Chapter 5: Summary, Findings, Implications & Suggestions

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5.0.0 Introduction

In the previous chapter, classification, analysis and interpretation of data were discussed. In it, 53 variables were categorized into eight main categories. The variables were clubbed in total 41 tables. For the sake of comparison, averages, rank, trend and rate were computed. The visual analysis was also done by graphical presentation in each table. Within state and between the states comparisons were made on the basis of tables and graphs.

The last chapter comprises of the summary, findings of the study, its implications and suggestions.

5.1.0 Summary

The elementary education is the foundation for the development of every citizen. Education is a powerful means to bring about a harmonious development in society for making the nation strong.

It is inevitably accepted that, elementary education plays an important role in the student’s future. India has made a constitutional commitment to provide free and compulsory education to all children up to the age of 14. It is important that, access and equity go together in order to make universalization of elementary education.

To reach the goals of universalization of elementary education, all the state governments strive much within the ways & means available to them and have achieved remarkable success. However, there are miles to go to reach complacency level. Further, governments have adopted fruitful and adequate steps to bring all children from every nook and corner to the arena of school. Many efforts are put by the government through various projects, programs, schemes & strategies. Almost all programs, plans and policies aim at bridging gender and social gaps in enrollment, retention and learning achievement at the elementary stage.

This study is an attempt to scale and compare the status of Gujarat and its neighboring state-Maharashtra, in the area of elementary education, with a view to cover growth along with development.
Education is the basic requirement for success of democracy and progress of the country. Universalization of Elementary Education (UEE) is a provision to provide free academic opportunities to all children of the society irrespective of caste, creed and sex. Universal education is at the centre of attention of democracy and development. The role of education in facilitating social and economic progress is well recognized. Education improves functional and analytical abilities and thereby opens up opportunities for individuals.

Elementary education plays an important role of students’ future life and it is necessary to achieve minimum levels of learning during elementary education. As elementary education is the foundation of the pyramid of education system, one must ensure access to good quality education for all sections of the society along with special attention to the needs of the SC, ST and Minority communities.

Government of India has always encouraged elementary education. In India, having impact of Ancient period, Medieval and Modern period & with the influence of different commissions and policies, India has progress very fast in different sectors like – education, social, economics, health, women development and labor…etc. Various commissions, committees and schemes have come up in the country to reach the goals of universalisation of elementary education.

Various researches were carried out in past in the field of elementary education. Studies conducted in past were on various aspects like - drop-out, impact of school condition, teacher-pupil ratio, Ashram schools, learning disabilities, urban primary education, progress of elementary education, gender bias, stagnation & drop-out, enrollment & retention trend, development of primary education & disparities in elementary education. Findings noted in these studies were – (i) The pupil teacher ratio in Gujarat & Kerala is 38 & 29 respectively, (ii) There was a considerable increase in the number of schools during last three decades in Gujarat, (iii) The rate of drop out is highest in class I in Assam, (iv) The correlation coefficient was found significant between pupils’ achievement and physical facilities at home, (v) The enrollment percentage of SC pupils were significantly lower than those of other community pupils for all the standards.

It is observed that, all these above studies have revealed with limited areas, sample and certain periods, where as the proposed study was undertaken with a view to
cover multi topics comparison together, for Gujarat and its neighboring state-Maharashtra.

This study aimed at covering neighboring state with multiple educational variables to reach at the conclusion indicating the state of Gujarat with its neighboring state - Maharashtra.

This study revealed the growth and development of different variables of Gujarat and Maharashtra for the five years (2003-04 to 2007-08). To focus more areas and to study the situation more vigorously, the researcher has worded the problem selected as under:

“A comparative study of the status of Elementary Education of Gujarat with its neighboring states of India”

The research was carried out with a view to compare different variables at various school structures as – (i) for primary only, (ii) for upper primary only, (iii) for primary with upper primary & (iv) for all school for the year 2003-04, 2004-05, 2005-06, 2006-07 and 2007-08. Fifty three research questions were framed in the light of variables like – population, literacy rate, schools, enrollment, achievement – standard wise & gender wise, teacher related, miscellaneous variables …etc. Some illustrative research questions were as follows.

- Is there any difference in both the states in the context of educational districts?
- Is there any difference in both the states in the context of SC and ST population?
- Is there any difference in both the states in the context of girls’ enrollment?
- Is there any difference in both the states in the context of Pupil Teacher Ratio (PTR)?
- Is there any difference in both the states in the context of beneficiaries of textbooks for the primary & the upper primary?

Objectives of the study were listed as under.

- To identify the status of elementary education of Gujarat and its neighboring state-Maharashtra with respect to different variables for various school structures from the year 2003-04 to 2007-08.
To compare the status of elementary education of Gujarat with its neighboring state- Maharashtra with respect to different variables for various school structures from the year 2003-04 to 2007-08.

To work out some recommendations for the development of elementary education in Gujarat.

Scope of the study was derived as under.

The study considered the two States – Gujarat and its neighboring state Maharashtra, As both the states have same pattern of Elementary Education.

i.e. same school structure as – Primary : I – IV
Upper Primary : V – VII

Different variables were compared in the context of following school structures.

(i) primary only  (ii) upper primary only
(iii) primary with upper primary (iv) all schools

The data reported in this study were for five years; i.e. 2003-04 to 2007-08. (it includes last four years of tenth five year plan & first year of eleventh five year plan)

The data considered for the study was based on the primary source - State Report Cards (SRC) of the respective states for the year 2003-04 to 2007-08.

Definitions of some key words were given as follow:

- **Comparison**: To estimate similarity among the values of the variables of the different States; To put side by side the value of the variables of the different States.

- **Neighboring state**: The education pattern of elementary education of Gujarat & Maharashtra are one and the same during 2003-04 to 2007-08 while remaining states Madhya Pradesh & Rajasthan have different pattern. Hence the neighboring state means Maharashtra only.

- **Status**: Value of variables under investigation like population, enrollment, achievement, teacher ...etc.
- **Government school**: Elementary school run by the education department, local body, tribal welfare department and others, as school management were treated as government schools.

- **Private school**: Elementary school managed by the trust, association or family with the government aided or without government aided.

- **Single classroom school**: Elementary school having single classroom.

- **Single teacher school**: Elementary school with single teacher in position.

- **Student classroom ratio (SCR)**: Ratio of the total enrollment in the elementary schools with the total classroom in the elementary schools.

- **Pupil Teacher Ratio (PTR)**: Ratio of the total enrollment in schools of the elementary category with the total teachers in the elementary schools category.

- **Gender Parity Index** (primary grade): Ratio of the enrollment of girls in the primary grades in the year 't' with the enrollment of boys in the primary grades in the year 't'.

- **Transition rate** (primary to upper primary): Percentage ratio of the new entrants into grade V in the year 't+1' with the enrollment in grade IV in the year 't'.

In our country, there were total 28 states and 07 union territories. Out of this, the elementary education in all the states of our country was considered as population for the proposed study. Thus, 28 states were considered as population for the study. The elementary education comprises of variables related to districts, blocks, clusters, population, literacy rate, school, enrollment, achievement, teacher and other miscellaneous features.

Out of 28 states of our country, Gujarat state and its neighboring states were selected as a sample for this study. There were three neighboring states namely Madhya Pradesh, Maharashtra and Rajasthan. At the time of proposal (September – 2009), the elementary education in Gujarat reflects to the education imparted to the standard I to standard VII. The same pattern was existing in Maharashtra. (At the time of preparing this thesis, the pattern of the elementary education in Maharashtra was the same as in Gujarat, but at present the pattern has changed.) So, Gujarat and its neighboring state - Maharashtra were selected as a sample for this study.
Here, the selection of the sample was purposive. The states which have the same pattern of the elementary education were considered as the sample for the study as the purposive sampling technique was used for the selection of the sample.

This study was a documentary survey type study. The entire data were available in the form of schedules. Hence, the data-schedule was treated as a tool.

As the collection of data is the most important stage for any study, the relevant data was collected mainly from the primary source which includes the “State Report Card”, NUEPA, New Delhi document, elementary education in India.

The information from the state report card of Gujarat and Maharashtra for last five years was collected. i.e. data for the year 2003-04, 2004-05, 2005-06, 2006-07, 2007-08 were collected from the “state report card” of the respective states.

The data collected from the “State Report Card” of Gujarat and its neighboring state – Maharashtra for 53 different variables were categorized into eight (8) main categories, for the year 2003-04, 2004-05, 2005-06, 2006-07, and 2007-08 as follows.

- General
- School
- Enrollment
- Achievement
- Teacher
- Miscellaneous
- Infrastructural facility
- Incentives

The collected data were classified for the five years (2003-04, 2004-05, 2005-06, 2006-07, 2007-08) for Gujarat and its neighboring state- Maharashtra. Total 53 variables were categorized into eight main categories. Further, the data were classified into various school structures as primary only, upper primary only, primary with upper primary & all schools for both the states. Moreover, data were also classified into standard IV and standard VII for the boys and the girls.
Keeping in mind the objectives of the study, total 41 tables covering 53 variables were formed. The data for the last five years (2003-04 to 2007-08) were placed into respective tables.

The analysis of collected data was done by using descriptive statistics. The comparison was made by computing Averages, Rates, Ranks …etc for each respective stratum. To decide the development and the trends, graphical presentation of the data was done for each table. The visual analysis was made to decide nature of the increasing or the decreasing trends of the values of the variable.

The statuses of the variables for both the states were interpreted from the tables and the graphs. Within the state and between the states comparisons of data for the five years were also narrated. The average, the trend and the rate for both the states were also compared.

To comprehend the status of variables easily, same color code was used in the table and the graph. Year wise table color was matched with graph color too. Further, to identify the data of variable at various positions as good, bad and average, the average/rate of the variable in table was colored as GREEN, RED and BLUE respectively.

### 5.2.0 Findings

The entire data were classified, tabulated and analyzed after a vigorous interpretation of data. The outcomes were interpreted in the following manner.

#### 5.2.1 General status

- Educational districts, blocks, clusters and villages of Gujarat are less compared to Maharashtra, for all the five years, but no change in number of educational districts has been observed for both the states during the year 2003-04 to 2007-08.

- The total population of Maharashtra is more than that of Gujarat, and it has 5% more urban population. Further, in the case of the SC population, Maharashtra has 3.1% more SC population, while in the case of the ST, Gujarat has 5.9% more ST population, than its counter part.
• The literacy rate of Gujarat is lower compared to Maharashtra in all the categories as male, female and overall during the investigation time-span.

5.2.2 Status of schools with reference to its type

• The number of the government schools, the private schools and the total schools in Gujarat are less than that in Maharashtra. The difference of number of schools between Gujarat and Maharashtra is much more for all the three school structures.

• The trend for the government schools, the private schools and the total schools is increasing in nature for Gujarat and Maharashtra. The nature of increasing trend is slightly sharp for the private schools in both the states. In case of the government schools, the increasing trend is uneven in nature in both the states. A gradual rise in the trend for the total schools is indicated in Gujarat as well as in Maharashtra with a hike in the year 2004-05 in Maharashtra.

• The rate of increase for the government schools and the private schools of Gujarat were higher than that of Maharashtra; whereas in case of the total schools, the situation was reverse. The difference of rate is minor in the case of the government schools and the total schools, while the difference is high for the private schools.

5.2.3 Enrollment

• The percentage of enrollment in the government school in Gujarat is higher than in Maharashtra for all the four school structures.

• Both the states are having decreasing trend of percentage of enrollment in government schools for all the four school structures.

• The declining trend in the enrollment percentage of the government schools is sharper in Gujarat than its counter part for all four school structures, except all schools.

• The enrollment percentage of single teacher school in Gujarat is higher than its counter part for all four school structures, except in 2005-06 (all schools) and in 2006-07 (upper primary only).

• The trend of the percentage of enrollment in single teacher school is decreasing in an uneven manner for all the four school structures in Gujarat and for primary only and all schools in Maharashtra. In Gujarat, the trend is more uneven in nature compared to
Maharashtra. In Maharashtra, there is increasing trend and the highest rise is found in the year 2006-07, in upper primary only.

- The percentage of Girls’ enrollment in Gujarat is less compared to its counter part for all four school structures, except primary only and upper primary only in the year 2005-06.

- The average value of percentage of the Girls’ enrollment in Maharashtra is higher than in Gujarat for all the school structure, except primary only, but the difference is marginal.

- The trend of percentage of the girls’ enrollment is increasing for Gujarat and decreasing for Maharashtra for all the four school structures, except upper primary only.

- In case of upper primary only, both states have contradictory trend in case of the girls’ enrollment.

- The SC girl-students’ enrollment percentage for primary is more than that of upper primary for both the states.

- The SC enrollment and the SC girl-students’ enrollment for primary and upper primary in Gujarat is less than that in Maharashtra for five years, except 2004-05 in the primary.

- The difference of the SC enrollment and the SC girl-students’ enrollment is very marginal between primary and upper primary for both the states.

- The decline graph of SC girl-students’ enrollment is higher in Gujarat compared to Maharashtra for the primary.

- The average value of percentage of the SC enrollment and the SC girl-students’ enrollment in Gujarat is less than that in Maharashtra for primary and upper primary.

- The trend of percentage of SC enrollment is increasing for primary, but it is decreasing for the upper primary & has an uneven nature, in both the states.
In the case of the SC girl-students’ enrollment, Maharashtra is having decreasing trend in nature for the primary and the upper primary both; whereas Gujarat is possessing decreasing trend for the primary and increasing trend for the upper primary.

The ST enrollment percentage & the ST girl-students’ enrollment percentage for primary is higher than that of upper primary in Gujarat and its neighboring state – Maharashtra.

Both the states share the same decline graph (primary to upper primary) for the ST girl-students’. The differences in Gujarat (2.14%) & in Maharashtra (2.18%) are very marginal.

The average value of the enrollment percentage of the ST and the ST girl-students’ in Gujarat is higher than that in Maharashtra for primary and upper primary.

The trend of the enrollment percentage of the ST is increasing in Gujarat and Maharashtra, for the primary; whereas in case of the upper primary, the trend declines in Gujarat, but nature of trend in not clear in Maharashtra.

The trend of enrollment percentage of the ST girl-students’ in Gujarat is increasing for primary and upper primary. In case of Maharashtra, the trend is increasing for upper primary, but for primary the nature of trend is not clear.

5.2.4 Achievement

The percentage of passed boys and girls in Maharashtra are higher than its counter part in the case of Std. IV. In the case of Std. VII, the picture is reverse.

The average percentage of passed boys and girls are higher in Maharashtra, for Std. IV, but in case of Std. VII, Gujarat is having higher average percentage of passed boys and girls than its counter part.

For Std. IV, the increasing trend for the boys and the girls is uneven in nature for both the states, except that the trend is slightly sharp for girls in Maharashtra.

In case of Std. VII, the trend of the percentage of the passed boys and the passed girls is in the increasing manner for both the states, except the girls in Gujarat. The nature of trend is uneven in both the states.
- In Gujarat and Maharashtra, the percentage of students securing more than 60 percent for girls is higher than that of boys, for Std. IV & Std. VII.

- The percentage of boys and girls securing more than 60 percent in Std. VII in Gujarat is higher than that in Maharashtra; but in case of Std. IV, the picture is the reverse.

- The trend shows a sharp rise in the percentage of boys and girls securing more than 60 percent in Std. IV in Gujarat; while in the case of Maharashtra, the trend shows an uneven decline in nature.

- In case of boys and girls of Std. VII, the trend of percentage securing more than 60 percent shows an increasing graph in both the states. Here, the increasing trend is uneven in both the states.

5.2.5 Teacher

- The number of total teachers in schools of Maharashtra is higher than that in Gujarat for the school structures - primary only and primary with upper primary.

- The average number of total teachers in Gujarat is more than that in Maharashtra for upper primary only. In case of the remaining two school structures, the picture is just the reverse.

- The trend of total teachers is increasing in all the three school structures in Gujarat and Maharashtra. The Gujarat reveals sharp increase in numbers of total teachers in all three school structures; while in case of Maharashtra, the increasing trend is not so sharp as compared to Gujarat.

- The rate of increase in number of total teachers in Gujarat is higher compared to its counterpart for all the three school structures.

- The number of teachers in the government schools in Maharashtra is higher than that in Gujarat for the school structures as primary only and primary with upper primary.

- The average number of teachers in the government schools in Gujarat is more than that in Maharashtra for upper primary only. In case of remaining two school structures, the picture is reverse.
• The trend of teachers in the government schools is increasing for school structures as primary with upper primary, in Gujarat and Maharashtra. In case of upper primary only, the trend of teachers in government schools is decreasing for both the states. For primary only, the trend of teachers in government schools is increasing and decreasing in Gujarat and Maharashtra respectively. The nature of trend (increase or decrease) is uneven in most of the cases.

• The rate of increase in number of teachers in the government schools in Gujarat is higher than that in Maharashtra for primary with upper primary school structure. In case of upper primary only, the rate of decrease in number of teachers in government schools in Gujarat is more than its counter part.

• The number of teachers in private schools in Maharashtra is much more than in Gujarat for primary only, and more than Gujarat for primary with upper primary.

• The average number of teachers in private schools in Gujarat is more than that in Maharashtra for upper primary only. In case of primary only, the average number of teachers in private schools in Maharashtra is much high than its counterpart.

• The trend of number of teachers in the private schools is increasing for all three school structures in Gujarat and Maharashtra. The nature of increasing trend in Gujarat is very sharp compared to its counterpart for school structures as primary only and primary with upper primary.

• The rate of increase in number of teachers in private schools in Gujarat is higher compared to its counter part for all three school structures.

• The number of female teachers in Maharashtra is much more than in Gujarat for primary only. In case of the remaining two school structures, Gujarat is having more number of female teachers than its counter part, except in 2003-04 (primary with upper primary).

• The average number of female teachers in Gujarat is more than that in Maharashtra for upper primary only & primary with upper primary. In case of primary only, the average number of female teachers in Maharashtra is more than in Gujarat. The difference is much more in case of primary only & upper primary only.
The trend of number of female teachers is increasing for all three school structures in Gujarat and Maharashtra. The nature of increasing trend of Gujarat is sharper compared to its counterpart for school structures as primary only and primary with upper primary. In case of upper primary only, the nature of trend is not clear.

The rate of increase in number of female teachers in Gujarat is higher compared to its counterpart for all three school structures, except upper primary only.

The number of teachers with the educational qualification as below secondary in Gujarat is higher than that in Maharashtra for school structure as upper primary only and primary with upper primary. In case of primary only, the picture is just the reverse.

The average number of teachers with the educational qualification as below secondary is the highest for primary with upper primary school structure and is the lowest for upper primary only among other school structures for Gujarat and Maharashtra.

The trend of teachers with the educational qualification as below secondary for Gujarat is increasing and for Maharashtra is decreasing for all three school structures. The increasing trend in Gujarat is uneven in nature for primary with upper primary and having marginal increase in first four year but hike in 2007-08 for primary only. In case of Maharashtra, there is sharp decrease & marginal decrease for primary only & primary with upper primary respectively.

For Gujarat state, the rate of increase in number of teachers with the educational qualification as below secondary for upper primary only is higher than that of remaining school structures.

For Maharashtra state, the rate of decrease in number of teachers with the educational qualification as below secondary for primary with upper primary is higher than that of remaining school structures.

The number of teachers with the educational qualification as secondary of Gujarat is higher than that of Maharashtra for school structures as upper primary only and primary with upper primary. In case of primary only, the picture is just the reverse.
- The average number of teachers with the educational qualification as secondary is the highest for primary with upper primary and is the lowest for upper primary only among other school structures for Gujarat and Maharashtra.

- The trend of teachers with the educational qualification as secondary for Gujarat is increasing and for Maharashtra is decreasing for all the three school structures. The increasing or decreasing trend is uneven by nature in all the cases.

- For Gujarat state, the rate of increase in number of teachers with the educational qualification as secondary for primary only is higher than that of remaining school structures.

- For Maharashtra state, the rate of decrease in number of teachers with educational qualification as secondary for primary with upper primary is higher than that of remaining school structures.

- The number of teachers with the educational qualification as higher secondary in Maharashtra is higher than that in Gujarat for school structures as primary only and primary with upper primary. In case of upper primary only, the picture is just the reverse.

- The average number of teachers with the educational qualification as higher secondary is the highest for primary with upper primary and is the lowest for upper primary only among other school structures in Gujarat and Maharashtra. The difference of average number of teachers with educational qualifications as higher secondary in Gujarat and Maharashtra for school structure as primary only is much more significant.

- The trend of teachers with the educational qualification as higher secondary is increasing in Gujarat and Maharashtra, for all three school structures. The nature of increasing trend is very sharp for primary with upper primary among other school structures for both the states.

- The rate of increase in number of teachers with the educational qualification as higher secondary for Gujarat is higher with compare to its counter part for primary only and primary with upper primary school structures.
The number of teachers with the educational qualification as graduate in Maharashtra is higher than that in Gujarat for school structure as primary only and primary with upper primary. In case of upper primary only, the picture is not clear.

The average number of teachers with the educational qualification as graduate is the highest for primary with upper primary and is the lowest for upper primary only among other school structures in Gujarat and Maharashtra. The difference of average number of teachers with educational qualifications as graduate in Gujarat and Maharashtra for school structure as upper primary only is minor compared to other two cases.

The trend of teachers with the educational qualification as graduate is increasing in Gujarat and Maharashtra, for all three school structures. The nature of increasing trend in Gujarat is very sharp in case of primary only and primary with upper primary school structures than its counterpart.

The rate of increase in number of teachers with the educational qualification as graduate in Gujarat is higher compared to its counterpart for primary only and primary with upper primary school structures. In case of upper primary, the picture is just the reverse.

The number of teachers with the educational qualification as post graduate in Maharashtra is higher than that in Gujarat for school structure as primary only and primary with upper primary. Whereas the picture is the reverse, in case of upper primary only.

The average number of teachers with the educational qualification as post graduate is the highest for primary with upper primary and is the lowest for upper primary only among other school structures in Gujarat and Maharashtra. The difference of average number of teachers with educational qualification as post graduate in Gujarat and Maharashtra is higher for school structure as primary only and primary with upper primary.

The trend of teachers with the educational qualification as post graduate is increasing in Gujarat and Maharashtra, for all three school structures. The nature of increasing
trend in Gujarat is sharp and very sharp in the case of primary only and primary with upper primary school structures respectively, than its counterpart.

- The rate of increase in number of teachers with the educational qualification as post graduate in Gujarat is higher compared to its counterpart for primary only and primary with upper primary school structures. While the picture is the reverse in case of upper primary only.

- The number of teachers with the educational qualification as M. Phil. in Maharashtra is higher than that in Gujarat for school structure as primary only. In case of primary with upper primary, Gujarat is having less number of teachers with the educational qualification as M. Phil. than its counterpart, except for the year 2007-08.

- The average number of teachers with the educational qualification as M. Phil. is the highest for primary with upper primary and is the lowest for upper primary only among other school structures in Gujarat and Maharashtra.

- The trend of teachers with the educational qualification as M. Phil. is increasing in Gujarat, for all three school structures. In case of Maharashtra, the trend of teachers with the educational qualification as M. Phil. is increasing for school structures as primary only and primary with upper primary.

- The nature of increasing trend for teachers with the educational qualification as M. Phil. is very sharp and sharp for primary with upper primary school structures in both the states - Gujarat & Maharashtra respectively. In case of primary only, the increasing trend is uneven by nature for both the states.

- The rate of increase in number of teachers with the educational qualification as M. Phil. in Gujarat is higher compared to its counterpart for primary only and primary with upper primary school structures.

**5.2.6 Miscellaneous**

- The percentage of schools having single classroom for school structure as primary only is the highest among other school structures in Gujarat and Maharashtra.
The average percentage of schools having single classroom in Maharashtra is more compared to Gujarat for school structure as primary only, upper primary only and all schools.

The trend of percentage of schools having single classroom is decreasing for all the four school structures in Gujarat and Maharashtra. The nature of trend of decrease is very sharp by nature for primary only and all school in both the states. It is good sign for development of the elementary education.

The percentage of schools having single teacher for school structure as primary only is the highest among all the four school structures in Gujarat and Maharashtra.

The average percentage of schools having single teacher in Maharashtra is more than that in Gujarat for school structure as primary only and primary with upper primary. In remaining two cases, the picture is just the reverse.

The trend of percentage of schools having single teacher is decreasing for all the four school structures in Gujarat and Maharashtra. The trend of decrease is very sharp by nature for primary only and all school in Maharashtra. In case of Gujarat, the nature of decreasing trend is uneven for all the four school structures.

The percentage of schools with pre-primary for school structure as primary only is the highest among all the four school structures in Maharashtra. In case of Gujarat, the primary with upper primary possesses the highest percentage of schools with pre-primary among the other school structures.

The average percentage of schools with pre-primary in Maharashtra is higher than its counterpart for all the four school structures.

The trend of percentage of schools with pre-primary is increasing for all the four school structures in Gujarat and Maharashtra, except upper primary only in Maharashtra. The nature of trend is sharp increasing in Gujarat for all the four school structures, except upper primary only. In case of Maharashtra, the trend of increase is uneven in nature for all the school structures, except upper primary only.
- The percentage of schools without female teacher (tea. ≥ 2) for school structure as primary only is the highest among all the four school structures in Gujarat and Maharashtra.

- The average percentage of schools without female teacher (tea. ≥ 2) in Maharashtra is higher than in Gujarat for all the four school structures.

- The trend of percentage of schools without female teacher (tea. ≥ 2) is decreasing for all the four school structures in Gujarat and Maharashtra, except primary only in Gujarat. The trend is not clear in case of primary only in Gujarat. The nature of decrease of trend is sharp for primary with upper primary in Gujarat. In case of Maharashtra, the trend of decrease is uneven in nature for all the four school structures, except all schools. The trend is slightly sharp in case of all schools of Maharashtra.

- The average number of teachers per school for school structure as primary only is the lowest among all the four school structures in Gujarat and Maharashtra.

- The average of average number of teachers per school in Maharashtra is more than in Gujarat for all the four school structures.

- The trend of average number of teachers per school is increasing for all the four school structures in Gujarat and Maharashtra, except upper primary only in Maharashtra. The nature of increasing trend is slightly sharp for all schools in both the states. In case of primary with upper primary, the increasing trend is uneven in nature in Gujarat and Maharashtra.

- The pupil teacher ratio (PTR) for school structures as primary only and upper primary only are the lowest among all the four school structures in Gujarat and Maharashtra respectively.

- The average number of PTR in Gujarat is higher compared to its counterpart for all the four school structures, except primary only.

- The trend of PTR is decreasing for all the four school structures in Gujarat. The nature of decreasing trend is not clear for Gujarat. In case of Maharashtra, trend is increasing and decreasing for upper primary only, all schools and primary only, primary with
upper primary respectively. Here, the nature of increasing or decreasing of trend is uneven in Maharashtra.

- The percentage of schools with PTR > 100 for primary with upper primary only in Gujarat is higher than in Maharashtra.
- The average percentage of schools with PTR > 100 for upper primary only is the highest among all the other school structures in both the states.
- The trend of schools with PTR > 100 is decreasing for all four school structures in Gujarat and Maharashtra. The nature of decreasing trend is zigzag with hike in the 2005-06 and 2006-07 in Gujarat and Maharashtra respectively, for upper primary only. In case of primary with upper primary and all schools, the nature of decreasing trend in Gujarat is sharp compared to Maharashtra.
- Student Classroom ratio for primary with upper primary is the highest among other school structures in Gujarat and Maharashtra.
- The average of SCR of Gujarat is higher than its counterpart for all school structures except primary only.
- The trend of SCR is decreasing in nature in both the states in all-most cases. The nature of trend is decreasing having zigzag in Maharashtra for all the four school structures. In case of Gujarat, the decreasing trend is sharp by nature for all schools, while it is uneven in nature for upper primary only & marginally sharp for primary only and primary with upper primary.
- Gujarat and Maharashtra both have percentage of schools with SCR > 60, the highest at school structure as primary with upper primary.
- The average percentage of schools with SCR > 60 in Gujarat is much more for primary only and all schools & marginally more for remaining two school structures than its counterpart.
- In Gujarat, the trend of percentage of schools with SCR > 60 is decreasing for all the four school structures except upper primary only. The nature of decreasing trend is sharp, very sharp and very very sharp for primary only, all schools and primary with
upper primary. In case of Maharashtra, the trend is decreasing for all the four school structures with zigzag by nature.

- The percentage of schools with \( \leq 50 \) students having school structure as primary only is the highest and primary with upper primary is the lowest (except for the year 2004-05) among other school structures in Gujarat and Maharashtra.

- The average percentage of schools with \( \leq 50 \) students in Gujarat is higher than its counterpart for primary with upper primary school structure. For remaining school structures, the picture is just the reverse.

- The trend of percentage of schools with \( \leq 50 \) students is increasing for upper primary only and primary with upper primary, while the trend is decreasing for all schools in Gujarat and Maharashtra both. In case of school structure as primary only, the trend of percentage of schools with \( \leq 50 \) students is decreasing in Gujarat and increasing in Maharashtra. The nature of increasing or decreasing trend is uneven in Maharashtra. In Gujarat, the nature of increasing trend is uneven also.

- Gender Parity Index (GPI) for primary grade in Gujarat is less than in Maharashtra, for all the five years.

- The trend of GPI is increasing in Gujarat, while it is decreasing in Maharashtra. The nature of the trend is not clear.

- Transition Rate (TR) for primary to upper primary for Gujarat is less than that of Maharashtra, for all five years, except 2004-05.

- The trend of TR is increasing and decreasing in Gujarat and Maharashtra respectively. The nature of decreasing or increasing trend is uneven here.

5.2.7 Infrastructure facilities

- The percentage of schools with the common toilet is the lowest for the school structure as primary only among all the four structures in Gujarat and Maharashtra.

- The percentage of schools with the common toilet in Gujarat is less than that in Maharashtra for the school structure as primary with upper primary for all the five years. In remaining school structures, the position of higher or lesser is not clear.
- The average percentage of schools with the common toilet in Gujarat and Maharashtra are the same for upper primary only.

- The trend of percentage of schools with the common toilet is increasing for all the four school structures in Gujarat and Maharashtra. The nature of increasing trend is very sharp for primary only, uneven for upper primary only and sharp for primary with upper primary & all schools in both the states.

- The percentage of schools with the girls’ toilet is the lowest and the highest for school structure as primary only and upper primary only respectively, among all four structures in Gujarat and Maharashtra.

- The average percentage of schools with girls’ toilet for Gujarat is higher than its counter part for all four school structures.

- The trend of percentage of schools with the girls’ toilet is increasing for all the four school structures in Gujarat and Maharashtra. The nature of increasing trend is uneven for upper primary only for both the states. In case of remaining three school structures, the nature of increasing trend is very sharp and sharp in Gujarat and Maharashtra respectively.

- The percentage of schools with the drinking water facility is the highest for school structure as upper primary only in Gujarat and Maharashtra.

- The average percentage of schools with the drinking water facility in Gujarat is more than that in Maharashtra for upper primary only and primary with upper primary. In case of remaining two school structures, the picture is just the reverse.

- The trend of percentage of schools with the drinking water facility is increasing for all the four school structures in Gujarat and Maharashtra, except upper primary only in Maharashtra. The nature of increasing trend is very sharp in Gujarat compared to its counterpart for school structures primary only, primary with upper primary and all schools.

- The percentage of schools with the kitchen shed (ramp) is the lowest for school structure as upper primary only among all the four school structures in Gujarat and Maharashtra.
The average percentage of schools with kitchen shed (ramp) in Maharashtra is higher than that in Gujarat for all the four school structures.

The trend of percentage of schools with kitchen shed (ramp) is increasing for all the four school structures in Gujarat and Maharashtra. The nature of increasing trend is very sharp in Gujarat compared to Maharashtra for all the school structures.

**5.2.8 Incentives**

- The numbers of boy and girl beneficiaries of text-books are increasing as years passes in both the school structures as primary and upper primary, except boys for primary and upper primary, in Gujarat.

- The average numbers of beneficiaries of text-books, more boy beneficiaries are found than that of girl for primary as well as upper primary in Gujarat. In case of Maharashtra, girl-beneficiaries are more than that of boy-beneficiaries for primary and upper primary too.

- The trends (increasing or decreasing) of number of beneficiaries of text-books are uneven in nature and not sharp in all the cases.

- The numbers of boy and girl beneficiaries of stationery are increasing for primary and upper primary, in Gujarat and Maharashtra.

- The average numbers of beneficiaries for stationery, more girl beneficiaries are found than that of boys for primary in Gujarat and Maharashtra. In case of upper primary, boy-beneficiaries are more than that of girl-beneficiaries in both the states.

- The trends of increasing or decreasing are uneven in nature and not sharp in all the cases, except upper primary in Maharashtra. The nature of increasing trend is sharp for upper primary in Maharashtra.

- The numbers of boy and girl beneficiaries for uniform are increasing for primary and upper primary, in both the states, except for boys in Maharashtra.

- The average number of beneficiaries for uniform, more boy beneficiaries are found than that of girls for primary and upper primary in Gujarat. In case of Maharashtra,
for upper primary, the averages of boy-beneficiaries are more than that of girl-beneficiaries, but the picture is the reverse for primary.

- The nature of increasing trends is very sharp with a hike in the year 2004-05 for primary and upper primary in Gujarat. In case of Maharashtra, the nature of increasing or decreasing trend is not clear for primary, whereas for upper primary, it is slightly sharp.

- The numbers of boy and girl beneficiaries for attendance are increasing for primary and upper primary, in both the states, except for primary in Maharashtra.

- The average number of beneficiaries for attendance, more boy beneficiaries are found than that of girls for primary and upper primary in Gujarat. In case of Maharashtra, the averages of boy-beneficiaries are less than that of girl-beneficiaries in primary as well as upper primary.

- The nature of increasing trends is very very sharp and very sharp for primary and upper primary respectively, in Gujarat. In case of Maharashtra, the nature of increasing trend is uneven for upper primary, whereas for primary, the decreasing trend is same as uneven in nature for boys and girls.

**5.3.0 Discussion of findings**

Looking to the findings, it was observed that, Gujarat state had during the study having positive effects for some variables like – higher enrollment percentage in government schools, increase in percentage of SC enrollment in primary, higher percentage of ST enrollment and ST girl-students enrollment in primary than upper primary, higher average value of enrollment of ST and ST girl-students than Maharashtra, increasing trend in passed boys and girls in Std. IV, higher average percentage of passed boys and girls in Std. VII than Maharashtra, more percentage of boys and girls securing more than 60 percent in Std. VII than its counterpart, increasing trend in percentage of boys and girls securing more than 60 percent in Std. IV & VII.

Moreover, Gujarat had possessing encouraging effect for variables as - increasing trend in number of total teachers, higher rate of increase in number of teachers in government schools than its counterpart, increasing trend in number of teachers in private schools,
higher rate of increase in number of female teachers compared to its counterpart, increasing trend of teachers with the educational qualification as graduate and post graduate, higher rate of increase in number of teachers with the educational qualifications as M.Phil. than that of Maharashtra.

Further, the study revealed that, Gujarat had holding affirmative situations for - higher average value of percentage of schools with girls’ toilet than its counterpart, increasing trend for percentage of schools with drinking water facility, very sharp increasing trend in percentage of schools with ramp compare to its counterpart, more average value of girl-beneficiaries of stationery than boys-beneficiaries of stationery for primary, sharp increasing trend in number of beneficiaries of attendance.

It could also be observed that, in case of few variables, negative changes were found. Those variables were – decreasing trend in enrollment in government schools, less girls enrollment than its counterpart, higher decline in SC student and girl-students enrollment than Maharashtra, decreasing trend in passed girls in Std. IV, less achievement in students securing more than 60 percent in Std. IV than its counterpart, achievement of students securing more than 60 percent is less in Std. IV than that of Std. VII.

Furthermore, variables having depressing effects were - more number of teachers with educational qualifications as below secondary and higher secondary in some school structures than its counterpart, less percentage of schools with pre-primary than its counterpart, high average number of PTR than its counterpart, high number of SCR than Maharashtra in most of the cases, less transition rate (primary to upper primary) than Maharashtra.

### 5.4.0 Educational Implications

It was seen from findings that, there were some variables in which the picture of Gujarat was reverse than that of its neighboring state – Maharashtra. Such points along with implication were listed as follows.

- Gujarat and Maharashtra are having decreasing trend of percentage of enrollment in the government schools for all the four school structures. In such situation, by implementing various incentive schemes and making school environment child friendly, the issue can be solved.
The trend in declining enrollment percentage of the government schools is sharp than its counterpart for all the four school structures except all schools. Here, such picture can be converted by bringing in various incentive schemes, educating parents regarding various benefits and making school environment child friendly.

The percentage of girls’ enrollment in Gujarat is less compared to its counterpart for all the four school structures. In this case, adopting girls’ incentives, making availability of facilities for specially girls could be resulting to increase the percentage of girls’ enrollment. It can also achieved by educating religious and social leaders about need of girls’ education, and /or by seeking their cooperation /involvement in girls’ enrollment.

The SC enrollment and SC girl-students’ enrollment for primary and upper primary in Gujarat is less than in Maharashtra for the five years. In such situation, by introducing scheme for special incentives & content enrichment program, by taking in confidence of their political and social leader, by motivating NGO’s who are working for them, percentage of enrollment of SC students and SC girl-students’ will increase in Gujarat.

The percentage of passed boys and girls in Maharashtra are higher than its counterpart in the case of Std. IV. The level of academic achievement of passed boys and girls in Gujarat can be increased by introducing more content based training program, modifying classroom transaction, changing in delivering methods. Specially designed study materials can help a lot for that.

In case of Std. VII, the trend of the percentage of passed girls is decreasing in Gujarat. In Gujarat state, achievement of passed girls can be increased by introducing content based training program, modify classroom transaction, change in delivering methods…etc. Specially, designing self-learning material can also be helpful for enhancing their level of achievement.

The percentage of students who have secured more than 60 percent for boys and girls in Std. VII in Gujarat is higher than in Maharashtra; but in case of Std. IV, the picture is just the reverse. In case of Std. IV, the government of Gujarat has to make change in the curriculum, teaching methods and also concentrate on teaching aids, evaluation strategy …etc. to improve the academic achievement in Std. IV in Gujarat.
- The percentage of students who have secured more than 60 percent in Std. IV is less than that in Std. VII in Gujarat. To increase the achievement in Std. IV, the monitoring system is to make more effective. Further by introducing some incentives for the students, teachers who look after them and the school too, the percentage can improved. This can also achieved by introducing star-batch teaching.

- The number of total teachers in Maharashtra is higher than in Gujarat for school structures primary only and primary with upper primary. As number of schools in Maharashtra is more than in Gujarat, it is but natural. But here, it can be made known that, only for two mentioned school structures, it happened. For other school structure, Gujarat state has to think over it.

- The number of teachers in government school in Maharashtra is higher than that in Gujarat for school structures primary only and primary with upper primary. As number of schools in Maharashtra is more than Gujarat, the picture is natural one. The government can add more teachers even over teacher policy to meet the need.

- The number of teachers with the educational qualification as below secondary in Gujarat is higher than that in Maharashtra for school structure as upper primary only and primary with upper primary. In case of primary only, the picture is just the reverse. This situation is not a desirable. One can not think quality education in such case. Government of Gujarat should modify the recruitment policy and “class : teacher” ratio to overcome such a position for school structure as upper primary only and primary with upper primary.

- The number of teachers with the educational qualification as higher secondary in Maharashtra is higher than that in Gujarat for school structure as primary only and primary with upper primary. In case of upper primary only, the picture is the reverse. To modify such situation, Gujarat state has to recruit teachers having higher educational qualifications. A special drive should be introduced for teachers to up-grade their qualifications during their service period. Government can tie-up with open universities for that.

- The average percentage of schools with pre-primary in Maharashtra is higher than its counterpart for all the four school structures. Such provision had made rise in
enrollment of the students in elementary school. In such case, Gujarat government should set up the schools with pre-primary education across the state.

- The average number of PTR in Gujarat is higher compared to its counterpart for all the four school structures, except primary only. This situation is not a desirable. To reduce the PTR, availability of teachers in position should be as per sanction teacher, so recruitment of teacher according to the actual demand (PTR) is taken by the government of Gujarat.

- The trend of PTR is decreasing for all the four school structures in Gujarat. The nature of decreasing trend is not clear in Gujarat. In case of Maharashtra, trend is increasing and decreasing for primary only, all schools and upper primary only, primary with upper primary respectively. The decreasing trend of PTR is a good sign for Gujarat, but government should try to reach the desired value by recruiting teachers according to the requirement. Addition of required teacher can help to enhance the quality education.

- The percentage of schools with PTR > 100 for upper primary only in Gujarat is much high than that in Maharashtra. This is not a desirable position for Gujarat. Gujarat state has to implement strict steps for recruitment of more teachers to overcome such position, for school structure as upper primary only.

- The average of SCR in Gujarat is higher than its counterpart for all the school structures except primary only. This situation is not a good. It effects the achievement of students’ education. To give attention to every child, SCR can be reduced by making more classrooms available in schools. Locally, schools should be motivated for adding more class-rooms by resource mobilization.

- The average percentage of schools with ≤ 50 students in Gujarat is higher than its counterpart for primary with upper primary school structure. For remaining school structures, the picture is just the reverse. This situation can be overcome by making cent percent enrollment and retention of the students for their area. By involving NGOs, this goal can be achieved. So that NGOs may be motivated by local political parties and local social workers.
The trend of GPI is increasing in Gujarat, while it is decreasing in Maharashtra. The nature of trend is not clear. This is a good signal, but still Gujarat government has to put action to increase the GPI as 1.00, which is an ideal position for elementary school system.

Transition Rate for primary to upper primary in Gujarat is less than that in Maharashtra, for all the five years, except 2004-05. This is not desirable. It shows that, cent percent students who got enrolled in primary are not entering in upper primary, it results into drop out. To improve the transition rate, various incentives at upper primary level should bring in and follow of child rights should make the part of discipline in Gujarat. At grass-root level, incentives for teachers and for schools should be provided.

The trend of percentage of schools with common toilet is increasing for all the four school structures in Gujarat and Maharashtra. The nature of increasing trend is very sharp for primary only, zigzag for upper primary only and sharp for primary with upper primary & all schools in both the states. This is good, but at the same time, separate facility for girls should also be taken into account.

The average number of beneficiaries for text-books, more boy-beneficiaries is found than that of girls for primary as well as upper primary in Gujarat. In case of Maharashtra, girl-beneficiaries are more than that of boy-beneficiaries for primary & while upper primary also. To make beneficiaries of text-books as boys and girls equal, more importance should be given to reduce the gender gap in enrollment and retention in primary as well as upper primary in the state of Gujarat.

The average number of beneficiaries for uniform, more boy-beneficiaries are found than that of girls for primary and upper primary in Gujarat. In case of Maharashtra, for upper primary, the averages of boy-beneficiaries are more than that of girl-beneficiaries, but the picture is the reverse for primary. In such case, to increase the girl-beneficiaries, strengthening of various strategies for retention at primary and upper primary both in Gujarat should be introduced.

The average number of beneficiaries for attendance, more boy-beneficiaries are found than that of girls for primary and upper primary in Gujarat. In case of Maharashtra also, for primary and upper primary, the averages of boy-beneficiaries are less than
that of girl-beneficiaries. For Gujarat state, in such case, to increase the girl-beneficiaries, strengthening of various strategies for retention at primary and upper primary both should be initiated. By putting more efforts in the system, one can bring more and more girl-beneficiaries under these schemes.

5.5.0 Suggestions for further research

Two types of suggestions were described as follows.

5.5.1 General Suggestion –

Looking to the findings related to the Gujarat, some weaknesses were found like - Literacy rate, girls’ enrollment, SC & ST enrollment, passed students in IV, students secured more than 60% in VII, teachers with educational qualification as below secondary, schools without female teacher (tea.≥2) in primary only, average number of teachers per school in primary only, student classroom ratio, gender parity index, transition rate, drinking water facility ...etc. Looking to these weaknesses, the related stake holders can plan and take necessary steps to remove it.

5.5.2 For further research –

# Comparison of status of elementary education of Gujarat with its all neighboring states of India.
# Comparison of status of elementary education of Gujarat with all other states of India for the same time span.

# Comparison of status of elementary education for other more types of school structures of Gujarat with its neighboring states and all states of India.
# Comparative study of status of elementary education of Gujarat and its neighboring states for years other than 2003-04 to 2007-08 on the same variables.

# Comparison of status of secondary, higher secondary and higher education of Gujarat with its neighboring states and all other states of India for the same duration.

Such titles can be worked for further researches.
5.6.0 Conclusion

In this chapter, summary of the research was given in brief. Findings related to various variables were narrated. Discussions of finding for positive change were described. Moreover, educational implications related to weaker results were discussed. Suggestions were narrated in two ways as – (i) general suggestions and (ii) suggestions for further study separately. The researcher has tried to evaluate all the selected variables under investigation by evaluating it from different view points. The investigator has tried to make the report error free. But due to lack of research experience, there may be some error in it which may be forgivable.