

## Significance of Non-Verbal Communication in the Teaching-Learning Process

Muhammad Naeem Butt and Muhammad Shafiq  
Kohat University of Science & Technology, Pakistan

Non-verbal communication is regarded as an important teaching technique that creates an impact on the comprehension of the students, which ultimately results in better learning and understanding of the concepts. The major objective of the study was to explore the significance of non-verbal communication in the teaching-learning process. The population of the study comprised all the teachers and students of Govt. Secondary Schools for boys and girls in rural and urban areas of District Peshawar, Khyber Pakhtunkhwa, Pakistan. A sample of forty teachers and forty students was taken out of the population through simple random sampling technique. Gamma co-efficient was used for the analysis of the data. The results revealed that both categories of respondents understood the importance of non-verbal communication skills in teaching-learning process, and considered this skill more efficient and attractive than the conventional teaching.

**Keywords:** non-verbal communication, facial expressions, body language, spatial distance.

Language is a source of communication among human beings through which they share their feelings, emotions, thoughts and ideas. It includes both verbal and non-verbal communication that plays a significant role in teaching-learning process. The present study focused on facial expressions, body language, eye contact, spatial distance, and pitch of voice as non-verbal communication used in the classroom. Everything speaks in the process of communication including material objects and physical space but we are mostly concerned with speech sounds or verbal production and are little conscious about non-verbal content which is a valuable component of communication. It enhances the meaning of words. A speaker can enhance the interest and curiosity of the listeners with the help of non-verbal communication.

Non-verbal communication plays a very significant role during teaching learning process in the classroom. It exerts a significant impact on the comprehension of the students, which ultimately results in better learning and understanding of the concepts. Although, teachers use non-verbal communication in the class rooms, but if they use it intentionally as a teaching technique to create interest among the students, better results can be obtained in the form of students' learning outcomes.

According to Given (2002), body movements, postures or various other objects provide a concept, an information and motivation than mere energy or matter. In the most general sense, gestures like body movements, dresses, and facial expressions provide a strong feedback to verbal communication.

### Literature Review

Allan and Pease (2004) presented their arguments regarding the importance of non-verbal communication by quoting Albert Mehrabian, who is regarded as pioneer

researcher of body language in 1950s. These researchers reported that impact of non-verbal message is almost 93% that includes tone of voice, intonation and other cues. They further highlighted importance of non-verbal communication by referring to the comments of Ray Birdwhistell who believe that we can make and identify as many as 250,000 facial expressions.

Smile, as a facial expression, is a powerful tool in the hands of a teacher, which can develop the understanding of the students by attracting their attention in the classroom and creating interest in learning. On the other hand, anger, as a facial expression, can be used in the classroom when students are not interested in the teaching-learning process or lose attention. Smile and anger are very powerful tools in the hands of a teacher, which, if used properly and purposefully, can enhance the students' learning outcomes.

According to O'Rourke (2004) communication experts are of the view that less than one third of the meanings are conveyed among the people from our verbal communication. Most of the meanings come from non-verbal sources like facial expressions, body language, eye contact, time spent, clothing, and pitch of voice along with other categories of non-verbal gestures. The same information about the importance of non-verbal communication was provided by Barber (1964) but in a different way. According to the author non-verbal gestures are caused by emotional feelings or being in emotional state than arbitrary or symbolic.

Pitch in the voice can play a very significant role in the teaching-learning process. Rise and fall in pitch of voice can change the meaning of a sentence. Teachers can utilize this technique in the understanding of the meanings of different words, phrases and sentences.

According to Given (2002), pitch of voice arouses emotional and psychological feelings. These feelings also carry information like sarcastic mood, indifferent, superior or docile manner of speaking.

Subsequent to the rationalization about the importance of non-verbal communication provided by Allan and Pease, O'Rourke, Barber, and Given, it is of prime importance for the teachers to use non-verbal cues in their teaching effectively, specially proper use of tone in the teaching of poetry is very essential and useful and creates interest and curiosity among the students.

Miller (1998) argued that spatial distance between teachers and students is very essential and has a great impact on students' understanding. Teachers can easily convey the feelings of acceptance or refusal merely by distance. Teachers have the liberty of space while students don't.

Kroehnert (2006) regarded body language as non-verbal communication and considered it a comprehensive study in itself. According to him some studies indicate that non-verbal signs are used 65% during the communication process whereas others consider it as high as 93% of the total communication.

According to Miller (1988) teachers articulate their feelings of confidence, warmth, likeness, pleasure or displeasure by their facial expressions, intonation, eye contact and spatial distance. If the verbal messages of teachers do not relate with their non-verbal signs, they may create confusion and affect the learning process of students.

The importance of body language is emphasized by Pease (1988). He pointed out that body gestures also work as punctuation marks in communication. Every movement that teachers make has impact on the understanding of the students and when used in comprehensive way produces a great impact on their understanding.

Young (2006) commenting on the importance of non-verbal signals, argued that communication is not merely the use of words but includes the use of body movements, facial expressions, eye contact, distance, tone of voice and clothing. He further stressed the significance of body language by considering it as important for casual communication as for formal presentation.

In addition to the significance of body language stated by various educationists, Lesikar and Flatley (2005) considered face and eyes as the most important features of body language. People look at eyes and face to determine the feelings of happiness, sorrow, fear, surprise and sadness behind the body language. The argument regarding the significance of eyes as non-verbal communication is also supported by Miller (1988) who considered eye as the most reliable feature of non-verbal communication.

The importance of pitch of voice as non-verbal communication is regarded very essential and effective by Mason (2003) and Hopkins (2004). Both the authors considered intonation as a vital ingredient of voice. The pitch and tone of voice can deliver a message very effectively. The tone also plays an important role towards clarity in the

communication. The feelings of anger or happiness can easily be transmitted to the audience with the help of voice texture. Teachers may use intonation in the teaching of stories to make the concept of the students clear and develop a climate in the class that is conducive to learning and understanding.

Every gesture of body is regarded as an important feature of communication. Allan and Pease (2004) believed that hand movements play most important function in communication; as there is more synchronization in human mind and hand movements than any other body part.

Hands and shoulders, as body parts, can tremendously influence the teaching-learning process. Teachers can utilize these parts of body for providing extra information and elicit more importance about different concepts and topics. It also generates a desire for learning among the students as they pay heed to body movements of the teachers and grasp the meaning of the lesson taught.

Witt and Wheelless (1999) conducted a research to examine nonverbal communication expectancies about teachers and enrolment behavior in distance learning. The study focused at exploring the relationship between students' expectations for teachers' non-verbal communication and their enrolment in distance education. For carrying out this research, only one hypothesis and one research question was developed. The sample of the study comprised of two groups of college students: distance and on-site classroom. Both the groups were taught five common courses and data were collected through questionnaires from the respondents. The hypothesis was tested through one tailed t-test and research question was tested through two tailed t-test.

The results revealed that the students of distance learning had less expectation for teachers' non-verbal communication in comparison to on-site classroom students and had fewer enrolments in the courses than on-site students. This clearly suggested that students' expectation about teachers' non-verbal communication was directly related to the enrolment of the students in distance learning. Low level of students' expectancies might have low enrolment in distance learning. It is clearly indicated that non-verbal communication plays a very essential role in the teaching-learning process and students learn a lot from visualizing their teachers in the actual classroom setting.

### Method

It was a correlational study, which best suited the purpose of quantitative research. To draw out the results of the correlation of the ordinal data, Gamma correlation coefficient technique was applied. A 5 point, Likert-type scale was used to collect data.

### Population of the Study

The population of the study comprised all the teachers and students of 103 Govt. Secondary Schools for boys and

girls established in rural and urban areas of District Peshawar, Pakistan.

#### Sample

Sample of the study consisted of 20 Govt. Secondary Schools, including 10 boys and 10 girls schools selected from the rural and urban areas of District Peshawar. The sample comprised 2 teachers and 40 students from each school. The total number of teachers and students comprising sample of the present study was 40 and 800 respectively. However to determine the correlation between teachers and students responses, 40 students were randomly selected from the original group of 800 students. Consequently, responses of 40 teachers and 40 students were used to compute correlation coefficient.

The selection of sampled schools was made through cluster sampling technique, whereas the selection of teachers and students was done through simple random sampling technique.

#### Delimitation of the Study

The scope of the study was narrowed down to facial expressions, eye contact, body movements, spatial distance between the teacher and students, and pitch of voice, as non-verbal communication cues. The study was further restricted to the subject of English taught at secondary school level.

#### Research Instrument and its Construction

Two close ended questionnaires were developed, one each for teachers and students. The questionnaires were designed keeping in view the objective of the study to collect data concerning the importance, awareness, and use of non-verbal communication by the respondents. The teachers and students' questionnaires included 12 items. All the items were to be rated on a 5 point, Likert-type scale. The questionnaires solicited the information from the teachers and students regarding nonverbal communication and their awareness about the same skills as used in the classroom setting. The questionnaires were used to collect the information about body language, facial expression, eye contact, pitch of voice, and spatial distance between teacher and student, in actual classroom setting.

#### Design of the Study

Identical question/ items were selected to devise questionnaires for both teachers and students. Total number of items in each questionnaire was 12. To explore the similarities among items, a correlation technique was employed. For this purpose Gamma co-efficient was used on the said question items. Ordinal variables (n.d) mentioned, "The estimator of gamma is based only on the number of concordant and discordant pairs of observations. It ignores tied pairs (that is, pairs of observations that have equal values of X or equal values of Y). Gamma is appropriate only when both variables lie on an ordinal scale. It has the

range  $-1 \leq G \leq 1$ . If the two variables are independent, then the estimator of gamma tends to be close to zero. Gamma is estimated by  $G = [(P-Q)/(P+Q)]$  with asymptotic variance:"

$$var = \frac{16}{(P+Q)^4} \sum_i \sum_j n_{ij} (QA_{ij} - PD_{ij})^2$$

#### Data Collection and Interpretation

The following discussion presents results of the study based on responses of teachers and students to the questionnaires administered on them. Responses of all the 40 teachers were correlated with the responses of forty students selected through simple random sampling among the total number of students (N=800).

The data presented in Table 1 shows Gamma Coefficients of Correlation based on paired observation of teachers' and students' on 12 questions comprising the questionnaires. The first question asked from the teachers was whether or not different facial expressions helped in understanding various concepts of a lesson. The responses of both teachers and students were recorded on 5 point, Likert-type scale. The correlation between the levels of responses was found through Gamma correlation co-efficient. The result showed that there was significant correlation between the levels of responses.

The second question asked from the respondents was whether or not different facial expressions positively affected the teaching learning process. The correlation between response levels found through Gamma correlation co-efficient shows that their response levels were significantly correlated with one another. This illustrates that both teachers and students agreed to the same level of responses.

One of the most important facets of non-verbal communication is making the environment of classroom alive. The third question posed to the respondents was whether or not eye contact made the students attentive in the classroom. The data presented in Table 1 illustrates that the correlation between levels of responses, calculated and tested for significance through Gamma correlation co-efficient, reveals that the response levels were significantly correlated with one another.

Eye contact is an important element of non-verbal communication that a teacher can utilize for the better learning of the students in the classroom. Next question asked from both the teachers and students required to answer whether or not the regular eye contact made the classroom climate alive. The correlation between the response levels was calculated and tested the significance through Gamma correlation co-efficient. The result was found highly significant demonstrating that both teachers and students agreed upon the same level of responses.

Table 1

*Gamma coefficients of correlation: Ordinal by Ordinal*

Items	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
1. Facial expressions help the students in understanding lesson	.756	.141	4.344	.000
2. Teachers' facial expressions positively affect teaching	.677	.171	3.709	.000
3. Teachers' eye contact makes students attentive	.782	.188	3.212	.001
4. Teachers' regular eye contact makes the classroom environment alive	.552	.216	2.418	.016
5. Body movements of teachers help students' understanding	.389	.212	1.748	.080
6. Teachers' body movements make classroom environment conducive to learning	.791	.127	3.987	.000
7. Use of body movements in teaching of stories	.830	.113	5.343	.000
8. Very high pitch of teachers' voice creates problems	.443	.183	2.346	.019
9. Low pitch of teachers' voice creates problems	.457	.211	2.008	.045
10. Soft pitch of teachers' voice attracts the attention of students	1.000	.000	2.998	.003
11. Teachers keep fair distance from students	.433	.173	2.384	.017
12. Students get confused when teachers come closer	.830	.075	5.039	.000

Another question was asked from the respondents to examine the importance of body movement in the teaching-learning process. Their responses were recorded on ordinal scale. To check the correlation between teachers' and students' responses Gamma correlation co-efficient was calculated and tested. The values given in Table 1 suggest that there is a significant correlation among the responses. This indicated that both teachers and students were familiar with the importance of body movement in the teaching-learning process.

A question was asked from both the groups of respondents whether or not body movements of the teacher made the classroom environment more conducive to learning and their responses were recorded. The relationship between the responses was calculated and tested whether both gave same responses or different. The calculated values in Table 1 suggested a strong correlation between the responses, which reflected that both the groups mostly agreed upon the same level of response.

Stories are interesting and fascinating part of the teaching-learning process. A question was asked from the respondents whether or not body movements of the teacher made it more interesting for the students. The data presented in Table 1 highlighted the relationship between

the responses. The calculated values suggested that there was significant relationship between the responses, which revealed that both the groups were aware of the fact that body movements made the teaching of stories more interesting and informative for the students.

Pitch of voice plays an important role in the teaching-learning process. It was asked from both teachers and students whether or not high pitch of voice made problems in the teaching-learning process. The responses of both the respondents were recorded and explained in Table 8. The relationship between the responses was calculated and tested with the help of Gamma correlation co-efficient. Both categories of respondents agreed upon the same level of responses. It clearly indicated a strong relation and showed that both groups were aware of the fact that high pitch of the teachers' voice created problems for the students in the teaching-learning process.

A question was asked from the respondents whether or not low pitch and tone of the voice made problems in understanding of lesson. The relationship between the responses of teachers and students was calculated and tested. The result presented in Table 1 indicated that there was significant relationship between the responses of both groups, which revealed that both the groups were aware of

the fact that low pitch and tone of the teacher's voice made it hard for students to understand the lesson.

A question was asked from the respondents whether or not soft pitch attracted the attention of the students towards the teaching-learning process in the classroom setting. The relationship between the responses of both teachers and students was recorded and tested. The result placed in Table 1 highlighted that there was significant relationship between the responses of teachers and students. This indicated that teachers and students were well aware of the importance of soft pitch of the teacher's voice in teaching learning process.

Teacher-student distance in the classroom plays an important role in learning process. A question was enquired from teachers and students, whether or not teachers kept fair distance from the students in the classroom. The responses from teachers and students were recorded on ordinal scale. To see the correlation between the responses it was calculated and tested. The values showed in Table 1 that there was strong correlation between the responses of teachers and students, which asserted the importance of distance between teachers and students in the actual classroom setting.

Another delicate and sensitive issue in the classroom teaching is distance between teacher and student that plays an important role in the teaching-learning process. A question was posed to teachers and students about the spatial distance in the class and its effect on their teaching and learning respectively. To see the correlation between the responses of both groups, it was calculated and tested. The result presented in Table 1 confirmed that there was strong relationship between the responses and both the groups agreed upon the same level of response.

### Conclusions

On the basis of data collection and interpretation, following conclusions were drawn:

1. Both categories of the respondents were of the opinion that facial expression is an important tool of the teaching-learning process, and could make this process more efficient and attractive.
2. Teachers and students were of the opinion that eye contact is an important technique of the teaching-learning process and make the classroom environment conducive to learning.
3. Importance of the body movements in classroom teaching was found lucid from the responses of teachers and students who endorsed the importance of the body movements during the teaching-learning process and especially during the teaching of poetry.
4. All the respondents agreed to the statement that rise and fall in teachers' voice positively affected the teaching-learning process in the classroom and if the pitch of teachers' voice was not maintained properly it could bring problems in understanding of a lesson.
5. Appropriate distance between teachers and students was viewed very necessary for the proper learning of the students and acceptable distance in the classroom was found very conducive to learning environment.

### Recommendations

Based on data interpreted and conclusions of the study, following recommendations are made:

1. Teachers at all levels may be given an orientation in non-verbal communication and the skills thus acquired must be utilized in their teaching methodologies for the attainment of learning outcomes.
2. Facial expressions are the primary type of non-verbal communication, which, if utilized properly by teachers, surely enhance the understanding of the students about the concepts taught in the classroom. Extra use of facial expression during the teaching-learning process is not recommended.
3. Body movements of the teachers create interest and attentiveness among the students and especially in the teaching of stories; therefore, teachers may purposefully use their body movements in their teaching.
4. Teachers may be aware of the fact that body movements are used where and when required because excess of body movements can spoil the purpose of its utilization.
5. Eye contact with the students in the classroom is very pivotal for active participation of the students. Therefore, it is highly recommended to make proper eye contact with students to make them alert and active during the teaching.
6. In teaching of poetry, intonation plays a very essential role. Teachers may vary their tone in the teaching of poetry to create interest among the students.
7. Rise and fall in the voice of teachers help the students in understanding the theme, setting, and beauty of the poems. It is highly recommended that teachers must exercise intonation or rise and fall in the pitch of their voices in the teaching of poetry.
8. Proper distance between teachers and students in the classroom is very sensitive; hence should be taken into consideration. Teachers may be aware of the proper distance with the students and keep it active in the classroom.
9. It is highly recommended that curriculum planners and policy makers must also recognize the importance of non-verbal communication and make it a part of the teacher education programs so that prospective teachers are trained in this important teaching skill.
10. It is also recommended to the future researchers to conduct studies on the role of non-verbal communication in different subjects with different methodologies.

## References

- Allan & Pease, B. (2004). *The definite book of Body language*. Buderim, Australia: Pease international. Retrieved on May 26, 2010 from <http://www.4shared.com/network/searches>.
- Barber, C. (1964). *The story of language*. London: Pan Books. (p.25).
- Given, D. B. (2002). *The nonverbal dictionary of gestures, signs & body language cues*. Washington: Centre for nonverbal studies press. Retrieved from <http://www.4shared.com/network/searches> on May 26, 2010.
- Hopkins, L. (2004). Accent and tone of voice. Retrieved from <http://www.4shared.com/network/searches> on June 22, 2010.
- Kroehnert, G. (2006). *Basic training for trainers* (3<sup>rd</sup> ed.). New Delhi, India: McGraw-Hill. (p. 151).
- Lesikar, R. V., & Flatley, M. E. (2005). *Basic business communication: Skill for empowering the internet generation* (10<sup>th</sup> ed.). New York: McGraw-Hill.
- Miller, P. W. (1998). *Nonverbal communication: what a researcher says to the teachers* (3<sup>rd</sup> ed.). USA: Nea. (pp. 6-7).
- Ordinal variables (n.d). "The estimator of gamma is based---" Retrieved from <http://eom.springer.de/G/g043290.htm> on October 10, 2010.
- O'Rourke, S. J. (2004). *Management communication, A case-analysis approach*. Delhi, India: Pearson Education.
- Pease, A. (1998). *Body language: how to read other's thoughts by their gestures*. UK: Sheldon Press. (p. 5).
- Witt, P. L., & Wheelless, L. R. (1999). Nonverbal communication expectancies about teachers and enrolment behavior in distance learning. *Communication Education*, 48 (2), 149-154.
- Young, D. J. (2006). *Foundations of business communication: An Integrative approach*. New York: McGraw-Hill. (pp. 194-196).

**Received:** March 25, 2013

**Revision Received:** May 17, 2013