

**A COMPARATIVE STUDY OF THE CLASSROOM INTERACTION IN  
VOCATIONAL AND NON VOCATIONAL CLASSES IN THE VOCATIONAL  
HIGHER SECONDARY SCHOOLS IN KERALA**

**Subin K S**, Research Scholar, Department of Education, University of Kerala

**Dr.Bindu.D**, Assistant Professor, Department of Education, University of Kerala

---

**ABSTRACT**

This study is an attempt to compare the classroom interaction pattern in vocational and non-vocational classes in the vocational higher secondary schools in Kerala. For this purpose a sample of 30 vocational classes and 30 non vocational classes from 3 different districts in Kerala were selected. The investigator observed these classes and analysed the classroom interaction using Flanders interaction analysis category system. Comparison of the classroom interaction in vocational and non-vocational classes in the vocational higher secondary schools revealed that better communication takes place in the non-vocational classes compared to vocational classes.

**Key words:** Classroom interaction, Classroom communication, interaction analysis

**INTRODUCTION**

Effectiveness of classroom teaching depends on the nature of communication between the teacher and the pupil and also among the pupil. Teaching will be effective when the interaction is optimum. Interaction analysis is a process of encoding and decoding the pattern of interaction between the communicator and the receiver. Several techniques have been used over the years for analyzing the classroom interaction. Classroom interaction analysis can be used for helping teachers improve the quality of classroom instruction. Ned. A. Flanders developed a system of interaction analysis to study what is happening in a classroom when a

teacher teaches. It is known as Flanders Interaction Analysis Categories System (FIACS). Flanders and others developed this system at the University of Minnesota, U.S.A. between 1955 and 1960. Flanders classified total verbal behaviour into 10 categories. The first seven categories include teacher talk. Next two categories include pupil talk. The last tenth category includes the small spans of silence or confusion. The first 7 categories or teacher talk has been bifurcated into indirect talk and direct talk. Indirect Talk has 4 categories viz. Accepts Feelings, Praise or Encouragement, Accepts or Uses ideas of Pupils and Asking Questions. Direct Talk has 3 categories viz. Lecture, Giving Directions and Criticizing or Justifying Authority. Pupil Talk has 2 categories viz. Pupil Talk Response and Pupil Talk Initiation.

### **PROCEDURE OF OBSERVATION**

The observer sits in the classroom in the best position to hear and see the participants. At the end of every three seconds he decides which category best represents the communication events just completed.

#### **Proportion of teacher talk**

The proportion of tallies for categories 1, 2, 3, 4, 5, 6 and 7 to the total tallies indicates how much the teacher talks.

#### **Proportion of Pupil talk**

The proportion of tallies for categories 8 and 9 to the total tallies indicates how much the student talks.

#### **Proportion of silence or confusion**

The proportion of tallies for the category 10 to the total tallies indicates the time spent in silence or confusion.

After several years of observing, we anticipate an average of 68 percent teacher talk, 20 percent of pupil talk and 11 or 12 percent silence or confusion.

#### **The ratio between indirect influence and direct influence**

The sum of tallies for categories 1, 2, 3 and 4 divided by the sum of tallies for categories 5, 6 and 7 gives this ratio. If the ratio is 1 or more than 1, the teacher is said to be indirect in his

behaviour. This ratio, therefore, shows whether a teacher is more direct or indirect in his teaching.

### **The ratio between positive reinforcement and negative reinforcement**

The sum of tallies for categories 1, 2 and 3 divided by the sum of tallies for categories 6 and 7 gives this ratio. If the ratio is 1 or more than 1 then the teacher is said to have succeeded in providing positive reinforcement.

### **OBJECTIVE OF THE STUDY**

The study has been designed to compare the classroom interaction in vocational and non-vocational classes in the vocational higher secondary schools in Kerala

### **HYPOTHESES**

1. There is significant difference in the percentage of teacher talk between the vocational and non-vocational classes in the vocational higher secondary schools in Kerala
2. There is significant difference in the percentage of pupil talk between vocational and non-vocational classes in the vocational higher secondary schools in Kerala
3. There is significant difference in the percentage of silence between vocational and non-vocational classes in the vocational higher secondary schools in Kerala
4. There is significant difference in the ratio of indirect influence to direct influence between vocational and non-vocational classes in the vocational higher secondary schools in Kerala
5. There is significant difference in the ratio of positive reinforcement to negative reinforcement between vocational and non-vocational classes in the vocational higher secondary schools in Kerala

### **METHODOLOGY**

The investigator adopted survey method for the present study.

### **POPULATION AND SAMPLE**

Population consists of all the vocational higher secondary classes in Kerala. The investigator selected a sample of 60 vocational higher secondary classes for the study. The samples were selected using multi stage cluster sampling technique.

## **TOOL USED FOR THE STUDY**

The investigator used Flanders Interaction Analysis Category System (FIACS) for the collection of data.

## **STATISTICAL TECHNIQUES**

Test of significance for difference between means was adopted for analysing the data.

## **ANALYSIS AND INTERPRETATION OF DATA**

**Table 1 Test of significance for difference between the means of percentage of teacher talk in the vocational and non-vocational classes in the vocational higher secondary schools**

<b>Class</b>	<b>N</b>	<b>M</b>	<b>SD</b>	<b>C.R.</b>	<b>LS</b>
Vocational	30	64.885	2.561	6.303	0.01
Non Vocational	30	69.057	2.567		

It is evident from the table that the obtained value of C.R. for the variable Percentage of teacher talk is significant at 0.01 level. Since the mean of the Non Vocational classes is significantly greater than that of the Vocational classes, Non Vocational classes have more teacher talk compared to Vocational classes.

### **Tenability of hypothesis**

Test of significance for difference between the means of percentage of teacher talk in the vocational and non-vocational classes in the vocational higher secondary schools revealed that there is significant difference between the means of percentage of teacher talk in the vocational and non-vocational classes. Hence hypothesis 1 is accepted.

**Table 2 Test of significance for difference between the means of percentage of pupil talk in the vocational and non-vocational classes in the vocational higher secondary schools**

Class	N	M	SD	C.R.	LS
Vocational	30	24.338	3.415	5.296	0.01
Non Vocational	30	20.61	1.787		

It is evident from the table that the obtained value of C.R. for the variable Percentage of pupil talk is significant at 0.01 level. Since the mean of the Vocational classes is significantly greater than that of the Non Vocational classes, Vocational classes have more pupil talk compared to Non Vocational classes.

**Tenability of hypothesis**

Test of significance for difference between the means of percentage of pupil talk in the vocational and non-vocational classes in the vocational higher secondary schools revealed that there is significant difference between the means of percentage of pupil talk in the vocational and non-vocational classes. Hence hypothesis 2 is accepted.

**Table 3 Test of significance for difference between the means of percentage of silence in the vocational and non-vocational classes in the vocational higher secondary schools**

Class	N	M	SD	C.R.	LS
Vocational	30	10.778	4.137	0.546	N.S.
Non Vocational	30	10.332	1.692		

It is evident from the table that the obtained value of C.R. for the variable Percentage of silence is not significant at 0.05 level. Since the mean scores of the vocational and non-vocational classes do not differ significantly, vocational and non-vocational classes are more or less equal in Percentage of silence.

### Tenability of hypothesis

Test of significance for difference between the means of percentage of silence in the vocational and non-vocational classes in the vocational higher secondary schools revealed that there is no significant difference between the means of percentage of silence in the vocational and non-vocational classes. Hence hypothesis 3 is rejected.

**Table 4 Test of significance for difference between the means of ratio of indirect influence to direct influence in the vocational and non-vocational classes in the vocational higher secondary schools**

Class	N	M	SD	C.R.	LS
Vocational	30	0.941	0.066	7.435	0.01
Non Vocational	30	1.331	0.28		

It is evident from the table that the obtained value of C.R. for the variable ratio of indirect influence to direct influence is significant at 0.01 level. Since the mean of the Non Vocational classes is significantly greater than that of the Vocational classes, Non Vocational classes have more indirect influence compared to Vocational classes.

### Tenability of hypothesis

Test of significance for difference between the means of ratio of indirect influence to direct influence in the vocational and non-vocational classes in the vocational higher secondary schools revealed that there is significant difference between the means of ratio of indirect influence to direct influence in the vocational and non-vocational classes. Hence hypothesis 4 is accepted.

**Table 5 Test of significance for difference between the means of ratio of positive reinforcement to negative reinforcement in the vocational and non-vocational classes in the vocational higher secondary schools**

Class	N	M	SD	C.R.	LS
Vocational	30	1.0003	0.074	8.366	0.01
Non Vocational	30	1.476	0.303		

It is evident from the table that the obtained value of C.R. for the variable ratio of positive reinforcement to negative reinforcement is significant at 0.01 level. Since the mean of the Non Vocational classes is significantly greater than that of the Vocational classes, Non Vocational classes have more positive reinforcement compared to Vocational classes.

#### **Tenability of hypothesis**

Test of significance for difference between the means of ratio of positive reinforcement to negative reinforcement in the vocational and non-vocational classes in the vocational higher secondary schools revealed that there is significant difference between the means of ratio of positive reinforcement to negative reinforcement in the vocational and non-vocational classes. Hence hypothesis 5 is accepted.

#### **CONCLUSION**

The study revealed that the vocational and the non-vocational classes in the vocational higher secondary schools in Kerala differ significantly in the percentage of teacher talk, percentage of pupil talk, ratio of indirect influence to direct influence and ratio of positive reinforcement to negative reinforcement. But they do not differ in the percentage of silence. The percentage of teacher talk, ratio of indirect influence to direct influence and ratio of positive reinforcement to negative reinforcement are greater for non-vocational classes. While the percentage of pupil talk is greater for vocational classes. This means that Non vocational teachers are more indirect in their teaching and also they provide more positive reinforcement. From the study it can be concluded that optimum level of communication take place only in the Non vocational classes in the Vocational higher secondary schools in Kerala.

## REFERENCES

1. Flanders, Ned A (1962). **Using Interaction Analysis in the In-service Training of Teachers**. Journal of experimental Education Vol 30 No. 4 June 1962.
2. Flanders, Ned A (1965). **Teacher influence, Pupil attitude and Achievement**. Co-operative Research monographs no 12 Washington: U.S. Govt. Printing office.
3. Flanders, Ned A (1970). **Analyzing Teacher Behavior**. Massachusetts: Addison Wesley Publishing co. Inc.
4. Januszewski, Al and Molenda, Michael (2013). **Educational Technology: A Definition with Commentary**. New York: Routledge.