

Study Of Charles Galloway Feedback System (CGS) In Terms Of Communication Skills Of B.Ed. Students**Dr. Jyoti Gangrade**

SDPS Women's College, Indore, M.P., India

Email- j.gangrade0801@gmail.com

INTRODUCTION

"Education is a conscious and deliberate process in which one personality acts upon another in order to modify the development of the other by the communication, manipulation and knowledge".

• Adams

It is clear from the above definition that the process of modifying the behavior of a student can be conscious and a deliberate effort by the teacher through communication and knowledge. Thus, we can say that modification of behavior could be done through interactions in the teaching learning process.

Teacher is the pivotal point and the heart of the matter. Education takes place through the interaction between the teacher and the taught. Teacher is the maker of man. He trains the mind, cultivates the manners and shapes the morals of members of community at their most impressionable age. However, it can only be possible if we have effective and capable teachers for bringing such changes in the behavior of the growing children.

Teaching is to cause the child to learn and acquire the desired knowledge, skills and also desirable ways of living in the society. The main aim of teaching is to help the child to respond to his environment in an effective way. According to Burton "Teaching is the simulation guidance, direction and encouragement of learning." The definition has four key words which need to cause motivation in learner to learn new things. It is to create an urge to learn. Direction means that teaching is not haphazard activity but, it is a goal directed activity, keeping into consideration the economy of time and effectiveness of

learning, guidance means to guide the learners to develop his capabilities skills, attitude and knowledge to the maximum for adequate adjustment in the external environment and the last key word is encouragement of learning to encourage the learner to acquire maximum learning. Teaching is manifested in various acts that a teacher carries out in congruence to certain professional rules and principles. Thus, we can say that good and efficient teachers on account of their magnificent qualities, virtues and skills may prove a boon to proper growth and development of the personality of the students. Therefore, teacher could be made efficient through proper training process.

Many people are in the opinion that teaching is an art since teachers are born and not made. Paintal (1980) opined that there may be few who are born teachers but majority of us have to be made, and even the born teachers can benefit from the psychological principles underlying in teacher training programme. Teaching is a complex / many sided activity consisting of a number of verbal and non-verbal acts, like, questioning, explaining, drawing, rewarding, smiling, nodding, movements etc. the complex task of teaching has been analyzed into limited but well defined components called teaching and skills. For inducing desired behavior or bringing needed modification

in the existing behavior of teacher, techniques such as shaping and modeling, Role Playing, Micro-teaching, Flander's Interaction Analysis etc. can be used. With the help of these techniques, the appropriate behavior is played by a model, for observation. This model may be the teacher trainer himself. Thus, the role of teacher trainer is very important in the student behavior modification. The process of training includes the cycle of plan, perform / feedback, which may continue till the trainee attains the desired standard teacher behavior. Therefore, feedback plays an important role in becoming an effective teacher.

The different types of Feedback are as follows:

- **Positive feedback:** After delivering the lesson on a particular content the teacher's trainee is made aware about the correctness of his/her performance or teaching behavior. Such type of feedback acts as a motivating factor.
- **Negative feedback:** After delivering the lesson on a particular content the teacher trainee is made aware about his/her undesirable teaching behavior or performance. Such type of feedback might hinder the process of development of the teacher trainee if given in the absence of positive feedback.
- **Mixed feedback:** It is evident from the above discussion that mixed feedback must be provided to the teacher trainees. In such type of feedback, the positive feedback works as a motivating factor while the negative feedback helps the teacher trainee to focus upon his / her weaknesses. Consequently, it helps in better performance of the teacher trainee.

The systematic observation of the teacher behaviour and interaction in the classroom can be studied through various feedback devices and interaction analysis techniques as-

- Flanders Interaction Analysis Category System (FIACS).
- Verbal Interaction Category System (VICS)
- Reciprocal Category System (RCS)
- Equivalent Talk Categories (ETC)
- Charles Galloway System (CGS) etc.

THE CHARLES GALLOWAY SYSTEM OF INTERACTION ANALYSIS

In category system, teacher behavior is first divided into various units. A behavior unit is then classified into categories. In this system, at regular intervals of the observation period the category is observed. The Charles Galloway System of Interaction Analysis represents a good example of the category interaction analysis.

This system of Interaction Analysis was developed by Charles Galloway in the form of a teachers' training technique. It is basically a category type system involving categorization of all sets of possible verbal and non-verbal behavior of a teacher in the classroom while interacting with the students.

In total there are ten categories of verbal behavior and ten categories of non-verbal behavior. These are divided into three major sections (a) Teacher talk (b) Student talk and (c) Silence on Confusion.

In this system relevance to the non-verbal cues is given along with the verbal behavior, as the teachers do convey information to students through non-verbal cues. These cues can be either spontaneous or managed and facilitate any effort to understand others and to be understood.

Since, the teacher is the important figure in his classroom and his behavior is one of the most important factor in producing communication and subsequent

interactions. Thus, this system provides a unique approach to a more complete analysis of interaction in the classroom as it combines both verbal and non-verbal dimensions of teacher behavior.

Assumptions of Charles Galloway System

The assumptions of Charles Galloway System are as follows:

- Non-verbal communication of a teacher does have a significant role in classroom interaction.
- As one cannot see when he / she behaves, so, a feedback is necessary for the behavior.
- The non-verbal cues are important, as they can reinforce and can motivate a student.
- Non-verbal communication can be more effective during interaction in the classroom.
- Becoming aware of his non-verbal events occurring around us, one can achieve a better understanding of himself.
- Training of teachers enhances the aspect of non-verbal communication in teachers.
- The system is based upon the theory of modification of the teacher's behaviour.

COMMUNICATION SKILL

The term communication has been derived from the Latin word "Communis" meaning "Common".

"Communication is a process of sharing or exchanging experiences, information, ideas, opinions, sentiments, thoughts and feelings etc. between the source of communication and the receiver through some mutually agreeable or known media (verbal or non-verbal)."

Communication Skill could be defined as- "We all use language to communicate, to express ourselves, to get our ideas across and to connect with the person to whom we are speaking. When a relationship is working, the act of communicating seems to flow relatively effortlessly. When a relationship is deteriorating, the act of communicating can be as frustrating as

climbing a hill of sand". (Chip Rose, attorney and Mediator)

Communication can be broadly classified into two categories i.e. verbal and non-verbal. The communication strategies in which both oral and written form of language is used, is termed as verbal or writing communication strategies. The communication of feelings and thoughts through non-verbal means with or without making use of any verbal or written language is known as non verbal communication. The details related with verbal and non verbal communication strategy are as follows:

(i) Verbal communication strategy

Language is the key and base of any verbal communication. The use of language can take one of the three forms i.e. oral, written and oral plus written. In the classroom communication, a teacher writes on the blackboard, also makes use of language for the explanation and exposition of the written contents. In this way oral form combined with written form of communication or vice-versa always proves more effective, than any of these forms used separately.

(ii) Non-verbal strategy

Non Verbal Communication refers to "all external stimuli other than spoken or written words and including body motion, characteristics of appearance, characteristics of voice and use of space and distancing." All these non verbal cues taken together are known as body language.

Communication process can also be carried out without the use of any verbal means (written or spoken language). In the normal situations non-verbal media is generally used for giving strength and effectiveness to the verbal communication. Some of these important modes of non-verbal communication are as follows:

- **Facial expressions:** Face and the facial expressions may be said to be a true index of one's emotional and thinking behaviour. When one is perturbed, his face gives the identity of the level of his anxiety and stress. Similarly, when one is in happy

mood or joyful, his or her facial expression conveys the same to others. Thus, these may be termed as one of the most important modes of non-verbal communication.

- **Language of Eye:** Eyes, in fact, in a very forceful way may convey all what is intended to be communicated by the communicator. Actually eye to eye contact forms the very basis of effective communication. In the classroom, the necessary interaction links between teacher and pupils are mostly maintained through eye language. The eye contact of a teacher with pupil may encourage or discourage in giving response.

- **Body Language:** Our body has an impressive and effective language for communicating our feelings, thoughts and actions. It includes various gestures, postures and movements of body parts. It could be effectively used by the teachers and pupils in the classroom for the healthy interaction in all types of teaching-learning situations.

- **Sound symbols:** Many of the sound symbols and vocal cues also prove an effective medium for the desired communication. For e.g. when a teacher narrates or explains something and he/she in responding simply by uttering the sound hunch-hunch, it may work well for maintaining communication.

- **Symbolic code language:** Special code language prepared with the help of various gestures, postures and body movements, which can be used for communicating with deaf and dumb.

TEACHING APTITUDE

Bingham defines Aptitude “As a condition symptomatic of a person’s fitness of which one essential aspect is his readiness to acquire proficiency his potential ability and another in his readiness to develop an interest in exercising his ability.”

An aptitude is a combination of characteristics indicative of an individuals’ capacity to acquire some specific knowledge skill or set of organized responses such as the ability to become an artist or to be a mechanic. An aptitude test

may be deferred as a test which measures a person’s potential ability in an activity of a specialized kind and within a restricted range. Aptitude means an individual’s aptitude for a given type of activity, the capacity to acquire proficiency under appropriate conditions. It reveals an individual’s promise or essential teach ability in a given area.

Some of the Implications of Aptitude for Teachers could be as-

1. Aptitude includes both in born capacity and the effects of environment on the individual.
2. Learning in any area is conditional by the learner’s readiness to learn.
3. A specific aptitude in the form of talent may show itself early and respond readily to training in future.

Rationale

Teaching cannot be imagined without communication. As teaching is a two-way process and there is a continuous interaction with students so, all the elements of communication i.e. Reading, Writing, Listening and Speaking play an important role in the process. Teachers should have a good communication skill for a meaningful and effective teaching. So, communication skill was chosen by the investigator for the present study as a dependent variable. Some of the researches in this area are as: Patil (1995), Macfarland (1998), Singh (2002), Joshi (2004), Philomen (2004), Chandel and Suri (2009), Sharma (2009) and Shrivastava (2010). From the above details of the research work indicates that these finding are not enough to relative the communication skill with teaching behaviour so, communication skill has been chosen as an important variable for the present study. It would enable a teacher of how to use the appropriate elements of communication skill while sending and receiving messages in his/her teaching.

Further, it can be said from the above details that Communication Skill was taken as dependent variable and Teaching

Aptitude was taken as covariate for the present study.

STATEMENT OF STUDY

The problem of present research is worded as:

“Study of Charles Galloway Feedback System (CGFBS) in Terms of Communication Skill of B.Ed. Student”

OBJECTIVE

To study the effect of Treatment, Teaching Aptitude and their interaction on the communication skills of B.Ed. students by taking Pre communication skills as covariate.

HYPOTHESES

There is no significant effect of Treatment, Teaching Aptitude and their interaction on the Communication Skills of B.Ed. students by taking Pre Communication Skills as covariate.

KEY WORDS

The Charles Galloway System of Interaction Analysis

In category system, teacher behavior is first divided into various units. A behavior unit is then classified into categories. In this system, at regular intervals of the observation period the category is observed. The Charles Galloway System of Interaction Analysis represents a good example of the category interaction analysis.

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In this system relevance to the non-verbal cues is given along with the verbal behavior, as the teachers do convey information to students through non-verbal cues. These cues can be either spontaneous

or managed and facilitate any effort to understand others and to be understood.

Since, the teacher is the important figure in his classroom and his/ her behavior is one of the most important factor in producing communication and subsequent interactions. Thus, this system provides a unique approach to a more complete analysis of interaction in the classroom as it combines both verbal and non-verbal dimensions of teacher behavior.

Communication Skill

Communication skill is the ability to use language (oral or writing form as verbal and facial expression, eye contact, body language, sound symbols and symbolic code language as non verbal) for reception and expression, information, ideas, opinions, sentiments, thoughts, feelings etc. between the source of communication and receiver.

Teaching Aptitude

Bingham defines Aptitude “As a condition symptomatic of a person’s fitness of which one essential aspect is his readiness to acquire proficiency his potential ability and another in his readiness to develop an interest in exercising his ability.”

An aptitude is a combination of characteristics indicative of an individuals’ capacity to acquire some specific knowledge skill or set of organized responses such as the ability to become an artist or to be a mechanic. It reveals an individual’s promise or essential teach ability in a given area.

CONSTRUCTION OF TOOLS

The tool was constructed by the researcher:

Communication, in its literal sense, stands for the act of communicating. The term has been derived from the Latin word ‘communis’ meaning ‘common’. In this sense, as a verb, the term stands for an act of sharing commonness or common understanding and experiences with others. Communication is a two way process involving interaction between two or more person (on giving and receiving ends) is carried out in a cycle.

Definitions of Communication

According to Dictionary of Education - "Imparting of a message not only verbally but also through body language and use of space, voice and eye contact".

Edgar Dale (1961) has defined as "Communication is defined as the sharing of ideas and feeling in a mood of mutuality".

Definitions of Skill

According to Good (1973) "Skill is anything that the individual has learned to do with ease and precision; may be either a physical or a mental performance".

According of Dictionary of Education (2008) "Refers to systematic and co-ordinate pattern of mental and physical activity, involving both receptor processes and effector processes. Skill may be perceptual, motor, manual, intellectual, social etc".

Definition of Communication Skill

"We all use language to communicate, to express ourselves, to get our ideas across and to connect with the person to whom we are speaking. When a relationship is working, the act of communicating seems to flow relatively effortlessly. When a relationship is deteriorating, the act of communicating can be as frustrating as climbing a hill of sand". Chip Rose, attorney and Mediator.

Operational Definition of Communication Skill

For present research Communication Skill is operationally defined as -

Communication skill is the ability to use language (oral or written form as verbal and facial expression, eye contact, body language, sound symbols and symbolic code language as non verbal) for reception and expression, information, ideas, opinions, sentiments, thoughts, feelings etc. between the source of communication and receiver.

DIMENSIONS OF COMMUNICATION SKILL

Communication skill is the ability to use language for reception and expression of information. For effective communication by teacher and students, reading, writing, speaking and listening are important. The

details related with these components are as follows-

(i) Active Listening: Active listening is a way of listening that focuses entirely on what the other person is saying and confirms understanding of both the content of the message and the emotions and feeling underlying the message to ensure that understanding is accurate. Active listening can be made effective by using following behaviors-

- Make eye contact: listener may listen with his/her ears but, others tend to judge whether he/she is really listening by looking at his/her eyes.
- Exhibit appropriate facial expressions: an effective active listener shows interest in what's being said through non-verbal signs.
- Avoid distracting action gestures: while listening one should not look at watch, shuffle papers, play with pencil or engage in similar distraction. They make the speaker feel, that the listener is getting bored or uninterested.
- Ask question: The critical listener analyzes what he or she hears and asks question the behaviour, provides clarification, ensures understanding and assures the speaker that one is really listening.
- Paraphrase: is to restore in one's own words what the speaker has said, the effective active listener user phrases such as "what" I hear you saying is "Or" do you mean? Paraphrasing is an excellent control device to check whether or not one is listening carefully and is also a

control for accuracy of understanding.

- Avoid interrupting the speaker: let the speaker complete his or her thoughts before a person tries to respond, don't try to second guess where the speakers' thoughts are going.
- Don't over talk: most of us would rather speak our own ideas than listen to what others say.

(ii) Speaking: speaking can be made effective by using following behaviors:

- Use of main points - To illustrate the content one uses the main points keeping in mind, the objectives.
- Use of audio - visual aids: appropriate selection of A - V aids and proper use of it, while teaching.
- Selection of appropriate words, their synonyms and antonyms while teaching.
- Information given during the lecture should be interesting and true.
- Lecture should be followed by a summary and recapitulation.

(iii) Reading: Reading can be made effective by using following behaviors:

- Reading volume is an important factor for effective reading.
- Appropriate difficulty texts should be used as a standard.
- One has to read superficially, the headings subheadings and highlighted words for effective reading.
- Reading activity is to highlight, take note and summarize the content.

- Scanning Reading involves reading for a specific focus i.e. when, we look for a name in the phone book.
- Critical reading involves, reading the full texts for critique or evaluate to see the relationship.
- Thorough reading should be done to understand the whole text and to learn.

(iv) Writing: Writing can be made effective by using following behaviors:

- Clear ideas- while writing one should try to minimize the number of ideas in each sentence, so that people understand, between the lines meaning.
- Concise - writing should be to the point, in brief.
- Concrete - message written should have a clear idea of what the sender wants to say.
- Correct - writing should be grammatically error free.
- Coherent - writing is relevant to the main topic and in a logical sequence.
- Complete - writing should imply the complete meaning to the audience.
- Courteous - writing should have openness, honesty and friendliness. It should be empathetic to the need of the readers and should not have hidden insults or tones.
- Create an outline - while writing one should break the content into manageable pieces and also use graphs and charts to break up the text.

Sample at Experimental Stage

The sample at Experimental stage comprised of 124 students, from School of Education, DAVV, Indore, Shri Vaishnav

College of Teacher's Training and Gujarati B.Ed. College, Indore. These colleges were selected purposively. 62 students for experimental group and 62 students for

control Group (Traditional Approach) were selected. The number of students, college wise and Group wise are given in table.

Table: Treatment wise distribution of sample at experimental stage

S. No.	Name of College/ Department	Treatment	No. of students
1	Shri Vaishnav College of Teacher's Training, Indore.	T – Group (CGS)	20
2	Gujarati Samaj B.Ed. College, Indore.	T – Group (CGS)	32
3	School of Education, DAVV, Indore.	T – Group (CGS)	10
4	ILVA B.Ed. College, Indore	Traditional Approach	50
5	Shiv Kumar B.Ed. College, Indore.	Traditional Approach	12

From the table, it can be seen that the sample was drawn from four colleges namely 20 students of Shri Vaishnav College of Teacher's Training, 32 students from Gujarati Samaj B.Ed. College, 10 students from School of Education, belonging to D.A.V.V. affiliated colleges of Indore City. Subjects were from both Rural and Urban Area. The age ranged between 23 - 40 years. The students belonged to different Socio -Economic Status and their medium of instruction was Hindi and English.

EXPERIMENTAL DESIGN (Non Equivalent Control Group Design)

The present study was Experimental in nature. The non equivalent control group design was used. This could be shown as below:

O	X	O

O	-	O

Where,

O = Observation

X = Treatment with CGS of FB

- = Treatment with Traditional Approach

Table: Schematic representation of the Experiment

Activity	Experimental Group	Control Group	Time
Pre- Testing of Dependent Variable	Administration of Communication Skill Scale	Administration of Communication Skill Scale	25-30 Min.
Treatment	Feedback through Charles Galloway System	Treated Traditionally	15-25 Min.

----- = Non equivalent Group

There were two groups; one was designated as Experimental and other as Control Group. The students of B. Ed College were selected randomly. Both the groups were pre- tested for both Communication Skill Scale and Teaching Effectiveness Scale. The Experimental Group was treated with the Feedback through Charles Galloway System of Interaction Analysis. The feedback was given by the researcher.

The total Treatment duration was 8-10 individual Feedback sessions at the rate of 15-20 minutes per day after complete observation of teaching period and rest of days they were observed by teacher for 5-7 minutes and individual feedback was given in their feedback copies on the other hand Control group continued with the Feedback through traditional method. At the end of the treatment both the groups were post- tested with the same tools, used for pre- testing. The Independent variable namely, Teaching Aptitude was assessed during practice teaching in both groups.

Testing of Independent Variable during practice teaching	Administration of Teaching Aptitude Test	Administration of Teaching Aptitude Test	40-50 Min.
Post testing of Dependent Variable	Administration of Communication Skill Scale.	Administration of Communication Skill Scale.	25-30 Min.

TOOLS

TEACHING APTITUDE

For the assessment of teaching aptitude Hindi version of '**Teaching Aptitude Test**' by Dr. Jai Prakash and R. P. Shrivastava (1973) was used. There was no time limit but, the subjects took 40-45 minutes to respond. The test consisted of 150 items/ statements in 5 parts. Separate answer sheet was given which had 5 boxes to put a tick mark i.e. strongly agree, decided, disagree. The students were asked to read the statements carefully and then give the answer. The reliability through test - retest was 0.94 the validity 0.5. This test was standardized on 1050 pupil teachers' students of B.Ed. class. This tool is in Hindi language.

COMMUNICATION SKILL

In the present study, investigator developed a '**Communication Skill Scale**' to assess the Communication Skill among the students of Experimental and Control group. The various dimensions of Communication are: Active Listening, Speaking, Reading and Writing. The scale consisted of 60 statements. Against each statement, five columns with degrees like, to very high extent, to high extent, to moderate extent, to low extent and to very low extent are given. Students are asked to read the statements carefully and put a tick mark in any one of the corresponding columns. Marks allotted were +5, +4, +3, +2, and +1 for the positive statements and +1, +2, +3, +4 and +5 for the negative statements for respective columns. The test - retest reliability coefficient for the scale was 0.87. The details related with standardization is given in Chapter III.

PROCEDURE OF DATA COLLECTION

The present study was experimental in nature. There were two groups one was designated as experimental group and the other as control group. The data was collected from both the groups with respect to communication skill and Teaching Aptitude from four B.Ed. colleges situated in Indore District/ City (i.e. School of Education, DAVV Indore, Shri Gujrati Samaj B. Ed. College, Shri Vaishnav B.Ed.college, and ILVA B.Ed. College). For these, the permission from the principals of the selected colleges was taken. The students taken up for the experiment were oriented about the objective of the experiment with a purpose to establish a rapport with them. The data was then collected for the above mentioned variable. The instructions mentioned in respective manuals were followed so as to get the reliable data. Further, the care was taken not to administer more than one test on a day.

After pretesting, Experimental group sample was treated with CGS for 8-10 feedback sessions at the rate of 15-25min. per day after observation of their teaching. Here, the treatment was to provide feedback to the student teachers' after completion of their Practice lesson. During the treatment, Teaching Aptitude Test of the students of experimental and control group was assessed with the help of with the help of Dr. Jai Prakash and R.P Shrivastava (1973). At the end of the treatment, both the groups were post tested for the same variables using same tools as at the pre testing stage while, in Traditional Approach the Feedback was given in their Feedback copies in the form of tips.

PROCEDURE OF PROVIDING FEEDBACK THROUGH CGS WITH THE HELP OF COMPUTER

In this system also, the process includes observation of the classroom event. The observer selects an appropriate position in the classroom to listen and watch the events as smoothly as possible without disturbing or interfering in the spontaneous activities of the classroom.

Procedure of providing feedback included both the Mechanical and live source i.e. Investigator/Supervisor. Supervisor is usually the main source and Mechanical source included the use of computerized programming meant to record each and every detail through Charles Galloway Category system or Interaction Analysis. It involves verbal behavior categories of teacher trainees from 0 to 9 (same as that of Flander's Interaction Analysis), Non verbal categories corresponding to these i.e. the behavior is congruent (when the non verbal expressions are shown in the appropriate manner) and the behavior is incongruent (when the non verbal expressions are not shown but, it is

required or shown in an inappropriate manner).

The supervisor enters the classroom with laptop, to observe the middle 20 minutes lesson of the teacher trainee through the programming done on computer. For observing the lesson, one has to first click the programme folder, then, open the entry file. General entries of this file have to be filled in i.e. Name of the student, class subject, duration etc. After the entries are complete it asks for a six character identifier which has to be filled in by the supervisor. Then only one can switch over to the marking of the categories. As soon as the identifier is filled in the field, it is saved in the F data file (F data file consist of details of general information of the trainee i.e. name, date, time etc.) Now, the supervisor is ready to put categories in the entry file. For the 20 minutes observation of the lesson of the trainee, every 3 second a category is put through the key board of the laptop starting with '0' and ending with '0'. These could be shown as below through the table.

Table: Charles Galloway Interaction Analysis System

Category Number according to FIACS	Verbal Behaviour As In FIACS	Keys showing Corresponding verbal Behaviour	Keys showing Corresponding Non verbal Behaviour / Congruency in Behaviour	Keys showing Non Corresponding Non verbal Behaviour / In congruency in Behaviour
1	Accept Student Feeling	1	Q	A
2	Reinforce-ment	2	W	S
3	Use Student Idea	3	E	D
4	Asking Question	4	R	F
5	Lecturing	5	T	G
6	Giving Instructions	6	Y	H
7	Criticism	7	U	J
8	Student	8	-	-

	Response			
9	Student Initiation	9	-	-
10	Silence or Confusion	0	-	-

Categories are entered in this way and at the end category '0' is entered and one has to press the spacebar to close the process. As soon as the entries are finished, the above file is saved. For making the matrix from the above file, one has to now open result file and enter the same six character identifier as in the entry file and press enter. The matrix opens on the screen with all the general information of the teacher trainee and category marking. It also shows the percentage of various behaviour exhibited and the frequency with which non verbal behaviour is shown in congruency with verbal behaviour. From the above data the supervisor analyses the positive and weak behaviour of teacher trainees and the extent to which they were shown in the classroom.

Along with this, the experimenter responded to the students query or problem faced by them during and after the performance of the lesson. Once the result is obtained, analysis of each behavior is done by the investigator and after the lesson, at a suitable time and place then, the feedback is explained to the student teacher. Encouragement is given for the positive behavior and also the student is told how to overcome the weakness. Every time the feedback is given, it is assured by the investigator that the student teacher has understood all the points clearly.

It this manner, 8 to 10 lessons of student teachers are to be recorded/observed and a

Summary of Two Way ANCOVA of Communication Skill by taking Pre Communication Skill as a covariate

Sources of Variance	df	SSy.x	MSSy.x	F
Treatment	1	3887.85	3887.85	7.72**
Teaching Aptitude	1	1.755E-005	1.755E-005	0.000
Treatment X Teaching Aptitude	1	1544.28	1544.28	3.07
Error	120	59863.97	503.05	
Total	124			

** Significant at 0.01 level of significance

detailed feedback related to Verbal and Non Verbal behaviors is given by the supervisor / Investigator immediately after the lesson.

DATA ANALYSIS

Following statistical techniques will be used-

The data related to the objective 'To study the effect of Treatment, Teaching Aptitude and their interaction on the communication skills, of B. Ed. students by taking Pre Communication Skills as covariate' were analyzed with Two way ANCOVA.

Result

The objective of the study was "To study the effect of Treatment, Teaching Aptitude and their interaction on the Communication Skill of B.Ed. students by taking Pre Communication Skill scores as covariate". There were two level of treatment namely CGS Approach and Traditional Approach. The students of experimental group i.e. CGS Approach and control group i.e. Traditional Approach were divided in respect of Teaching Aptitude into two groups on the basis of mean scores of Teaching Aptitude. The students scoring 359 and above 359 were designated as high Teaching Aptitude and below the score 359 were designated as low Teaching Aptitude. Thus, the data were analyzed with the help of Two Way Analysis of Covariance. The results are given in the table.

Effect of Treatment on Communication Skill of students by taking Pre Communication Skill as covariate

From the table, it can be seen that the adjusted F value for the treatment is 7.72 which is significant at 0.01 level of significance with degree of freedom 1/120. It indicates that the adjusted mean score of Communication Skill of experimental group i.e. CGS Approach and control

Treatment wise Number of students, Adjusted mean scores of Teaching Aptitude when Pre Communication Skill score taken as covariate

Treatment	Number of students	Adjusted Mean scores of Teaching Aptitude
CGS Approach	62	422.06
Traditional Approach	62	409.90

Further, from table, it is clear that the adjusted mean score of Communication Skill of experimental group i.e. CGS Approach students is 422.06 and control group i.e. Traditional Approach students is 409.90 which reveals that the adjusted mean score of CGS Approach students is higher than that of Traditional Approach students. Thus, it can be concluded that CGS Approach was found to be significantly effective in comparison to Traditional Approach for development of Communication Skill among student when pre Communication Skill was taken as covariate.

Effect of Teaching Aptitude on Communication Skill of B.Ed. students by taking Pre Communication Skill as covariate

From the table, it can be seen that the adjusted F value for Teaching Aptitude is 0.00 which is not significant at 0.05 level of significance with degree of freedom 1/120. It indicates that the adjusted mean score of Communication Skill of B.Ed. students with high and low Teaching Aptitude do not differ. Thus, the null hypothesis that “there is no significant effect of Teaching Aptitude of on Communication Skill B.Ed. Students by taking Pre Communication Skill as covariate” is not rejected. Thus, it can be concluded that Teaching Aptitude did not produce significant effect on Communication Skill of B.Ed. Students

group i.e. Traditional Approach students differ significantly. Thus, null hypothesis that “there is no significant effect of Treatment on Communication Skill of B. Ed. students by taking pre Communication Skill as covariate” is rejected. In order to know which traditional adjusted mean scores of Communication Skill is significantly higher, the data were further studied in the table.

when Pre Communication Skill was taken as covariate.

Effect of interaction between Treatment and Teaching Aptitude on Communication Skill of B. Ed. students by taking Pre Communication as covariate

From the table, it can be seen that the adjusted F value for interaction between Treatment and Teaching Aptitude is 3.07 which is not significant at 0.05 level of significance with degree of freedom 1/120. It indicates that interaction between Treatment and Teaching Aptitude had no significant effect on Communication Skill. Thus, the null hypothesis that “there is no significant effect of interaction between Treatment and Teaching Aptitude on Communication Skill of student by taking Pre Communication Skill as covariate is not rejected. Thus, it can be concluded that interaction between Treatment and Teaching Aptitude did not produce any significant effect on Communication Skill of B.Ed. Students when Pre Communication Skill was taken as covariate.

FINDING AND INTERPRETATION**Effect of treatment, teaching aptitude and their interaction on the communication skill of b.ed. Students by taking pre communication skill as covariate**

The objective of the study was “to study the effect of Treatment, Teaching Aptitude

and their interaction on the Communication Skill of B.Ed. students by taking Pre Communication Skill scores as covariate". The results of the study was found as-

(a) The first finding of the objective is "feedback through CGS Approach was found to be significantly effective in comparison to Traditional Approach for development of Communication Skill among students when Pre Communication Skill was taken as covariate".

(b) The second finding of the objective is "Communication Skill was found to be independent of Teaching Aptitude when, Pre Communication Skill was taken as covariate". The reason for the finding may be as, the dimensions of Communication Skill are Reading, Writing, Listening and Speaking whereas, for Teaching Aptitude are cooperative attitude, moral character, discipline, fairness, interest, optimism, kindness, enthusiasm etc. The dimensions of Communication Skill do not directly influence the dimensions of Teaching Aptitude thus, due to this there may be no significant effect of Teaching Aptitude on Communication Skill of students.

(c) The third finding of the objective is "interaction between Treatment and Teaching Aptitude did not produce any significant effect on Communication Skill of B.Ed. students when, Pre Communication Skill was taken as covariate". The reason for the above finding may be as –

For both the types of treatment, process of giving feedback is similar i.e. first positive and then negative or suggestive. Feedback is basically related to the content presentation. Thus, the students with high Teaching Aptitude and low Teaching Aptitude belonging to any group of the two treatments did not have influence of feedback in enhancement or decrease in dimensions of Teaching Aptitude like kindness, patience, moral character etc. So, interaction of Treatment and Teaching Aptitude may not found significant.

Educational Implications

The finding of the present research is "Treatment based on feedback through CGS Approach was found to be significantly effective in the development of Communication Skill among B.Ed. Students when Emotional Intelligence, Personality, Teaching Aptitude and Pre Communication Skill were taken as covariate." Educational implications of this finding are as follows:

- Treatment is useful for the teachers in enhancement of their Communication Skill so, it should be included in Teacher Training Programme.
- Treatment is useful for the student teachers to improve on their speaking, listening, reading and writing skill.
- It is useful for the text-book writers to use the appropriate and standardized language for the content so, that the teachers could also improve upon their reading skills.
- It is useful for the Trainers in the education field so that the trainees get a detailed account of their behaviours related to reading, writing, speaking and listening skills.
- It is useful for the Policy Makers to involve this treatment necessarily during the practice sessions of B.Ed. students for development of their Communication Skill.
- It is useful for the Curriculum Developers to improving the Communication Skill of teachers' by providing knowledge about their verbal and non- verbal behaviour corresponding to the elements of Communication.

CONCLUSION

From the findings of the study, it can be concluded that the Charles Galloway Feed Back System has positive effect on the development of Communication Skill of B.Ed. students. The study reflects that,

feedback through CGS Approach was found to be significantly effective in comparison to Traditional Approach for development of Communication Skill among students when Pre Communication Skill was taken as covariate.

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