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## CHAPTER 4

### DATA ANALYSIS AND INTERPRITATION

Data analysis is a body of methods that helps the researchers to describe facts, detect pattern and to develop the explanation collected by the researcher. The researcher will properly tabulate , analyze and interpret by using appropriate statistical tools according to the objectives said by the researcher. t-test will use to find out the impact of online education students achievement .The data analysis will be done to address the statement of problem of the particular area , to find out why the problem is taking place and to prove the objectives and hypothesis of the study.

#### 4.1 Analyzing part of teachers :

##### Demographic profile of teachers –

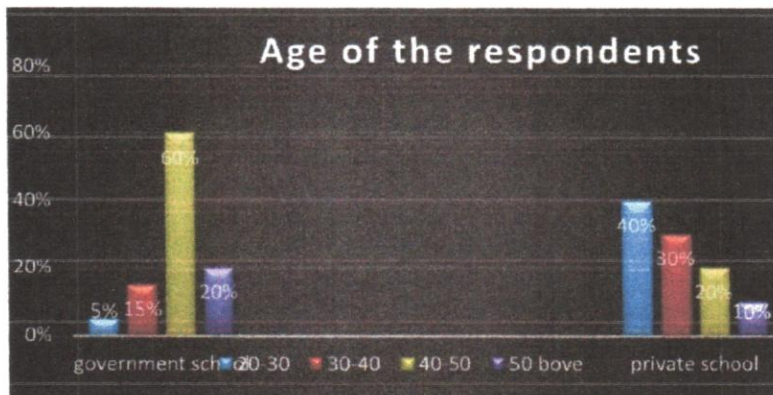


Fig. 4.1.1

In Figure 4.1.1 represents that in the Government school there are 5 percent respondents are between 20 to 30 years, 15 percent respondents are between 30 to 40years, 60 per cent of respondents are between 40 to 50 years, and 20 percent of respondents are 50 above years. In the private school 40 percent respondents are between 20 to 30 years, 30 percent of the respondents are between 30-40 years, 20 percent respondents are between 40 to 50 years and 10 per cent people are between 50 above year.

### Highest qualification of the respondents

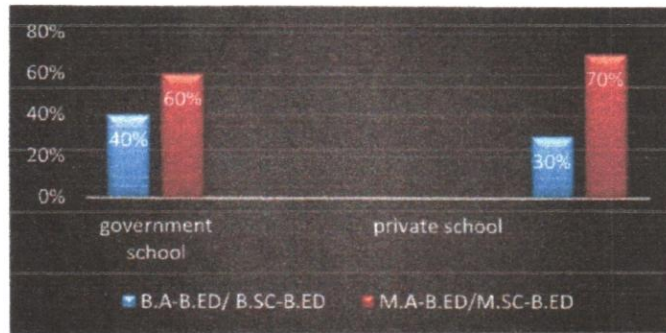


Fig.4.1.2

Figure no 4.1.2 represents that in the Government school 60 percent respondents were M.A-B.ED / M.SC-B.ED degree holders and 40 percent respondents were B.A-B.ED / B.SC-B.ED degree holders. On the other hand in the Private School 30 percent respondents were B.A-B.ED / B.SC – B.ED degree holder and 70 percent respondents were M.A-B.ED /M.SC-B.ED degree holder.

### Platform used in school for online learning

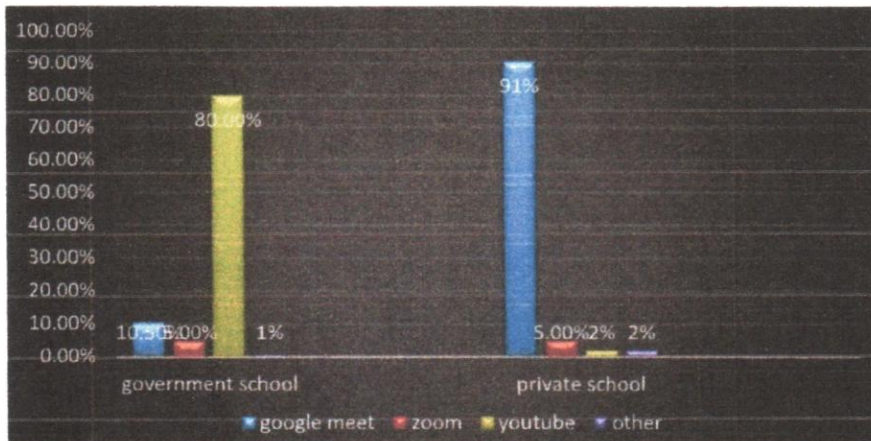
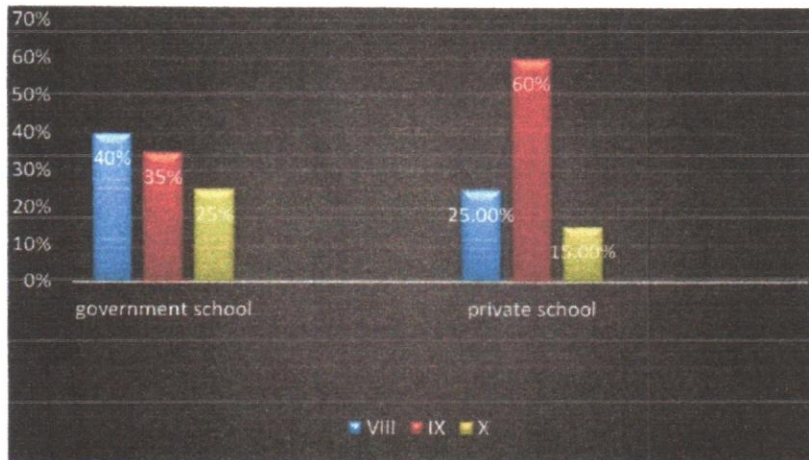


Fig.4.1.3

fig.4.1.3 represents that in government schools 10.5% are using google meet , 5% are using zoom app , 80% are using youtube and 1% are using other apps for teaching learning process through digital mode while in private schools 91% are using google meet , 5% are using zoom app, 2% are using youtube and 2% are using other apps for teaching learning process through digital platform during this pandemic.

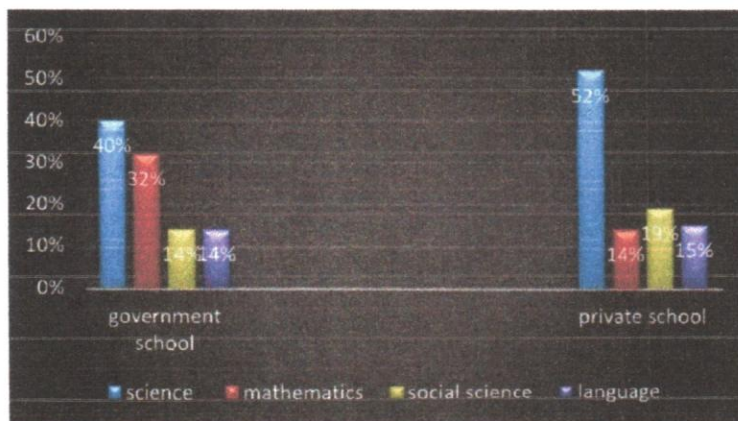
#### Classes taken by the respondents through online mode



**FIG.4.1.4**

Fig. 4.1.4 represents that in government school 40% respondents are teaching class VIII , 35% are teaching class IX and 25% are teaching class X where in private school 25% are teaching class VIII , 60% are teaching class IX and 15% are teaching class X.

#### Subjects taken by the respondents in respective classes through online mode



**Fig. 4.1.5**

Fig.4.1.5 represents in government school 40% respondents are teaching science , 32% are teaching mathematics , 14% are teaching social science and 14% are teaching language subject while in private school 52% are teaching science , 14% are teaching mathematics , 19% are teaching social science and 15% are teaching language subject during online mode o teaching learning process.

#### Working experience of respondents in digital field

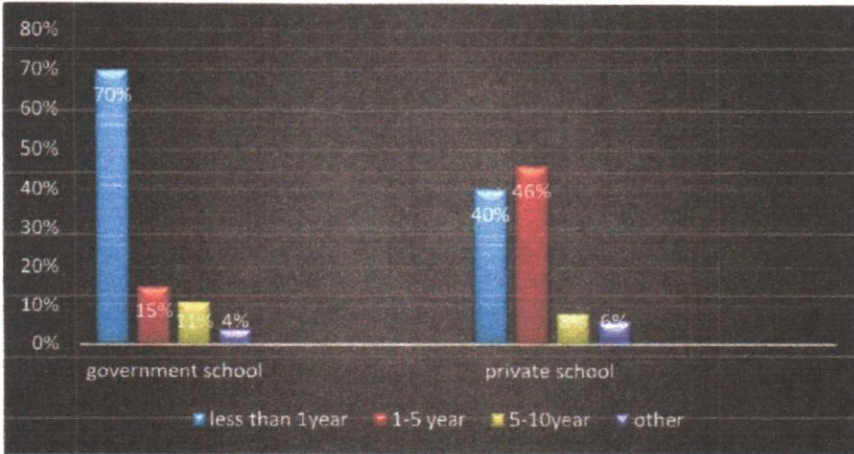


Fig.4.1.6

Fig.4.1.6 represents that in government schools 70% respondents have working experience less than 1 year , 15% have 1-5 year , 11% have 5-10 year and 4% have above that where in private schools 40% respondents have working experience less than 1 year , 46% have 1-5 years , 8% have 5-10 years and 6% have above that in the digital field of teaching learning process.

#### Location of respondents during online mode of teaching

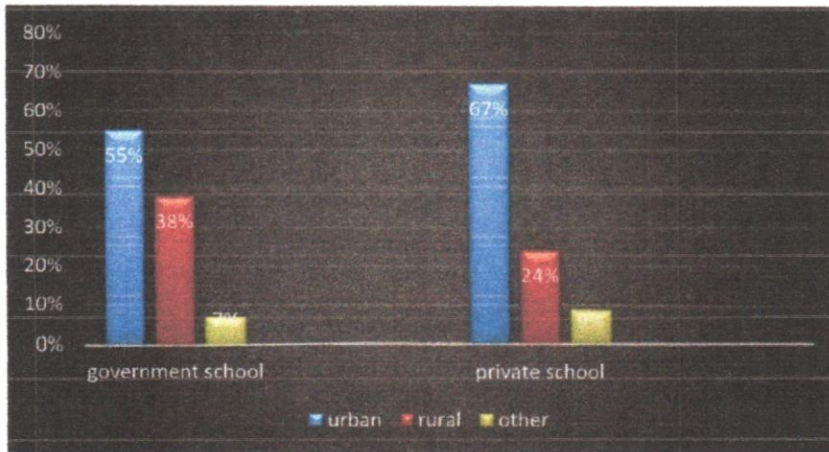


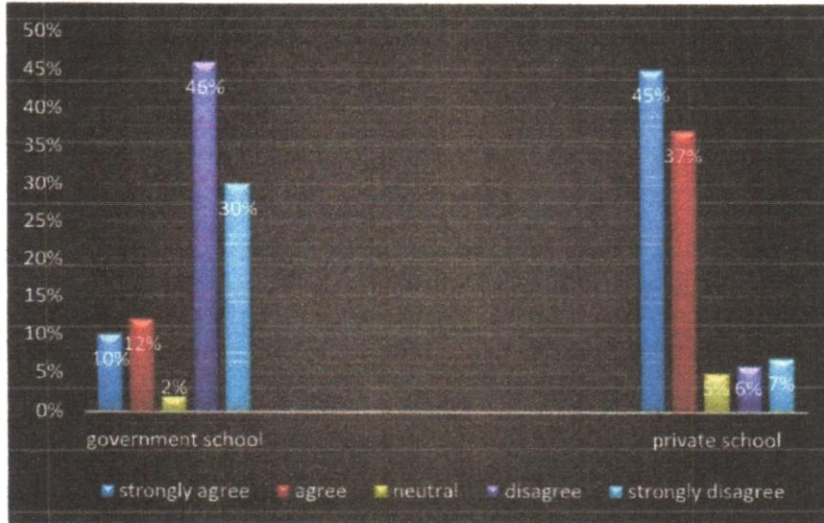
Fig.4.1.7

Fig. 4.1.7 represents that in government school 55% respondents are in urban area , 38% are in rural area and 7% are in other area while in private schools 67% are in urban area , 24% are in rural area and 9% are in other area while teaching through online mode during the pandemic

**Analysis of data using likert point scale:**

[Strongly agree – S.A , Agree- A , Disagree – D , Strongly disagree – S.D]

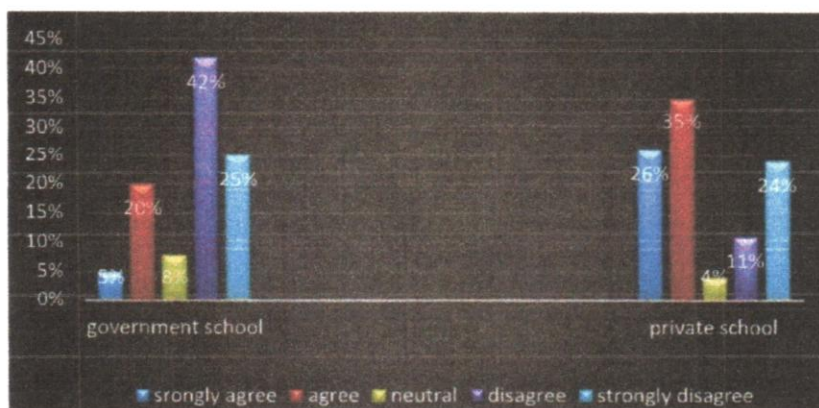
- I have received various in-service/pre-service training programme and trained in technical field before the COVID-19 pandemic.



**Fig.4.1.8**

The mean score of government school is 2.26 which is close to D means most of the respondents are disagree with the statement. In private school the mean score is 4.07 which is close to A i.e. most of the respondent are agree with the statement.

- school/government have provided a detailed training programme to deal with online education during covid-19 pandemic.



**FIG.4.1.9**

In government school the mean score is 2.38 which is close to D i.e most of the respondents are disagree with the statement. In private school the mean score is 3.28 that is close to N i.e. there is average no of respondents who are agree and disagree with the statement.

- **school's management system ( technical team ) is supporting/ co-operating fully to teach students through online mode. \***

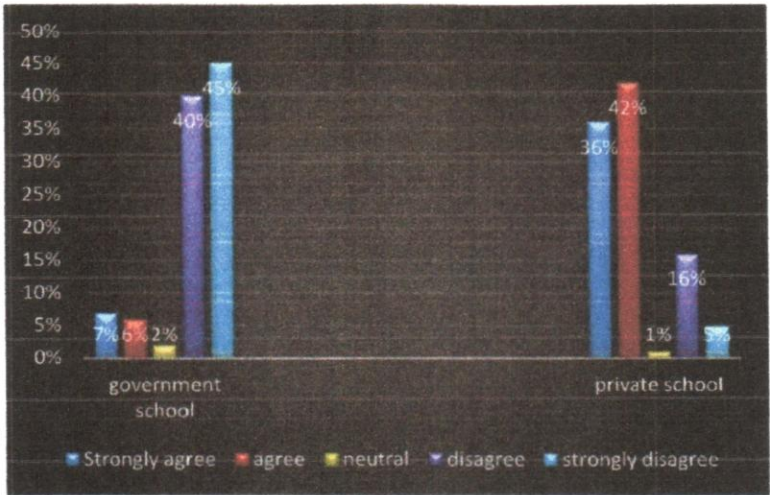


fig.4.1.10

In government school the mean score is 1.9 that is close to D i.e. most of the respondents are disagree with the statement. While in private school the mean score is 3.88 that is close to A i.e. most of the respondents are agree with the statement.

- **I make sure that the teaching-learning process used by me during online education student-centric.**

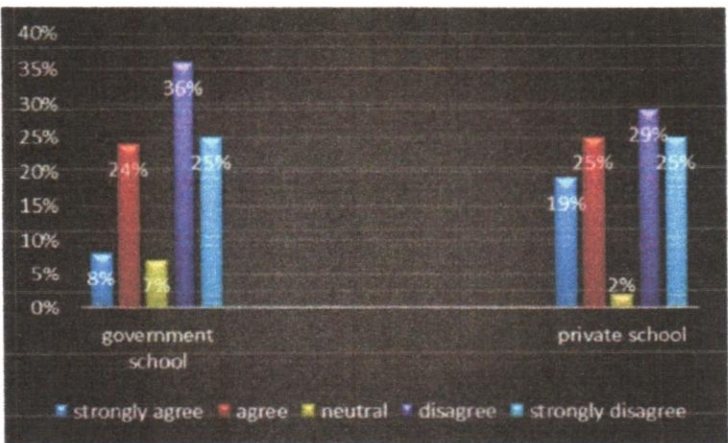


Fig.4.1.11

in government school the mean score is 2.54 i.e. the result is close to N where in private school the mean score is 2.84 which is also close to N.

- I used to motivate students in the class to interact more and more with teacher during teaching-learning process through online mode.

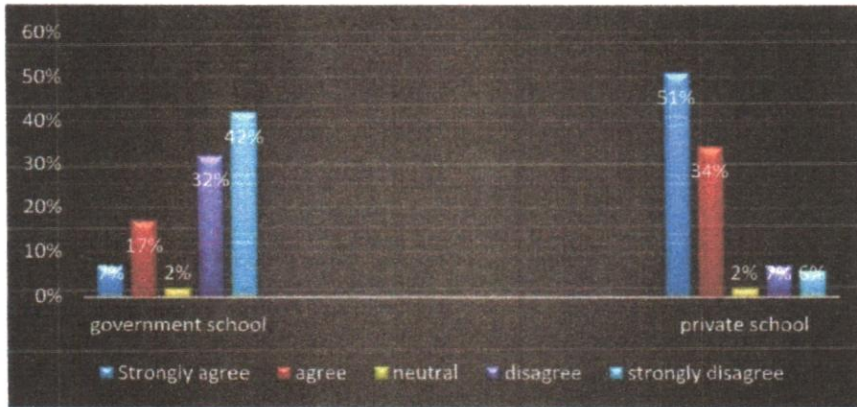


Fig.4.1.12

In government college the mean score is 2.15 i.e. the result is close to D and in other hand in private school the mean score is 4.61 i.e the result is close to S.A.

- I used to share my screen with innovative teaching-learning materials ( i.e. visual aids , ppts , audio-visual aids etc.) to make students understand the content easily through online mode.

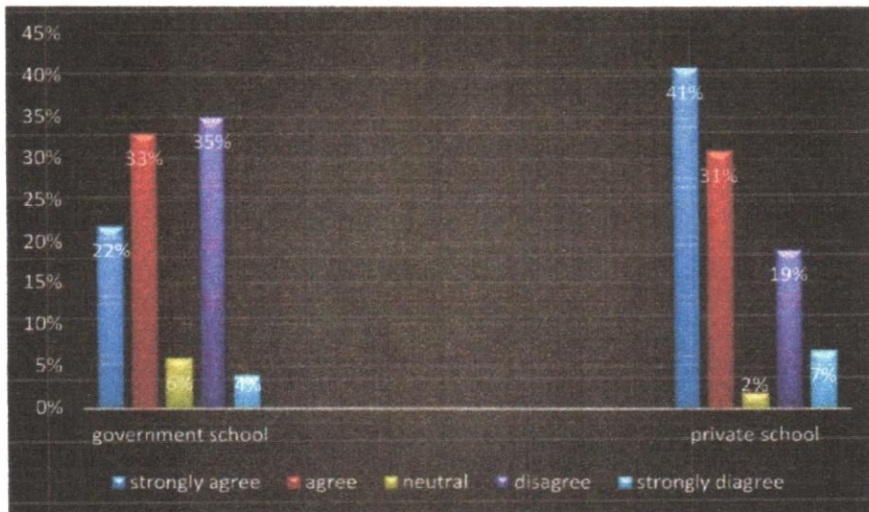


Fig.4.1.13

In government school the mean score is 3.34 i.e. the result is close to N and in private school the mean score is 3.8 i.e. the result is close to A.

- I prefer to go from simple to complex to make students comfortable with the lesson during online teaching-learning process.

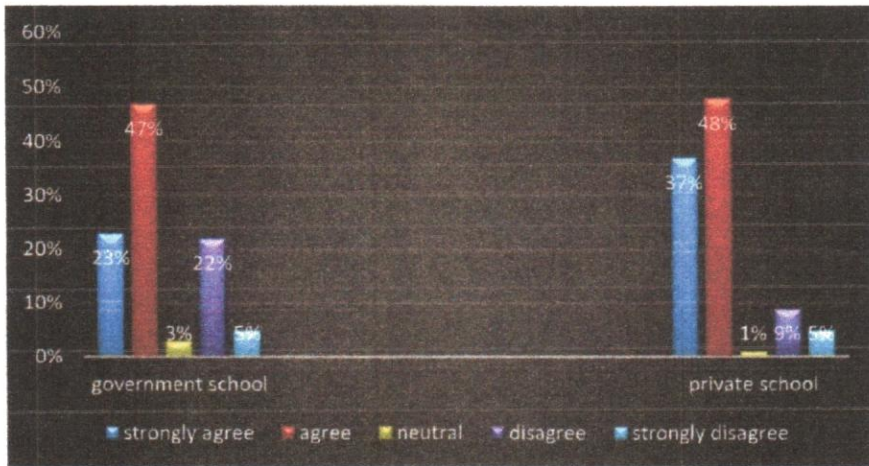


Fig.4.1.14

In government school the mean score is 3.61 i.e. the result is close to A and in private school the mean score is 4.03 i.e. the result is close to A.

- I communicate with students through school language as well as mother tongue in order to make them understand the lesson easily through online mode.

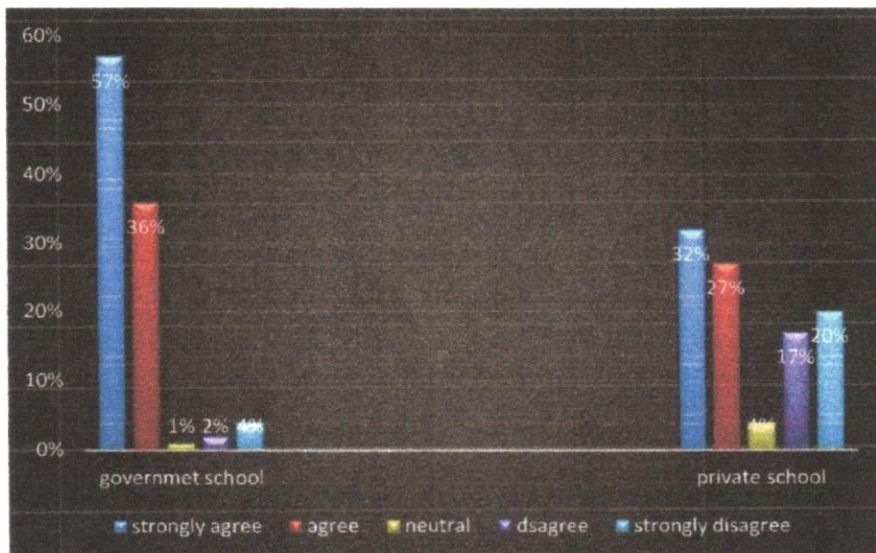
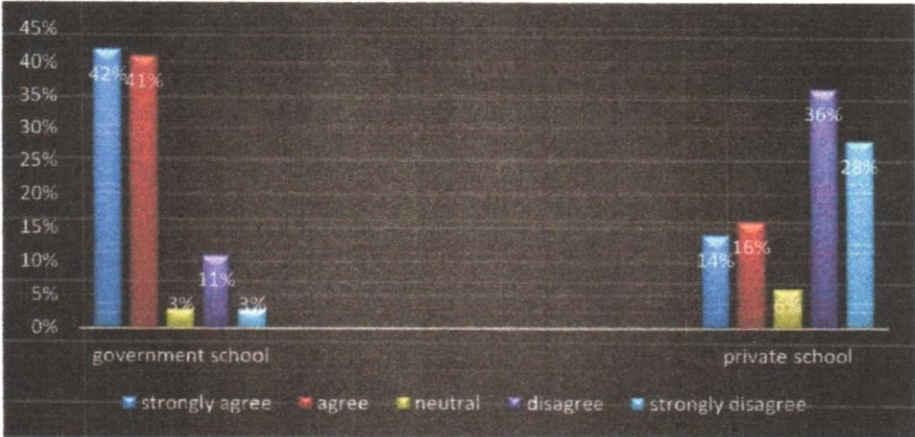


Fig.4.1.15



In government school the mean score is 4.42 i.e. the result is close to A where in private school the mean score is 3.34 i.e. close to N.

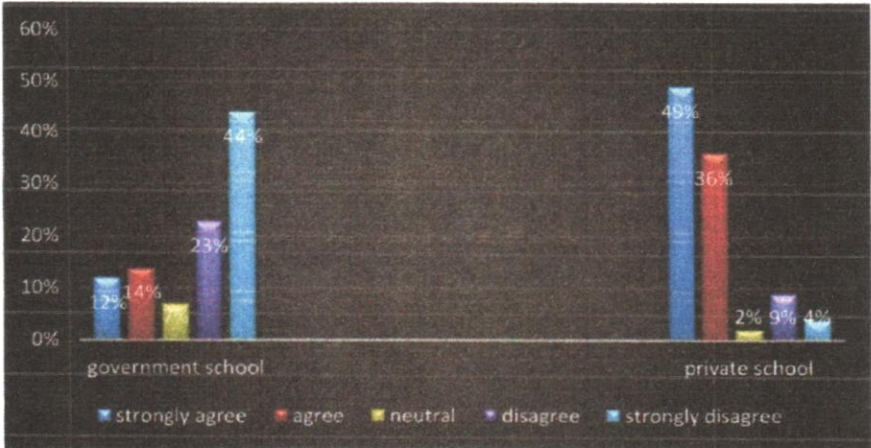
- **I used to prefer lecture/traditional method of teaching as there is no face-to-face interaction during online teaching-learning process.**



**Fig.4.1.16**

In government school the mean score is 4.07 i.e. close to A while In private school the mean score is 2.52 i.e close to D.

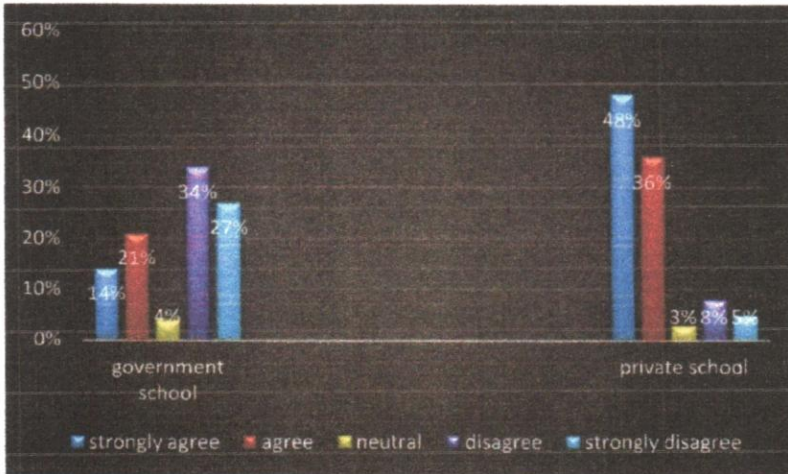
- **Discussion and question-answer session is always there to clarify the doubts of students during online teaching-learning process.**



**Fig.4.1.17**

In government school the mean score is 2.19 i.e. close to D and in private school the mean score is 4.17 i.e.close to D.

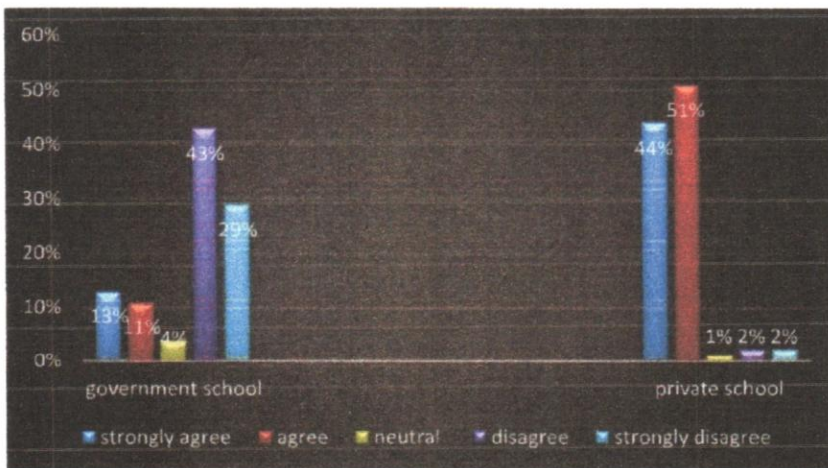
- I used to prefer white/black-board / smart-board to explain the concept easily to the students during online mode of teaching-learning process.



**Fig.4.1.18**

In government school the mean score is 2.61 i.e. close to N while in private school the mean score is 4.14 i.e. close to A.

- Assignment and project work used to assign to students in order to make them involve with the educational process during covid-19 pandemic.



**Fig.4.1.19**

In government school the mean score is 2.36 i.e. close to D where in private school the mean score is 4.33 i.e. close to A.

- school's management team provide feedback form to parents in order to improve/modify the teaching-learning process through online mode during covid-19 pandemic.

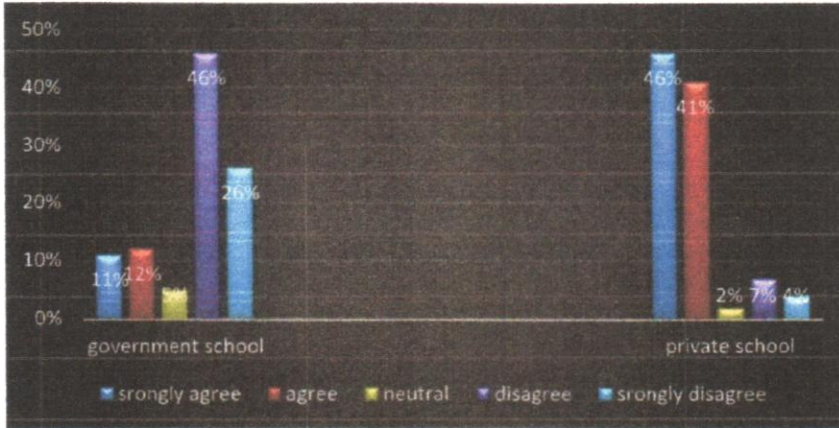


FIG.4.1.20

In government school the mean score is 2.35 i.e. close to D where in private school the mean score is 4.18 i.e close to A.

- Teaching through online mode helps me to understand the individual difference /problem faced by learners during the class.

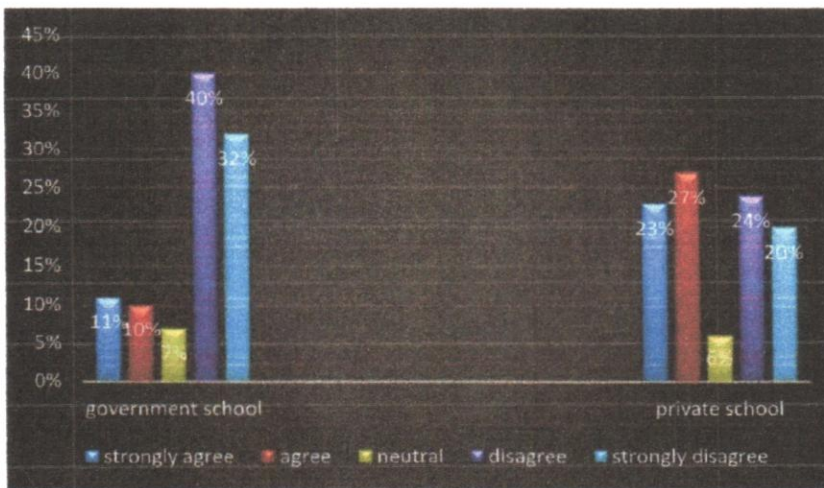


Fig.4.1.21

In government school the mean score is 2.28 i.e. close to D and in private school the mean score is 3.09 i.e. close to N.

- The achievement score of the students is better through online mode than that of traditional face-to-face mode.

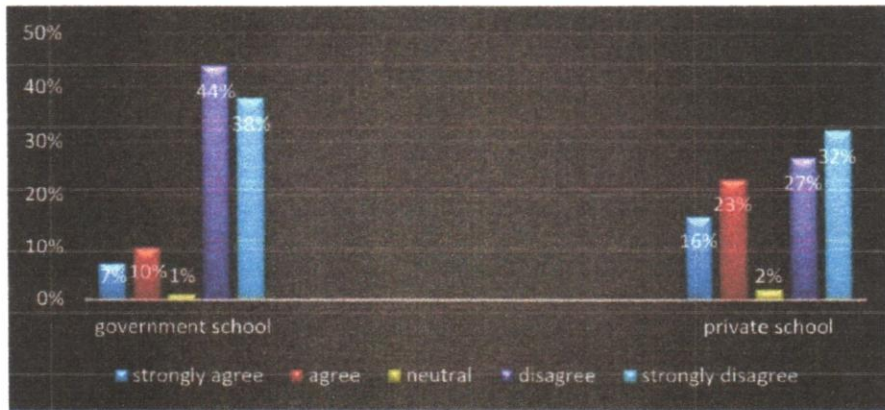


Fig.4.1.22

In government school the mean score is 2.04 i.e. close to D and in private school the mean score is 2.64 i.e. close to N.

- The educational process by using technology is far better and interesting than face-to-face traditional classroom.

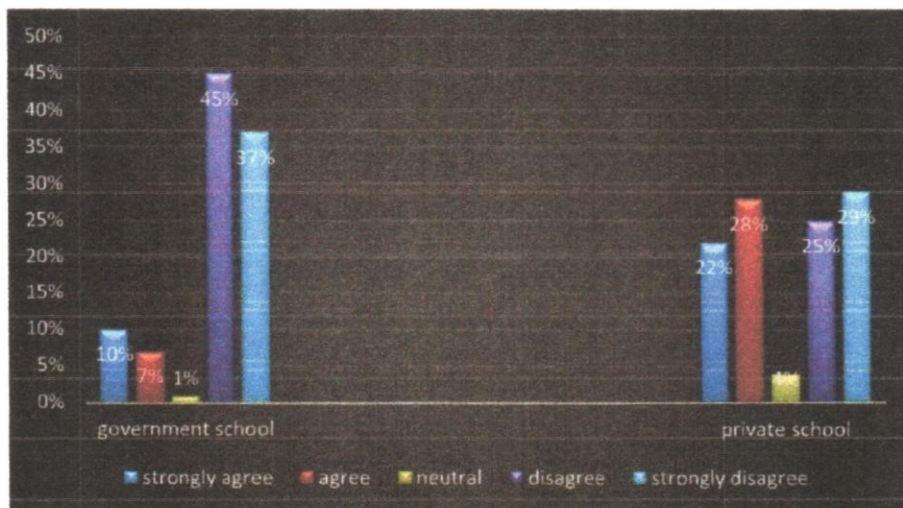


Fig.4.1.23

In government school the mean score is 2.08 i.e. close to D and in private school the mean score is 3.3 i.e. close to N.

## 4.2 Analyzing the part of learners

Demographic profile of learners.

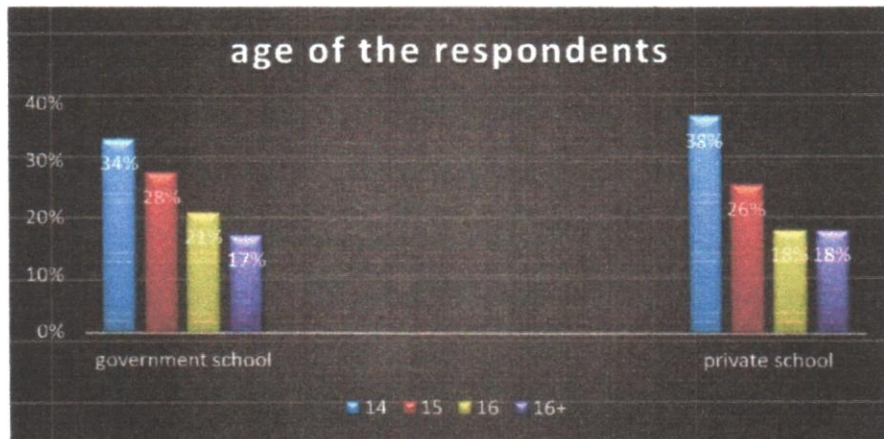


Fig.4.2.1

Fig.4.2.1 represents that in government school 34% respondents are of 14 years, 28% are of 15 years, 21% are of 16 years and 17% are of 16 years above age where as in private school there are 38% respondents are of 14 years, 26% are of 15 years, 18% are of 16 years and 18% are of 16 years above age.

### Gender of the respondents

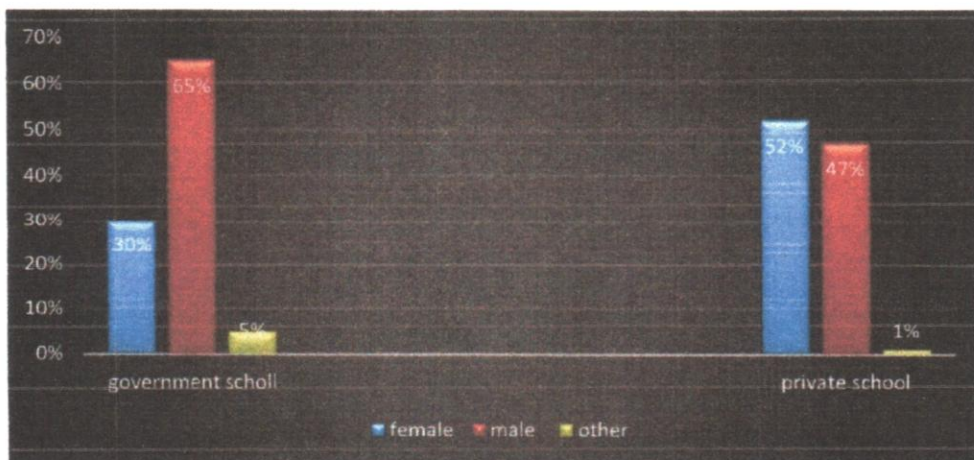
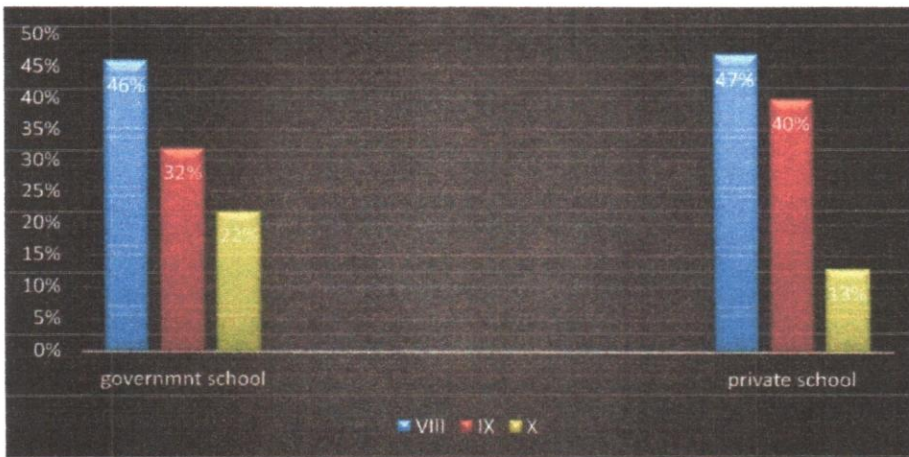


Fig.4.2.2

Fig.4.2.2 represents that in government school there are 30 % respondents who are female , 65% are male and 5% are others where as in private school there are 52% respondents who are female , 47% are male and 1% are others.

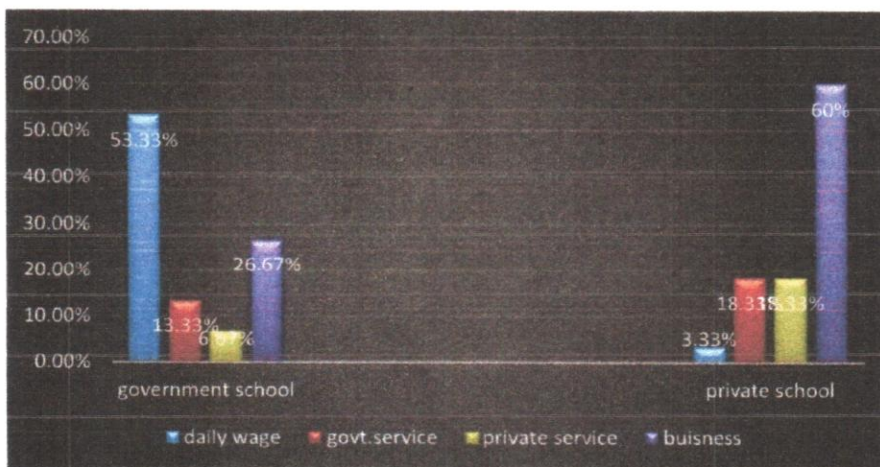
**Class of respondents**



**Fig.4.2.3**

Fig. 4.2.3 represents that in government school 46% respondents are of class VIII , 32% are of class IX , 22% are of class X while in private school 47% respondents are of class VIII , 40% are of class IX , 13% are of class X.

**Occupation of parents of the respondents**

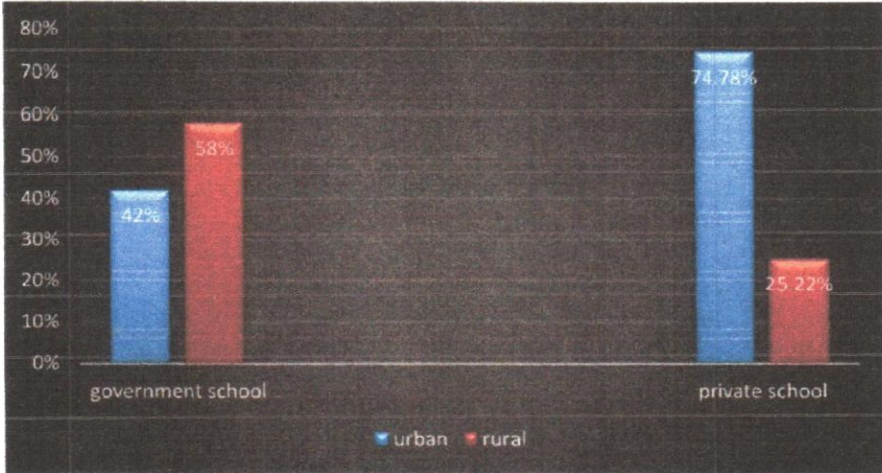


**Fig.4.2.4**

Figure no 4.2.4 shows that the government schools respondent's parent's livelihood like 53.33% from daily wage, 13.33% from government service, 6.67% from private service and 26.67 % from business background. On the other hand in the private schools respondents parents

livelihood like 3.33% from daily wage, 18.33% from government service, 18.33% from private service and 60% from business background.

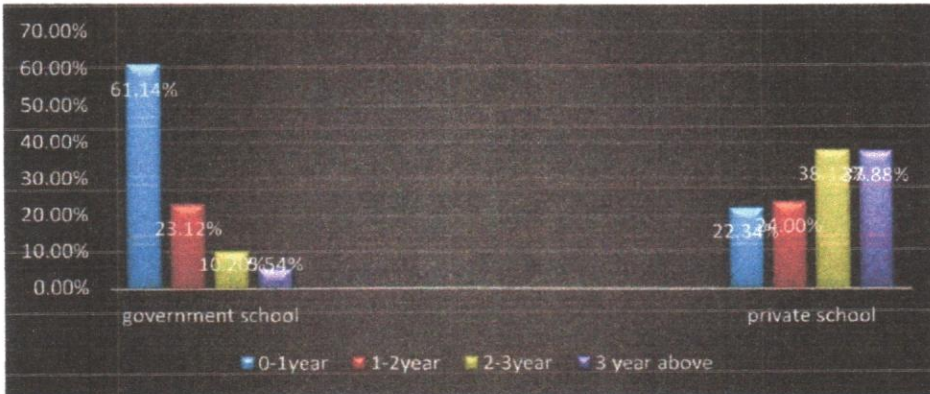
**Location of hometown of respondents**



**Fig.4.2.4**

Fig.4.2.4 represents that in government school 42% respondents belong to urban area where as 58% belong to rural area. on the other hand in private school 74.78% belong to urban area and 25.22% belong to rural area.

**Learner’s experience of learning by using technology/through online mode**

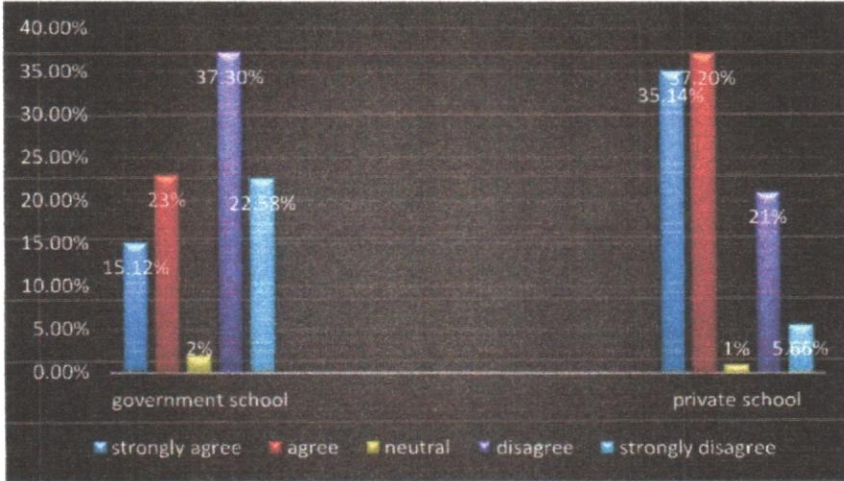


**Fig.4.2.5**

Fig.4.2.5 represents that in government school 61.14% respondents have 0-1 year of learning experience by using technology/through online mode, 23.12% have 1-2 year, 10.2% have 2-3 year and 5.54% have 3 year above experience. While in private school 22.34% respondents have 0-1 year of experience, 24% have 1-2 year, 38.12% have 2-3 year and 37.88% have 3 year above learning experience by using technology/through online mode.

**Analysis of data using likert point scale:**

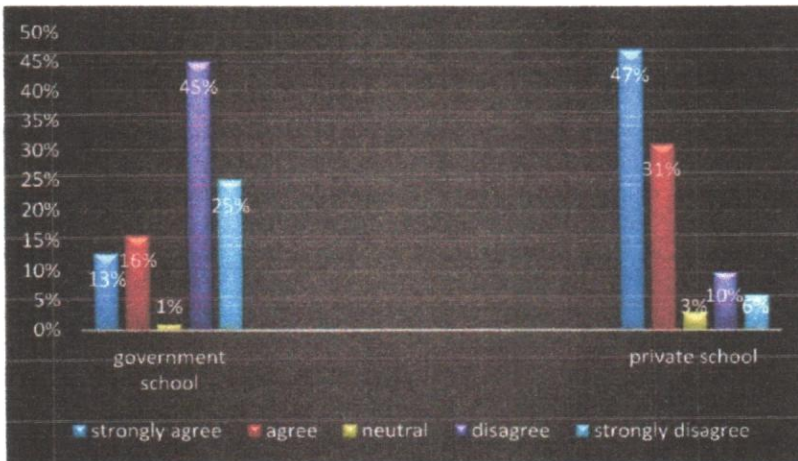
- school's management section(technical team) is fully supportive and provide us the link of the respective class time to time.



**Fig.4.2.6**

In government school the mean score is 2.43 i.e. close to D and the mean score of private school is 3.75 i.e. close to A.

- The technical team of our school is taking precautions of the safety and security of our personal information during online mode of teaching-learning process.



**Fig.4.2.7**

The mean score of the government college is 2.47 i.e. close to D and the mean score of private college is 3.91 i.e. close to A.



- I have my proper technical device / PC to attain my online class during covid-19 pandemic regularly.

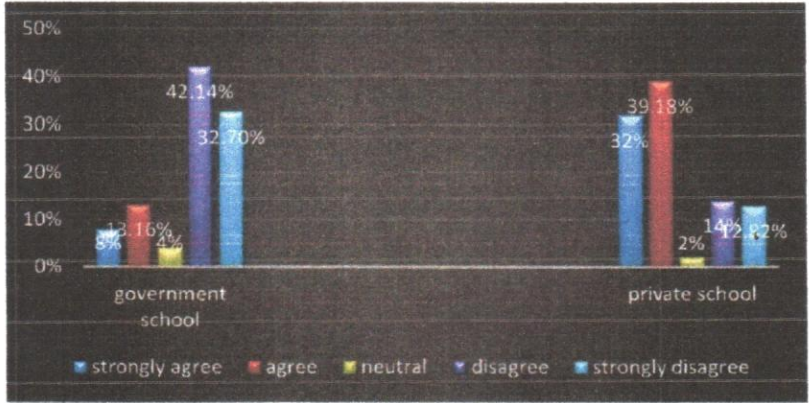


Fig.4.2.8

In government school the mean score is 2.21 i.e. close to D while in private school the mean score is 3.63 i.e. close to A.

- I have a proper internet connection to take the online class without any disturbance.

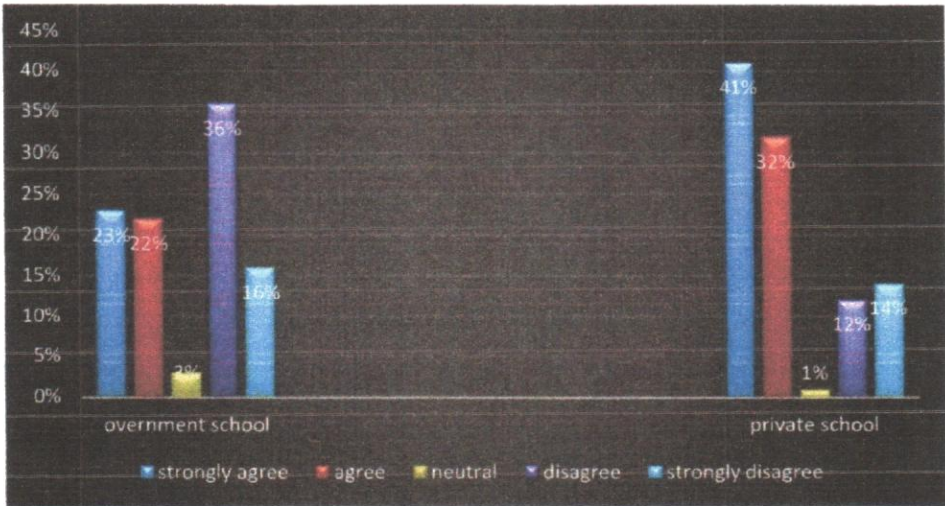


Fig.4.2.9

The mean score of government school is 3 i.e. close to N and the mean score of private school is 3.74 i.e. close to D.

- There is proper time-table/routine in order to have regular class through online mode.

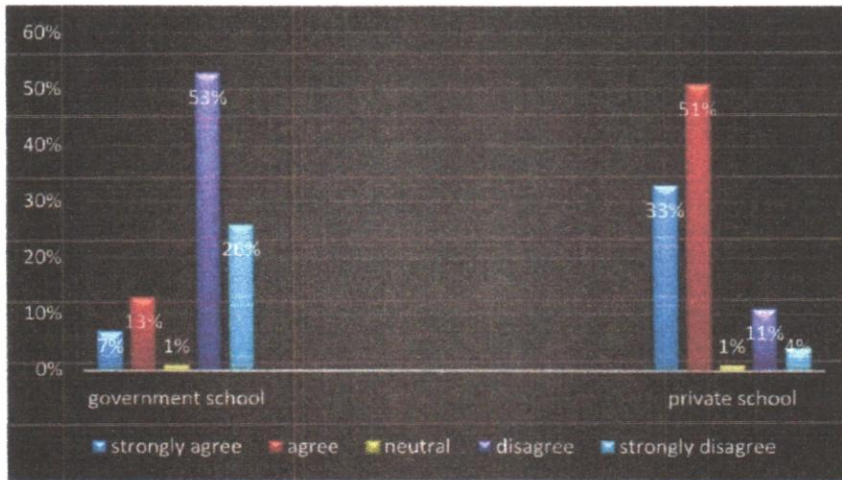


Fig.4.2.10

The mean score of the government school is 2.22 i.e. close to D while the mean score of private school is 3.98 i.e. close to A.

- Our subject teacher used to take the class regularly through online mode.

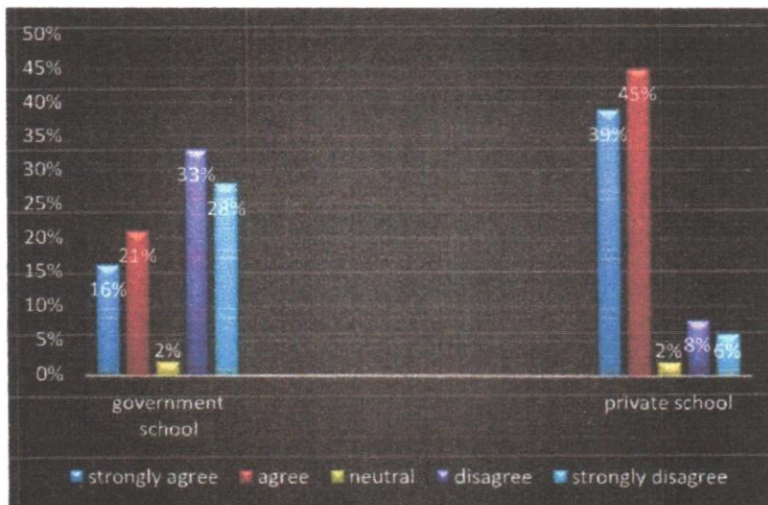


Fig.4.2.11

The mean score of government school is 2.64 i.e. close to N and in private school the mean score is 4.03 i.e. close to A.

- I have been given enough opportunities by my teacher to interact within the class during online mode of teaching-learning process.

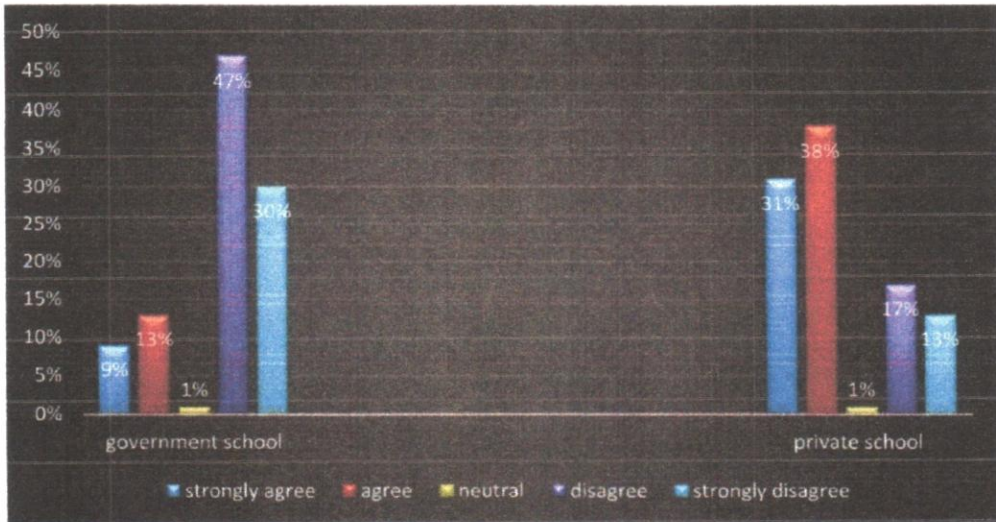


Fig.4.2.12

The mean score of the government school is 2.24 i.e. close to D while in private school the mean score is 3.57 i.e. close to A.

- I sometimes find difficulty to understand the lesson as teacher use lecture/traditional method of teaching during online mode.

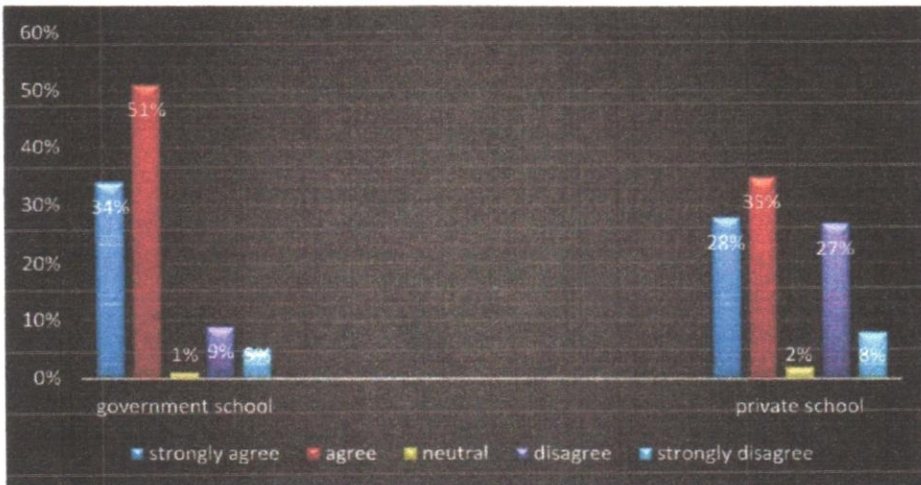


Fig.4.2.13

The mean score of government school is 4.00 i.e. close to A and in private school the mean

- Teacher use white/black-board / smart-board or share the screen to explain the content easily through online mode of teaching-learning process.

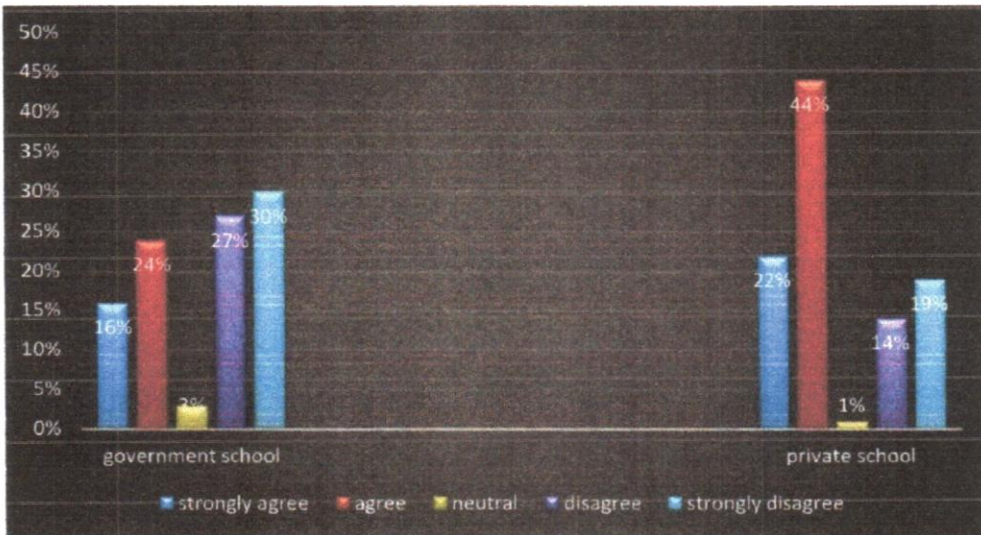


Fig.4.2.14

The mean score of government school is 2.69 i.e. close to N and the mean score of private school is 3.51 i.e. close to A.

- Subject teacher often share screen to show teaching aids ( audio , video or audiovisual aids) to make us understand the concept easily.

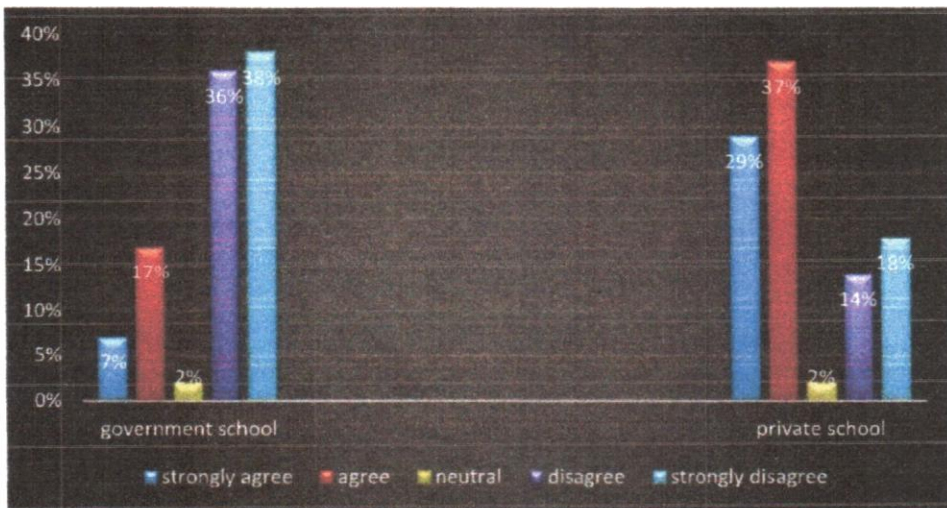


Fig.4.2.15

The mean score of government school is 2.19 i.e. close to D and in private school the mean score is 3.45 i.e. close to A.

- Teachers often do any other activity/ experiment to make us understand the lesson through online mode.

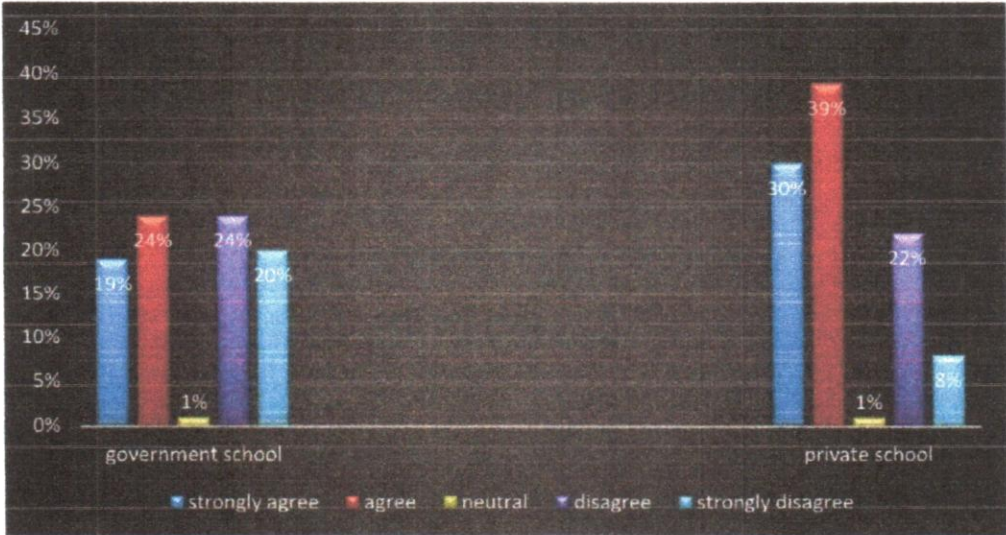


Fig.4.2.16

In government school the mean score is 2.62 i.e. close to N and in private school the mean score is 3.61 i.e. close to A.

- There is always a discussion and question-answer session after the end of the lesson to clarify the doubts during online mode of teaching-learning process.

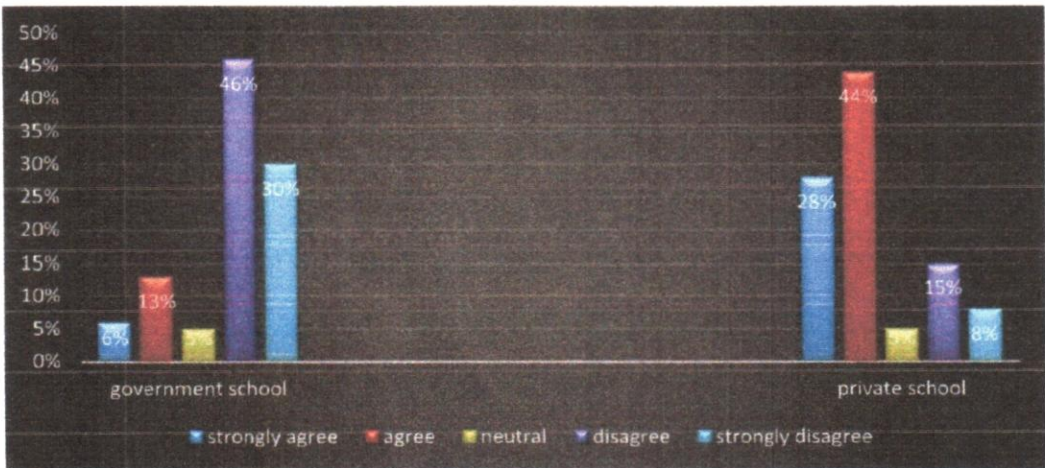
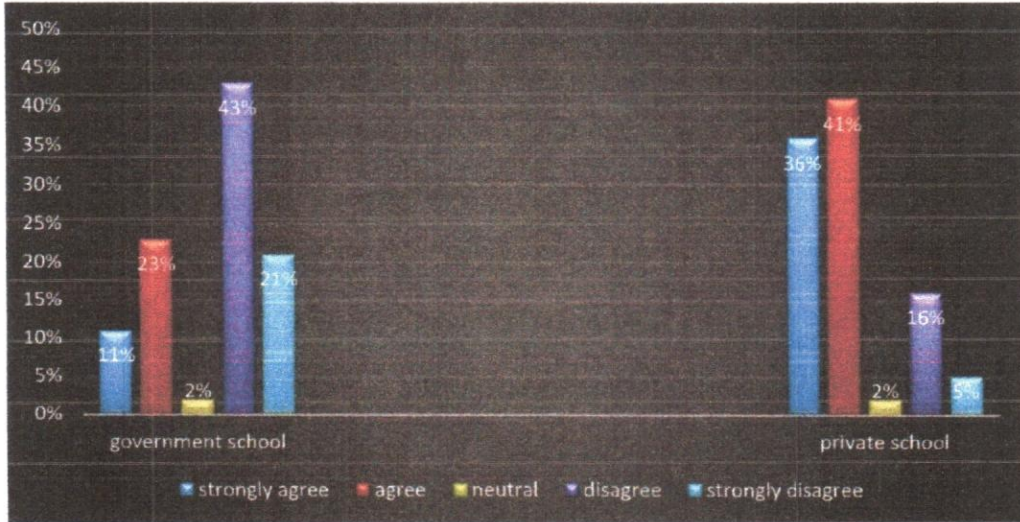


Fig.4.2.17

The mean score of government school is 2.13 i.e. close to while in private school the mean score is 3.63 i.e. close to A.

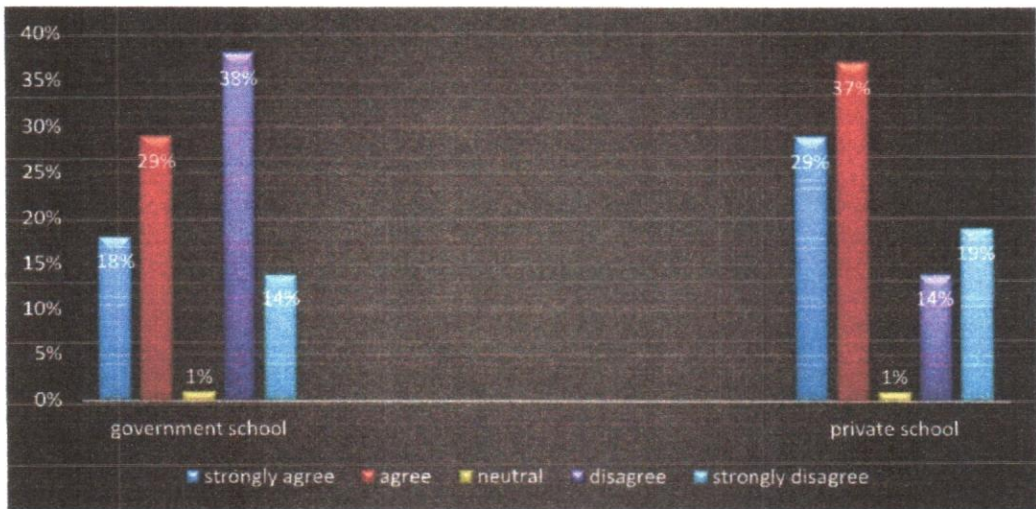
- I have been assigned home work/ assignments by the subject teachers on regular basis during this covid-19 pandemic.



**Fig.4.2.18**

The mean score of government school is 2.60 i.e. close to A and in private school the mean score is 3.87 i.e. close to A.

- I understand the lessons taught by my teachers properly during online mode of teaching-learning process than that of traditional classroom settings.



**Fig.4.2.19**

In government school the mean score is 2.99 i.e. close to N and in private school the mean score is 3.43 i.e. close to N .

- Teachers often do any other personal activity during the class hour through online mode.

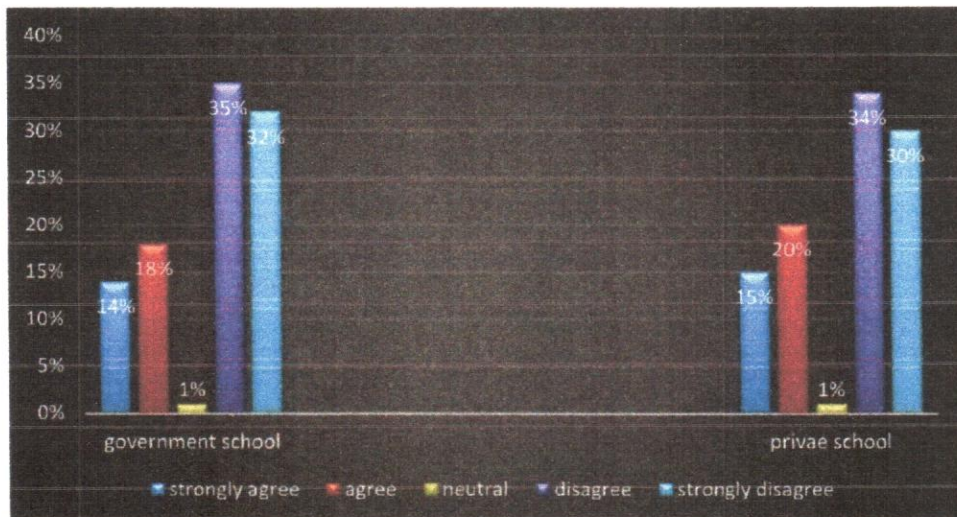


Fig.4.2.20

In the government school the mean score is 2.47 i.e. close to D and in private school the mean score is 2.56 i.e. close to D.

- School often arrange other extra/ co-curricular activities ( singing , essay , debate, quizzes etc.) through online mode in which i always take part as per my interest.

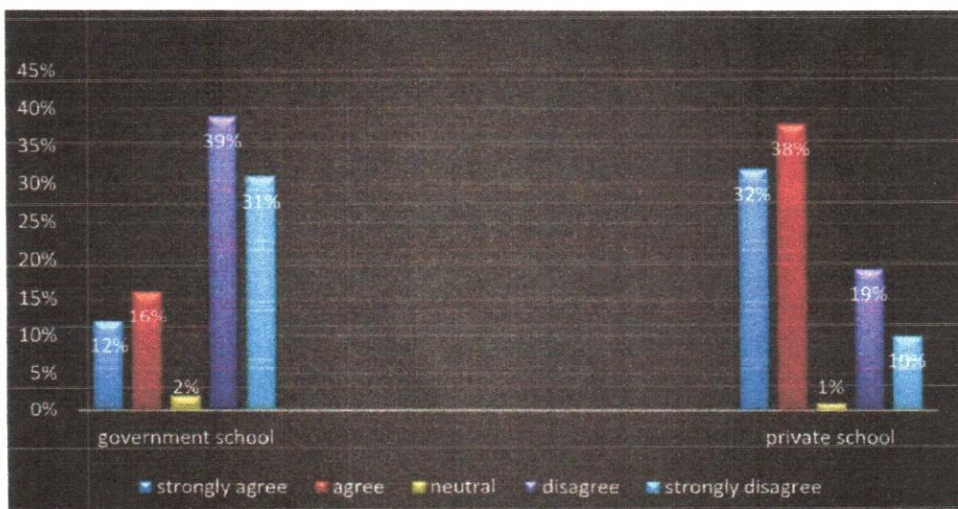


Fig.4.2.21

The mean score of government school is 2.39 i.e. close to D while the mean score of private school is 3.53 i.e. close to A.

- I feel our school focuses on all round development rather than only to complete the syllabus even if during online mode of teaching-learning process.

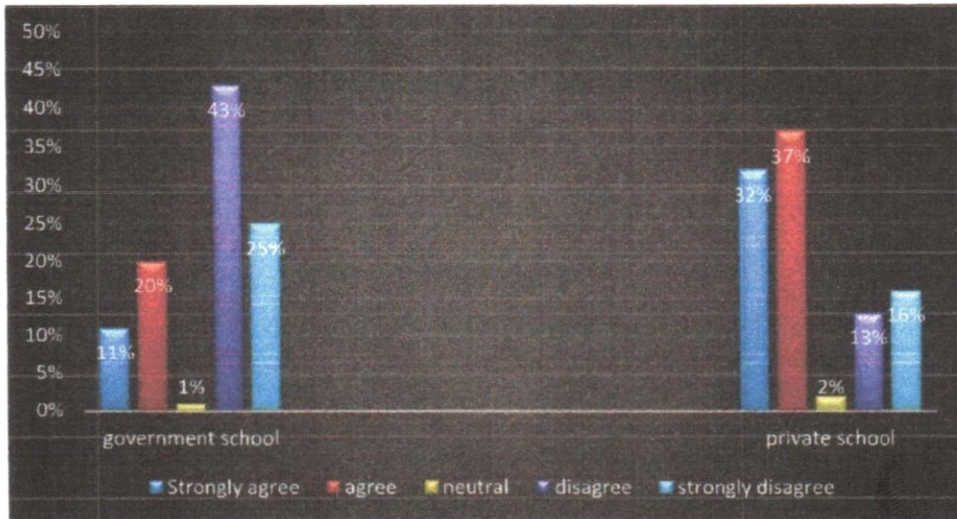


Fig.4.2.22

In government school the mean score is 2.49 i.e. close to D and in private school the mean score is 3.56 i.e. close to A.

- My achievement score is good and satisfactory through online mode of teaching-learning process than that of face-to face traditional classroom setting.

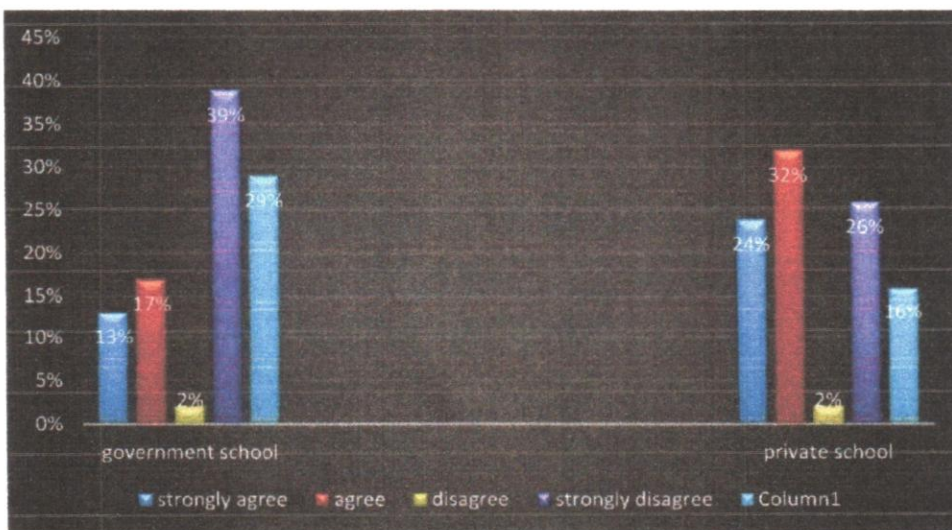


Fig.4.2.2

The mean score of government school is 3.24 i.e. close to N while the mean score of private school is 3.22 i.e. close to N.



- Our subject teachers are in contact with parents in a regular interval to discuss about the progress of teaching-learning process during covid-19 pandemic through online mode/ social media group.

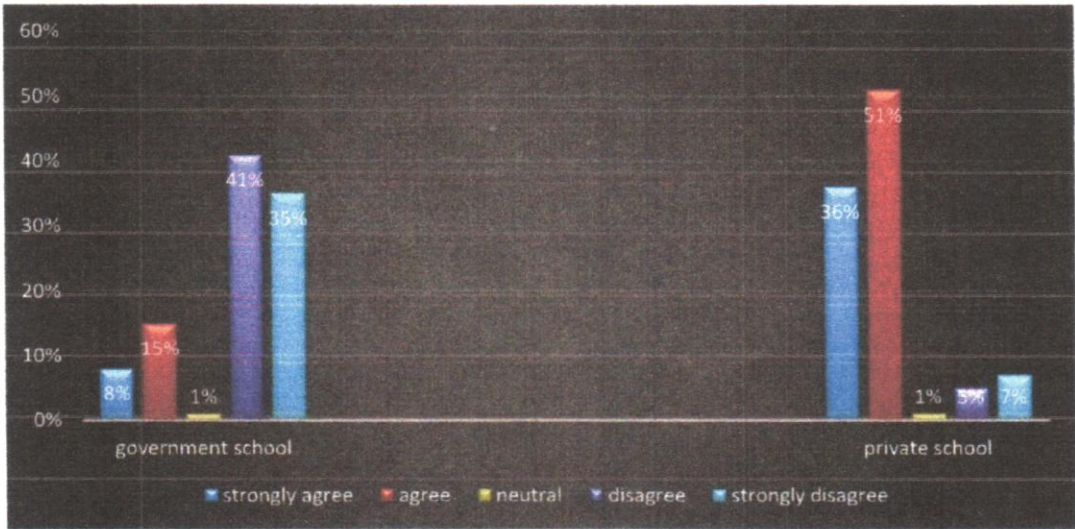


Fig.4.2.24

In government school the mean score is 2.20 i.e. close to D and in private school the mean score is 4.04 i.e. close to A.

- I find the online mode of teaching-learning process during covid-19 pandemic quite interesting and effective than that of traditional setting.

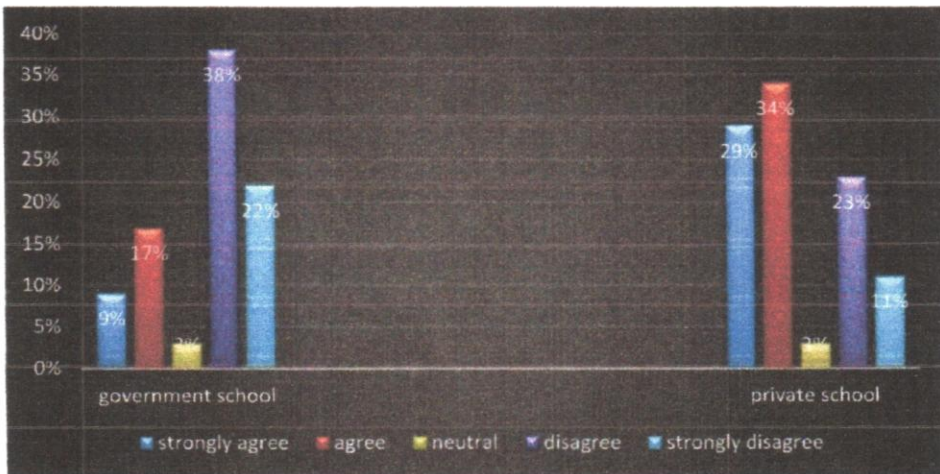


Fig.4.2.25

The mean score of government school is 2.20 i.e. close to D and the mean score of private school is 3.47 i.e. close to N.

**4.3 Achievement score of both government and private school through online mode of teaching learning process during covid-19 pandemic.**

<b>Students</b>	<b>Mean</b>	<b>SD</b>	<b>t-value</b>
<b>Govt. school</b>	<b>71.91</b>	<b>16.39</b>	<b>5.48</b>
<b>Private school</b>	<b>82.26</b>	<b>12.59</b>	

**Fig.4.3.1**

The above data shows that there is a mean difference between government and private school students on academic achievement. The mean of govt. school i.e.  $M = 71.91$  and the mean of private school i.e.  $M = 82.26$ . The calculated t-value which comes out to be 5.48 is higher than tabulated value and significant at 0.01 level. Thus the null hypothesis i.e. there is no significant difference between the achievement score of government and private school students through online education during covid-19 pandemic will be rejected.