

## CHAPTER – 4

### RESULTS AND DISCUSSIONS

#### 4.1 Introduction

Data analysis and interpretation is the process of assigning meaning to the collected information and determining the conclusions, significance and implications of the findings. It is an important and exciting step in the process of research. In all research studies, analysis follows data collection. It is considered to be the heart of the research in research work. According to C. R. Kothari (1989), “The term analysis refers to the computation of measures along with searching for patterns of relationship that exist among the data-groups”. Data interpretation refers to the implementation of processes through which data is reviewed for the purpose of arriving at an informed conclusion. The interpretation of data assigns a meaning to the information analyzed and determines its significance and implications. The purpose of collection and interpretation is to acquire useful information and to make the most informed decisions possible.

Having a baseline method (or methods) for interpreting data will provide a structural and consistent foundation. Indeed different subjects have different approaches to interpret the same data while sharing the same goals. Inappropriate methods may lead to duplicated efforts, inconsistent solutions, wasted energy and inevitably time and money. The interpretation of data is designed to help people make sense of data that has been collected, analyzed and presented. The aim of the present study is to find out "The Influencing Factors of Teacher Effectiveness of Catholic Missionary Schools in the State of Nagaland". This chapter deals with the analysis, results and interpretations of data and discusses the main findings. The collected data are arranged properly, analyzed systematically and interpreted precisely. The findings are also linked to the research outcomes wherever applicable.

## 4.2 Analysis of Data

### 4.2.1 Influencing Factors of Teacher Effectiveness

To meet **objective-1** viz., “**To study the influencing factors of teacher effectiveness of Catholic Missionary Schools as perceived by teachers themselves and students**”, the researcher analysed the data collected from the field survey which is as follows:-

SL. No	Items	Response of teachers 'Yes'	
		Total	Percentage
1.	Prepare and plan lessons well in advance	504	84.00 %
2.	Cite Interesting Examples	495	82.50%
3.	Systematic presentation of the class	494	82.33%
4.	Motivate the students for learning	435	72.50%
5.	Interactive class	429	71.50%
6.	Conduct tests periodically	440	73.30%
7.	Mastery over the subject	490	81.67%
8.	Update knowledge of the subject	495	82.50%
9.	Punctual for classes	510	85.00%
10.	Possess pleasing manners	519	86.50%
11.	Friendly with colleagues	498	83.00%
12.	Impartial in dealing with students	490	81.67%
13.	Show interest in parent teacher association	488	81.33%
14.	Neatly dressed and Smart	501	83.50%
15.	Emotionally balanced	511	85.17%
16.	Stimulate intellectual curiosity of students	498	83.00%

N.B: 14 Items which were responded by less than 50% respondents were not considered for the analysis

**Table-4.1: Shows the Causes of Teacher Effectiveness As Perceived by Teachers**

Table-4.1 shows the item wise response of the teachers {items considered are given in Appendix-I (E)} to the questions belonging to the influencing factors of their effectiveness in teaching. It is reflected from the table that 84% of the teachers planned lessons well in advance, 82.5% made teaching interesting by giving suitable examples, 82.33% presented classes systematically, 72.5% motivated their students for learning, 71.5% valued interaction of their students during teaching-learning sessions, 73.3% conducted tests periodically to evaluate their teaching, 81.67% had full control over the subject they are teaching, 82.5% kept updating their knowledge, 85% were punctual for classes, 86.5% possessed pleasing manners, 83% were friendly with

colleagues, 81.67% were impartial in dealing with students, 81.33% took great deal of interest in parent-teacher association and 83.5% came to the school neatly dressed and smart, 85.17% were emotionally balanced, and 83% were able to stimulate intellectual curiosity of students. Therefore it was found that the influencing factors of teacher effectiveness were very good.

Sl. No.	Influencing Factors of Teacher Effectiveness	Percentage of Response	
		'Yes'	'No'
1	Preparation and Planning for Teaching (Items 1, 2 & 3)	82.94%	17.06%
2	Classroom Management (Items 4,5,6 & 16)	75.08%	24.92%
3	Knowledge of Subject Matter (Items 7 & 8)	82.08%	17.92%
4	Teacher Characteristics (Items 9,10,14 & 15)	85.04%	14.96%
5	Interpersonal Relations (Items 11,12 & 13)	82.00%	18.00%

**Table-4.2: Shows the Overall Percentage of the Teachers' Responses 'Yes' and 'No' Based on Influencing Factors of Teacher Effectiveness**

Table-4.2: Shows the overall percentage of the teachers' responses 'Yes' and 'No' based on influencing factors of teacher effectiveness and the following are the findings:-

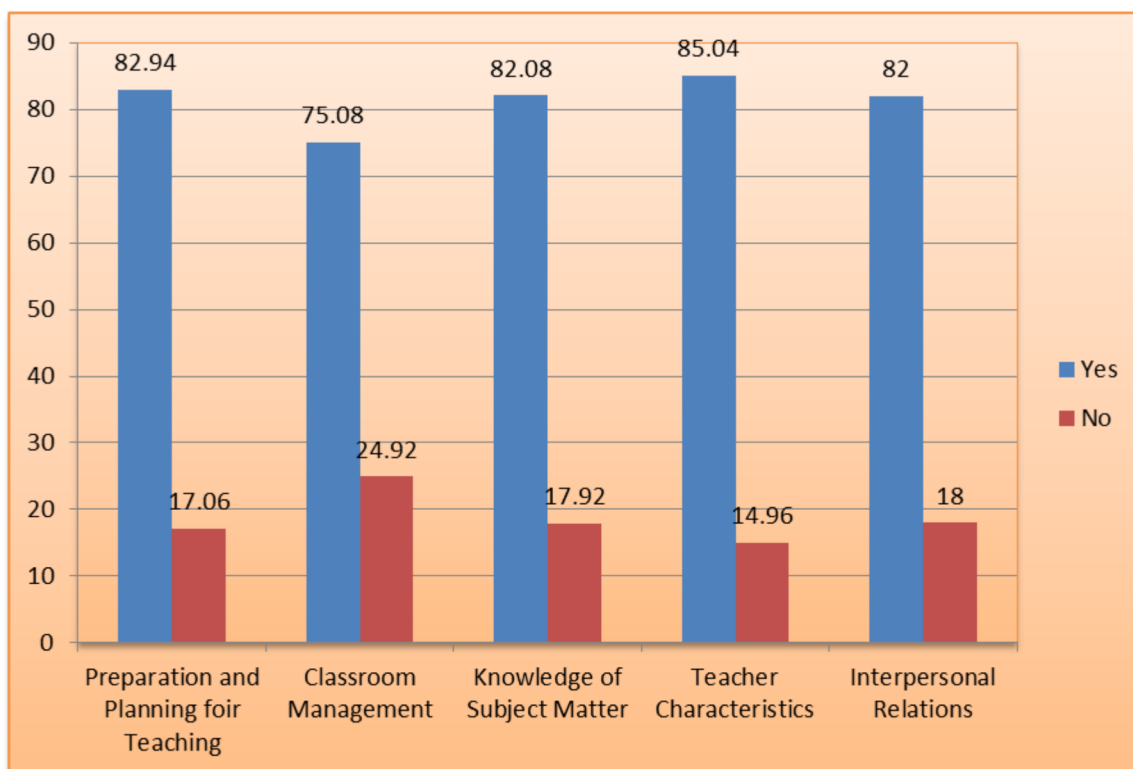
a) It is found that 82.94% of the teachers responded 'Yes' and 17.06% 'No' to the questions based on preparation and planning for teaching.

b) It is revealed that 75.08% of the teachers responded 'Yes' and 24.92% 'No' to the questions based on classroom management.

c) It is reflected that 82.08% of the teachers responded 'Yes' and 17.92% 'No' to the questions based on knowledge of subject matter.

d) It is found that 85.04% of the teachers responded 'Yes' and 14.96% 'No' to the questions based on teacher characteristics.

e) It is revealed that 82% of the teachers responded 'Yes' and 18% 'No' to the questions based on interpersonal relations.



**Figure-4.1: Shows the Bar Diagram of Overall Percentage of the Teachers' Responses 'Yes' and 'No' Based on Influencing Factors of Teacher Effectiveness**

It is reflected from the above figure-4.1 that the factors such as preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristic and interpersonal relations strongly influenced teacher effectiveness.

It is found that the factors such as preparation and planning for teaching, classroom management, knowledge of subject matter, teacher characteristics and interpersonal relations strongly influenced teacher effectiveness. It is revealed that that 84% of the teachers planned lessons well in advance. This finding is supported by the finding of the study done by Rotter (1966), Hudgins (1971) and Cosper (1986). Their study revealed that effective teachers always went to classroom with proper preparation. They planned before they teach a lesson, the activities that are to be given, strategies that should be adopted, evaluation pattern to be conducted and assignments that should be given. The finding also reports that if planning is not done, teaching becomes confused and chaotic which may lead to negative experience for students.

Planning helps the teacher to adapt and improve their efforts in the classroom quicker than they could in the past. Lesson plan also makes the teacher confident as they impart lessons to their students.

It is found that 82.5% of the teachers made teaching interesting by giving suitable examples. Citing examples make the students understand the subject matter easily and make them more active and enthusiastic in learning. It is found that 82.33% of the teachers presented classes systematically. Systematic presentation helps the students to understand the subject matter clearly and without confusion. It also helps the students to learn most of the topics taught in the class itself.

It is found that 72.5% of the teachers motivated their students for learning. This finding is in line with study done by Handayani (1985). The study revealed that the teachers who possessed the highest level of motivation tended to motivate his/her students for the class and be more effective in teaching. Motivation is the key to success in learning. Some students are motivated by themselves while others are not. So it is the duty of the teacher to motivate students. Students who are motivated are able to concentrate and pay attention in the class without distraction.

It is found that 71.5% of the teachers valued interaction of their students during teaching-learning sessions. Interaction will make students to learn more in the class itself. Interaction between the teacher and the students during teaching learning process is vital for success. This finding is supported by the study done by Cawley and Zimmaro (2000) and Bagin and Gallagher (2001). The finding of their study proposed six components for measuring teacher effectiveness such as, well prepared class, clear objectives, clear communication, fair student teacher interaction, promote students participations and provide timely feedback. The result of their study also revealed that the teachers who used the knowledge of their students' interests as a motivational tool to helped them in their study were effective. As a consequence students felt comfortable and were willing to be engaged when the atmosphere was positive and respectful.

It is found that 73.3% of the teachers conducted tests periodically to evaluate their teaching. Effective teachers conduct test often in order to find out the effectiveness of their teaching. Teacher evaluation promotes effectiveness in teaching. It is revealed that 81.67% of the teachers had full control over the subject they were teaching and 82.5% kept updating their knowledge of subject. This finding is supported by result of the study done by Witcher and Onwnegbuzie (2000). Their study found that knowledge of subject matter was one of the most important qualities that effective teachers require.

It is found that 86.33% of the teachers were punctual for classes. It is reflected from the study that 86.5% possessed pleasing manners, 83.5% were neatly dressed and smart and 85.17% were emotionally balanced. This shows that there is a close relationship between personality of the teacher and teacher effectiveness. This finding is supported by the study done by Chhaya (1974). His study revealed that effective teachers had significantly better personality adjustment and were more emotionally stable. It was reflected that 83% of the teachers were friendly with their colleagues, 81.67% did not discriminate students for their personal reasons, and 81.33% took great deal of interest in parent-teacher association and 83% stimulated intellectual curiosity of students.

Students' opinion regarding factors that influence teacher effectiveness is found through interview schedule-II {items considered are given in Appendix:I (F)}. 110 students from 11 schools from all the 11 districts of Nagaland are interviewed in order to to find out their opinion about the causes of effectiveness of their teachers. The result of the analysis is given below:-

SL. No	Items	YES		NO	
		Total	%	Total	%
1.	Prepare and plan lessons well in advance	541	98.36	9	1.64
2.	Cite Interesting Examples	538	97.82	12	2.18
3.	Summarize the lessons at the end of the class	535	97.27	15	2.73
4.	Motivate the students for learning	385	70	165	30
5.	Interactive class	390	70.91	160	29.09
6.	Conduct tests periodically	387	70.36	163	29.64
7.	Mastery over the subject	420	76.36	130	23.64
8.	Great deal of interest in the subject	450	81.82	100	18.18
9.	Pleasant and approvable gestures	470	85.45	80	14.54
10.	Role model of personal and social living	468	85.09	82	14.91
11.	Accept criticism positively	430	78.18	120	21.82
12.	Impartial in dealing with students	445	80.91	105	19.09
13.	Maintain cordial human relation	465	84.54	85	15.45

N.B: Items which are responded by less than 50% respondents are not considered for the analysis

**Table-4.3: Shows the Causes of Influencing Factors of Teacher Effectiveness as Perceived by Students**

The following results can be observed from the table-4.3:-

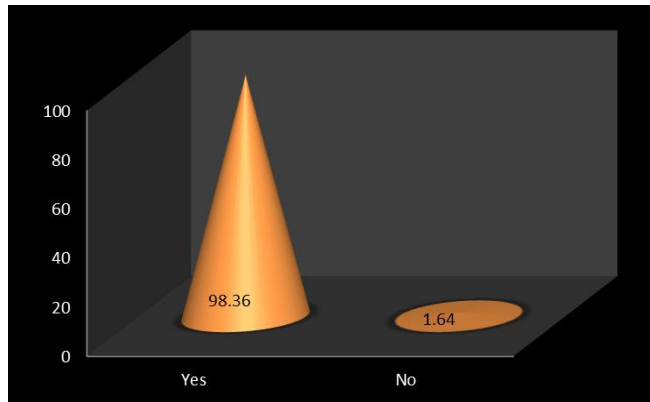
- i) It is found that 98.36% of the total responses of the students were 'Yes' and 1.64% were 'No' to the questions regarding teachers' preparation and planning lessons well in advance.
- ii) It is found that 97.82% of the total responses of the students were 'Yes' and 2.18% were 'No' to the questions regarding teachers' making their teaching interesting by citing suitable examples.
- iii) It is revealed that 97.27% of the total responses of the students were 'Yes' and 2.73% were 'No' to the questions regarding teachers' summarizing the lessons at the end of their classes.
- iv) It is found that 70% of the total responses of the students were 'Yes' and 30% were 'No' to the questions regarding teachers' motivating their students for learning.
- v) It is revealed that 70.91% of the total responses of the students were 'Yes' and 30% were 'No' to the questions regarding teachers' interaction with students during the class.

- vi) It is found that 70.36% of the total responses of the students were 'Yes' and 29.64% were 'No' to the questions regarding the conduct of tests periodically by the teachers to evaluate their teaching.
- vii) It is revealed that 76.36% of the total responses of the students were 'Yes' and 23.64% were 'No' to the questions regarding teachers' mastery over the subject they teach.
- viii) It is revealed that 81.82% of the total responses of the students were 'Yes' and 18.18% were 'No' to the questions regarding interest of teachers in subject they teach.
- ix) It is found that 85.45% of the total responses of the students were 'Yes' and 14.54% were 'No' to the questions regarding pleasant and approvable gestures of the teachers while teaching.
- x) It is revealed that 80.09% of the total responses of the students were 'Yes' and 14.91% were 'No' to the questions regarding exemplary personal and social living of teachers.
- xi) It is found that 78.18% of the total responses of the students were 'Yes' and 21.82% were 'No' to the questions on teachers' taking criticisms from others as a feedback for his/her own self-improvement.
- xii) It is revealed that 80.91% of the total responses of the students were 'Yes' and 19.09% were 'No' to the questions regarding teachers' impartiality in dealing with students.
- xiii) It is revealed that 84.54% of the total responses of the students were 'Yes' and 15.45% were 'No' to the questions regarding teachers' adaptability in maintaining cordial human relations.



The results of the analysis are given in the following figures:-

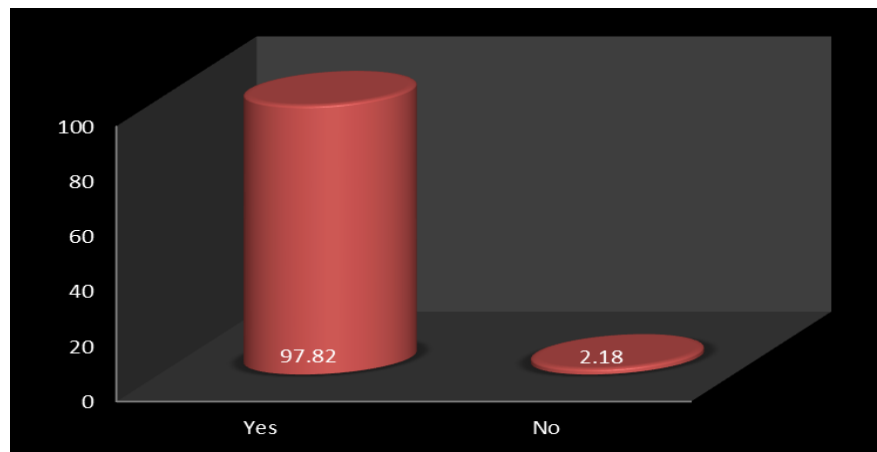
**i) Preparation and Planning Lessons Well in Advance**



**Figure-4.2: Shows the Bar Diagram of Percentage of Responses of the Students on Preparation and Planning of Lessons by the Teacher**

It is found from the above figure-4.2 that 98.36% of the total responses of the students were ‘Yes’ and 1.64% were ‘No’ to the questions regarding teachers’ preparation and planning lessons well in advance.

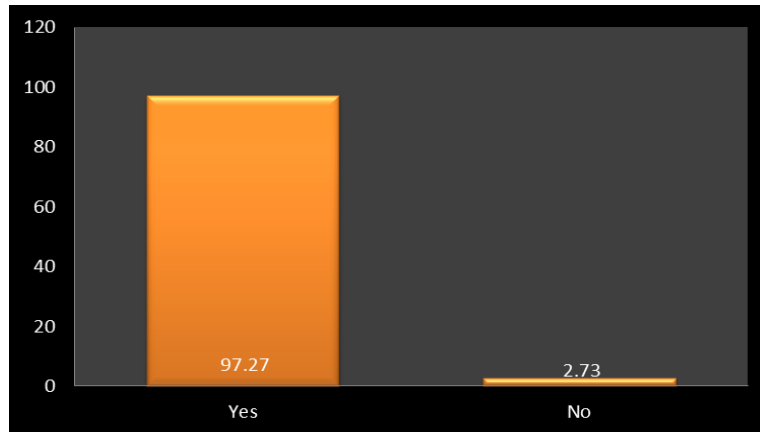
**ii) Citing Interesting Examples**



**Figure-4.3: Shows the Bar Diagram of Percentage of Responses of the Students on Teachers’ Making Their Teaching Interesting by Citing Suitable Examples**

It is reflected from the figure-4.3 that 97.82% of the total responses of the students were ‘Yes’ and 2.18% were ‘No’ to the questions regarding teachers’ making their teaching interesting by citing suitable examples.

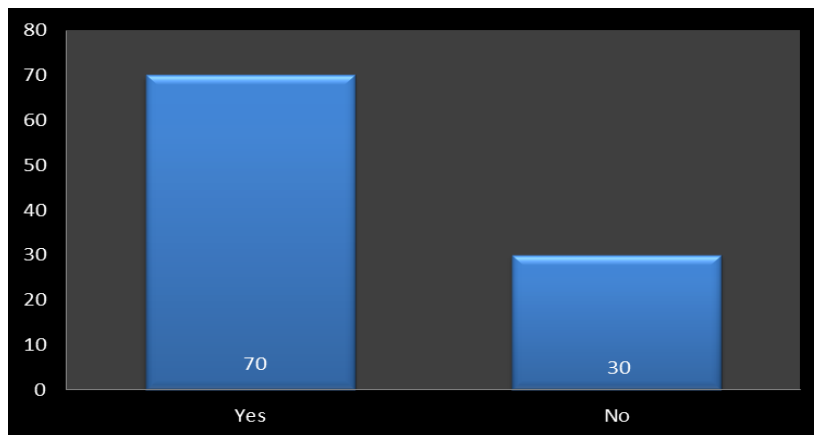
### iii) Summarising Lessons at End of the Class



**Figure-4.4: Shows the Bar Diagram of Percentage of Responses of the Students on Teachers' Summarizing the Lessons at the End of Their Classes**

It is revealed from the above figure-4.4 that 97.27% of the total responses of the students were 'Yes' and 2.73% were 'No' to the questions regarding teachers' summarizing the lessons at the end of their classes.

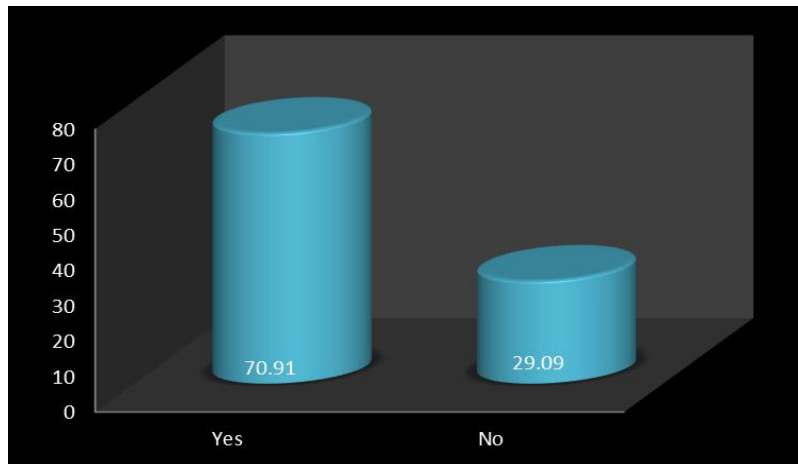
### iv) Motivating Students for Learning



**Figure-4.5: Shows the Bar Diagram of Percentage of Responses of the Students on Teachers' Motivating Their Students for Learning**

It is found from the figure-4.5 that 70% of the total responses of the students were 'Yes' and 30% were 'No' to the questions regarding teachers' motivating their students for learning.

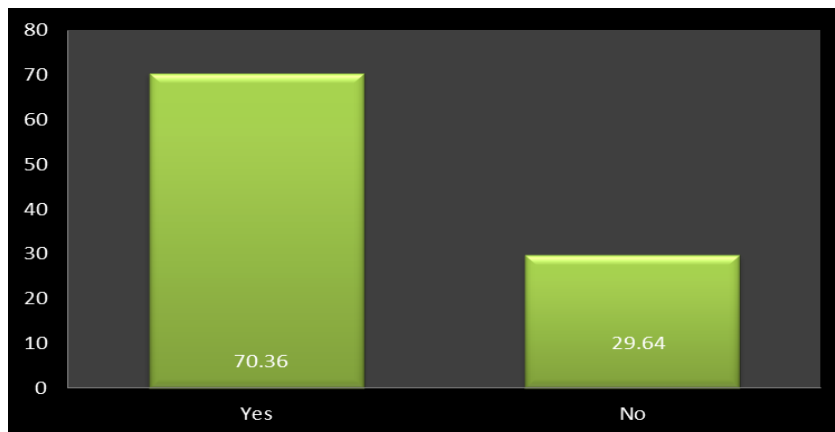
v) **Interactive Class**



**Figure-4.6: Shows the Bar Diagram of Percentage of Responses of the Students on Teachers' Interaction with Students During the Class**

It was revealed from the figure-4.6 that 70.91% of the total responses of the students were 'Yes' and 29.09% were 'No' to the questions regarding teachers' interaction with students during the class.

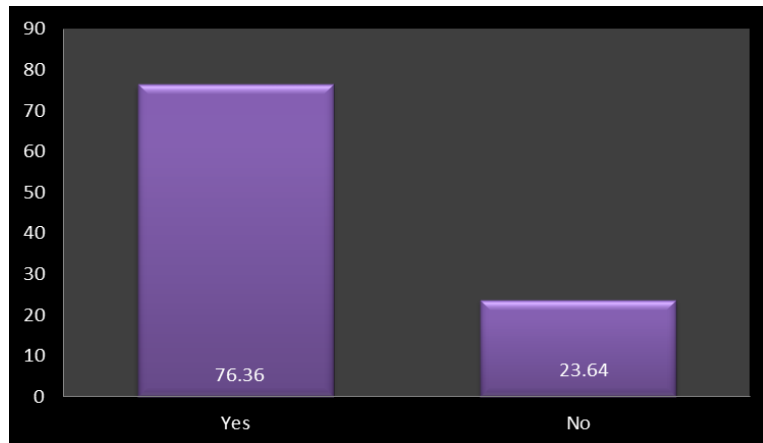
vi) **Conducting Tests Periodically**



**Figure-4.7: Shows the Bar Diagram of Percentage of Responses of the Students on Teachers' Conducting Test Periodically**

It is revealed from the figure-4.7 that 70.36% of the total responses of the students were 'Yes' and 29.64% were 'No' to the questions regarding the conduct of tests periodically by the teachers to evaluate their teaching.

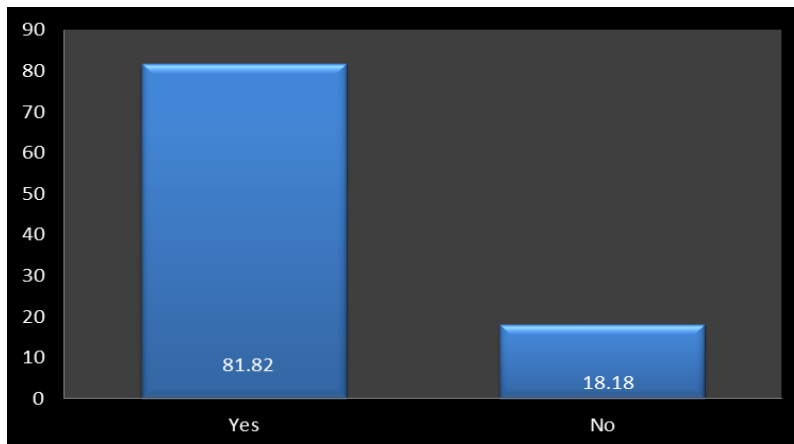
### vii) Mastery Over the Subject



**Figure-4.8: Shows the Bar Diagram of Percentage of Responses of the Students on Teachers' Mastery Over the Subject They Teach**

It is reflected from the figure-4.8 that 76.36% of the total responses of the students were 'Yes' and 23.64% were 'No' to the questions regarding teachers' mastery over the subject they teach.

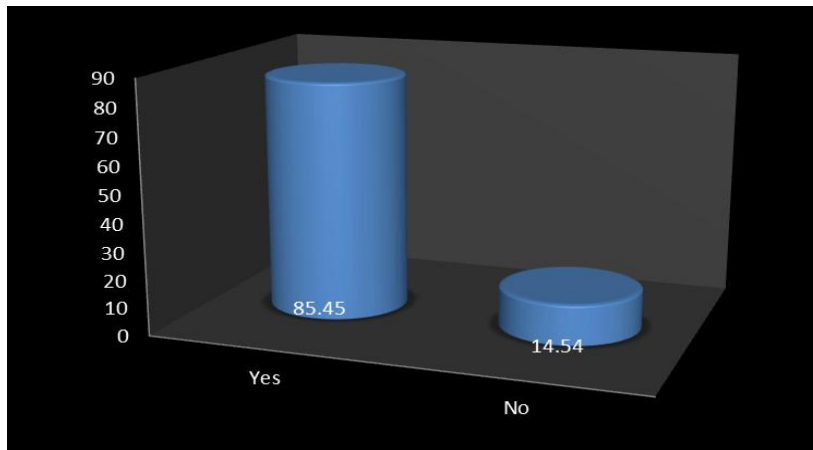
### viii) Great Deal of Interest in the Subject



**Figure-4.9: Shows the Bar Diagram of Percentage of Responses of the Students on Interest of Teachers in the Subject They Teach**

It is found from the figure-4.9 that 81.82% of the total responses of the students were 'Yes' and 18.18% were 'No' to the questions regarding interest of teachers in the subject they teach.

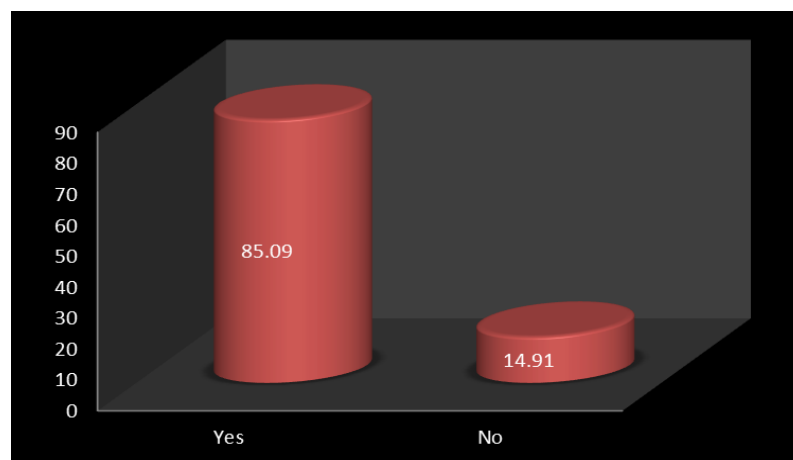
### ix) Pleasant and Approvable Gestures



**Figure-4.10: Shows the Bar Diagram of Percentage of Responses of the Students on Gesture of the Teachers While Teaching**

It is found from the figure-4.10 that 85.45% of the total responses of the students were 'Yes' and 14.54% were 'No' to the questions regarding pleasant and approvable gestures of the teachers while teaching.

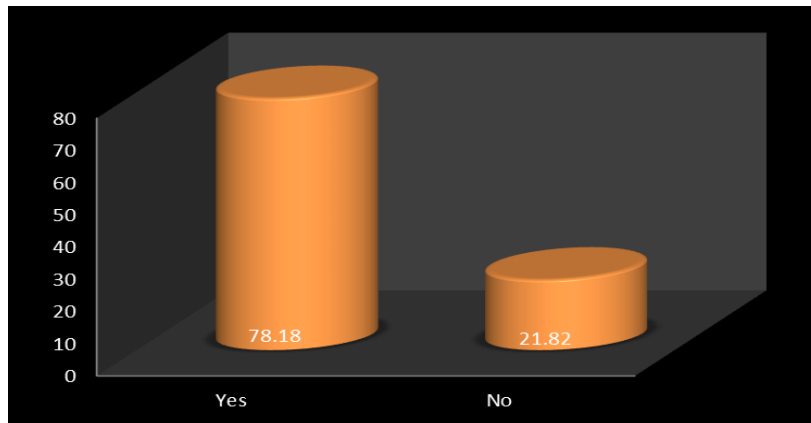
### x) Role Model of Personal and Social Living



**Figure-4.11: Shows the Bar Diagram of Percentage of Responses of the Students on Teachers as Role Model for Students in their Personal and Social Living**

It was found from the figure-4.11 that 80.09% of the total responses of the students were 'Yes' and 14.91% were 'No' to the questions regarding exemplary personal and social living of teachers.

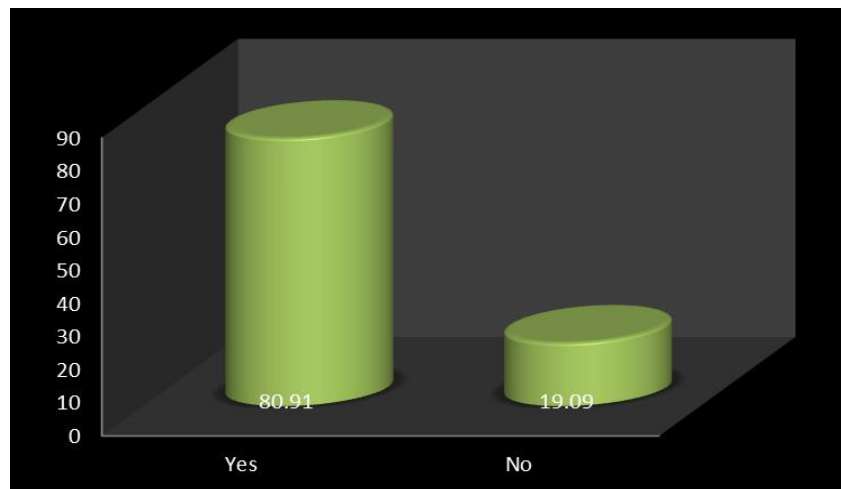
**xi) Accepting Criticism Positively**



**Figure-4.12: Shows the Bar Diagram of Percentage of Responses of the Students on Teachers' Accepting Criticism Made by Others**

It was reflected from the figure-4.12 that 78.18% of the total responses of the students were 'Yes' and 21.82% were 'No' to the questions on teachers' taking criticisms from others as a feedback for his own self-improvement.

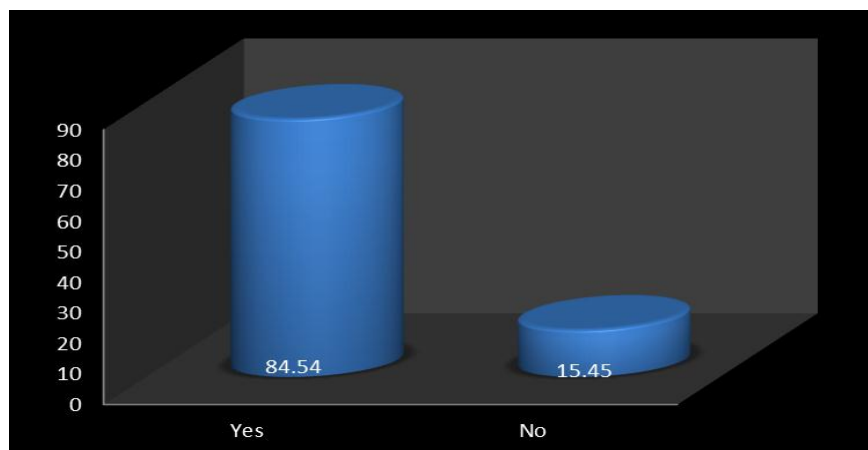
**xii) Impartial in Dealing with Students**



**Figure-4.13: Shows the Bar Diagram of Percentage of Responses of the Students on the Teachers' Impartiality in Dealing with Students**

It was found from the figure-4.13 that 80.91% of the total responses of the students were 'Yes' and 19.09% were 'No' to the questions regarding teachers' impartiality in dealing with students.

### xiii) Maintaining Cordial Human Relations



**Figure-4.14: Shows the Bar Diagram of Percentage of Responses of the Students on the Teachers' Adaptability in Maintaining Human Relations**

It was revealed from the figure-4.14 that 84.54% of the total responses of the students were 'Yes' and 15.45% were 'No' to the questions regarding teachers' adaptability in maintaining cordial human relations.

There fore it can be concluded that according to students, 98.36% of the teachers planned lessons well in advance, 97.82% made teaching interesting by giving suitable examples, 97.27% had the habit of summarizing the lessons at the end of their teaching, 70% motivated their students for learning, 70.91% valued interaction of their students during teaching-learning sessions, 70.36% conducted tests periodically to evaluate their teaching, 76.36% had full control over the subject they teach, 81.82% had great deal of interest in the subject they teach, 85.45% had pleasant and approvable gestures in the classroom, 85.09% provided laudable examples of their personal and social living to their students, 78.18% accepted criticisms from others as a feedback for their own improvement, 80.91% did not discriminate students for personal reasons and 84.54% adapted sufficiently themselves in maintaining cordial human relations.

#### 4.2.2 Teacher Effectiveness in terms of Age, Qualification, Length of Service, Gender and Locality

To meet the **Objective-2 viz., “To study the influencing factors of teacher effectiveness in terms of (a) age, (b) qualification, (c) length of service, (d) gender and (e) locality”**, the researcher analysed the data collected from the field survey which is as follows:-

##### (a) Teacher Effectiveness in Terms of Age of Teachers

Influencing Factors of Teacher Effectiveness of teachers from 19 to 30 years and from 31 to 58 years of age	N	Mean	S.D.	d.f.	't'- value	Level of Significance
19-30 years of age	371	458.29	74.45	598	1.5459	Not Significant
31-58 years of age	229	468	75.22			

df=598 at .05=1.96; .01=2.59.

**Table-4.4: Shows the 't'- value between Influencing Factors of Teacher Effectiveness of teachers between 19 to 30 years of age and between 31 to 58 years of age**

It can be observed from the above table-4.4 {items considered are given in Appendix:I (A)} that the calculated 't'- value 1.5459 is less than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is not significant and indicates that there is no statistically significant difference between the age limit of 19 to 30 years and 31 to 58 years regarding their influencing factors of teacher effectiveness.

**Hence, the Null Hypothesis 1 (a)** which states that,

**“There exists no significant difference in influencing factors of teacher effectiveness in relation to age”, is accepted.**

On the basis of their obtained mean scores, it may be said that the influencing factors of teacher effectiveness of teachers between the age limit of 31-58 years was comparatively better than that of teachers between the age limit of 19-30 years.



It has been found that, the age of teachers has a significant influence on the influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. This finding is contradictory to the findings of Renaud and Murray (1996), Cornwell (1974) and Joan and E. Henry (2015). Their study revealed that teacher effectiveness was inversely and negatively related to age and students' academic achievement is significantly influenced by it.

The analysis and the result of the teacher effectiveness rating scale {items considered are given in Appendix:I (B)} based on age of teachers are given in the table-4.5. The rating is done on the basis of roles / functions of teachers such as 'poor', 'fair', 'good', 'very good' and 'excellent'.

Sl. No.	Influencing Factors	Role / function	Age of teachers			
			19-30 years:371		31-58 years:229	
			Number	Percentage	Number	Percentage
1	Preparation and Planning for Teaching	Poor	23	6.19%	04	1.75%
		Fair	133	35.85%	38	16.59%
		Good	128	34.5%	65	28.38%
		Very Good	68	18.33%	84	36.68%
		Excellent	19	5.12%	38	16.59%
2	Classroom Management	Poor	06	1.62%	01	0.44%
		Fair	90	24.25%	21	9.17%
		Good	147	39.62%	56	24.45%
		Very Good	95	25.61%	96	41.92%
		Excellent	33	8.89%	55	24.02%
3	Knowledge of Subject Matter	Poor	Nil	Nil	Nil	Nil
		Fair	66	17.79%	15	6.55%
		Good	162	43.67%	52	22.71%
		Very Good	107	28.84%	105	45.85%
		Excellent	36	9.7%	57	24.89%
4	Teacher Characteristics	Poor	01	0.27%	Nil	Nil
		Fair	98	26.42%	20	8.73%
		Good	140	37.74%	56	24.45%
		Very Good	100	26.95%	99	43.23%
		Excellent	32	8.63%	54	23.58%
5	Interpersonal Relations	Poor	03	0.81%	Nil	Nil
		Fair	108	29.11%	23	10.04%
		Good	136	36.66%	65	28.38%
		Very Good	102	27.49%	90	39.3%
		Excellent	22	05.93%	51	22.27%

**Table-4.5: Shows the Result of Teacher Effectiveness Rating Scale Based on Age of Teachers**

The following findings have been revealed from the table-4.5:-

**(i) Regarding Preparation and Planning for Teaching.**

- (a) 6.19% of the teachers between the age limit of 19 to 30 years out of 371 and 1.75% of the teachers between the age limit of 31 to 58 years out of 229 were **'poor'** in preparation and planning for teaching.
- (b) 35.85% of the teachers between the age limit of 19 to 30 years out of 371 and 16.59% of the teachers between the age limit of 31 to 58 years out of 229 were **'fair'** in preparation and planning for teaching.
- (c) 34.5% of the teachers between the age limit of 19 to 30 years out of 371 and 28.38% of the teachers between the age limit of 31 to 58 years out of 229 were **'good'** preparation and planning for teaching.
- (d) 18.33% of the teachers between the age limit of 19 to 30 years out of 371 and 36.68% of the teachers between the age limit of 31 to 58 years out of 229 were **'very good'** in preparation and planning for teaching.
- (e) 05.12% of the teachers between the age limit of 19 to 30 years out of 371 and 16.59% of the teachers between the age limit of 31 to 58 years out of 229 were **'excellent'** in preparation and planning for teaching.

**(ii) Regarding Classroom Management**

- (a) 1.62% of the teachers between the age limit of 19 to 30 years out of 371 and 0.44% of the teachers between the age limit of 31 to 58 years out of 229 were **'poor'** in classroom management.
- (b) 24.25% of the teachers between the age limit of 19 to 30 years out of 371 and 9.17% of the teachers between the age limit of 31 to 58 years out of 229 were **'fair'** in classroom management.
- (c) 39.62% of the teachers between the age limit of 19 to 30 years out of 371 and 24.45% of the teachers between the age limit of 31 to 58 years out of 229 were **'good'** in classroom management.

- (d) 25.61% of the teachers between the age limit of 19 to 30 years out 371 and 41.92% of the teachers between the age limit of 31 to 58 years out of 229 were **'very good'** in classroom management.
- (e) 08.89% of the teachers between the age limit of 19 to 30 years out 371 and 24.02% of the teachers between the age limit of 31 to 58 years out of 229 were **'excellent'** in classroom management.

**(iii) Regarding Knowledge of Subject Matter**

- (a) No teachers between the age limit of 19 to 30 years and between the age limit of 31 to 58 years were **'poor'** in knowledge of subject matter.
- (b) 17.79% of the teachers between the age limit of 19 to 30 years out 371 and 6.55% of the teachers between the age limit of 31 to 58 years out of 229 were **'fair'** in knowledge of subject matter.
- (c) 43.67% of the teachers between the age limit of 19 to 30 years out 371 and 22.71% of the teachers between the age limit of 31 to 58 years out of 229 were **'good'** in knowledge of subject matter.
- (d) 28.84% of the teachers between the age limit of 19 to 30 years out 371 and 45.85% of the teachers between the age limit of 31 to 58 years out of 229 were **'very good'** in knowledge of subject matter.
- (e) 09.7% of the teachers between the age limit of 19 to 30 years out 371 and 45.85 % of the teachers between the age limit of 31 to 58 years out of 229 were **'excellent'** in knowledge of subject matter.

**(iv) Regarding Teacher Characteristics**

- (a) 0.27% of the teachers between the age limit of 19 to 30 years out 371 were **'poor'** in teacher characteristics.
- (b) No teachers between the age limit of 31 to 58 years were **'poor'** in teacher characteristics.

- (c) 26.42% of the teachers between the age limit of 19 to 30 years out 371 and 8.73 % of the teachers between the age limit of 31 to 58 years out of 229 were **'fair'** in teacher characteristics.
- (d) 37.74% of the teachers between the age limit of 19 to 30 years out 371 and 24.45 % of the teachers between the age limit of 31 to 58 years out of 229 were **'good'** in teacher characteristics.
- (e) 26.95% of the teachers between the age limit of 19 to 30 years out 371 and 43.23% of the teachers between the age limit of 31 to 58 years out of 229 were **'very good'** in teacher characteristics.
- (f) 08.63% of the teachers between the age limit of 19 to 30 years out 371 and 23.58% of the teachers between the age limit of 31 to 58 years out of 229 were **'excellent'** in teacher characteristics.

**(v) Regarding Interpersonal Relations**

- (a) 0.81% of the teachers between the age limit of 19 to 30 years out 371 were **'poor'** in interpersonal relations.
- (b) No teachers between the age limit of 31 to 58 years were **'poor'** in interpersonal relations.
- (c) 29.11% of the teachers between the age limit of 19 to 30 years out 371 and 10.04% of the teachers between the age limit of 31 to 58 years out of 229 were **'fair'** in interpersonal relations.
- (d) 36.66% of the teachers between the age limit of 19 to 30 years out 371 and 28.38% of the teachers between the age limit of 31 to 58 years out of 229 were **'good'** in interpersonal relations.
- (e) 27.49% of the teachers between the age limit of 19 to 30 years out 371 and 39.3% of the teachers between the age limit of 31 to 58 years out of 229 were **'very good'** in interpersonal relations.
- (f) 05.93% of the teachers between the age limit of 19 to 30 years out 371 and 22.27% of the teachers between the age limit of 31 to 58 years out of 229 were **'excellent'** in interpersonal relations.

**(b) Teacher Effectiveness in Terms of Qualification of Teachers**

Influencing Factors of Teacher Effectiveness of Trained & Untrained Teachers	N	Mean	S.D.	d.f.	't'- value	Level of Significance
Trained teachers	116	463.43	77.37	598	0.1577	Not Significant
Untrained teachers	484	462.21	74.22			

df=598 at .05=1.96; .01=2.59

**Table-4.6: Shows 't'- value between Influencing Factors of Teacher Effectiveness of Trained and Untrained Teachers**

**N.B:**

- i) Trained: Trained is referred to teachers who had completed general qualifications like Higher Secondary, Degree and Post-graduation and had undergone any of the teacher training programmes like PSTE, D.El.Ed., B.Ed. and M.Ed.
- ii) Untrained: Untrained refers to the teachers who had completed only general qualifications like Higher Secondary, Degree and Post-graduation and had not undergone any of the teacher training Programmes like PSTE, D.El.Ed., B.Ed. and M.Ed.

It can be observed from the above table-4.6 {items considered are given in Appendix:I (A)} that the calculated 't'- value 0.1577 is less than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is not significant and indicates that there is no statistically significant difference between trained and untrained teachers regarding their influencing factors of teacher effectiveness.

**Hence, the Null Hypothesis 1 (b)** which states that,

**“There exists no significant difference in influencing factors of teacher effectiveness in relation to qualification”, is accepted.**

On the basis of their obtained mean scores, it may be said that the influencing factors of teacher effectiveness of trained teachers was more sound than that of untrained teachers.

It was found that the training status of teachers has a significant influence on influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. This finding is supported by the finding of the study conducted by Sundara Rao (2009). The study found that training status had a significant influence on teacher effectiveness of teachers. This finding is negated by the studies of Jayamma (2002) and Jones (2005). They found that training status had no significant impact on teacher effectiveness of teachers.

The analysis and the result of the teacher effectiveness rating scale {items considered are given in Appendix:I (B)} based on qualification of teachers are given in the table-4.7. The rating is done on the basis of roles / functions of teachers such as 'poor', 'fair', 'good', 'very good' and 'excellent'.

Sl. No.	Influencing Factors	Role / function	Qualification			
			Trained: 116		Untrained: 484	
			Number	Percentage	Number	Percentage
1	Preparation and Planning for Teaching	Poor	04	3.44%	24	04.75%
		Fair	11	9.48%	161	33.26%
		Good	24	20.68%	169	34.91%
		Very Good	46	39.66%	105	21.69%
		Excellent	31	26.72%	25	05.16%
2	Classroom Management	Poor	Nil	Nil	07	1.44%
		Fair	10	8.62%	101	20.86%
		Good	20	17.24%	183	37.8%
		Very Good	38	32.76%	153	31.61%
		Excellent	48	41.38%	40	08.26%
3	Knowledge of Subject Matter	Poor	Nil	Nil	Nil	Nil
		Fair	08	6.9%	73	15.08%
		Good	21	18.1%	193	39.87%
		Very Good	36	31.03%	176	36.36%
		Excellent	51	43.97%	42	8.67%
4	Teacher Characteristics	Poor	Nil	Nil	01	0.2%
		Fair	12	10.34%	106	21.9%
		Good	18	15.52%	178	36.77%
		Very Good	36	31.03%	163	33.67%
		Excellent	50	43.10%	36	7.43%
5	Interpersonal Relations	Poor	Nil	Nil	03	0.61%
		Fair	16	13.79%	115	23.76%
		Good	15	12.93%	186	38.42%
		Very Good	46	39.66%	146	30.16%
		Excellent	39	33.62%	34	07.02%

**Table-4.7: Shows the Result of Teacher Effectiveness Rating Scale Based on Qualification of Teachers**

The following findings have been revealed from the table-4.7:-

(i) **Regarding Preparation and Planning for Teaching**

- (a) 3.44% of the trained teachers out of 116 and 04.75% of untrained teachers out of 484 were **'poor'** in preparation and planning for teaching.
- (b) 09.48% of the trained teachers out of 116 and 33.26% of untrained teachers out of 484 were **'fair'** in preparation and planning for teaching.
- (c) 20.68% of the trained teachers out of 116 and 34.91% of untrained teachers out of 484 were **'good'** in preparation and planning for teaching.
- (d) 39.66% of the trained teachers out of 116 and 21.69% of untrained teachers out of 484 were **'very good'** in preparation and planning for teaching.
- (e) 26.72% of the trained teachers out of 116 and 05.16% of untrained teachers out of 484 were **'excellent'** in preparation and planning for teaching.

(ii) **Regarding Classroom Management**

- (a) No trained teachers were **'poor'** in classroom management.
- (b) 1.44% of untrained teachers out of 484 were **'poor'** in classroom management.
- (c) 8.62% of the trained teachers out of 116 and 20.86% of untrained teachers out of 484 were **'fair'** in classroom management.
- (d) 17.24% of the trained teachers out of 116 and 37.8% of untrained teachers out of 484 were **'good'** in classroom management.
- (e) 32.76% of the trained teachers out of 116 and 31.61% of untrained teachers out of 484 were **'very good'** in classroom management.
- (f) 41.38% of the trained teachers out of 116 and 08.26% of untrained teachers out of 484 were **'excellent'** in classroom management.

**(iii) Regarding Knowledge of Subject Matter**

- (a) No trained and untrained teachers were **'poor'** in knowledge of subject matter.
- (b) 6.9% of the trained teachers out of 116 and 15.08% of untrained teachers out of 484 were **'fair'** in knowledge of subject matter.
- (c) 18.1% of the trained teachers out of 116 and 39.87% of untrained teachers out of 484 were **'good'** in knowledge of subject matter.
- (d) 31.03% of the trained teachers out of 116 and 36.36% of untrained teachers out of 484 were **'very good'** in knowledge of subject matter.
- (e) 43.97% of the trained teachers out of 116 and 8.67% of untrained teachers out of 484 were **'excellent'** in knowledge of subject matter.

**(iv) Regarding Teacher Characteristics**

- (a) No trained teachers were **'poor'** in teacher characteristics.
- (b) 0.2% of untrained teachers out of 484 were **'poor'** in teacher characteristics.
- (c) 10.34% of the trained teachers out of 116 and 21.9% of untrained teachers out of 484 were **'fair'** in teacher characteristics.
- (d) 15.52% of the trained teachers out of 116 and 36.77% of untrained teachers out of 484 were **'good'** in teacher characteristics.
- (e) 31.03% of the trained teachers out of 116 and 33.67% of untrained teachers out of 484 were **'very good'** in teacher characteristics.
- (f) 43.10% of the trained teachers out of 116 and 7.43% of untrained teachers out of 484 were **'excellent'** in teacher characteristics.

**(v) Regarding Interpersonal Relations**

- (a) No trained teachers were **'poor'** in interpersonal relations.
- (b) 0.61% of untrained teachers out of 484 were **'poor'** in interpersonal relations.



- (c) 13.79% of the trained teachers out of 116 and 23.76% of untrained teachers out of 484 were **‘fair’** in interpersonal relations.
- (d) 12.93% of the trained teachers out of 116 and 38.42% of untrained teachers out of 484 were **‘good’** in interpersonal relations.
- (e) 39.66% of the trained teachers out of 116 and 30.16% of untrained teachers out of 484 were **‘very good’** in interpersonal relations.
- (f) 33.62% of the trained teachers out of 116 and 07.02% of untrained teachers out of 484 were **‘excellent’** in interpersonal relations.

**(c) Teacher Effectiveness in Relation to Length of Service**

Influencing Factors of Teacher Effectiveness based on length of service of teachers	N	Mean	S.D.	d.f.	‘t’- value	Level of Significance
6 months – 10 years	454	459.60	72.45	598	1.6321	Not Significant
11 – 35 years	146	471.20	81.35			

df=598 at .05=1.96; .01=2.59

**Table-4.8: Shows ‘t’- value between Influencing Factors of Teacher Effectiveness of teachers having length of service from 6 months to 10 years and from 11 to 35 years**

It can be observed from the above table-4.8 {items considered are given in Appendix:I (A)} that the calculated ‘t’- value 1.6321 is less than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is not significant and indicates that there is no statistically significant difference between teachers having length of service from 6 months to 10 years and from 11 to 35 years regarding their influencing factors of teacher effectiveness.

**Hence, the Null Hypothesis 1(c)** which states that,

**“There exists no significant difference in influencing factors of teacher effectiveness in relation to length of service”, is accepted.**

On the basis of their obtained mean scores, it may be said that the influencing factors of teacher effectiveness of teachers having length of service from 11 to 35 years is higher than that of teachers having length of service from 6 months to 10 years.

It was found that the length of service of teachers has a significant influence on the influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. This finding is in line with the studies conducted by Padmanabaiiah (1984); Jayamma (2002); Tyagi (2013); Onyekuru and Ibegbunam (2013); and Pachaiyappan & Ushalaya Raj (2014). They found that teaching experience had a significant influence on teaching effectiveness of teachers. But this finding is negated by the findings of the study done by Sodhi (2010) and Chowdhury (2014). Their study revealed that teaching experience had no significant impact on teaching effectiveness of teachers.

The analysis and the result of the teacher effectiveness rating scale {items considered are given in Appendix: I (B)} based on length of service of teachers are given in the table-4.9. The rating was done on the basis of roles / functions of teachers such as ‘poor’, ‘fair’, ‘good’, ‘very good’ and ‘excellent’.

Sl. No.	Influencing Factors	Role / function	Length of Service			
			6 Months–10 years:451		11 – 35 years:149	
			Number	Percentage	Number	Percentage
1	Preparation and Planning for Teaching	Poor	27	05.99%	Nil	Nil
		Fair	154	34.15%	17	11.4%
		Good	156	34.59%	39	26.17%
		Very Good	90	19.96%	61	40.93%
		Excellent	24	5.32%	32	21.48%
2	Classroom Management	Poor	7	1.55%	Nil	Nil
		Fair	104	23.06%	07	4.69%
		Good	178	39.47%	26	17.45%
		Very Good	117	25.94%	74	49.67%
		Excellent	45	9.98%	42	28.19%
3	Knowledge of Subject Matter	Poor	Nil	Nil	Nil	Nil
		Fair	77	17.07%	4	2.68%
		Good	193	42.79%	20	13.42%
		Very Good	134	29.71%	78	52.35%
		Excellent	47	10.42%	47	31.54%
4	Teacher Characteristics	Poor	09	1.99%	Nil	Nil
		Fair	109	24.17%	9	6.04%
		Good	174	38.58%	22	14.77%
		Very Good	117	25.94%	74	49.67%
		Excellent	42	9.31%	44	29.53%
		Poor	03	0.67%	Nil	Nil

5	Interpersonal Relations	Fair	120	26.6%	07	4.69%
		Good	154	34.14%	37	24.83%
		Very Good	127	28.16%	65	43.62%
		Excellent	47	10.42%	40	26.85%

**Table-4.9: Shows the Result of Teacher Effectiveness Rating Scale Based on Length of Service**

The following findings have been revealed from the table-4.9:-

**(i) Regarding Preparation and Planning for Teaching.**

- (a) 05.99% of the teachers having length of service from 6 months to 10 years out of 451 were **'poor'** in preparation and planning for teaching.
- (b) No teachers having length of service from 11 to 35 years were **'poor'** in preparation and planning for teaching.
- (c) 34.15% of the teachers having length of service from 6 months to 10 years out of 451 and 11.4% of the teachers having length of service from 11 to 35 years out of 149 were **'fair'** in preparation and planning for teaching.
- (d) 34.59% of the teachers having length of service from 6 months to 10 years out of 451 and 26.17% of the teachers having length of service from 11 to 35 years out of 149 were **'good'** in preparation and planning for teaching.
- (e) 19.96% of the teachers having length of service from 6 months to 10 years out of 451 and 40.93% of the teachers having length of service from 11 to 35 years out of 149 were **'very good'** in preparation and planning for teaching.
- (f) 5.32% of the teachers having length of service from 6 months to 10 years out of 451 and 21.48% of the teachers having length of service from 11 to 35 years out of 149 were **'excellent'** in preparation and planning for teaching.

**(ii) Regarding Classroom Management**

- (a) No teachers having length of service from 6 months to 10 years and from 11 to 35 years were **'poor'** in classroom management.
- (b) 23.06% of the teachers having length of service from 6 months to 10 years out of 451 and 4.69% of the teachers having length of service from 11 to 35 years out of 149 were **'fair'** in classroom management.
- (c) 39.47% of the teachers having length of service from 6 months to 10 years out of 451 and 17.45% of the teachers having length of service from 11 to 35 years out of 149 were **'good'** in classroom management.
- (d) 25.94% of the teachers having length of service from 6 months to 10 years out of 451 and 49.67% of the teachers having length of service from 11 to 35 years out of 149 were **'very good'** in classroom management.
- (e) 9.98% of the teachers having length of service from 6 months to 10 years out of 451 and 28.19% of the teachers having length of service from 11 to 35 years out of 149 were **'excellent'** in classroom management.

**(iii) Regarding Knowledge of Subject Matter**

- (a) No teachers having length of service from 6 months to 10 years and from 11 to 35 years were **'poor'** in knowledge of subject matter.
- (b) 17.07% of the teachers having length of service from 6 months to 10 years out of 451 and 2.68% of the teachers having length of service from 11 to 35 years out of 149 were **'fair'** in knowledge of subject matter.

- (c) 42.79% of the teachers having length of service from 6 months to 10 years out of 451 and 13.42% of the teachers having length of service from 11 to 35 years out of 149 were **'good'** in knowledge of subject matter.
- (d) 29.71% of the teachers having length of service from 6 months to 10 years out of 451 and 52.35% of the teachers having length of service from 11 to 35 years out of 149 were **'very good'** in knowledge of subject matter.
- (e) 29.71% of the teachers having length of service from 6 months to 10 years out of 451 and 52.35% of the teachers having length of service from 11 to 35 years out of 149 were **'excellent'** in knowledge of subject matter.

**(iv) Regarding Teacher Characteristics**

- (a) 1.99% of the teachers having length of service from 6 months to 10 years out of 451 were **'poor'** in teacher characteristics.
- (b) No teachers having length of service from 11 to 35 years were **'poor'** in teacher characteristics.
- (c) 24.17% of the teachers having length of service from 6 months to 10 years out of 451 and 6.04% of the teachers having length of service from 11 to 35 years out of 149 were **'fair'** in teacher characteristics.
- (d) 38.58% of the teachers having length of service from 6 months to 10 years out of 451 and 14.77% of the teachers having length of service from 11 to 35 years out of 149 were **'good'** in teacher characteristics.
- (e) 25.94% of the teachers having length of service from 6 months to 10 years out of 451 and 49.67% of the teachers having length of service

from 11 to 35 years out of 149 were **'very good'** in teacher characteristics.

- (f) 9.31% of the teachers having length of service from 6 months to 10 years out of 451 and 29.53% of the teachers having length of service from 11 to 35 years out of 149 were **'excellent'** in teacher characteristics.

**(v) Regarding Interpersonal Relations**

- (a) 0.67% of the teachers having length of service from 6 months to 10 years out of 451 were **'poor'** in interpersonal relations.
- (b) No teachers having length of service from 11 to 35 years were **'poor'** in interpersonal relations.
- (c) 26.6% of the teachers having length of service from 6 months to 10 years out of 451 and 4.69% of the teachers having length of service from 11 to 35 years out of 149 were **'fair'** in interpersonal relations.
- (d) 34.14% of the teachers having length of service from 6 months to 10 years out of 451 and 24.83% of the teachers having length of service from 11 to 35 years out of 149 were **'good'** in interpersonal relations.
- (e) 28.16% of the teachers having length of service from 6 months to 10 years out of 451 and 43.62% of the teachers having length of service from 11 to 35 years out of 149 were **'very good'** in interpersonal relations.
- (f) 10.42% of the teachers having length of service from 6 months to 10 years out of 451 and 26.85% of the teachers having length of service from 11 to 35 years out of 149 were **'excellent'** in interpersonal relations.

**(d) Teacher Effectiveness in Relation to Gender**

Influencing Factors of Teacher Effectiveness of Male & Female Teachers	N	Mean	S.D.	d.f.	't'- value	Level of Significance
Male Teachers	219	461.42	74.68	598	0.3548	Not Significant
Female Teachers	381	463.67	74.99			

df=598 at .05=1.96; .01=2.59

**Table-4.10: Shows 't'- value between Influencing Factors of Teacher Effectiveness of Male and Female Teachers**

It can be observed from the above table-4.10 {items considered are given in Appendix:I (A)} that the calculated 't'- value 0.3548 is less than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is not significant and indicates that there is no statistically significant difference between female and male teachers regarding their influencing factors of teacher effectiveness.

**Hence, the Null Hypothesis 1(d)** which states that,

**“There exists no significant difference in influencing factors of teacher effectiveness in relation to gender”, is accepted.**

On the basis of their obtained mean scores, it may be said that the influencing factors of teacher effectiveness of female teachers is slightly higher than that of male teachers.

It is found that the gender of teachers had a significant influence on the influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. This finding is in line with studies done by Chacko (1981); Akpan (1996); Sundara Rao (2009); Sodhi (2010); Kiadese (2011); Malik & Sharma (2013); Onyekuru & Ibegbunam (2013); Pachaiyappan & Ushalaya Raj (2014); and Chowdhury (2014). All these studies have shown that gender had significant influence on teacher effectiveness of teachers.

The analysis and the result of the teacher effectiveness rating scale {items considered are given in Appendix:I (B)} based on gender are given in the table-4.11. The rating was done on the basis of roles / functions of teachers such as ‘poor’, ‘fair’, ‘good’, ‘very good’ and ‘excellent’.

Sl. No.	Influencing Factors	Role / function	Gender			
			Female:381		Male:219	
			Number	Percentage	Number	Percentage
1	Preparation and Planning for Teaching	Poor	14	6.39%	13	3.41%
		Fair	65	29.68%	107	28.08%
		Good	66	30.14%	127	33.33%
		Very Good	47	21.46%	104	27.3%
		Excellent	27	12.33%	30	7.88%
2	Classroom Management	Poor	2	0.91%	5	1.31%
		Fair	53	24.2%	58	15.22%
		Good	67	30.6%	136	35.7%
		Very Good	62	28.31%	129	33.86%
		Excellent	35	15.98%	53	13.91%
3	Knowledge of Subject Matter	Poor	Nil	Nil	Nil	Nil
		Fair	39	17.8%	42	11.02%
		Good	78	35.62%	136	35.7%
		Very Good	65	29.68%	147	38.58%
		Excellent	37	16.89%	56	14.7%
4	Teacher Characteristics	Poor	Nil	Nil	1	0.26%
		Fair	52	23.74%	66	17.32%
		Good	67	30.6%	129	33.86%
		Very Good	67	30.6%	132	34.65%
		Excellent	33	15.06%	53	13.91%
5	Interpersonal Relations	Poor	Nil	Nil	3	0.79%
		Fair	59	26.94%	72	18.9%
		Good	69	31.5%	132	34.65%
		Very Good	63	28.77%	129	33.86%
		Excellent	28	12.79%	45	11.81%

**Table-4.11: Shows the Result of Teacher Effectiveness Rating Scale Based on Gender**

The following findings have been revealed from the table-4.11:-

**(i) Regarding Preparation and Planning for Teaching**

- (a) 6.39% of the female teachers out of 219 and 3.41% of the male teachers out of 381 were ‘poor’ in preparation and planning for teaching.



- (b) 29.68% of the female teachers out of 219 and 28.08% of the male teachers out of 381 were **'fair'** in preparation and planning for teaching.
- (c) 30.14% of the female teachers out of 219 and 33.33% of the male teachers out of 381 were **'good'** in preparation and planning for teaching.
- (d) 30.14% of the female teachers out of 219 and 27.3% of the male teachers out of 381 were **'very good'** in preparation and planning for teaching.
- (e) 12.33% of the female teachers out of 219 and 7.88% of the male teachers out of 381 were **'excellent'** in preparation and planning for teaching.

**(ii) Regarding Classroom Management**

- (a) 0.91% of the female teachers out of 219 and 1.31% of the male teachers out of 381 were **'poor'** in classroom management.
- (b) 24.2% of the female teachers out of 219 and 15.22% of the male teachers out of 381 were **'fair'** in classroom management.
- (c) 30.6% of the female teachers out of 219 and 35.7% of the male teachers out of 381 were **'good'** in classroom management.
- (d) 28.31% of the female teachers out of 219 and 33.86% of the male teachers out of 381 were **'very good'** in classroom management.
- (e) 15.98% of the female teachers out of 219 and 13.91% of the male teachers out of 381 were **'excellent'** in classroom management.

**(iii) Regarding Knowledge of Subject Matter**

- (a) No female and male teachers were **'poor'** in Knowledge of Subject Matter.
- (b) 17.8% of the female teachers out of 219 and 11.02% of the male teachers out of 381 were **'fair'** in Knowledge of Subject Matter.
- (c) 35.62% of the female teachers out of 219 and 35.7% of the male teachers out of 381 were **'good'** in Knowledge of Subject Matter.
- (d) 29.68% of the female teachers out of 219 and 38.58% of the male teachers out of 381 were **'very good'** in Knowledge of Subject Matter.
- (e) 16.89% of the female teachers out of 219 and 14.7% of the male teachers out of 381 were **'excellent'** in Knowledge of Subject Matter.

**(iv) Regarding Teacher Characteristics**

- (a) No female teachers were **'poor'** in teacher characteristics.
- (b) 0.26% of the male teachers out of 381 were **'poor'** in teacher characteristics.
- (c) 23.74% of the female teachers out of 219 and 17.32% of the male teachers out of 381 were **'fair'** in teacher characteristics.
- (d) 30.6% of the female teachers out of 219 and 33.86% of the male teachers out of 381 were **'good'** in teacher characteristics.
- (e) 30.6% of the female teachers out of 219 and 34.65% of the male teachers out of 381 were **'very good'** in teacher characteristics.

(f) 15.06% of the female teachers out of 219 and 13.91% of the male teachers out of 381 were **‘excellent’** in teacher characteristics.

**(v) Regarding Interpersonal Relations**

(a) No female teachers were **‘poor’** in interpersonal relations.

(b) 0.79% of the male teachers out of 381 were **‘poor’** in interpersonal relations.

(c) 26.94% of the female teachers out of 219 and 18.9% of the male teachers out of 381 were **‘fair’** in interpersonal relations.

(d) 31.5% of the female teachers out of 219 and 34.65% of the male teachers out of 381 were **‘good’** in interpersonal relations.

(e) 28.77% of the female teachers out of 219 and 33.86% of the male teachers out of 381 were **‘very good’** in interpersonal relations.

(f) 12.79% of the female teachers out of 219 and 11.81% of the male teachers out of 381 were **‘excellent’** in interpersonal relations.

**(e) Teacher Effectiveness in Relation to Locality**

Influencing Factors of Teacher Effectiveness of Rural & Urban Teachers	N	Mean	S.D.	d.f.	‘t’- value	Level of Significance
Rural Teachers	284	446.59	83.05	598	5.0488	Significant
Urban Teachers	316	476.87	63.38			

df=598 at .05=1.96; .01=2.59

**Table-4.12: Shows ‘t’- value between Influencing Factors of Teacher Effectiveness of Rural and Urban Teachers**

It can be observed from the above table-4.12 {items considered are given in Appendix:I (A)} that the calculated ‘t’- value 5.0488 is greater than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is significant and indicates that there is statistically significant difference between rural and urban teachers regarding their influencing factors of teacher effectiveness.

Hence, the Null Hypothesis 1(e) which states that,

**“There exists no significant difference in influencing factors of teacher effectiveness in relation to locality”, is rejected.**

On the basis of their obtained mean scores, it may be said that the influencing factors of teacher effectiveness of urban teachers is far better than that of rural teachers.

It has been found that the locality of the school had a significant influence on the influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. This finding is supported by studies conducted by Vijaya Lakshmi (2005); Sodhi (2010) and Kothawade (2014). Their studies revealed that locality of school had a significant influence on effectiveness of teachers. But, this study is negated by the findings of the studies done by Sundara Rao (2009); Tyagi (2013); and Pachaiyappan & Ushalaya Raj (2014). They found that locality of school had no significant influence on effectiveness of teachers.

The analysis and the result of the teacher effectiveness rating scale {items considered are given in Appendix:I (B)} based on locality are given in the table-4.13. The rating was done on the basis of roles / functions of teachers such as ‘poor’, ‘fair’, ‘good’, ‘very good’ and ‘excellent’.

Sl. No.	Influencing Factors	Role / function	Locality			
			Rural:284		Urban:316	
			Number	Percentage	Number	Percentage
1	Preparation and Planning for Teaching	Poor	20	7.04%	16	05.06%
		Fair	94	33.09%	27	08.54%
		Good	97	34.15%	106	33.54%
		Very Good	54	19.01%	119	37.66%
		Excellent	19	6.69%	48	15.19%
2	Classroom Management	Poor	03	1.06%	04	1.26%
		Fair	68	23.94%	43	13.6%
		Good	98	34.5%	105	33.23%
		Very Good	83	29.22%	108	34.18%
		Excellent	32	11.27%	56	17.72%
		Poor	Nil	Nil	Nil	Nil
		Fair	51	17.96%	30	9.49%

3	Knowledge of Subject Matter	Good	107	37.68%	107	33.86%
		Very Good	90	39.69%	122	38.61%
		Excellent	36	12.68%	57	18.04%
4	Teacher Characteristics	Poor	01	0.35%	Nil	Nil
		Fair	74	26.06%	44	13.92%
		Good	95	33.45%	101	31.96%
		Very Good	82	28.87%	117	37.02%
		Excellent	32	11.27%	54	17.09%
5	Interpersonal Relations	Poor	02	0.7%	01	0.32%
		Fair	81	28.52%	50	15.82%
		Good	97	34.15%	104	32.91%
		Very Good	79	27.82%	113	35.76%
		Excellent	25	8.8%	48	15.19%

**Table-4.13: Shows the Result of Teacher Effectiveness Rating Scale Based on Locality**

The following findings have been revealed from the table-4.13:-

**(i) Regarding Preparation and Planning for Teaching**

- (a) 7.04% of the rural teachers out of 284 and 05.06% of the urban teachers out of 316 were **‘poor’** in preparation and planning for teaching.
- (b) 33.09% of the rural teachers out of 284 and 08.54% of the urban teachers out of 316 were **‘fair’** in preparation and planning for teaching.
- (c) 34.15% of the rural teachers out of 284 and 33.54% of the urban teachers out of 316 were **‘good’** in preparation and planning for teaching.
- (d) 19.01% of the rural teachers out of 284 and 37.66% of the urban teachers out of 316 were **‘very good’** in preparation and planning for teaching.
- (e) 6.69% of the rural teachers out of 284 and 15.19% of the urban teachers out of 316 were **‘excellent’** in preparation and planning for teaching.

## **(ii) Regarding Classroom Management**

- (a) 1.06% of the rural teachers out of 284 and 1.26% of the urban teachers out of 316 were **'poor'** in classroom management.
- (b) 23.94% of the rural teachers out of 284 and 13.6% of the urban teachers out of 316 were **'fair'** in classroom management.
- (c) 34.5% of the rural teachers out of 284 and 33.23% of the urban teachers out of 316 were **'good'** in classroom management.
- (d) 29.22% of the rural teachers out of 284 and 34.18% of the urban teachers out of 316 were **'very good'** in classroom management.
- (e) 11.27% of the rural teachers out of 284 and 17.72% of the urban teachers out of 316 were **'excellent'** in classroom management.

## **(iii) Regarding Knowledge of Subject Matter**

- (a) No rural and urban teachers were **'poor'** in knowledge of subject matter.
- (b) 17.96% of the rural teachers out of 284 and 9.49% of the urban teachers out of 316 were **'fair'** in knowledge of subject matter.
- (c) 37.68% of the rural teachers out of 284 and 33.86% of the urban teachers out of 316 were **'good'** in knowledge of subject matter.
- (d) 39.69% of the rural teachers out of 284 and 38.61% of the urban teachers out of 316 were **'very good'** in knowledge of subject matter.
- (e) 12.68% of the rural teachers out of 284 and 18.04% of the urban teachers out of 316 were **'excellent'** in knowledge of subject matter.

## **(iv) Regarding Teacher Characteristics**

- (a) 0.35% of the rural teachers out of 284 were **'poor'** in teacher characteristics.
- (b) No urban teachers were **'poor'** in teacher characteristics.
- (c) 26.06% of the rural teachers out of 284 and 13.92% of the urban teachers out of 316 were **'fair'** in teacher characteristics.

- (d) 33.45% of the rural teachers out of 284 and 31.96% of the urban teachers out of 316 were **‘good’** in teacher characteristics.
- (e) 28.87% of the rural teachers out of 284 and 37.02% of the urban teachers out of 316 were **‘very good’** in teacher characteristics.
- (f) 11.27% of the rural teachers out of 284 and 17.09% of the urban teachers out of 316 were **‘excellent’** in teacher characteristics.

**(v) Regarding Interpersonal Relations**

- (a) 0.7% of the rural teachers out of 284 and 0.32% of the urban teachers out of 316 were **‘poor’** in interpersonal relations.
- (b) 28.52% of the rural teachers out of 284 and 15.82% of the urban teachers out of 316 were **‘fair’** in interpersonal relations.
- (c) 34.15% of the rural teachers out of 284 and 32.91% of the urban teachers out of 316 were **‘good’** in interpersonal relations.
- (d) 27.82% of the rural teachers out of 284 and 35.76% of the urban teachers out of 316 were **‘very good’** in interpersonal relations.
- (e) 08.8% of the rural teachers out of 284 and 15.19% of the urban teachers out of 316 were **‘excellent’** in interpersonal relations.

**4.2.3 Teacher Effectiveness in Relation to Attitude of Teachers towards**

**Computer Education**

To meet the **Objective-3 viz., “To find out whether the attitude of teachers towards computer education determine influencing factors of teacher effectiveness”**, the researcher analysed the data collected from the field survey which is as follows:-

Influencing Factors of Teacher Effectiveness and Attitude of Teachers towards Computer Education	N	Mean	S.D.	d.f.	‘t’- value	Level of Significance
Attitude towards Computer Education	600	350.94	25.31	1198	34.2605	Significant
Influencing Factors of Teacher Effectiveness	600	461.64	74.99			

df=1198 at .05=1.96 ; .01=2.58

**Table-4.14: Shows ‘t’- value between Influencing Factors of Teacher Effectiveness and Attitude of Teachers towards Computer Education**

It can be observed from the above table-4.14 {items considered are given in Appendix:I (C)} that the calculated 't'- value 34.2605 is greater than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is significant and indicates that there is a statistically significant difference in the attitude of teachers towards computer education and influencing factors of teacher effectiveness.

**Hence, the Null Hypothesis 2** which states that,

**“There exists no significant difference in the mean scores of attitude of teachers towards computer education and influencing factors of teacher effectiveness”, is rejected.**

On the basis of their obtained mean scores, it may be said that the attitude of teachers towards computer education determined influencing factors of teacher effectiveness.

It has been found that favourable attitude of teachers towards computer education increased teacher effectiveness. Therefore it can be concluded that the attitude of teachers towards computer education had a significant influence on the influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. The result of the analysis revealed that relationship between the attitude of teachers towards computer education and the influencing factors of teacher effectiveness is directly proportional. It means, if the attitude of teachers towards computer education is more favourable then the influencing factors of teacher effectiveness is higher and vice versa. Kumaran and Selvaraju (2001) conducted a study of 'Cognitive and Affective Computer Attitudes of Teachers' and found that in general, teachers had more favourable computer attitude.

#### **4.2.4. Teacher Effectiveness in Relation to Attitude of Teachers towards Using New Technology in Education**

To meet the **Objective-4 viz., “To find out whether attitude of teachers towards using new technology in education determine influencing factors of teacher**



**effectiveness”**, the researcher analysed the data collected from field the survey which is as follows:-

Influencing Factors of Teacher Effectiveness and Attitude towards Using New Technology in Education	N	Mean	S.D.	d.f.	‘t’- value	Level of Significance
Attitude towards Using New Technology	600	103.64	8.73	1198	116.1535	Significant
Influencing Factors of Teacher Effectiveness	600	461.64	74.99			

df=1198 at .05=1.96 ; .01=2.58

**Table-4.15: Shows ‘t’- value between Influencing Factors of Teacher Effectiveness and Attitude of Teachers towards Using New Technology in Education**

It can be observed from the above table-4.15 {items considered are given in Appendix:I (D)} that the calculated ‘t’- value 116.1535 is greater than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is significant and indicates that there is a statistically significant difference in the attitude of teachers towards using new technology and influencing factors of teacher effectiveness.

**Hence, the Null Hypothesis 3** which states that,

**“There exists no significant difference in the mean scores of attitude of teachers towards using new technology education and influencing factors of teacher effectiveness”, is rejected.**

On the basis of their obtained mean scores, it may be said that the attitude of teachers towards using technology determined influencing factors of teacher effectiveness.

It has been found that favourable attitude of teachers towards using new technology increased teacher effectiveness. Therefore it can be concluded that the attitude of teachers towards using new technology has a significant influence on influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. The result of the analysis revealed that relationship between the attitude of teachers towards using new technology and the influencing factors of teacher

effectiveness is directly proportional. It means if the attitude of teachers towards using new technology is more favourable then the influencing factors of teacher effectiveness is higher and vice versa. This finding is in line with study conducted by Moallem & Micallef (1997); Eichenold (2008); Ng (2009); Moore-Hayes (2011); and Watson (2016). These studies found that teachers who had positive attitudes toward using technology in education were effective in teaching. It is also found that teachers' beliefs in effectiveness of technology were a decisive motivator in integrating it in their classrooms. It was still found from their study that teachers who had positive attitude towards the use of computer in instruction, were tempted to use computers often. This contributed to a more positive attitude, which in turn motivated teachers to try additional computer-related instructional activities which brought about increase in teacher effectiveness.

#### 4.2.5 Teacher Effectiveness in Terms of Mode of Appointment

To meet the **Objective-5 viz., “To study the relationship between mode of appointment of teachers in influencing factors of teacher effectiveness”**, the researcher analysed the data collected from field the survey which is as follows:-

Influencing Factors of Teacher Effectiveness of Permanent and Temporary Teachers	N	Mean	S.D.	d.f.	't'- value	Level of Significance
Permanent Teachers	279	471.32	73.37	598	3.0023	Significant
Temporary Teachers	321	453.02	75.41			

df=598 at .05=1.96; .01=2.59:

**Table-4.16: Shows 't'- value between Influencing Factors of Teacher Effectiveness of Mode of Appointment of Teachers**

It can be observed from the above table-4.16 {items considered are given in Appendix:I (A)} that the calculated 't'- value 3.0023 is greater than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is significant and indicates that there is a statistically significant difference between permanent and temporary teachers regarding their influencing factors of teacher effectiveness.

Hence, the Null Hypothesis 4 which states that,

**“There exists no significant difference in the mean scores of mode of appointment of teachers towards influencing factors of teacher effectiveness”, is rejected.**

On the basis of their obtained mean scores, it may be said that the influencing factors of teacher effectiveness of permanent teachers was far better than that of temporary. It has been found that the mode of appointment of teachers had a significant influence on the influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland.

The analysis and the result of the teacher effectiveness rating scale {items considered are given in Appendix:I (B)} based on mode of appointment are given in the table-4.17. The rating was done on the basis of roles / functions of teachers such as ‘poor’, ‘fair’, ‘good’, ‘very good’ and ‘excellent’.

Sl. No.	Influencing Factors	Role / function	Mode of Appointment			
			Temporary:321		Permanent:279	
			Number	Percentage	Number	Percentage
1	Preparation and Planning for Teaching	Poor	24	7.48%	03	1.08%
		Fair	130	40.5%	42	15.05%
		Good	100	31.15%	93	33.33%
		Very Good	48	14.95%	103	36.92%
		Excellent	19	5.92%	38	13.62%
2	Classroom Management	Poor	5	1.56%	2	1.56%
		Fair	94	29.28%	18	6.45%
		Good	127	39.56%	75	26.89%
		Very Good	60	18.69%	131	46.95%
		Excellent	35	10.09%	53	18.1%
3	Knowledge of Subject Matter	Poor	Nil	Nil	Nil	Nil
		Fair	72	22.43%	10	3.58%
		Good	143	44.55%	71	25.45%
		Very Good	72	22.43%	140	50.18%
		Excellent	34	10.59%	58	20.79%
4	Teacher Characteristics	Poor	Nil	Nil	1	0.36%
		Fair	104	32.4%	14	5.02%
		Good	120	37.38%	76	27.24%
		Very Good	66	20.56%	133	47.67%
		Excellent	31	9.66%	55	19.71%
		Poor	1	0.31%	2	0.72%

5	Interpersonal Relations	Fair	113	35.2%	18	6.45%
		Good	117	36.45%	84	30.1%
		Very Good	69	21.5%	123	44.09%
		Excellent	21	6.54%	52	18.63%

**Table-4.17: Shows the Result of Teacher Effectiveness Rating Scale Based on Mode of Appointment**

The following findings have been revealed from the table-4.17:-

**(i) Regarding Preparation and Planning for Teaching**

- (a) 7.48% of the temporary teachers out of 321 and 1.08% of the permanent teachers out of 279 were **'poor'** in preparation and planning for teaching.
- (b) 40.5% of the temporary teachers out of 321 and 15.05% of the permanent teachers out of 279 were **'fair'** in preparation and planning for teaching.
- (c) 31.15% of the temporary teachers out of 321 and 33.33% of the permanent teachers out of 279 were **'good'** in preparation and planning for teaching.
- (d) 14.95% of the temporary teachers out of 321 and 36.92% of the permanent teachers out of 279 were **'very good'** in preparation and planning for teaching.
- (e) 5.92% of the temporary teachers out of 321 and 13.62% of the permanent teachers out of 279 were **'excellent'** in preparation and planning for teaching.

**(ii) Regarding Classroom Management**

- (a) 1.56% of the temporary teachers out of 321 and 1.56% of the permanent teachers out of 279 were **'poor'** in Classroom Management.

- (b) 29.28% of the temporary teachers out of 321 and 6.45% of the permanent teachers out of 279 were **'fair'** in Classroom Management.
- (c) 39.56% of the temporary teachers out of 321 and 26.89% of the permanent teachers out of 279 were **'good'** in Classroom Management.
- (d) 18.69% of the temporary teachers out of 321 and 46.95% of the permanent teachers out of 279 were **'very good'** in Classroom Management.
- (e) 10.09% of the temporary teachers out of 321 and 18.1% of the permanent teachers out of 279 were **'excellent'** in Classroom Management.

**(iii) Regarding Knowledge of Subject Matter**

- (a) No temporary and permanent teachers were **'poor'** in knowledge of subject matter.
- (b) 22.43% of the temporary teachers out of 321 and 3.58% of the permanent teachers out of 279 were **'fair'** in knowledge of subject matter.
- (c) 44.55% of the temporary teachers out of 321 and 25.45% of the permanent teachers out of 279 were **'good'** in knowledge of subject matter.
- (d) 22.43% of the temporary teachers out of 321 and 50.18% of the permanent teachers out of 279 were **'very good'** in knowledge of subject matter.
- (e) 10.59% of the temporary teachers out of 321 and 20.79% of the permanent teachers out of 279 were **'excellent'** in knowledge of subject matter.

**(iv) Regarding Teacher Characteristics**

- (a) No temporary teachers were **'poor'** in teacher characteristics.
- (b) 0.36% of the permanent teachers out of 279 were **'poor'** in teacher characteristics.
- (c) 32.4% of the temporary teachers out of 321 and 5.02% of the permanent teachers out of 279 were **'fair'** in teacher characteristics.
- (d) 37.38% of the temporary teachers out of 321 and 27.24% of the permanent teachers out of 279 were **'good'** in teacher characteristics.
- (e) 20.56% of the temporary teachers out of 321 and 47.67% of the permanent teachers out of 279 were **'very good'** in teacher characteristics.
- (f) 9.66% of the temporary teachers out of 321 and 19.71% of the permanent teachers out of 279 were **'excellent'** in teacher characteristics.

**(v) Regarding Interpersonal Relations**

- (a) 0.31% of the temporary teachers out of 321 and 0.72% of the permanent teachers out of 279 were **'poor'** in interpersonal relations.
- (b) 35.2% of the temporary teachers out of 321 and 6.45% of the permanent teachers out of 279 were **'fair'** in interpersonal relations.
- (c) 36.45% of the temporary teachers out of 321 and 30.1% of the permanent teachers out of 279 were **'good'** in interpersonal relations.
- (d) 21.5% of the temporary teachers out of 321 and 44.09% of the permanent teachers out of 279 were **'very good'** in interpersonal relations.

(e) 6.54% of the temporary teachers out of 321 and 18.63% of the permanent teachers out of 279 were ‘**excellent**’ in interpersonal relations.

#### 4.2.6 Teacher Effectiveness in Terms of Academic Discipline

To meet the **Objective-6 viz., “To study the relationship between academic discipline of teachers in influencing factors of teacher effectiveness”**, the researcher analysed the data collected from field the survey which is as follows:-

Influencing Factors of Teacher Effectiveness of Academic Discipline of Teachers	N	Mean	S.D.	d.f.	‘t’- value	Level of Significance
Arts Teachers	490	458.87	75.07	586	1.5176	Not Significant
Science Teachers	98	471.35	70.40			

df=586 at .05= 1.96 ; .01=2.59:

**Table-4.18: Shows ‘t’- value between Influencing Factors of Teacher Effectiveness of Academic Discipline of Teachers**

It can be observed from the above table-4.18 {items considered are given in Appendix:I (A)} that the calculated ‘t’- value 1.5176 is less than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is not significant and indicates that there is no statistically significant difference between arts and science teachers regarding their influencing factors of teacher effectiveness.

**Hence, the Null Hypothesis 5** which states that,

**“There exists no significant difference in the mean scores of academic discipline of teachers towards influencing factors of teacher effectiveness”, is accepted.**

On the basis of their obtained mean scores, it may be said that the influencing factors of teacher effectiveness of science teachers was slightly better than that of arts teachers.

It has been found that the academic discipline of teachers has a significant influence on the influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. This finding is supported by the findings of the studies conducted by Vijaya Lakshmi (2005); Sodhi (2010) and Malik & Sharma (2013). They found that subject stream or subject of teaching had a significant influence on teaching effectiveness of teachers. But, this finding of the study has been negated by the studies of Sharadha & Parameswaram (2008), Tyagi (2013); and Pachaiyappan & Ushalaya Raj (2014). They found that stream of subject of teaching had no significant impact on teaching effectiveness of teachers.

The analysis and the result of the teacher effectiveness rating scale {items considered are given in Appendix:I (B)} based on academic discipline are given in the table-4.19. The rating was done on the basis of roles / functions of teachers such as 'poor', 'fair', 'good', 'very good' and 'excellent'.

Sl. No.	Influencing Factors	Role / function	Academic Discipline			
			Arts: 490		Science: 98	
			Number	Percentage	Number	Percentage
1	Preparation and Planning for Teaching	Poor	23	04.7%	04	4.08%
		Fair	156	31.83%	13	13.27%
		Good	160	32.65%	26	26.53%
		Very Good	116	23.67%	34	34.69%
		Excellent	35	7.14%	21	21.43%
2	Classroom Management	Poor	5	1.02%	2	2.04%
		Fair	101	20.6%	9	9.18%
		Good	176	35.9%	21	21.43%
		Very Good	148	30.2%	39	39.8%
		Excellent	60	12.24%	27	27.55%
3	Knowledge of Subject Matter	Poor	Nil	Nil	Nil	Nil
		Fair	73	14.89%	7	7.14%
		Good	189	38.57%	20	20.4%
		Very Good	165	33.67%	42	42.86%
		Excellent	63	12.88%	29	29.59%
4	Teacher Characteristics	Poor	1	0.2%	Nil	Nil
		Fair	108	22.04%	8	8.16%
		Good	169	34.49%	24	24.49%
		Very Good	152	31.02%	41	41.84%
		Excellent	60	12.24%	25	25.51%
		Poor	3	0.61%	Nil	Nil



5	Interpersonal Relations	Fair	118	24.08%	11	11.22%
		Good	170	34.69%	27	27.55%
		Very Good	147	30%	40	40.8%
		Excellent	52	10.61%	20	20.4%

**Table-4.19: Shows the Result of Teacher Effectiveness Rating Scale Based on Academic Discipline of Teachers**

The following findings have been revealed from the table-4.19:-

**(i) Regarding Preparation and Planning for Teaching**

- (a) 04.7% of the arts teachers out of 490 and 4.08% of the science teachers out of 98 were **'poor'** in preparation and planning for teaching.
- (b) 31.83% of the arts teachers out of 490 and 13.27% of the science teachers out of 98 were **'fair'** in preparation and planning for teaching.
- (c) 32.65% of the arts teachers out of 490 and 26.53% of the science teachers out of 98 were **'good'** in preparation and planning for teaching.
- (d) 23.67% of the arts teachers out of 490 and 34.69% of the science teachers out of 98 were **'very good'** in preparation and planning for teaching.
- (e) 7.14% of the arts teachers out of 490 and 21.43% of the science teachers out of 98 were **'excellent'** in preparation and planning for teaching.

**(ii) Regarding Classroom Management**

- (a) 1.02% of the arts teachers out of 490 and 2.04% of the science teachers out of 98 were **'poor'** in classroom management.
- (b) 20.6% of the arts teachers out of 490 and 9.18% of the science teachers out of 98 were **'fair'** in classroom management.

- (c) 35.9% of the arts teachers out of 490 and 21.43% of the science teachers out of 98 were **'good'** in classroom management.
- (d) 30.2% of the arts teachers out of 490 and 39.8% of the science teachers out of 98 were **'very good'** in classroom management.
- (e) 12.24% of the arts teachers out of 490 and 27.55% of the science teachers out of 98 were **'excellent'** in classroom management.

**(iii) Regarding Knowledge of Subject Matter**

- (a) No arts and science teachers were **'poor'** in knowledge of subject matter.
- (b) 14.89% of the arts teachers out of 490 and 7.14% of the science teachers out of 98 were **'fair'** in knowledge of subject matter.
- (c) 38.57% of the arts teachers out of 490 and 20.4% of the science teachers out of 98 were **'good'** in knowledge of subject matter.
- (d) 33.67% of the arts teachers out of 490 and 42.86% of the science teachers out of 98 were **'very good'** in knowledge of subject matter.
- (e) 12.88% of the arts teachers out of 490 and 29.59% of the science teachers out of 98 were **'excellent'** in knowledge of subject matter.

**(iv) Regarding Teacher Characteristics**

- (a) 0.2% of the arts teachers out of 490 were **'poor'** in teacher characteristics.
- (b) No science teachers were **'poor'** in teacher characteristics.
- (c) 22.04% of the arts teachers out of 490 and 8.16% of the science teachers out of 98 were **'fair'** in teacher characteristics.

- (d) 34.49% of the arts teachers out of 490 and 24.49% of the science teachers out of 98 were **‘good’** in teacher characteristics.
- (e) 31.02% of the arts teachers out of 490 and 41.84% of the science teachers out of 98 were **‘very good’** in teacher characteristics.
- (f) 12.24% of the arts teachers out of 490 and 25.51% science teachers out of 98 were **‘excellent’** in teacher characteristics.

**(v) Regarding Interpersonal Relations**

- (a) 0.61% of the arts teachers out of 490 were **‘poor’** in interpersonal relations.
- (b) No science teachers were **‘poor’** in interpersonal relations.
- (c) 24.08% of the arts teachers out of 490 and 11.22% of the science teachers out of 98 were **‘fair’** in interpersonal relations.
- (d) 34.69% of the arts teachers out of 490 and 27.55% of the science teachers out of 98 were **‘good’** in interpersonal relations.
- (e) 30% of the arts teachers out of 490 and 40.8% of the science teachers out of 98 were **‘very good’** in interpersonal relations.
- (f) 10.61% of the arts teachers out of 490 and 20.4% of the science teachers out of 98 were **‘excellent’** in interpersonal relations.

**4.2.7 Teacher Effectiveness in Terms of Computer Knowledge**

To meet the **Objective-7 viz., “To study the relationship between computer knowledge of teachers in influencing factors of teacher effectiveness”**, the researcher analysed the data collected from field the survey which is as follows:-

Influencing Factors of Teacher Effectiveness of Teachers with computer Knowledge and Teachers without computer knowledge	N	Mean	S.D.	d.f.	't' value	Level of Significance
Teachers without computer knowledge	404	458.61	72.04	598	1.9369	Not Significant
Teachers with computer Knowledge	196	471.29	78.89			

df=598 at .05= 1.96 ; .01=2.59;

**Table-4.20: Shows 't'- value between Influencing Factors of Teacher Effectiveness of Teachers with computer Knowledge and Teachers without computer knowledge**

It can be observed from the above table-4.20 {items considered are given in Appendix:I (A)} that the calculated 't'- value 1.9369 is less than the table value at both 0.05 and 0.01 levels of significance. Therefore the result is not significant and indicates that there is no statistically significant difference between teachers without computer knowledge and teachers with computer knowledge regarding their influencing factors of teacher effectiveness.

**Hence, the Null Hypothesis 6** which states that,

**“There exists no significant difference in the mean scores of computer knowledge of teachers towards influencing factors of teacher effectiveness”, is accepted.**

On the basis of their obtained mean scores, it may be said that of teachers with computer knowledge were better in the influencing factors of teacher effectiveness.

It has been found that the computer knowledge of teachers had a significant influence on the influencing factors of teacher effectiveness of Catholic Missionary schools in the state of Nagaland. This finding is supported by the findings of Brill and Galloway (2007). The study found that the instructors who used technology had beneficial impacts on the instructional setting.

The analysis and the result of the teacher effectiveness rating scale {items considered are given in Appendix:I (B)} based on computer knowledge are given in

the table-4.21. The rating was done on the basis of roles / functions of teachers such as ‘poor’, ‘fair’, ‘good’, ‘very good’ and ‘excellent’.

Sl. No.	Influencing Factors	Role / function	Computer Knowledge			
			With Computer :196		Without Computer:404	
			Number	Percentage	Number	Percentage
1	Preparation and Planning for Teaching	Poor	12	0.51%	15	3.71%
		Fair	58	29.59%	119	29.46%
		Good	68	34.7%	121	29.95%
		Very Good	38	19.39%	113	27.97%
		Excellent	20	10.2%	36	8.91%
2	Classroom Management	Poor	2	1.02%	5	1.24%
		Fair	43	21.93%	71	17.57%
		Good	72	36.73%	129	31.93%
		Very Good	47	23.98%	143	35.4%
		Excellent	32	16.32%	56	13.86%
3	Knowledge of Subject Matter	Poor	Nil	Nil	Nil	Nil
		Fair	24	12.24%	162	40.09%
		Good	83	42.34%	128	31.68%
		Very Good	56	28.57%	57	14.1%
		Excellent	33	16.84%	57	14.1%
4	Teacher Characteristics	Poor	Nil	Nil	Nil	Nil
		Fair	31	15.81%	80	19.8%
		Good	71	36.22%	125	30.94%
		Very Good	52	26.53%	144	35.64%
		Excellent	42	21.42%	55	13.61%
5	Interpersonal Relations	Poor	Nil	Nil	2	0.49%
		Fair	48	24.49%	90	22.27%
		Good	70	35.71%	128	31.68%
		Very Good	54	27.56%	138	34.16%
		Excellent	24	12.24%	46	11.39%

**Table-4.21: Shows the Result of Teacher Effectiveness Rating Scale Based on Computer Knowledge of Teachers**

The following findings have been revealed from the table-4.21:-

**(i) Regarding Preparation and Planning for Teaching**

- (a) 0.51% of the teachers who have computer knowledge out of 196 and 3.71% of the teachers who don't have computer knowledge out of 404 were ‘poor’ in preparation and planning for teaching.

- (b) 29.59% of the teachers who have computer knowledge out of 196 and 29.46% of the teachers who don't have computer knowledge out of 404 were **'fair'** in preparation and planning for teaching.
- (c) 34.7% of the teachers who have computer knowledge out of 196 and 29.95% of the teachers who don't have computer knowledge out of 404 were **'good'** in preparation and planning for teaching.
- (d) 19.39% of the teachers who have computer knowledge out of 196 and 27.97% of the teachers who don't have computer knowledge out of 404 were **'very good'** in preparation and planning for teaching.
- (e) 10.2% of the teachers who have computer knowledge out of 196 and 8.91% of the teachers who don't have computer knowledge out of 404 were **'excellent'** in preparation and planning for teaching.

**(ii) Regarding Classroom Management**

- (a) 1.02% of the teachers who have computer knowledge out of 196 and 1.24% of the teachers who don't have computer knowledge out of 404 were **'poor'** in classroom management.
- (b) 21.93% of the teachers who have computer knowledge out of 196 and 17.57% of the teachers who don't have computer knowledge out of 404 were **'fair'** in classroom management.
- (c) 36.73% of the teachers who have computer knowledge out of 196 and 31.93% of the teachers who don't have computer knowledge out of 404 were **'good'** in classroom management.
- (d) 23.98% of the teachers who have computer knowledge out of 196 and 35.4% of the teachers who don't have computer knowledge out of 404 were **'very good'** in classroom management.

- (e) 16.32% of the teachers who have computer knowledge out of 196 and 13.86% of the teachers who don't have computer knowledge out of 404 were '**excellent**' in classroom management.

**(iii) Regarding Knowledge of Subject Matter**

- (a) No teachers who have computer knowledge and who don't have computer knowledge were '**poor**' in knowledge of subject matter.
- (b) 12.24% of the teachers who have computer knowledge out of 196 and 40.09% of the teachers who don't have computer knowledge out of 404 were '**fair**' in knowledge of subject matter.
- (c) 42.34% of the teachers who have computer knowledge out of 196 and 31.68% of the teachers who don't have computer knowledge out of 404 were '**good**' in knowledge of subject matter.
- (d) 28.57% of the teachers who have computer knowledge out of 196 and 14.1% of the teachers who don't have computer knowledge out of 404 were '**very good**' in knowledge of subject matter.
- (e) 16.84% of the teachers who have computer knowledge out of 196 and 14.1% of the teachers who don't have computer knowledge out of 404 were '**excellent**' in knowledge of subject matter.

**(iv) Regarding Teacher Characteristics**

- (a) No teachers who have computer knowledge and who don't have computer knowledge are '**poor**' in teacher characteristics.
- (b) 15.81% of the teachers who have computer knowledge out of 196 and 19.8% of the teachers who don't have computer knowledge out of 404 were '**fair**' in teacher characteristics.

- (c) 36.22% of the teachers who have computer knowledge out of 196 and 30.94% of the teachers who don't have computer knowledge out of 404 were **'good'** in teacher characteristics.
- (d) 26.53% of the teachers who have computer knowledge out of 196 and 35.64% of the teachers who don't have computer knowledge out of 404 were **'very good'** in teacher characteristics.
- (e) 21.42% of the teachers who have computer knowledge out of 196 and 13.61% of the teachers who don't have computer knowledge out of 404 were **'excellent'** in teacher characteristics.

**(v) Regarding Interpersonal Relations**

- (a) No teachers who have computer knowledge were **'poor'** in interpersonal relations.
- (b) 0.49% of the teachers who don't have computer knowledge out of 404 were **'poor'** in interpersonal relations.
- (c) 24.49% of the teachers who have computer knowledge out of 196 and 22.27% of the teachers who don't have computer knowledge out of 404 were **'fair'** in interpersonal relations.
- (d) 35.71% of the teachers who have computer knowledge out of 196 and 31.68% of the teachers who don't have computer knowledge out of 404 were **'good'** in interpersonal relations.
- (e) 27.56% of the teachers who have computer knowledge out of 196 and 34.16% of the teachers who don't have computer knowledge out of 404 were **'very good'** in interpersonal relations.

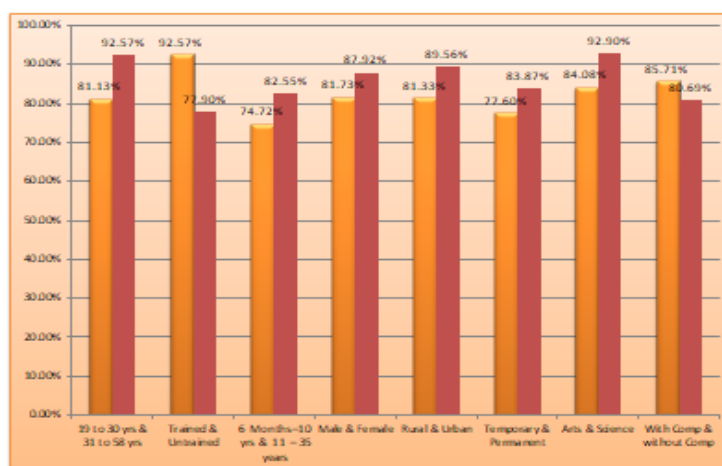


(f) 12.24% of the teachers who have computer knowledge out of 196 and 11.39% of the teachers who don't have computer knowledge out of 404 were 'excellent' in interpersonal relations.

Overall it was found from the analysis of teacher effectiveness rating scale {items considered are given in Appendix:I (B)} that there were effective teachers in all the variables. The number and percentage of effective teachers as per teacher effectiveness rating scale are given below:-

Variables		Total	No. of effective teachers	Percentage of effective teachers
Age	19-30 years	371	301	81.13%
	31-58 years	229	212	92.57%
Qualification	Trained	116	101	87.07%
	Untrained	484	377	77.9%
Length of service	6 Months-10 years	451	337	74.72%
	11 - 35 years	149	123	82.55%
Gender	Male	219	179	81.73%
	Female	381	335	87.92%
Locality	Rural	284	231	81.33%
	Urban	316	283	89.56%
Mode of appointment	Temporary	321	249	77.6%
	Permanent	279	234	83.87%
Academic Discipline	Arts	490	412	84.08%
	Science	98	91	92.9%
Knowledge of computer	With Computer	196	168	85.71%
	Without Computer	404	326	80.69%

**Table-4.22: Shows the Number and Percentage of Effective Teachers of the Sample of the Study**



**Figure-4.15 Shows the Bar Diagram of the Number and Percentage of Effective Teachers of the Sample of the Study**

It is revealed from the table-4.22 and figure-4.15 that 301 (81.13%) teachers out of 371 between the age limit of 19 - 30 years and 212 (92.57%) out of 229 between the age limit of 31 - 58 years were rated as effective teachers. Likewise 101 (87.07%) out of 116 trained teachers and 377 (77.9%) out of 484 untrained teachers were rated as effective teachers.

337 (74.72%) out of 451 teachers who had length of service from 6 months to 10 years and 123 (82.55%) out of 149 teachers who had length of service from 11 to 35 years were rated as effective teachers. 179 (81.73%) male teachers out of 219 and 335 (87.92%) female teachers out of 381 were rated as effective teachers. Likewise 231 (81.33%) out of 284 teachers from rural areas and 283 (89.56%) out of 316 teachers from urban areas were rated as effective teachers.

249 (77.6%) out of 321 temporarily appointed teachers and 234 (83.87%) out of 279 permanent teachers were rated as effective teachers. 412 (84.08%) out of 490 Arts teachers and 91 (92.9%) out of 98 Science teachers were rated as effective teachers. Likewise 168 (85.71%) out of 196 teachers with computer knowledge and 326 (80.69%) out of 404 teachers without computer knowledge were rated as effective teachers.