Statement of the problem-

“EFFECTIVENESS OF INTERACTION ANALYSIS OBSERVATION SYSTEM TOWARDS MODIFICATION OF TEACHER BEHAVIOUR”

OBJECTIVES OF THE STUDY:-
The Study has been conducted with following objectives:-

1. To know about the observation pattern of classroom interaction at secondary level in the light of Flanders Interaction Analysis.
2. To know about the observation pattern of classroom interaction at primary level in the light of Flanders Interaction Analysis.
3. To compare the observation patterns of classroom interaction at secondary as well as primary level in the light of flanders Interaction Analysis.

HYPOTHESIS

1. About one third of the classroom time is devoted to talking at both secondary and primary levels.
2. About one third of the classroom time is devoted to personal talk by the teacher at both secondary and primary levels.
3. About one third of the classroom time is devoted to teacher talk (i.e lecturing, giving directions, class-management etc.) at secondary and primary levels.

DELIMITATION

Keeping in view the time available and limited resources the study will be delimited to the teachers of 10 primary and 10 secondary schools of Bhiwani District.

RESEARCH METHODOLOGY
The study focused on patterns of classroom interaction at secondary and primary levels in the light of Flanders Interaction Analysis. This study will be an observational type of the descriptive method. The following procedure will be adopted for studying patterns of classroom interaction.

**Sample:**

The sample of the study consisted of 40 classrooms at secondary and primary level. The number of observed teachers will be 20 at secondary level and 20 at Primary level. Thus the total numbers of observed teachers were 40 and total number of observed students will be 1000. All the 40 classes of the above level will be selected randomly. 40 teachers and one thousands students from 20 Govt. and Private schools Charkhi-Dadri, be randomly selected as the sample of the study.

<table>
<thead>
<tr>
<th>Schools</th>
<th>Teachers</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Primary Schools</td>
<td>20</td>
<td>500</td>
</tr>
<tr>
<td>10 Secondary Schools</td>
<td>20</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total = 20 Schools</strong></td>
<td><strong>40</strong></td>
<td><strong>1000</strong></td>
</tr>
</tbody>
</table>

**Research Instrument**

After going through the related literature, the research, with help of supervisor discussed the instruments, Flanders Interaction Analysis for observing and measuring classroom interaction patterns. The instrument will be develop by Ned A. Flander (1970) and has been used extensively in various studies regarding classroom interaction. The items in the Flanders interaction analysis will be converted in an observation sheet called coding chart. The Flanders interaction Analysis system and specimen of observational sheet is given below:

| Time in | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 13.50 Min |
The above observational sheet represents 90 seconds for 10 categories of FIA. Each block in observational sheet represents 3 secs.

**Procedure**

The design of the study will be observational, in order to secure data, Flander’s Interaction Analysis procedure will be employed to observe classroom interaction patterns in secondary level classrooms and Primary levels classrooms. The following observation procedure will be adopted:

- In the each class of 45 minutes duration, 13.50 minutes (810 sec.) will be used for observation.
- 13.50 minutes (810 sec.) will be divided in to nine observation session.
- Each observation session will be for the duration of 1.30 min.(90sec.).
- One observation sheet will be used for each observation session of 90 seconds.
- Each observation session is constituted 30 observation periods.
- Each observation period will be of 3 seconds duration.
The teacher’s behaviour in each observation period of 3 seconds will be observed, classified and recorded in the relevant block of the sheet till the termination of observation session of 90 seconds.

Stopwatch will be used to note initiation and expiry of each observation period of 3 seconds.

Total time for observation in a single classroom comprised 13.50 minutes (810 sec.)

Before conducting the actual study, the researcher will visit the local schools and it will be inspiring for the researcher that Principal’s appreciated and extended cooperation for conduction of research. They all are ready to give time for observation of different classes with different teachers. Observation will be conducted through simple random sampling.

**Data Collection**

The observational session will be an interesting stage for the researcher. He will have to visit different classrooms, of different stages with different subject matter and with different teachers. 20 classes (as mentioned in sample) will be observed in a period of one month, the co-operation of the principals, administrative staff and teachers will be commendable. The researcher however will have to face some difficulties in class time management.

**Data Analysis**

Data collected through the above mentioned research instrument will be coded in the observation sheets. Each table will be analyzed and interpreted by using percentages. In order to calculate, all the categories from category 1 to 10 will be added and the mean and standard deviation of 10 categories for 5 secondary classes will be calculated. In order to calculate the talk time, frequencies from category 1 to 9 will be added which will be converted into percentages by dividing the frequencies with total time of interaction. To calculate teacher’s talk time, frequencies from category 1 to 7 will be added which will be converted into percentages by dividing the frequencies with the total talk time. To calculate the teacher’s direct talk time, frequencies from category 5 to 7 will be added which will be converted into percentages by dividing the frequencies with teacher’s talk time. The same procedure will be used for primary level classes. In order to compare secondary and primary classrooms interaction patterns, t-test will be used.
The procedure for the whole process of analysis and interpretation along with formulas are given below.

1. Every table will be constructed using percentages. The formula of percentage will be:

   Time for a specific interaction

   ................................................................. x 100

   Total time of interaction

The following statistical technics will be used:

\[
\text{Mean} = \frac{\text{Sum of total time}}{\text{No. of classes}}
\]

\[
\text{SD} = \sqrt{\frac{\sum f d^2}{N} - \frac{\left(\sum f d\right)^2}{N}}
\]

\[
SE_d = \sqrt{\frac{SD_1^2 + SD_2^2}{N_1 + N_2}}
\]

\[
D = M_1 - M_2
\]

\[
t = \frac{D}{SE_d}
\]

**Conclusion:**

To conclude the whole, we can say that the study will focus on patterns of classroom interaction at secondary and primary levels in the light of flanders interaction Analysis. It will conclude the effectiveness and significance of the flanders interaction Analysis at secondary and primary levels. It will bring into sharp focus the significance of ‘t’ at both the above said levels. So it will be devoted to summing up the various findings of the present study.