-teachers were also able to interpret the non-verbal communication of students like, they could identify students who were not attentive in the class by their posture and gestures, the facial expressions of students reflected whether they were able to understand the content delivered by teacher. Thus, student-teachers consciously interpreted the non-verbal behaviour of students to get feedback of their teaching and made changes wherever required. The findings revealed that the student-teachers showed in their reaction that the training programme on non-verbal communication helped them in improving their classroom transaction. It can be said that the training programme on non-verbal communication helps the teachers to make their classroom transaction effective. These findings are supported by the study conducted by Edwards (1997) and Vandivere (2008).

#### 5.2 IMPLICATIONS OF THE PRESENT STUDY

The results of the present study show that the non-verbal communication helps in maintaining discipline in the classroom, helps in catching attention of students, creating interest in students, improving the classroom interaction and making the classroom environment lively and conducive to learning. More precisely, the outcome of the present study is the positive impact of non-verbal communication on classroom transaction. The results of the present study have implications for various fields of education which aim at good classroom transaction for quality education. The implications of the present study are as follow.

### Implications for Pre-Service Teacher Education Programme (B.Ed.)

The present study was conducted on pre-service teachers of secondary education i.e. B.Ed. student-teachers. The results revealed that the appropriate use of non-verbal communication of B.Ed. student-teachers improved their classroom transaction. Thus the findings of the present study have direct implications for preservice teachers. The pre-service teachers can be trained for appropriate use of non-verbal communication for classroom transaction in order to improve their classroom transaction using the training programme developed for the present study. The integration of skills of non-verbal communication in B.Ed. teacher education programme can help to prepare student-teachers for good classroom transaction leading to quality school education. Taking into consideration the heavy curriculum of pre-service teacher education, training in non-verbal communication may not be introduced as a new course rather it should be integrated to the already existing curriculum.

The emphasis can be given on non-verbal cues when training students for other skills of teaching like in questioning skill, student-teachers can be made aware about their posture, tone, facial expression while asking question. Similarly while introducing the explanation skill, the student-teachers should be made aware that the meaningful pauses during explanation (chronemics) and appropriate use of gestures (kinesics), appropriate distance with the students (proxemics), emphasis on proper words and variation in the tone and pitch, the speed of explanation (paralinguistics) can have impact on their explanation of the content. In the similar manner all the skills of teaching can be taught emphasizing the proper use of non-verbal communication in the practice of these skills.

The teacher educator can thus enhance the study of pedagogy when skills of non-verbal communication are deliberately highlighted in the curriculum. This awareness and training on appropriate use of non-verbal communication for classroom transaction alongwith the usual pedagogy of teacher education can completely prepare pre-service student-teachers for actual teaching in the classroom.

# Implications for In-service Teacher Education Programme

The present study was conducted on pre-service B.Ed. student teachers. Hence, although the results of present study have direct implications for pre-service teachers, but these results can be extended to in-service teacher education programme also. The awareness and training on non-verbal communication is helpful to in-service student-teachers also. The in-service student-teachers have the experience of real classroom teaching; therefore they are aware about the intricacies of classroom teaching-learning. They can understand the impact of non-verbal communication easily. For the in-service student-teachers rather an awareness raising approach may suffice the purpose of appropriate use of non-verbal communication for classroom transaction. A detailed discussion on the concept, importance and impact of components of non-verbal communication can be done with the in-service studentteachers during their workshop programmes. This awareness on appropriate use of non-verbal communication and its impact on classroom transaction can help them in classroom management, catching attention of all the students in the class, identifying checking inattentive students, making classroom environment lively and thus improving their classroom transaction.

# Implications for Other Teacher Training Programme (Pre-Primary Teacher Education and Primary Teacher Education)

The appropriate use of non-verbal communication influences affective domain of young learners. The reinforcing non-verbal cues are of prime importance for preprimary and primary level students. The meaningful pauses of teacher while narrating a story or facial expressions of teacher while reading a poem, appropriate gestures and many other such components of non-verbal communication have direct impact on student learning. The training programme on non-verbal communication can be introduced in pre-primary and primary teacher education programme so that the student-teachers of these courses are enabled to interpret the non-verbal cues of young students. They can be made aware of the effect of their non-verbal cues on the students and on the teaching-learning process.

# Implications for Academic Staff Colleges (Orientation and Refresher Course)

The teacher-educators and all the teachers in the field of higher education should also be made aware of the impact of non-verbal communication on their classroom transaction. The non-verbal communication of teachers influences the students in higher education also. They are also distracted in the learning process when teachers emit undesirable non-verbal cues. The negative non-verbal cues emitted by teachers hurt their ego. The teachers in higher education should evaluate their use of non-verbal communication for better classroom transaction so that they can stay away from the non-verbal cues which hinder learning and use the non-verbal cues which motivate the students and reinforce learning. The training programme on proper use of non-verbal communication can be added as one of the aspects to be dealt with in the orientation and refresher courses organized for teachers teaching in

the field of higher education. It can be in the form of discussion on the concept and use of non-verbal communication or in the form of workshop focused at the proper use of non-verbal communication. This can help the teacher community of higher education to become better communicators and successful teachers.

# 5.3 SUGGESTIONS FOR FURTHER RESEARCH

The present study has thrown scientifically credible light on the impact of non-verbal communication of B.Ed. student-teachers on their classroom transaction. Some suggestions in the lines on which further research studies can be conducted are given as follow.

- The present study was carried on pre-service teacher training programme i.e.
   B.Ed. Similar study can be carried out on in-service teacher training programme.
- 2. A comparative study of impact of non-verbal communication of B.Ed. student-teachers on their classroom transaction for different streams like science, social science, commerce and arts can be undertaken.
- 3. A study to find the impact of non-verbal communication of teachers on the academic achievement of students at different levels can be conducted.
- 4. Similar study can be conducted on pre-school teacher trainees to study the impact of non-verbal communication of pre-school teacher trainees on their classroom transaction.
- A study can be conducted on primary teacher trainees to find the impact of non-verbal communication of primary teacher trainees on their classroom transaction.

- A study to find the impact of non-verbal communication of primary teacher trainees on the academic achievement of students can be conducted.
- 7. The present study was qualitative. The similar study can be conducted using quantitative methodology.
- 8. A case study on impact of non-verbal communication on classroom transaction can be conducted.
- 9. A study to find impact of non-verbal communication on classroom management can be conducted.
- 10. In the present study certain components of non-verbal communication viz. haptics, olfasics, physical appearance, artifacts of classroom were not considered due to feasibility of observation. A study to find the impact of these components of non-verbal communication on classroom transaction can be conducted.

# **5.4 CONCLUSION**

The findings of the study lead to the conclusion that the better use of non-verbal communication can prove to be useful in improving the classroom transaction in terms of maintaining discipline in the classroom, making students attentive in the classroom, creating interest of students in the classroom transaction, improving classroom interaction and improving the classroom environment. These findings lead to the conclusion that the classroom transaction by student-teachers can be improved by training them in the better use of non-verbal communication.

The findings of the present study also revealed an important result that both the groups improved in the use of non-verbal communication gradually over previous days although, the improvement was better in experimental group. It can be inferred that training on non-verbal communication is somewhere inherent in teacher education programme. The only effort required is to make a deliberate attempt to highlight it so that student-teachers become aware of the use of non-verbal communication and its positive impact on classroom transaction which can help all the student-teachers to consciously select the non-verbal cues which motivate students for learning. Purposefully, it could be added at different levels in teacher education programme for the improvement of its use. At least they can be made aware how to use it. Training program need not be added as a separate course in teacher education programme, rather just the part of it highlighting the proper and conscious use of non-verbal communication and its impact on classroom teaching-learning process can be included in teacher education programme. Thus the appropriate use of skills of non-verbal communication can be integrated in teacher education without much effort.