

**A COMPARATIVE STUDY OF QUALITY OF EDUCATION IN  
PUBLIC AND PRIVATE SECONDARY SCHOOLS OF PUNJAB**



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04-arid-26

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**Pakistan**

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PUBLIC AND PRIVATE SECONDARY SCHOOLS OF PUNJAB**

**By**

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**Dedicated**

**To**

***My adorable father and enchanting  
Mother (late)***

**Whose heartfelt prayers and altruistic love as  
deep as sea, as philanthropic and pure as  
unsullied lily, as constant  
as Northern star and whose advises and  
suggestions  
as valuable as the most precious diamonds,  
have always transformed my dreams  
into reality and made me what I am today**

# CONTENTS

	<b>Page</b>
<b>Acknowledgements</b>	xii
<b>Abstract</b>	xiv
<b>1 INTRODUCTION</b>	<b>1</b>
<b>2 REVIEW OF LITERATURE</b>	<b>5</b>
2.1 IMPORTANCE OF EDUCATION	5
2.2 EDUCATION SYSTEM IN PAKISTAN	6
2.3 IMPORTANCE OF SECONDARY EDUCATION	7
2.4 GOALS FOR SECONDARY EDUCATION	8
2.5 SCIENTIFIC, TECHNICAL AND VOCATIONAL ASPECTS OF SECONDARY EDUCATION	9
2.6 FIVE YEAR PLANS AND SECONDARY EDUCATION	11
2.6.1 The First Five-Year Plan (1955-60)	11
2.6.2 The Second Five-Year Plan (1960 -65)	13
2.6.3 The Third Five-Year Plan (1965 -70)	13
2.6.4 Non-Plan Period (1970 -78)	15
2.6.5 Fifth Five-Year Plan (1978-83)	17
2.6.6 The Sixth Five-Year Plan (1983-88)	18
2.6.7 The Seventh Five-Year Plan 1988-93	19
2.6.8 Eighth Five Year Plan (1993 -98)	21
2.7 EDUCATION POLICIES AND SECONDARY EDUCATION	23
2.7.1 Report of Commission on National Education (1959)	23
2.7.2 The Education Policy (1972 -1980)	24
2.7.3 National Education Policy, 1979	25
2.7.4 National Education Policy 1998 -2010	27
2.7.5 Education Sector Reforms -Action Plan 2001-2005	29
2.7.6 Future Scenario	30
2.8 OBJECTIVES OF SECONDARY EDUCATION	31
2.9 THE ROLE OF SECONDARY EDUCATION	34
2.10 CARDINAL PRINCIPLES OF SECONDARY EDUCATION	36

2.10.1	Health	36
2.10.2	Command of fundamental processes	36
2.10.3	Worthy Home Membership	36
2.10.4	Vocation	37
2.10.5	Civic Education	37
2.10.6	Worthy Use of Leisure	37
2.10.7	Ethical Character	37
2.11	PUBLIC SECTOR IN EDUCATION	38
2.11.1	Government Should Spend on Education	39
2.12	QUALITY AND ACADEMIC STANDARDS	40
2.13	ISSUES OF QUALITY	43
2.13.1	Quality of Secondary Education	45
2.14	PROBLEMS, ISSUES AND TRENDS IN SECONDARY EDUCATION	46
2.14.1	Educational institutions	48
2.14.2	Medium of Instruction	48
2.14.3	Non-Availability of Audio-Visual Aids	50
2.14.4	The Educational System Collapse	51
2.14.5	Learning a Language	51
2.14.6	Diversification of Secondary Education	52
2.15	ROLE OF PHYSICAL FACILITIES	53
2.15.1	School Building	55
2.15.2	Facilities in the Building	56
2.15.3	School Library	57
2.15.4	School Laboratory	60
2.15.5	Laboratory facilities	60
2.15.6	Dimension of the Laboratory	61
2.15.7	Laboratory plans	61
2.15.8	Instructional Technology	62
2.15.9	Audio-Visual Aids	62
2.15.10	Flannel Boards	63

2.15.11 Flash Cards	63
2.15.12 Pictures	64
2.15.13 Charts	64
2.15.14 Maps	65
2.16 RESEARCH IN SECONDARY EDUCATION	65
<b>3. RESEARCH METHODOLOGY</b>	<b>68</b>
3.1 POPULATION	68
3.2 DELIMITATIONS OF THE STUDY	68
3.3 SAMPLE	69
3.3.1 Sample of Schools	69
3.3.2 Sample of Heads	69
3.3.3 Sample of Teachers	69
3.3.4 Sample of Students	70
3.4 RESEARCH INSTRUMENTS	70
3.4.1 PILOT TESTING	71
3.5 DATA COLLECTION	71
3.6 DATA ANALYSIS	71
<b>4. RESULTS AND DISCUSSION</b>	<b>74</b>
DISCUSSION	145
CONCLUSIONS	149
RECOMMENDATIONS	152
SUMMARY	154
<b>LITERATURE CITED</b>	<b>156</b>
<b>APPENDICES</b>	<b>161</b>

## LIST OF TABLES

<b>Table No.</b>		<b>Page</b>
1.	Academic Qualification of Administrators	74
2.	Professional Qualification of Administrators	74
3.	Administrative experience of Administrators	74
4.	Academic Qualification of teachers	76
5.	Professional Qualification of teachers	76
6.	Teaching experience of teachers	76
7.	Status of building	78
8:	Overall result of students in pass percentage in sampled public and private schools	78
9:	Heads' opinion about average number of teachers in public and private schools	78
10:	Heads' opinion about enrollment of students in secondary classes teacher student ratio	78
11:	You involve your staff in decision-making.	80
12:	You like to be a part of team while leading teachers.	80
13:	Tasks being carried out in the institutions are well organized.	80
14:	The selection procedure for recruitment of teachers is fair.	81
15:	There is coordination among the administrative staff	81
16:	Teachers have command over subject matter	81
17:	Teachers have command over teaching methodology.	83
18:	Job security for teachers is ensured	83
19:	School environment is suitable for teaching.	83
20:	Attention is given to the character building of students.	84
21:	Religious ethics are maintained at the school	84
22:	The student assessment procedure is fair	84
23:	Students are admitted according to merits.	86
24:	Student –teacher ratio is adequate.	86
25:	Your school provides quality education	86
26:	The students of your school of the institution compete well with other	87



School students

27:	Merit is strictly followed in all matters.	87
28:	Building facility is adequate	87
29:	Equipment is according to present and future needs	89
30:	Playground is available.	89
31:	Proper fans are available in all rooms of school.	89
32:	Gas facility is available in all rooms of school	90
33:	The school has well maintained boundary wall	90
34:	Sufficient furniture is available in rooms.	90
35:	The school has separate staffroom for teachers.	92
36:	Drinking water facility is available.	92
37:	Science laboratories are well equipped	92
38:	Co-curricular activities are arranged regularly.	93
39:	Needed A.V. aids are available.	93
40:	Teachers use A.V. aids effectively	93
41:	Computer lab. is available in library	95
42:	Sufficient books are available in library	95
43:	The curricula being taught at school is according to growing needs of the society.	95
44:	The curricula is revised regularly	96
45:	Subjects and content being taught is relevant to the present and future needs to society.	96
46:	Give reasons for deterioration of quality at secondary level:	96
47:	Give suggestions to improve quality of secondary education:	98
48:	Teachers in your school are well qualified	99
49:	Teachers in your school are professionally well-trained	99
50:	In-service training is provided to teachers	99
51:	The selection procedure for recruitment of teachers is standardized	100
52:	Teachers have command over subject matter	100
53:	Your teachers are well prepared before delivering the lecture.	100
54:	Teachers have command over teaching methodology.	102
55:	Present is given for encouragement of good teachers.	102

56:	Incentives are given for encouragement of good teachers	102
57:	The teacher communicates the subject matter effectively in the class	103
58:	Job security for teachers is ensured	103
59:	Facilities for teachers of qualifications for teachers within / outside the Country is available	103
60:	Student –teacher ratio is adequate.	105
61:	School environment is suitable for teaching.	105
62:	Merit is strictly followed in all matters.	105
63:	You are satisfied with present pay structure.	106
64:	Attention is given to the character building of students.	106
65:	Religious ethics are maintained at the school	106
66:	Facilities are provided to the secondary school teachers in Transport:	108
67:	Facilities are provided to the secondary school teachers in Medical	108
68:	The teachers are competent to use A.V aids.	108
69:	You're Headmaster / Headmistress involves you in decision making.	109
70:	Your Headmaster / Headmistress likes to be a part of team while leading teachers.	109
71:	Tasks being carried out in the institution are well-organized.	109
72:	Proper planning is conducted before launching any activity in school	111
73:	The student assessment procedure is fair.	111
74:	Students are admitted according to merits	111
75:	Your school focuses upon qualitative aspect of education.	112
76:	Creative thinking is encouraged in class.	112
77:	Subjects and content being taught is relevant to the present and future needs to society.	112
78:	The teachers show respect towards students and encourages class participation.	114
79:	The teacher maintaining an environment that is conducive to learning.	114
80:	The teachers arrive on time.	114
81:	The teachers leave class on time.	115
82:	Questioning is encouraged in class.	115

83:	The students of your school of the institution compete well with the students of other schools.	115
84:	Building facility is adequate	117
85:	Equipment is according to present and future needs	117
86:	Play ground is available.	117
87:	Proper fans are available in all rooms of school.	118
88:	Gas facility is available in all rooms of school.	118
89:	The school has well maintained boundary wall.	118
90:	Sufficient furniture is available in rooms.	120
91:	Drinking water facility is available.	120
92:	Science laboratories are well equipped.	120
93:	Instructional facilities are appropriate.	121
94:	Needed A.V. aids are available.	121
95:	Teachers use A.V. aids effectively.	121
96:	The school has well managed hostel facilities for students.	123
97:	Computer lab. Is available in library.	123
98:	Sufficient books are available in library.	123
99:	Give reasons for deterioration of quality at secondary level:	125
100:	How can quality of secondary education be improved? Give some suggestions.	125
101:	Teachers at your school are well qualified.	126
102:	Teachers have command over subject matter.	126
103:	Your teachers are well prepared before delivering the lecture.	126
104:	Teachers have command over teaching methodology.	127
105:	The teacher communicates the subject matter effectively in the class	127
106:	School environment is suitable for teaching.	127
107:	Attention is given to the character building of students.	129
108:	Religious ethics are maintained at the school.	129
109:	Facilities are provided to the secondary school students in Hostel:	129
110:	Facilities are provided to the secondary school students in Transport:	130
111:	Facilities are provided to the secondary school students in Medical:	130
112:	The teachers are competent to use A.V aids.	130

113:	The student assessment procedure is fair.	132
114:	Students are admitted according to merits.	132
115:	Your school provides quality education.	132
116:	Creative thinking is encouraged in class.	133
117:	Subjects and content being taught is relevant to the present and future needs to society.	133
118:	The teacher encourages class participation.	133
119:	The teacher maintains an environment that is conducive to learning.	135
120:	The teachers arrive on time.	135
121:	The teachers leave class on time.	135
122:	Questioning is encouraged in class.	136
123:	The students of your school of the institution compete well with the students of private sectors schools.	136
124:	Building facility is adequate.	136
125:	Equipment is according to present and future needs.	138
126:	Play ground is available.	138
127:	Proper fans are available in all rooms of school.	138
128:	Gas facility is available in all rooms of school	139
129:	The school has well maintained boundary wall.	139
130:	Sufficient furniture is available in rooms.	139
131:	The school has separate staffroom for teachers.	141
132:	Drinking water facility is available.	141
133:	Science laboratories are well equipped.	141
134:	Instructional facilities are appropriate.	142
135:	Needed A.V. aids are available.	142
136:	Computer lab. is available in library.	142
137:	Sufficient books are available in library.	144

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## **ABSTRACT**

The quality education is an indispensable and inevitable agent for change as education is a process of civilization and development. The issue of deterioration of quality in education in Pakistan, especially decline in quality of secondary education was the slogan of the day. The major purpose of the research was to compare the quality of education in public and private schools of Punjab. All the secondary schools, their heads, secondary school teachers and students of 10<sup>th</sup> class of public and private sector of the Punjab constituted population of the study. Punjab is generally distributed in three different stratus, which are North Punjab, Central Punjab, and South Punjab. Due to limited time and resources, the study was delimited to the nine districts of Punjab namely Rawalpindi, Chakwal, Attock, Lahore, Gujranwala, Dera Ghazi Khan, Bahawalpur, Mianwali and Sargodha. Two hundred and sixteen secondary schools (twenty-four secondary schools from each sample district) were randomly selected. The proportion of public sector schools and private sector schools, boys and girls schools was equal. All the heads of selected 24 secondary schools of public and private sector from each district (the proportion of public sector schools and private sector schools, boys and girls schools was equal i.e. fifty fifty) were included in sample. One thousand and eighty teachers (one hundred and twenty from each sample district) constituted the sample of the study. The proportion of the public and private, male and female teachers was fifty fifty. Four thousand, three hundred and twenty students studying in 10<sup>th</sup> class in public and private high schools of already sampled district of Punjab were randomly selected as the sample of the study. The proportion of public and private and male and female students was fifty fifty. Three questionnaires, one each for heads, secondary school teachers and students, prepared and validated through pilot-testing, were used as the research instruments of the study. The researcher visited the target areas personally, distributed the questionnaires himself, and got filled questionnaires back from respondents. The data obtained was tabulated and analyzed by using simple percentage and two way chi square tests. Main conclusions of the study were: that private sector schools had actually less number of students and teachers at secondary level as compared to public sector schools. The results of 10<sup>th</sup> class students in boards' examinations of private schools were better than government schools. While with respect to ownership of building, almost 98% public sector schools had their own buildings and majority of private schools was running in rented buildings. In public sector schools student-teacher ratio was higher than private

schools. Heads of private sector secondary schools were better than heads of public sector secondary schools regarding involvement of subordinate staff in decision making, keeping themselves as a part of team while leading them and carrying out the well- organized tasks. But the heads of public sector secondary schools were more qualified academically as well as professionally, having more administrative experience as compared to private sector secondary schools' heads. Teachers of public secondary schools were more qualified academically as well as professionally having command over teaching methodology as compared to the teachers of private secondary schools. In public schools, in service training was provided to teachers and their selection was done on merit. They had also job security and their pay structure was well. In contrast, private sector was lacking these factors. Behaviour of teachers of private schools was motivating and they encouraged questioning and enhanced creativity among students, whereas public schools were lacking these factors. Availability of A.V. aids was excessive in public secondary schools as compared to private secondary schools but their use was more in private public secondary schools. Position of physical facilities was better in public secondary schools than in private secondary schools with respect to buildings, libraries, play grounds, furniture. While position of private sector secondary schools was better in availability of computer labs and gas. Respondents of both the systems were of the view that curriculum of both type of systems was not up-to-date, fulfilling emerging needs of neither society nor it was being revised regularly.

The major recommendations are: more schools be established in public sector. School mapping be kept in mind before establishing new schools. The heads and teachers of school should take such necessary actions which may help to raise academic standard of their school. The heads of public schools should take seriously the problem of their low pass percentage. Teachers of public schools may be held accountable on showing poor result in examination. They must be given incentives for showing good results. Teachers of both systems be given opportunities to get training in order to improve their teaching skills. Libraries of public and private schools be kept well-maintained and all necessary treasure of books be present in them and students and teachers should be allowed to get benefit from library. Teachers should make more use of A.V. aids to make teaching process more effective.



## **INTRODUCTION**

The standard of education or quality of education is very low in Pakistan. As a scholar of Ph.D. Education, I thought that it was imperative to research upon quality of education in Pakistan, especially to compare the quality of both the sectors public and private secondary schools. Keeping in view the slogan of the day that quality was deteriorating and lowering in our schools, it was need of the day to compare the quality of education of public and privately managed schools to the factual position. Without improving quality of education, we cannot keep pace with the modern era.

The concept of quality in every field is a complex concept. It is complex in nature, elements, components, and every respect. Quality is the most honorable but the slipperiest term in the field of education. Sometimes it is used in evaluative sense, for example as scale of goodness. Sometimes it is implied to seek some distinguishing characteristics. The quality in education refers to the standard of management, educational facilities, curriculum, methods of teaching, students, examination system, teaching staff etc.

The quality of education is poor at all levels in developing and under developed countries, Iqbal (1987) stated that students in developing countries have a mean level of achievement below that in industrial countries and their performance shows a much greater variation around the mean. According to a report of the World Bank (1999), the main ways in which governments can help to improve the quality of education are setting standards, supporting inputs to improve, achievements, adopting flexible strategies for the acquisition and use of inputs, and monitoring performance. Generally the spaces are not taken because of the weight of the existing education

speeding and management practices. Learning requires five inputs: the students learning capacity and motivation, the subject to be learned, teacher who has good knowledge of subject can teach that subject, time for learning, and tools for teaching and learning.

Secondary education holds pivotal position in education system of every country, for it is terminal stage for most of students and it also serves as a linkage stage between elementary stage and higher education. It provides input for higher education and thus quality of higher education is dependant upon secondary education (AIOU, 1997). In Pakistan it consists of four classes, 9th and 10th secondary education, and 11th and 12th higher secondary education. Secondary education (IX-XII) is an important sub-sector of the entire educational system. On one hand, it provides the middle level work force for the economy and on the other it acts as a feeder for the higher levels of education. Higher education, which is expected to produce quality professionals in different field's hinges on the quality of secondary education. This level of education, therefore, needs to be revamped in such a way that it prepares young men and women for the pursuit of higher education as well as prepares them to adjust to their practical lives meaningfully and productively (Govt. of Pakistan, 1998).

There are two sectors working side by side in the field of secondary education, i.e. private sector and government sector in Pakistan. National Education Policy (1979) states that private sector plays an important role in the development of education in a country. It helps both in the qualitative improvement and the qualitative expansion. Private sector bears a good deal of burden of the expenditures on this important social cause even in the most advanced countries. In a country like Pakistan

where the population growth rate is about 3 percent, annually and only about 20 percent of the existing children are in the secondary schools, the support of the private sector is the most needed to share this huge burden. Government alone cannot build and run all the schools required for the purpose.

Recognizing that the Government alone cannot achieve the policy objectives, it is imperative to seek volition involvement of the private sector in the expansion of the education. The private sectors need to be assured that the educational institutions established by them in the future will not be nationalized. Unless such an assurance is forthcoming, the private enterprise is most likely to remain shy of making any further investment in the education.

The nation also needs assurance that the private institutions would maintain high quality and provide the required physical facilities (Govt. of Pakistan, 1979). In pursuance of National Education Policy of 1979, the Punjab Private Education Institutions (Promotion and regulation), Ordinance No. 11 was passed in 1984. The governments of NWFP and Sindh adopted similar Ordinances. These Ordinances demand the registration of all private institutions with a Registration Authority, the constitution of a managing body for each institution, and spell out the conditions for registration. Under these conditions, the government approval was considered mandatory for the adoption of a fee structure by each private institution.

As a consequence of the promulgation of these Ordinances in the provinces, a second wave of community participation in education had been energized. It is estimated that more or less 30,000 private educational institutions at all levels with approximately 3 millions students are functioning in the country. Most of these institutions are 'English medium' schools and impart education from playgroup to

postgraduate level. Some schools have been established on community basis, while the others are owned by individuals (Govt. of Pakistan, 1998).

It is a fact that destiny of nation is shaped in the classrooms. This implies that education is the main source of progress and development. It can be said without hesitation that education is mostly responsible for the future of Pakistan. Through education, nation building process for the future citizens of the country is taken place. Sooner the education moulds students, country will be molded. From this point of view, a lot of responsibilities lie with the educationist and the quality of education. Therefore, the education must be qualitative so that the students should develop necessary knowledge, skills, and attitude to perform their duties effectively. It is in this context that quality education becomes the most important ingredient to enhance the quality of life in any country. It is so worthwhile to raise some issues in this regard and think of their solution. The present study was therefore conducted to compare the quality of education in public and private schools of Punjab having following objectives:

1. To investigate the number and qualification of teachers, the enrollment of students as well as student-teacher ratio in both types of schools.
2. To compare the results of the students of the both classes who appeared in boards' examination.
3. To compare the quality of education in terms of quality of management, quality of infrastructure, quality of teaching staff, quality of curricula etc. in both types of schools.
4. To make recommendations for improvement of the quality of education in both types of schools.

## **REVIEW OF LITERATURE**

This chapter deals with the review of available literature on the secondary education in Pakistan. In the final section, a critical review of the related research has been presented.

### **2.1 IMPORTANCE OF EDUCATION**

Education is a powerful catalyzing agent, which provides mental, physical, ideological and moral training to individuals, so as to enable them to have full consciousness of their mission, of their purpose in life and to equip them to achieve that purpose. It is an instrument for the spiritual development as well as the material fulfillment of human beings. With in the context of Islamic - perception, education is an instrument for developing the attitudes of individuals in accordance with the value of righteousness to help build a sound Islamic society (Govt. of Pakistan, 1998).

Education plays an important role in human resource development. It raises the productivity, efficiency of individuals and produce skilled manpower that is capable of leading the economic development. Importance of Education for human resource development does not need any justification and clarification. The developed countries attach highest priority to education; same is the case with the developing countries. The constitution of Pakistan accepts education as one of the fundamental rights of a citizen as well as constitutional commitment of the government accepts to provide access to education to every citizen (Govt. of Pakistan, 2000).

## 2.2 EDUCATION SYSTEM IN PAKISTAN

The education system in Pakistan consisted of a number of stages, primary, middle secondary, higher secondary/intermediate, and college and university levels. These categories overlap and so does the administration of institutions overlap in each category. For example, there are schools/colleges offering education from nursery to degree level (class XIV), even to masters' level. Principals of such colleges are responsible for over all administration of the colleges. But staff of that college/school may be under the directorate of schools or colleges for the purpose of transfers, promotions and posting etc. The structure of formal education system in Pakistan can be summarized as following.

	<u>Level</u>	<u>Schooling</u>	<u>Age</u>
1.	Primary	Five years	5-9 years
2.	Middle	Three	10-13
3.	Secondary	Two	14-15
4.	Higher Secondary/Intermediate	Two	16-17
5.	Higher (College)	Two	18-19
6.	Higher (University)	Two to Five	20 and above

(Rasul, 1998)

There was a proposal in National Education Policy 1979 to make the education a 3 tier system as: Elementary (I-VIII); Secondary (IX-XII); and Higher (XIII-above). Three tier system could not be implemented effectively but as a result of this exercise we had higher secondary schools with XI and XII classes in the secondary schools having large enrollment. Presently, the education system in Pakistan comprises the following tiers: Primary (I-V); Secondary (VI-X); college Education (XI-XIV); and

Higher Education (XV and onward). Apart from these regular tiers there are institutions for: Engineering; Technical and Vocational Education; Medicine, Teacher Education, Agriculture; Business and Commerce and law (Farooq, 1993).

### **2.3 IMPORTANCE OF SECONDARY EDUCATION**

Secondary education (IX-XII) is an important sub-sector of the entire educational system. On the one hand, it provides the middle level work force for the economy and on the other; it acts as a feeder for the higher levels of education. Higher education, which is expected to produce quality professionals in different fields, hinges on the quality of secondary education. This level of education, therefore, needs to be revamped in such a way that it prepares young men and women for the pursuit of higher education as well as prepares them to adjust to their practical lives meaningfully and productively.

Secondary education is a stage where a student enters adolescence. This is the most crucial stage of life. The basic perceptions and modes of behaviour start taking shape and problems of adjustment with the new roles in life assume critical significance. Four years of secondary education, therefore, provide an excellent opportunity for the educationists to conceive and launch programs that initiate the learners into proper forms of behaviour and attitudes.

In the past, secondary education could not attract attention in terms of efforts and investment. The perennial problem of illiteracy and the legacy of backwardness in the field of science and technology have forced the governments to give greater priority to these two areas. Now, we have reached a stage, where the number of universities in the public and private sectors has raised to 110 including degree-awarding institutes, the number of primary schools has crossed the mark of 2,60,000.

It is, therefore, most appropriate to address the problems of secondary education seriously. With increased emphasis on quality of primary education and renewed efforts to check the high drop-out rate at primary level, the secondary level of education now needs to be prepared for comparatively heavier influx of aspirants to this level.

Compared to primary and elementary education, the base of secondary education is very narrow. The enrollments on the female side are particularly low. Due to lack of planning in identifying the schools, the areas of highest concentration are overlooked. On the other hand, there are also large areas, which are not covered by adequate facilities. Expansion of schools in an unplanned manner, therefore, needs to be discouraged and we need to proceed very cautiously and in a planned manner (Govt. of Pakistan, 1998).

#### **2.4 GOALS FOR SECONDARY EDUCATION**

The Committee on Curriculum Planning and Development of the National Association of Secondary School Principals identified following goals for secondary education.

- All youth need to develop salable skills and those understandings and attitudes that make the worker an intelligent and productive participant in economic life.
- All youth need to develop and maintain good health and physical fitness.
- All youth need to understand the rights and duties of the citizen of a democratic society and to be diligent and competent in the performance of their obligations as members of the community and citizens of the state and nation.



- All youth need to understand the significance of the family for the individual and society and the conditions conducive to successful family life.
- All youth need to know how to purchase and use goods and services intelligently, understanding both the values received by the consumer and the economic consequences of their acts.
- All youth need to understand the methods of science, the influence of science on human life, and the main scientific facts concerning the nature of the world and of man.
- All youth need opportunities to develop their capacities to appreciate beauty in literature, art, music and nature.
- All youth need to be able to use their leisure time well and to budget it wisely, balancing activities that yield satisfactions to the individual with those that are socially useful.
- All youth need to develop respect for other persons to grow in their insight into ethical values and principles, and to be able to live and work cooperative with others.
- All youth need to grow in their ability to think rationally (Faunce, Munshaw, 1965).

## **2.5 SCIENTIFIC, TECHNICAL AND VOCATIONAL ASPECTS OF SECONDARY EDUCATION**

Man has been striving to improve his conditions of life from times immemorial. He faced many hurdles in his early age in this world and would keep on facing them subsequently. He had to work hard to procure ever-increasing changing necessities of life with the passage of time. He developed a sense of search for

knowledge in the world around him and tried to take benefit out of it from time to time.

Such a system of education was inherited by Pakistan which imparts only general education in the institution. Enough time has passed by now. We must not any more curse the old system left by the British but curse ourselves because we have not been able to take initiatives to generate a new system of education which should not only have created an urge for knowledge but should have also created a scientific outlook in the society. In this space age we have been able to do nothing concrete in spite of our lofty claims.

It is quite essential that a scientific out-look is created in the educational institutions so that a headway could be made in discovering secrets in the area of technology. We may take benefit from borrowed technologies but we cannot depend on them indefinitely. Efforts shall have to be made in this field for self-sufficiency. There is no escape from it.

No doubt, science education is being imparted in our primary and secondary schools as a subject but it is painful to point out that it is being taught just as history and not as a subject of science with a scientific approach. That is why we could not achieve the desired results from our science education.

Though some funds are released for purchase of scientific equipments but those are quite inadequate. There is also no check on quality control whenever purchases are made. Students can only see the science laboratories but never allowed to carry out experiments themselves due to shortage of chemical apparatus.

In Pakistan, system of education is mainly exam-oriented. In fact it should have been both knowledge and profession oriented. In addition to the highly skilled

manpower to deal with the complicated problems of our daily life, it is also necessary to utilize a sizeable proportion of (semi-skilled) manpower in various vocations so that there could be established a sound foundation for a sophisticated technology. It is, therefore necessary that we should convert our educational institutions to semi-vocational ones where professional training could be imparted from the 4th class in primary schools unto the 10th class of secondary schools.

The majority of women are reluctant to work outside their homes due to cultural inhibitions. Male members have to bear the financial burden of the whole family. Non-participation of about half of the population, in addition to old and handicaps, has given a serious setback to the Pakistan economy. Until females are trained and encouraged to participate in the economic uplift of the country, we cannot attain economic self-sufficiency (Baloch and Khalid, 1990).

It is, therefore, recommended that in all the existing boys and girls schools, technical and vocational education should also be imparted to students on proper lines. In addition to it short courses on various vocations should be introduced in selected schools in the evening so that house hold wives could be benefited. Moreover, Government should establish polytechnic institutes for both males and females, at least, at all the Divisional headquarters so that adequate chances of technical education are also made available to them (Tufail, 1966).

## **2.6 FIVE YEAR PLANS AND SCONDARY EDUCATION**

### **2.6.1 The First Five-Year Plan (1955-60)**

Iqbal (1993) stated that according to the First Five Year Plan (1955-60), the main objectives of secondary education are: (i) to introduce diversified courses in

commerce, agriculture and technical subjects, (ii) to improve quality, (iii) to increase the number of secondary schools.

Secondary education greatly needs strengthening through emphasizing the history and ideology of the country by developing individual character and dignity; balancing literacy studies with improved courses in Mathematics and Science; and adding courses to prepare pupils for careers in agriculture, teaching, social welfare, commerce and industry. The aim is to develop multipurpose secondary schools with agricultural, technical, or commercial bias depending upon the demands of different societies, but giving to secondary school pupils good general education, rather than limiting them to a narrow and premature specialization. In Pakistan, 15 schools will be upgraded to high level; 75 new government schools will be established, Grants-in-aid will be given to 100 private schools. Five hundred middle schools and 100 high schools will be improved by adding or strengthening science and pre vocational and industrial courses.

Number of middle/junior high schools increased from 1517 (156 female) in 1955 to (281 female) in 1960. This included 470 schools managed by Government, 1263 by local bodies and 137 by private agencies /organization. Number of high schools increased from 747 (148 female) in 1955 to 1069 (205 female) during 1955-1960. This included 381 schools managed by government, 293 by local bodies and 395 by private organizations. The number of trained teachers in middle junior high schools increased from 9000 (1400 female) in 1955 to 11200 (1800 female) during 1955-1960. Number of trained teachers in high schools increased from 9200 (1900 female) in 1955 to 13800 (3100 females) in 1960. Enrollment in middle/junior high schools increased from 0.332 million (45000 female) in 1955 to 0.422 million (63000

female) in 1960 i.e. increase of 27 percent (40 percent female); (22.3 percent female) of enrollment at primary level; 27 percent (26 percent female) roll on from primary classes. Enrollment in high schools increased from 0.109 million (15000 female) in 1955 to 0.149 million (23000 female) in 1960 i.e. increase of 36.7 percent (53.3 percent female); 35 percent (36.5 female) of enrollment at middle level; 51.9 percent (51.1 percent female) roll on from middle level. Number of secondary teacher training institutions increased from 36 in 1955 to 48 in 1960. Two new teacher training colleges for B.Ed. courses were opened during the plan period (Memon, 1986).

### **2.6.2 The Second Five Year Plan (1960 -65)**

Educational advancement is a complicated process. The quality of various types of education is of great importance.

Iqbal (1993) stated that according to the second five year plan, the main objectives of secondary education are: (1) integration of middle classes in higher secondary schools, (b) diversification of courses. (c) Guidance programmes. (d) Opening of residential schools, (e) to increase enrollment of age group from 12 percent (1960) to 16 percent (1965).

The second plan makes provision for the amalgamation of the intermediate classes with the secondary education system; for the improvement of secondary schools by bringing their accommodation, equipment, libraries, and teaching up to a specified standard; for the diversification of the programme in these institutions. As West Pakistan has a larger area and a smaller number of schools (2900), this region will be provided with additional facilities. During the plan period, 160 high schools will be opened, 103 middle schools will be up-graded to high schools, and 600 primary schools will be raised to middle schools. Two hundred of the 1,900 existing

middle schools will be provided with additional accommodation and equipment. Government high schools will be improved by adding 800 qualified teachers, 650 class-rooms and 70 art rooms. Seventy science laboratories will be fitted with modern equipment. Courses in industrial arts, commerce and agriculture will be introduced in 250 middle schools and 45 high schools (Govt. of Pakistan, 1960).

According to Hussain, (2003): “The program for secondary education proposed in the plan will increase the enrollment at this level by 430,000 students, raising the percentage of the age group attending school from 12 in 1960 to 16 in 1965. The 200,000 additional pupils in East Pakistan will raise the percentage attending secondary schools from 9 to nearly 12, while the 230,000 new students in West Pakistan will raise the corresponding percentage from 17 to 20.

### **2.6.3 The Third Five-Year Plan (1965 -70)**

Education has always been considered significant as a social obligation. But the importance of human resource development as an essential agent in the socio-economic growth of the country is a concept of comparatively recent origin.

Iqbal (1993) states that according to the third five year plan, the main objectives of secondary education are: (i) middle stage to be made compulsory during the perspective plan period, (ii) expansion of educational facilities. Opening of comprehensive schools, (iii) upgrading of middle schools to high schools and improvement of existing schools (iv) emphasis on science and mathematics, (v) to provide the people with requisite skills and intellectual ability to meet the needs of an expanding economy, (vi) change in curriculum from general education to the development of agricultural, commercial and administrative skills.

Enrollment at high schools increased from 0.222 million (0.046 million female) to 0.333 million (0.062 million female) i.e. 51.8 percent increase; 37.5 percent of enrollment at middle level, 54 percent (48.4 percent female) roll on from middle classes. Number of high schools increased from 1622 (376 female) to 1995 (520 female) i.e. 22.9 percent increase. Number of trained teacher at high school level increased from 22300 (5300 female) to 3450 (9000 female) i.e. 54.7 percent increase (Memon, 1986).

#### **2.6.4 Non-Plan Period (1970 -78)**

Education has been traditionally regarded as a social obligation. More recently, it has come to be seen as an essential pre-requisite in the process of development. Countries that have made rapid economic and social progress are significantly those that have devoted a great deal of attention to education, training and research.

Iqbal (1993) states that according to the non-plan period, the main objectives of secondary education were: (a) to narrow the gulf existing between various types of schools by evolving a comprehensive curriculum with a common base for all schools, (b) to achieve an enrollment ratio of 40:60 between the arts and sciences programmes and (c) consolidation of existing secondary schools.

According to Govt. of Pakistan (1970): "It is estimated that at the primary level 85000 additional teachers will be needed in Pakistan and about 70000 in the provinces or Pakistan during the non-plan period. The problem of teacher's training in Pakistan is extremely acute as only 67 percent of the working primary schools training institutes will be expanded and 52 teachers' training centers established and the two programmes together will provide about 71000 trained teachers during the non-plan period; in service training facilities for a sizeable number of working untrained teachers will also

be provided in these institutes. The position in Pakistan is better as about 95 percent of the working teachers in primary schools are already trained. While the requirements of the four provinces of Pakistan are not yet available separately, it is estimated that about 57000 additional teachers will be trained during the non-plan period.”

In terms of physical targets. the plan will envisaged to provide educational facilities for one million additional students in classes VI-VIII: against the enrollment of I, 94 million in these classes in 1970. At the high stage (Classes IX and X) enrollment is proposed to be increased by: 35 million against an enrollment of: 77 million at the end of third plan (Government of Pakistan, 1970).

Number of middle schools and high schools increased from 4110 (1038 female) and 2247 (571 female) respectively to 5031 (1389 female) and 3202 (869 female) respectively during 1971-72.. Enrollment in middle schools increased from 0.963 million (196,000 female) in 1971-72 to 1,348 million (323,000 female) during 1971-72 i.e. 40 percent (64.8 percent female) increase 22 percent (19.5 percent) of enrollment at primary level; 32 percent (29 percent female) roll on from primary classes.

Enrollment in high schools increased from 366,000 (71000 females) in 1971-72 to 522,000 (118,000 female) in during 1971-72 i.e. 56.7 percent (90 percent female) increase; 38.7 percent (36.5 percent female) of enrollment at middle; 54 percent (60 percent female) roll on from middle classes. Number of teacher training colleges increased from 14 (1 female) during 1971-72 to 17 (2 female) in 1977-78. Curriculum for Agro- technical/Industrial, Arts and Vocational subjects was developed and introduced. Inter Board Committee of Chairmen was set up (Memon, 1986).



### **2.6.5 Fifth Five-Year Plan (1978-83)**

The fifth plan marks a fundamental recording of national priorities in favor of primary education and vocational and technical training. In secondary and higher education there will be a shift of emphasis from quantitative expansion to qualitative improvement. In achieving these twin objectives, the nation will have substantially increased the proportion national resources to education by the end of the plan.

At that time, about 34 percent boys and 11 percent girls of the middle school age population reach up to middle stage (classes 5-8). Corresponding percentages of boys and girls reaching up to classes 9 and 10 are 22 and 6, respectively. These percentages are extremely low by any standard. Students, particularly boys, leaving school on completion of class VIII face great hardship in finding gainful employment, because they seldom possess any skills enabling them to become productively engaged in some occupation. Curricular reform aimed at inclusion of job oriented training in secondary education programme is therefore of highest importance in the development of secondary education.

To increase enrollment at middle schools from 1.293 million (0.284 million girls) to 2.023 million (0.468 million girls). Fifty-one high school buildings were constructed against the target of 162 shortfalls of 111, 68.5 percent of the target. 195 science laboratories were constructed against the target of 340 i.e. shortfall of 145; 42.6 percent of the target. 111 schools (only in Baluchistan and Federally managed schools) were provided with science equipment against the target of 540 i.e. shortfall of 429; 79.4 percent of the target. 1650 additional rooms were constructed of high schools against the target of 3156, i.e. shortfall of 1506; 47.7 percent of the target. No

hostel was constructed against the target of 1270 seats. No teacher residence was constructed against the target of 1150 (Memon, 1986).

The principal step in re-orienting secondary education has been the introduction of agro-technical courses. The plan provides for the introduction of these courses in 1,750 additional schools at the middle stage and 874 schools at higher stage. Efforts shall be concentrated on maintenance and improvement of facilities of existing schools and their expansion, but about! 58 new high schools will also be set up. Province wise programme are given below (Govt. of Pakistan, 1978):

#### **2.6.6 The Sixth Five-Year Plan (1983-88)**

Education is the most vital investment for socio-economic advancement. Its negligence can cost and harm generations. No uneducated society has ever achieved the heights of economic and political power. No educated society has ever been left behind in the relentless march of history. .

Despite the diversity of educational requirements of students, there is a hard core of subjects including Islamyat, Pakistan Studies, Languages, Mathematics and Science which have to be essentially studied by all students in order to have correct understanding of Islamic principles and Pakistan ideology on the one hand, and a sound academic base on the other. In view of the rapid technological advances resulting from scientific inventions and discoveries, study of strong courses in Science and mathematics is becoming increasingly essential for all students. Hence teaching of these subjects will receive special emphasis in development of secondary education (Govt. of Pakistan, 1983).

Number of middle schools to be increased to 10209. Number of high schools to be increased to 5530 and up-gradation of 1073 middle schools to high schools.

Open 236 new high schools. Increase enrollment to 2508 million at middle level, addition of 0.705 million children. Increase enrollment to 0.919 million at high school level addition of 0.236 million.

Against the target of 1.031 million additional enrollments in middle and high schools 0.316 million were enrolled i.e. 30.6 percent of the target -if rate remains constant only 63 percent will be achieved at the end of the plan.

Middle schools were upgraded to high schools 561 against the target of 5530. Number of high schools increased to 4274 against the target of 5530 during the plan i.e. 77.3 percent of the target. Enrollment in classes VI-X increased by 894,000 during the plan raising the secondary school participation rate from 22 to 26 percent (Memon, 1986).

### **2.6.7 The Seventh Five-Year Plan 1988-93**

The education system suffers from chronic deficiencies. That 40 percent of the children do not have access to education. This has perpetuated a high rate of illiteracy. According to Govt. of Pakistan, 1988: "The seventh plan strategy will be to increase the literacy rate through improvement and expansion of primary education as well as to motivate the private sector to play an active role. While it is estimated that the literacy rate will rise to about 40 percent by 1992 -93, the infrastructure created during the seventh plan is expected to yield a literacy rate of 80 percent by the end of the century."

The seventh plan will further expand the secondary education facilities to absorb the increased output from primary schools. The curriculum at secondary level will be changed so that students leaving the system after classes or X possess some useful skills to enable them to earn a living. In classes VI, VII and VIII, students may

be required to opt for one skill -oriented subject such as agriculture, home economics, metal works, electricity, woodwork or furniture making, etc. This will enable a class VIII graduate to practice that skill or enroll in a vocational school for further training.

Incentives will be provided to attract good science and mathematics teachers. The ongoing project of improvement of science education will be expanded to cover more schools, together with in-service training of teachers, construction of laboratories and supply of science equipment. The quality of teaching the English language will be improved by strengthening the teacher training programme and by revising courses in English language. During the seventh plan, the participation rate will increase from 30.4 percent to 41.6 percent at the middle stage and from 17.2 percent to 24.1 percent at the high stage. The overall participation rate for classes VI-X will rise from 25.7 percent to 35.5 percent. It is expected that girls enrollment will increase more rapidly than that of boys.

It is proposed that the Seventh plan reorient the educational structure as follows:

Classes 0, I, II, III Lower Elementary

Classes IV, V, VI, VII, VIII Upper Elementary

Classes IX, X, XI, XII Secondary

Classes XIII, XIV College

Classes XV, XVI and above University

In order to improve the quality of education in secondary schools, teachers possessing a Bachelor of Education (B.Ed.) degree will also be appointed along with those holding certificate of teaching (C. T) to teach classes VI, VII and VIII. The number of B.Ed. teachers will be increased gradually. Existing incentives of M.Ed.

teachers will be continued so that a large number of M.Ed. teachers become available to teach classes IX and X. Teachers for classes XI and XII will be required to possess at least Master's degree in the relevant subject preferable with three to six months training in educational theory and practice.

A small hostel for students will be provided to secondary schools which serve several villages not within commutable distance. Efforts will be made to locate the secondary schools so that these facilities are available to the maximum number of students in all districts and tehsils.

Under the seventh plan a programme will be launched to provide at least one model or comprehensive school for boys and for girls in each district so that quality education to talented children can be insured. Forty selected high schools will be upgraded to model or comprehensive school level in districts where no such schools exist. Ultimately all secondary schools will be converted into institutions of quality, education through provision of better qualified teachers and physical facilities (Hussain, 2003).

### **2.6.8 Eighth Five Year Plan (1993 -98)**

Education is an indispensable ingredient of development and a fundamental right of every individual. Substantial expansion of education facilities took place in the country since independence. Due to ever increasing demand for quantitative expansion of educational facilities, adequate resources could not be spared for qualitative improvement. A large number of educational institutions were started without proper infrastructure.

According to Govt. of Pakistan (1993) : "Facilities for secondary education will be expanded to absorb the increased output from primary schools. For this

purpose, about 2.4 million additional seats in classes VI to X will be created by upgrading primary and middle schools, establishment of new high schools and adding classrooms in the existing schools. Construction of additional classrooms and improvement of the existing buildings of the schools will also be carried out. In urban areas, second shift will be introduced in selected secondary schools wherever feasible. During the plan period, the participation rate at the secondary level will be raised from 50% in 1992-93 to 55% for boys and from about 26% to 30% for girls. Private sector is estimated to accommodate about 15% of the target enrollment at secondary level.

For qualitative improvement, the existing curricula will be reviewed and reformed, particularly that of science and mathematics. Facilities for teaching of science subjects will be improved by provision of additional laboratories and equipment and better-trained teachers (Govt. of Pakistan, 1993).

The policy of adding classes XI and XII to the existing secondary schools was implemented during the last two plans. Performance of classes XI and XII in the existing higher secondary schools will be evaluated and remedial measures will be adopted wherever necessary. Priority will be given to adding classes XI and XII in secondary schools instead of establishing new intermediate colleges.

According to Hussain (2003): "The eighth plan will encourage spread of quality education institutions to remote areas of the country, By the end of the Eighth plan, each district will have a model school for boys and each division will have such an institution for girls in the public or private sector. Private sector will be encouraged to establish the quality education institutions. Government will establish model schools only in district where such institutions do not exist under public or private

sector. Efforts will be made to upgrade the quality of all secondary schools through provision of better-qualified teachers and physical facilities.”

## **2.7 EDUCATION POLICIES AND SECONDARY EDUCATION**

### **2.7.1 Report of Commission on National Education (1959)**

The commission on National Education was appointed by a Resolution adopted by the Government of Pakistan on the 30<sup>th</sup> December, 1958. The commission was inaugurated by the President of Pakistan, General Muhammad Ayub Khan, on January, 1959. The commission analyzed all the previous reports and the prevailing situations of the country and the reforms movements in other societies and submitted a comprehensive report to the government after one year in 1960.

The commission maintained that secondary education should be recognized as a complete stage in itself and organized as a separate academic and administrative unit. It should bring about the full development of the child as an individual, as a citizen, as a worker, and as a patriot, to enable him to enjoy and understand the benefits of social and economic progress and scientific development. It was suggested that secondary education should be divided into three stages /classes 6-8(middle classes),9-10(secondary classes) and classes 11-12 (higher secondary classes).The commission recommended that secondary education must provide a compulsory core of subjects to give every pupil the knowledge needed to live a successful and happy life .It should also include additional subjects and training to prepare him for a definite vocation and career. The teaching of national language, science, and mathematics should receive greater emphasis. The commission recommendation that the system of examination should be recognized and the award of certificate be based on the performance of the students in:

1. Public examination conducted by (boards of secondary education 75% marks.
2. His school record including the result of periodical tests and appraisal of habits and general behaviour (25% marks) for private candidates, separate examinations, called external examination, should be held. The commission held that efforts should be made by educational authorities and community to provide facilities like class room, science labs, workshops, libraries, garden plots, play grounds and equipments to achieve the objectives of diversified multipurpose secondary school in future.

The commission maintained that regulation, control and development of education at secondary and higher secondary levels (classes IX-XII) should be entrusted to the Boards of Secondary Education. New Boards should be set up at Peshawar, Hyderabad and Rajshahi and jurisdiction of the boards at Karachi and Dacca, should be extended to include higher secondary (intermediate) stage (Ghaffar, 2003).

The income of a school should be raised from three sources; (i) Fee (ii) The contribution of the management, and (iii) The grant from Government. The appropriate proportions would be approximately 60 percent from fees, 20 percent from management and 20 percent from government. The government grant of 20 percent should be paid only if a school fulfils the minimum requirements in respect of staff, buildings, and equipment, and offers diversified courses. (Govt. of Pakistan, 1959).

### **2.7.2 The Education Policy (1972 -1980)**

The President of Pakistan Zulfikar Ali Bhutto, in his address to the nation on 15th March 1972 presented the salient features of Education Policy 1972-80. He observed that the education system imposed in the part was much rigid, unwarranted,



to inflexible and was availed only to the privileged few who constitute the elite in the country. The expenditure on education was mostly incurred on 'bricks and mortars' as compared to that on teachers and books. Therefore, the government expressed its commitment to clear the jungle weed out of the complexities and put the nation out of the sloth without loosing the spirit of religion, fine tradition and culture.

According to Memon (1986): “Secondary Education should not be an abstract endeavor but must relate to employment opportunities. The secondary education may provide for progressive integration of general and technical education. The enrollment in arts subjects may be restricted to the existing level and significant increase be made in science and agro technical education. 2200 additional units with enrollment of 80 students in each for science teaching be established. 175,000 additional seats may be created in high schools for science teaching. 3500 units to enroll 80 students in each may be established for teaching of technical/occupational subjects. Education may be introduced as an elective subject at Matriculation. 12100 teachers may be trained in science and technical subjects up to 1980”.

### **2.7.3 National Education Policy, 1979**

In view of the policy secondary education played a very important role in the system. It was both a terminal stage for majority of students and also a significant determinant of quality of higher and professional education. The policy maintained that the existing four tier system of education namely primary, secondary, college and university, would be replaced by a three tier system of elementary, secondary and university education in a phased manner: classes IX and X would be added to all intermediate colleges while classes XI and XII would be added to selected high schools.

Physical facilities such as science laboratories, teaching and individual aids of hostels would be provided to the secondary schools, particularly in rural areas. A wide range of curriculum offering would be introduced at the secondary stage for greater diversification according to the aptitudes of the students. Other programmes for development and improvement of secondary education are as under:

- Mathematics would be introduced as a compulsory subject.
- The present scheme of agro-technical subjects would be reviewed and necessary changes would be made in the light of the past experience so as to make it more purposeful.
- One thousand middle schools would be upgraded to high schools and 200 new schools would be opened.
- New science laboratories and libraries' would be added to the secondary schools where these did not exist.
- 1150 residences for teachers, especially for female teachers would be constructed.
- Second shift would be introduced in schools wherever feasible, in order to increase the enrollment (Ghaffar, 2003).

Practically in all the countries of the world, the school education is of 12 years' duration and B.A / B.Sc. of 4 years duration offer secondary education. Even in our country, the intermediate Classes (XI -XII) are not university classes. The courses of studies and examination of these classes are controlled by Boards of Intermediate and Secondary Education.

The fifth plan 1978-83 provided an estimate of financial requirements of Rs.8,073.5 million (Rs.3,257.8 million developmental and Rs.4,815.7 million non-

developmental) for secondary education. In addition Rs. 483.5 million has been provided for the development of education at intermediate level. All the programmes of the secondary education will be adjusted within the plan allocation (Govt. of Pakistan, 1979).

#### **2.7.4 National Education Policy 1998 -2010**

According to this policy secondary education (IX -XII) is an important sub-sector of the entire educational system. On the one hand, it provides the middle level work force for the economy and on the other; it acts as a feeder for the higher levels of education. Higher education, which is expected to produce quality professionals in different fields, hinges on the quality of secondary education (Govt. of Pakistan, 1998).

The policy makers had pointed out some weaknesses in secondary education, such as:

- Secondary education had not attracted attention in terms of efforts and investment in the past.
- There had been unplanned expansion in secondary education and irrational distribution of schools.
- The provision of science and mathematics teachers had not been considered seriously.
- The introduction of technical and vocational education at secondary level remained a controversial issue.
- Physical facilities and textbooks were inadequate.

The following programmes were embodied in the policy for the achievement of the objectives of secondary education in the country:

- a. Setting up one model secondary school initially at each district level.
- b. Introduction of a definite vocation or career at secondary level.
- c. Revision of curricula for secondary and higher secondary level would be initiated.
- d. Multiple text books would be introduced at secondary school level.
- e. A comprehensive in service and pre-service teacher training programme would be launched in the area of assessment and evaluation for the improvement of public examinations.
- f. Project method of teaching would be initiated at secondary level.
- g. Education service commission would be established for recruitment of teachers.
- h. Salary structures of teachers would be based on qualification.
- i. Education card would be provided to needy students (Ghaffar, 2003).

The present participation rate at secondary level is 32 percent which will be raised to 48 percent by providing new teachers and increasing the number of schools as given in the following table.

According to Govt. of Pakistan (1998) : “Curriculum at secondary stage will be based on two principles. First, at it will provide a compulsory core of subjects to give every pupil the knowledge useful for a developing society. Second, it will include additional subjects and training to prepare the student of a definite career. Curricula for secondary stage (IX-XII) shall be revised with a view to stimulate problem-solving, independent thinking and in the light of other objectives outlined above. The Provincial Textbook Boards enjoy complete monopoly over production and distribution of textbooks. The textbooks are written in a very traditional manner. Due

to the absence of a healthy competition, the Boards have not considered the possibility of introducing innovation in their production.

Autonomy will be given to the Examination Boards and Research and Development (R&D) Cells will be established in each Board to improve the system. Mechanism shall be developed to integrate internal and external assessment. Extensive in-service training programs for teachers shall be conducted in assessment techniques. Internal assessment shall be properly moderated. Moderated marks/grades for internal assessment shall be reported separately either the certificate or as a part of a composite assessment.

Gradual resort to improved testing instruments for Classes IX and X and XI I & XII to obviate and minimize unfair means. For this purpose the present structure of examination papers will be reviewed. The share of standardized test items will be gradually increased. The present system of objective questions, which are not objective in any sense, shall be gradually discontinued and replaced by a more scientific method. A uniform schedule for holding the Board examinations and announcing the results and admissions etc. shall be adopted.

B.S.Ed. (Bachelor of Science Education) and B.A.Ed. (Bachelor of Arts Education) programs shall be implemented throughout the country parallel to the B.Ed. program.”

### **2.7.5 Education Sector Reforms -Action Plan 2001-2005**

The stream of Matric (Technical) parallel to the Science and Arts groups was reintroduced in secondary schools which offer vocational subjects based on the needs of the locality. Its objective is to expose students to the world of work and to prepare them to respond to the call of practical life, if they choose to work after completing

their secondary schooling. The NEP target is to establish 1,100 technical high schools in the 108 districts of the country. The Matric (Technical) stream becomes the main source of students for the DAE program. This development provided greater access to and mobility in technical education leading to higher education. Technical education has not only a long history but now has an identity as an integrated system of education (Govt. of Pakistan, 2003).

### **2.7.6 Future Scenario**

From the analysis of the education policies and practices of policy formulation in Pakistan following major points emerge:

- Policy-making is generally an adhoc affair in Pakistan.
- There are no systematic studies to precede policy that may provide a rationale for policy decisions.
- Policy making is abrupt and not periodic
- Policies lack continuity
- Policy-making is generally not a participatory process but usually an outcome of personal decisions of individuals who are sometime not even adequately informed and equipped with skills of rational decision-making.
- Policy targets are very often too ambitious to be achieved.
- There is always a resource constraint for implementation of policies and plans.
- Provinces and districts governments lack capacity to difficult operational strategies.
- Implementation of policies and plans remain very poor and gap between policy and implementation is widening.

The past experience shows that the major factors controlling our policies and plans are as Pakistan's ideology, socio-economic development, qualitative and quantitative improvement, population pressure, defense and debt servicing, political turbulence, world movements, diversity in language,

The policies need to address additional requirements to meet the needs. The estimated requirements of additional seats for institutions and teachers are as under:

The present trend towards privatization is attributable to a variety of factors such as paucity of resources for education. The growing respect for foreign degrees and credentials is likely to increase resulting not only in a greater number of private institutions but a wider variety of educational models and programmes. This trend will obviously lead to two possibilities one opening of institutions, which offer good quality education and the other a further exploitation of students, teachers and parents as well as a decline in the quality of education. Much would depend upon the educational managers on how they ensure a healthy expansion of the private sector way they will manage a trade off between quality and quantity and more than how they achieve balance between public and private enterprise. This will not remain confined to educational institutions and classrooms but will have a spill over in curriculum, teacher training, textbooks, examinations etc.

## **2.8 OBJECTIVES OF SECONDARY EDUCATION**

It is reality that we are still economically so backward that we feel helpless and beg for financial aids or loans from the advanced nations. Such nations dictate to us their own prescribed terms even in political matters in lieu of economic compulsions. The economic liberty has a great impact on the minds of people. Unfortunately in such a situation a nation has no right to be called a free nation in the real sense of the term.

If a nation desired to be independent, it shall have to achieve economic independence through general education, science and technology.

We can develop and explore our financial resources provided we have our own well qualified and well trained manpower. Such a manpower could only be groomed in well equipped educational institutions. Therefore, it will be in the best interest of the nation to improve the educational institutions from the elementary stage to the highest level. No doubt, primary education serves as a base for the entire education, but it cannot play an effective role in the economic life of a country, unless it is supported by science and technology.

The objectives of secondary education are to produce qualified and skilled manpower to develop the nation. In secondary institutions, a reasonable quantum of knowledge should be sufficient to render the manpower capable of meeting the challenges being faced by the nation. Likewise, manpower should be given sufficient training in different skills in well-equipped secondary institutions to impart well-founded knowledge in various technical fields. Needs of the human beings are rapidly changing day by day and require competent, qualified and skilled manpower.

The objectives of secondary education have been streamlined in various educational policies, and in the reports of Commissions, Committees, Conferences, Seminars, Workshops and other related forums.

Although the aims and objectives have been duly discussed in all forums and measures for improvement recommended from time to time, yet most of the recommendations could not be implemented in better way and spirit.

Pakistan has been created on the ideology of Islam which not only demands honesty and capability in citizens but also high moral character. Therefore, the aim of



our system of education should be not only to develop capabilities of students but also to inculcate moral values in them. Islam is a universal religion. Its teachings stress on the welfare of mankind as a whole. Therefore, in the curricula of secondary, education, it should not be thought only to give sufficient knowledge to young students but also build up their moral character according to the teachings of Islam. Only then, we will be able to have a nation with unity, strength and dignity. Secondary education is a stage where girls and boys attain a sense of maturity. At this stage they are enthusiastic to entertain hopes about their bright future and to work for the attainment of their ideals. If they are mounded towards the right direction, they will exert on proper lines and will embrace success.

The objectives of secondary education are summarized as under:

- That secondary institutions should be provided with all physical facilities necessary for the creation of a healthy educational atmosphere for the students.
- That the best and dedicated brains should be selected as teachers who should work to develop the capabilities of the younger generations on proper lines.
- That a high degree of discipline must be maintained in the secondary schools so that students inculcate a sense of discipline in their practical life and participate with interest in various activities of the society.
- That secondary education should be able to enable the students not only to express their knowledge and ideas verbally and in writing but to be able to form a solid opinion about every problem.
- That secondary education should generate a sense of responsibility, integrity and a national spirit in students.

- That the curricula should be diversified and made dynamic which should be responsive to the needs of the nation.
- That the secondary education should serve as a sound base for higher scientific and technological education in the country with a view to restrengthening society in a manner to catch up with the rest of the educationally progressive nations in the world.
- That the secondary education needs to be expanded and developed in the rural areas.
- That normal teachers-students ratio should be maintained in all institutions of the secondary education so that individual attention could be paid to students.

General type of secondary education creates a sense of arrogance with the purpose behind and does not imbibe dignity of labour in the students. Secondary education must create a sense of dignity of labour in the adolescence and fulfill requirement of second level manpower in Pakistan. A student of secondary stage should be guided properly with modern instructional methods. At this stage the physiological and psychological growths of adolescence are likely to bring about many important changes in their mental frame work. Hence, their powers of comprehension, devotion memorizing, critical appreciation and reasoning should be developed to great extent. Secondary education should expand and improve such faculties in the adolescence so that they may play their role as useful citizens of Pakistan (Baloch, Khalid, I 990).

## **2.9 THE ROLE OF SECONDARY EDUCATION**

There was substantial unanimity among participants the role of secondary education today and in the future. The end product should be a healthy young person

with self-esteem, concern for others and with the knowledge, skills and motivation to pursue learning as a life-long process. This person should be prepared to fulfill multiple roles as a mature individual, a responsible citizen, and a productive member of society. He or she should be equipped with the knowledge and skills necessary for participation in life in a rapidly changing technological world.

With this end product as a goal the major role of secondary education is to help students grow towards self-actualization-to develop the full potential of every individual. Schools should offer the knowledge and skills appropriate to the needs and abilities of all students. They should be extended both mentally and physically to reach their own standards of excellence.

A major role of schools is to produce students who can reason and make informed judgments in a rapidly changing world. The highest priority in the past was placed by schools on the skills of literacy and numeracy. Increasing attention has been given to personal development which emphasizes the social responsibilities of people living together in communities. As a result, communication skills, skills for social living, problem-solving skills and co-ordination of physical and mental skills are all seen to be important. Schools also have the role of preparing students to contribute to society in a productive way. This requires the development of vocational and life-skills through formal and non-formal approaches.

The acquisition of knowledge, the development of skills and values and the formation of attitudes are all interrelated. Effective classroom programmes integrate these aspects. All subjects of the curriculum promote the development of the ability to reason, the ability of use language effectively, and social and emotional stability. Through the study of mathematics, science, social studies, the arts and other aspects of

our intellectual, social, and cultural heritage, and by observing, listening, reading writing and speaking about them, students are helped to learn those skills and abilities mentioned above.

Teacher should therefore, develop programmes which enrich young peoples' experiences, and stimulate them to widen their horizons and to use their natural curiosity. The activities planned should help to foster students' learning and teach them to co-operate with and learn from others (UNICEF, 1986).

## **2.10 CARDINAL PRINCIPLES OF SECONDARY EDUCATION**

These seven principles were published in 1918 in a bulletin and entitled cardinal principles of secondary education.

### **2.10.1 Health**

The secondary school should provide health instruction, inculcate health habits, organize an effective program of physical activities, regard health needs in planning work and play, and co-operate with home and community in safeguarding and promoting health interests.

### **2.10.2 Command of fundamental processes**

This was to include further instruction in the fundamentals, such as reading, writing arithmetical computations, oral and written expression.

### **2.8.3 Worthy Home Membership**

Worthy home membership as an objective calls for the development of those qualities that make the individual a worthy member of a family, both contributing to and deriving benefit from that membership.

**2.10.4 Vocation**

Vocational education should equip the individual to secure a livelihood for himself and those dependent on him, to serve society well through his vocation, to maintain the right relationships toward his fellow workers and society, and as far as possible to find in that vocation his own best development.

**2.10.5 Civic Education**

Civic education should develop in the individual those qualities whereby he will act well his part as a member of neighborhood, town or city, state, and nation, and give him a basis for understanding international problems.

**2.10.6 Worthy Use of Leisure**

Education should equip the individual to secure from his leisure the recreation of body, mind, and spirit, and the enrichment and enlargement of his personality.

**2.10.7 Ethical Character**

In a democratic society ethical character becomes paramount among the objectives of the secondary school. Among the means for developing ethical character may be mentioned the wise selection of content and methods of instruction in all subjects of study, the social contacts of pupils with one another and with their teachers, the opportunities afforded by the organization and administration of the school for the development on the part of the pupils of the sense of personal responsibility and initiative, and, above all, the spirit of service and the principles of true democracy which should permeate the entire school-principal, teachers, pupils. (McNeil and Wiles, 1990).

## 2.11 PUBLIC SECTOR IN EDUCATION

Public Sector includes all those schools whose expenditure and teachers salaries are drawn from national exchequer.

The public sector is responsible to educate maximum number of students at the expense of government. Education is provided free or with nominal charges only. Nations spend million and billions because they need some specific number of educated people or experts in every sector of economy. They need doctors, engineers, government servants, teachers, administrators, qualified technical personnel etc., and this can be possible only through education. Governments can have some control over the type of education being provided in the public sector. It is very important that only required number in every sector is produced. If this number is surplus then the unemployment will be increased because supply will be greater than the demand. This supply demand factor forces the government to intervene the educational system of public sector. Education sector is very sensitive and it cannot be left totally independent without any check and balance from, the government and this become more sensitive if the country has any ideological base as in case of Pakistan. Any desired or undesired change can be cultivated into young minds through curriculum.

Education is essentially a social activity that interacts with society in two ways: "Firstly, it receives support and assistance from the society to sustain its programs and secondly, it endeavors to reform and improve society through innovations and reforms. Government wants to control the system through providing education in public sector. Some arguments in favour of public sector are. Public participation leads to the democratization of education. As education in private sector is too expensive to afford, majority can have access to the cheaper public sector."

This access will help in eliminating the injustices, inequalities and disparities in education that are caused by private sector. Our society is based on ideological foundations and these can be safeguarded by the state through curriculum. Preservation of religious truths and values is the fundamental duty of every state (Maqsoodah, 1998).

### **2.11.1 Government Should Spend on Education**

The arguments in favour of a state provision of education rely on the wide spread belief that the market of educational services fails when left to its own. But to what extent the state should intervene is not easy to prescribe. However, many educationists argued for state to set minimum standards and give financial support to the poorer families, but otherwise to allow education to be privately provided. This would enable market for educational services to be liberated from the government control. There are some educationists who argued that the benefits of a less regulated system of education will be more than offset by the loss of some important externalities; these include the social cohesion fostered by schools with a well-defined geographical catchments area. It is nonetheless important to note that on both sides of the debate there is argument that government should finance the education of our children. Few arguments in favour of government's spending are:

- a) People are the main source of strength to any nation and people's strength is their knowledge and information. For any country's political, social and economic developments the best investment by the government is in the field of education. They can have maximum returns from this investment in the form of development.

- b) Education is the most important duty of the state because functioning of a democracy presupposes an electorate composed of members who can understand the various aspects of the social government, and who can balance and weigh the claim of competing candidates and rival parties of their manifestoes.
- c) Unless education is made free or heavily subsidized it cannot reach the underprivileged sections of society.
- d) Government spending has become necessary to update the content and methodology of education.
- e) Huge governmental financing has become essential to provide new services like guidance and counseling, to give vocational bias to secondary education and to equalize educational expenditure (Maqsoodah, 1998).

## **2.12 QUALITY AND ACADEMIC STANDARDS**

It has rightly been said that welfare, prosperity and security of a nation depends upon the quality of the education system prevailing in that country. The better the standards of education the better will be the position of the prosperity of the nation. In the present age of science and technology, the advanced and developed nations are dominating in the world only due to their latest knowledge.

In the coming times only a nation equipped with the most advanced knowledge will survive and succeed. It is very urgent to examine the standards of the education to the weaknesses of the system and to get rid of them (Iqbal, 1987).

Being a student of Education, I think standard of Education is not synonymous with academic standard. Before going through the education policies of Pakistan it looks appropriate to dig out the meaning of the term standard. Dictionary of Education



edited by Cater V. Good defines "standard" as a goal, objective or criterion of education expressed either numerically as a statistical average or philosophically as an ideal of excellence (Good, 1959).

The Encyclopedia of Education and Research, edited by Ebel says that the standards apply to any systematic basis for making inferences about characteristics of people (Ebel, 1969). The Webster's third New International Dictionary, edited by Philip Babcock Gove, defines standard as something that is established by authority, custom or general consent as a model or example to be followed or a defined level or degree of quality that is proper and adequate for a specified purpose (Gove, 1964).

The "Academic Standard" has been defined by Cater V. Good as officially accepted level of attainment of scholarly excellence (Good, 1959).

Standard of education is more cosmopolitan than standard academic. A person may not be at the peak of scholarly excellence in any subject like calculation, science or language but he or she may not be a good follower of the particular philosophy adopted by his nation or country. In Pakistan a person may not be a good engineer, good doctor or a good scientist but he or she may not be a good Muslim at the same time. So the out come of education in Pakistan should be balanced personality possessing all the qualities of a Muslim scholar (Iqbal, 1987).

The Report of the Commission on National Education (1959) says:" the education system is the instrument a society uses to equip its entire people to lead productive public lives and fall personal lives, according to their talents and interests. The report further says that the moral and spiritual values of Islam combined with freedom; integrity and strength of Pakistan should be the ideology which inspires our education system. National unity and religious values have to be translated into deeds

in a manner that all our citizens can accept them and join in a common effort. Islam teaches honesty in thought, in deed; and in purpose; it lays emphasis on social justice and active participation in the removal of distress, poverty and ignorance (Govt. of Pakistan, 1959).

It has been stated that academic standards are low. What does this mean? Does it mean that clerk getting four rupees a day misspells English words or that a graduate does not know where Timbuktu is? If an adequate production process was on the way, how far would this be barrier to real achievement? Academic standards are certainly low in the closed power-complex of Unreformed Civil Instrument else today when man elsewhere has reached the moon; Pakistan would at least have been making motor trucks.

The complaint about academic standards is a vague generalization the genesis of which is the neo-colonial habit of finding targets in quarters, which cannot answer back, for shifting the blame for malfunctioning elsewhere. If proper economic proceed had been operating in the country, the general majority of educated manpower would have been as adroit skilled and effective as the minority that does fond jobs. Hence it can be stated that while there is much room for improvement and reform in education, there is no occasion for drastic upheavals and changes. Consequently it would be best to begin with details and improve existing practices, method, rules and regulations before any major change is implemented / drastic changed when they are not really required are likely to make things worse. A major source from which educational negligence has sprung is that education was put outside the citadel of power by being excluded from the central and superior services. This has also been the misfortune of the national administration, which had been deprived of knowledge, scholarship and

the academic approach, which makes for a wider vision and statesmanship. Even a score of professors in the higher posts of the nation would have changed the temper of Civil Government and saved it from sliding into chaos for the lack of historical design in its policy-making.

Education itself aims at to equip the people with knowledge, attitudes and skills to enable them to lead full Islamic lives. When we have measure the standards of education system and they are the educated person who are contributing to the development of the society. The levels of their knowledge, behaviour and skills are manifested in their deeds. If we want to see the academic standards that cover only knowledge domain, the standards of education have to be determined then entire personality is to be examined thoroughly. And existing national scene also indicates the level of excellence or standard.

The standards are measured numerically as well as philosophically. Pakistan has got a particular philosophy of life and that is the Islamic philosophy. We can see to what extent this philosophy has been adopted by the people and whether they are enjoying the blessings of an Islamic State or not. Numerically we can compare the educational achievements with the average of the similar countries (Iqbal, 1987).

### **2.13 ISSUES OF QUALITY**

According to the UNESCO (1998), quality is inseparable for social relevance. The implication of the quality requirement and of policies aiming at "quality safeguard" approach is that improvements should be sought, at the same time, to each of the components parts of the institution and to the institution as an integral while, functioning as a coherent system. The quality of education depends upon:

- Quality of staff which employees acceptable social and financial status, a will to reduce inequalities such as those relating to gender; a concern to manage staff in accordance with the merit principle and provide them with the in-service training. They need in order to fulfill their role in changing society; the establishment of incentives and structures to encourage researchers to work in multidisciplinary teams on thematic projects, thus breaking with the habit of exclusively solitary scientific work.
- Quality of curricula, which calls for special care in the definition of the objectives of the training provided in relation to the requirements of the world of work and the needs of society; an adaptation of teaching methods to make students more active and to develop an enterprising spirit; an expansion of, and greater flexibility/ training facilities so as to make full use of the possibilities afforded by IT and to take the characteristics of the context into account; the internationalization and networking of curricula, students and teachers.
- Quality of the students who constitute the raw material of any level of education, which requires special attention to their problems of access in the light of criteria related to merit (abilities and motivation); proactive policies for benefit of the disadvantaged, exchanges with elementary education and with the involved in the transition from secondary to higher education, to ensure that education is an unbroken chain.
- Quality of the infrastructure and of the external environment, not for getting the infrastructure connected with the use and development of IT, without

which networking, distance education facilities and the possibility of a "virtual university" could not be envisaged.

- Quality of the management of the institution as a coordinated and coherent whole, interacting with its environment, being impossible for institutions of higher education to exist as isolated enclaves.

### **2.13.1 Quality of Secondary Education**

It is not always easy to arrive at a commonly agreeable definition of quality of education. It is equally difficult to quantify the notion of quality in education. Research in this area has very often adopted an operational definition of the term and emphasized on various dimension of quality. Many researchers have focused upon the level of material and human resources or facilities available in the schools while defining quality of education.

Others have tended to equate quality with school effectiveness and treat learner achievement as the indicator of quality. While such approaches to provide as assessment regarding different dimensions of quality, these attempts by themselves present only a practical picture of quality; perhaps we have also to consider various factors and processes that take place in the actual functioning of a secondary school.

The argument is that the quality of education should be understood in a contextual manner, keeping in view the varying operational setting in which the schools are functioning. The development context of the locality in question provides the external environment. The operational setting in which the schools function provides the internal environment in the schools and is reflected through:

- i      Infrastructural facilities available.

- ii The human resources especially the teachers and the administrators.
- iii The teaching learning process to take into account the way curriculum is transacted.
- iv The learner achievement reflecting outcomes of schooling.

No doubt, these outcomes will be influenced by the other three set of factors and hence, learner achievement can be considered as an indicator of quality of education.

In a detailed survey of studies have identified school and family background factors affecting learner achievement. The school factors considered to be influencing learner achievements are facilities and equipment available in the school, institutional climate and leadership behaviour of the head, qualification, training and morale of the teachers (Singhal, 1991).

#### **2.14 PROBLEMS, ISSUES AND TRENDS IN SECONDARY EDUCATION**

The secondary education is the most defective stage in our entire educational organization and it needs urgently a thorough examination and complete reorientation. During the vital period of secondary education, the objective should be more inclusive, embracing the needs and problems of adolescent life, which is the most critical period of the individual development. The allied problem of the determination of the impact of society upon the individual and the reaction of the individual to society should be carefully solved. The fact can not be overlooked that during the period of secondary education, the young boys and girls of the country are exploited by individuals and groups and their energies and impulses, instead of being channeled into worthy social purposes, are harnessed to destructive activities. The large body of

youthful students provided raw material for the future leaders of every walls of life. It constitutes the biggest challenges to the nation and the salvation of the nation depends on facing and successfully meeting it.

Another point, which may be mentioned in connection with the secondary education, is the great importance of programs of educational and vocational guidance and of the provision of variety of curricula to suit different talent and aptitude.

As it is clear that the secondary stage education has its own objectives in term of the needs of the youth, therefore, it is recommended that:

- i The program of secondary education be enriched by putting emphasis on humanities and social sciences and on the great principles of liberty of our culture in order to develop individual character and dignity among our youth to strengthen and purify the base of patriotism.
- ii Secondary education programme must offer more diversified and enriched series of courses to prepare citizens in terms of their own capabilities and social and economic needs of the country.
- iii There should be one and not several secondary school systems. Instead of having technical, agricultural, commercial and traditional high schools, curriculum of the secondary schools should be broadened and enriched so that fuller opportunities may be provided for developing the talents of boys and girls in academic as well as in other non academic and technical subjects. Under this concept, secondary schools both Middle and High would become multipurpose schools and provide general education with practical bias suited to the interests of the children and the life of the community (Louis, 1987).

### **2.14.1 Educational institutions**

Educational facilities have been expanding over time, but have not kept pace with the requirements of a modernizing policy. The literacy rate, which is estimated at 56 percent in 2006-07, is still behind other countries of the regions. Both public and private sectors are involved in education. Government finances all public facilities; undertake expansion schemes under its annual development programme while encouraging private sector's role in this field.

### **2.14.2 Medium of Instruction**

- a** The medium of instruction is of the critical importance to the education enterprise; language is the important aspect of learning. Without it nothing, which distinguish human beings from other members of the animal kingdom, can be learned. There are three choices open to Pakistan: instruction in native language i.e., Punjabi for Punjabis, Sindhi for Sindhis etc. the second alternative is Urdu, the national official language. The third is English.
- b** Native languages are important elements in socialization and personality development. They are learned at home and provide identity in terms of one's culture and social tradition. A language policy designed to promote a high level of literacy proficiency in these languages would be, however, immensely impractical. In the first place, these languages as already mentioned lack the sophistication as required to cope with the demands of the modern world. They lack a technical vocabulary, to say nothing of a technical literature. To lose them altogether would be significant social and cultural sacrifice. How to preserve and promote them is a difficult public policy question. To continue them as a required part of the school curriculum is a drain on resources and a



burden on students. Time, effort and money are dissipated in developing language skills which are ultimately of limited practical value. Every one learns a mother tongue whether they attend school or not. The educational system at the primary level at least, should concentrate on the common language, largely to the exclusion of others. It is better to be literate in one language than to be illiterate in two or three.

- c** Relying upon a single language at primary level means that for some people, formal language and linguistic proficiency would be in a language other than their mother tongue. In the long run, this is probably the most optimal approach and it has in fact been the policy of the government since Quaid-e-Azam. Even though many of the country's leaders have not themselves been thoroughly conversant in Urdu, they have, nevertheless, recognized the importance of a common national language. Not would only all people in the country be able to communicate with each other, but that most elusive commodity, national unity would be promoted. A single language would have the additional advantage of the economy. Books could be published in one language, understandable by all. Energies could be focused on enriching the national language by developing a broader literary and intellectual tradition.
- d** Given the practical advantages of such an approach, it would seem that the idea would be universally attractive and relatively easy to implement. But it is not. Despite the fact that there has been a commitment to develop literacy in Urdu as the national language since independence, the record is largely one of the failures. One reason is a natural reluctance to part with one's mother tongue. This is the language of intimate, oral communication. And for the

people, who are about sixty percent literate anyway, it is the only communication. Moreover the Islamic practice, of isolation of women presents a structural barrier to implementing language policy. Few females attend schools in rural areas, and only between one and four percent literate in the frontier province. The situation presents an almost impenetrable barrier to the expansion of Urdu literacy. Children receive their basic language skills from their mothers, few of whom are both literate and have Urdu as their first language. Considerably less than half of the children attend school where they could learn Urdu. Consequently the overwhelming majority of the population does not have exposure, either informally at home or formally in school, to literacy in the national language.

- e Another problem is the timid effort by the government to promote literacy and an Urdu language policy. Urdu cannot be made the national language if it is second, or third or fourth language. It must be the first language. Vigorous efforts must be made to enrich it, a circumstances that will not come about under a program of censorship and government control of book publishing. Only when reading material is widely varied and readily available then people will be able to develop literacy habits (Quddus, 1990).

### **2.14.3 Non-Availability of Audio-Visual Aids**

Ignorance of better practices of teaching is one of the main obstacles in the progress of education in Pakistan. Teachers being older, have much experience than their students. And all the students do not have same experience. It is only audio-visual materials, the use of which can revolutionize Teachers, and can help decrease the amount of forgetting and increase the permanence of what is taught.

#### **2.14.4 The Educational System Collapse**

The commonly held belief in Pakistan as quoted by Louis (1987) is that: “Not with standing the increase of number of teachers, the educational system of Pakistan has completely collapsed. Broadly speaking, three kinds of arguments are suggested as reasons for this collapse. Firstly, the government is not investing enough resources according to increase in population and therefore in the demand for education. Secondly, the quality of teachers is poor. Thirdly, society is indifferent to intellectual pursuits and is interested in education only as a screening device for the limited job opportunities. The teachers are generally low paid and in the prevailing economic depression the woefully underpaid maker of the nation have often been driven to desperate measure to push a little of their urgent demands. Undesirable as hunger strikes are, it cannot be contradicted that a hungry teacher is just as pitiable as any other hungry man, and the high more or intellectual discipline which is rightly assumed to be so attributes of the really good and able teachers does not make them less vulnerable to acute physical distress.”

#### **2.14.5 Learning a Language**

Learning of any language /concept is scientific process. Memory plays very important role in this learning process. Memory process the incoming information, blends it with already stored information, interprets it and meaningful coding is done. So every language is to be learned through the same process. In a sense, most of the energies will be used up for learning so many languages which is mere wastage of energies or resources (Satijia, 1998).

#### **2.14.6 Diversification of Secondary Education**

The most crucial issue confronting secondary education in Pakistan today is the diversification of courses offered so as to cater for the varied needs of students both from psychological and economic points of view. In spite of repeated policy statements, the emphasis on general education at secondary level continues unabated. Whereas the science stream seems to be somewhat established at the secondary stage, no significant advancement appears to have taken place for vocational /technical /agricultural/ commercial/home economics and other occupational streams. This trend needs to be reversed if a viable link is planned to be established between secondary education and the world of work. The entire secondary school curriculum continues to be dominated by the elitist and white-collar approaches thwarting all attempts towards vocationalisation during the last fifty years.

The working group on secondary Education for the Seventh Five Year Plan (1988-93) and Perspective Plan constituted by the Planning Commission has addressed itself to this critical problem and given various alternative models to overcome to present skewed situation towards general education. According to the working grip even after fifty years of our independence, “the number of baboos” previously turned out by the “McCaulay’s stream” has now only been multiplied manifold, because neither the curriculum nor the school organization and the plant facilities could change the emphasis from the theoretical to the practical, from the imaginary to the applied, and from white collar to blue collar positions. The working group emphasis the production of second level workers who form the backbone of the democracy. Subjects at his level should be offered according to the findings of ‘survey

needs approach' in specific areas. The subjects offered at this stage should be lead to self-employment or partial self-employment (Louis, 1987).

### **2.15 ROLE OF PHYSICAL FACILITIES**

The design of a school building and the provision of others physical facilities cannot insure that the educational program will be a superior one, but a poorly planned facility can greatly impede the development of an excellent program in all areas of the curriculum.

Boles in his publication (Boles, 1965) emphasizes the importance of a thorough study of the curriculum as a basis for a school building program he writes:" Studying curriculum is essential to any kind of school construction as it consists of a process of describing the predetermined experiences to be had by boys and girls within school facilities. Without this, the unique curriculum needs of a particular school community may be ignored."

The physical facilities should cover all the needs of various subjects being taught in the school, the level of education and ages and population of the students. Following four points are to be taken into consideration while planning for the physical facilities:

1. Provision of the physical facilities related to needs of the curriculum of all the subjects being taught in the school and the needs of the students of their age group and population.
2. Maintenance and repairs of facilities.
3. Updating the facilities with the change in curriculum and the pulsation of the students and staff.
4. Replacement of the facilities when they become un-repairable.

After the physical facilities are provided every efforts must be made to see that the facilities and equipment are properly used to a maximum degree.

Relating to an educational innovation and the school plan Silverthorn (1965) writes: "The important consideration for design is not the listing of activates to be housed, but crystal-ball exploration in to tends, techniques, and new programs that will have a present and future in flamenco on the kinds of facilities planned".

About the importance of library in a school, Brown (1965) stated:" If our schools are to become places where the creative potential of students can develop, then we must have a new kind of school plant. The architect should first turn his attention to the schools today. The new Library must be as large as a gymnasium and is intensely used." Physical facilities are to be designed in such a way that it also takes care of the future developments in schools education. Library should be an important component. The books and other read in material are to be selected which can help the students and teachers in improving their knowledge and Teachers-learning skills. The nature of required physical facilities vary with the level an type of education. Requirements of physical facilitates at elementary level are different from those of secondary level. Colleges and universities need entirely different facilities. Vocational and technical education demand facilities, which are drastically at variance with those of general education. Education Facilities generally include the physical facilities of an educational institution and they mainly deal with the school building, equipment, furniture, Library and laboratories. The researcher however has included the provision of teachers in the schools as a facility because no educational institution can be of repute with out its teachers. The discussion in this chapter has however been divided into the following sub heading:

- I. School Building.
- II. School Library.
- III. School Laboratory.

A review of literature regarding these points has been made in this chapter.

### **2.15.1 School Building**

Many factors contribute to a good school building, but no one can be considered unimportant. According to Report of Commission on National Education (1959), " Several factors are involved which deserve further consideration. The size and shape of classrooms must be conducive to good vision and hearing. The placement and size of windows to permit maximum light an ventilation, acoustics, construction patterns ad furniture that will minimize the possibility of injury to small children an color that get the most advantage from natural light an prevent eye strain, are a few problems that have assorted the attention of researchers else where."

#### **a. Size of as School Site**

There are differences of opinion regarding the size of the school site. Generally five acres of land is required or an elementary school (Celebrazze, 1970). Following are the recommendations by different authorities.

- i. Thirty to forty acres of land for a secondary school (Hardth, 1971)
- ii. Ten acres for 500 students plus an additional acre for every 100 pupils (American Association of School Administration, 1985)
- iii. Twenty-five acres for 500 students (National commission on School House Construction, 1985)
- iv. Fifteen acres for 1500 students (Ali, 1982)

### 2.15.2 Facilities in the Building

The number of rooms depends on the facilities provided in the school. Normally each section of the class should have a separate room. So extra rooms should also be available to suffice the future need. Moreover, there are some subjects e.g. Science Drawing etc. which cannot be taught in the conventional classroom. So separate room should be available for such subjects. We can divide the schoolrooms in to the following three categories:

1. Instruction Room, the classrooms and laboratories.
2. Non-instruction rooms, as headmaster's office clerks office ,staff-room, library room etc
3. Miscellaneous room as tuck shop, store, water rooms etc.

**Ventilation Facilities:** Fresh air is necessary for the students to keep them health, active and free from mental and physical fatigue. So ventilation facilities are necessary in the classrooms.

**Water Supply Facilities:** The Supply of pure water for drinking purposes is very important for the up keeping of health of the children. Health experts are of the opinion that water should be stored in covered tanks instead of open pits. Hand-pump is desirable to be with in the school compound. Science laboratories and special rooms equipment; in science laboratory the demonstration desk should be with in the sight of each student. Student desks should be furnished with water, gas-supply; chemistry laboratories should have exhaust pumps as well.

**Toilets:** Toilets are basic necessity of all, because children spend most of the day in the school. Regular care should be taken to keep them clean and neat.



**Playgrounds:** Playgrounds are necessary for out-door activities. In Pakistan the necessity of grounds is even more apparent as most of the school buildings are outdated and inhygienic. This deficiency could only be compensated with the playgrounds.

**Classroom Equipment:** Each classroom should have sufficient number of desks or benches for the students. The arrangement of the desks should be such that light be cast on them from the left.

### **2.15.3 School Library**

A good library is a necessity in a school. No school can function successfully without a well-equipped library. It is necessary both for teachers and taught. Every teacher should devote enough time in studying the various books to elaborate his lessons and also increase his general knowledge. Extra reading is very useful for children also. Library books are more interesting and attractive but they are as useful as textbooks as far as learning is concerned. The library books elaborate the lessons of the textbooks. Without library facilities, the textbooks become dry and difficult. The Report of the Commission on National Education (1959) had shown the increasing importance of libraries in schools. A few decades ago, library was hardly made use of especially in our country, but in view of its utility, everybody, though he may be working in any profession either directly or indirectly, seeks the help of library to enrich his existing knowledge. Knowledge not brushed up by frequenting libraries becomes stagnant and rusty. Latest books on a particular subject can be available in the libraries only and, therefore, those visiting and consulting libraries very frequently keep themselves abreast of the knowledge of the globe.

The Commission on National Education says that: "The academic heart of the school should be its library, which should be specially stocked to meet the educational requirements"

According to educationists, library services are basic requirements of a modern elementary school. A good modern school must have a library and rich room collections in order to get maximum utilization of the reading materials provided for the children. The importance of school library has been emphasized by the authorities on the following lines:

"The academic heart of the school should be its library, which should be specially stocked to meet educational requirements" (Report of the Commission on National Education, 1959)

In this sense the school library becomes the heart of a school's instructional services, pumping life-giving blood to the entire educational organism

"The contribution of the school library as an instrument of education and training for life's situations is unquestionable.

Books abolish time and distance. They are still the most important and permanent media by which experience and knowledge is communicated.

It is, therefore, of fundamental importance that the effective use of books should be taught and practiced and the proper time for imparting this knowledge is the age of form education and the proper place is the school library (Viswanthan, 1962)

**Book Selection for Library:** "The books must be an effective instrument; the secondary school library must contain not only the right books but an adequate number of them. The first step, therefore, should be to decide how many books should be school have"(George, 1960)

According to, Celebrazze, (1970), "The minimum number of books required per pupil is, that is, a school with a population of 500 should have 250 books at least"

In brief the school library should have that following physical facilities:

**a. Space and Seating Capacity in Library:** The library should be accommodated in a big room and it should have a seating capacity of one tenth of the total number of students. However, there should be proper arrangement for the light and air. The library should be situated in the center of all the blocks of the school, if possible

**b. Decoration in Library:** The library should be attractive. The vacant walls should be treated with significant murals and nice pictures. The ceiling should be of cream of Worry color to reflect light

**c. Furniture of library:** The-modern material should be professed for being less noisy, more easily movable and more home like. The tables should be smart: The chairs should be comfortable. The bookracks should be short enough for the topmost shelf to be reached standing on the floor.

**d. Library Materials:** A library in school should have the following material.

1. Books
2. Manuscripts
3. Maps, charts, diagrams and designs of Art
4. Motion pictures an language records
5. Pictures
6. Periodicals and magazines
7. Newspapers
8. Indices

9. Store books for the children
10. Filmstrips, taps recorders and projectors

#### **2.15.4 School Laboratory**

Since laboratories play an essential part in the process of teaching science every science teacher needs to make the best use of it, so that the laboratory experience may contribute to scientific understanding.

The science laboratory should be adequately equipped with the modern scientific equipment and chemicals that are needed at the secondary stage.

Laboratories are the center of activity of scientific education. A special room for scientific experimentation by the students is indispensable because a science teacher is not only required to give lecture/demonstration to the students but to allow the students opportunities to use the apparatus to do the experiments themselves and to arrive at conclusions at their own accord. It is, therefore necessary that adequate space for experimentation should be provided for the students in the science laboratories. Jacobson and other are to the opinion that:

Science laboratories and special rooms equipment: In science Laboratory the demonstrate desk should be within the sight of each student. Student desks should be furnished with water, gas-supply, and chemistry laboratories should have exhaust pumps as well. Similarly geography rooms should have maps, stands, cupboards and drawing-room tables, model stands, sliding boars etc.

#### **2.15.5 Laboratory facilities**

For teaching the science subject, laboratory facilities are essential. A good science laboratory must have the following features:

1. It must be quite spacious so as to allow enough space for pupils to have certain freedom of movement throughout the practical experiment.
2. It must have well ventilated building, water supply, light and exhausting fan, gas, electricity and supply of distilled water.
3. It must permit enough teacher supervision of the pupil's work.
4. It must have fire extinguishers which are now treated indispensable for the laboratories.
5. It must have preparation and balance rooms along with ample storage facility for equipment

#### **2.15.6 Dimension of the Laboratory**

According to Celebrazze, (1970), size of laboratory is adequate if the flow area occupied by benches, tables, cupboards and shelves are twenty five to thirty square feet for each pupil in the class.

If the provision of preparation room is in adequate, the size of a laboratory should be proportionally increased.

A preparation room should cover about 2000 square feet storeroom should not be less than 16 x12 to allow access to shelves and racks.

#### **2.15.7 Laboratory plans**

Following are the two general plans in the administration of the laboratory:-

- A) The group plan
- B) The individual plan.
- A) The Group Plan**

According to this plan, if the class consists of many students then it is divided in two or more groups and if the number of students is not many then the whole

classes perform the same experiment at the same time. Ease of administration is the characteristic feature of the plan, provision of the equipment and supply is greatly emphasized. Every thing in need is provided and arranged before hand so those students are saved from confusion at the beginning of the period.

### **B) The Individual Plan**

According to this plan each student or groups of students perform the experiments individually in their own way. It results in difference of a performance: when the discrepancies are pointed out in their performance, they become aware of their mistakes committed, which the students never forget. Thus it is presumed to be more efficient manner than the group plan.

### **2.15.8 Instructional Technology**

Modern technology has placed at the disposal of educationist's tools and techniques of great research and effectiveness. People do not need now to leave their work and home to obtain education. Exceptionally talented teachers, modern facilities for teaching and demonstration have come within easy reach of the masses through the powerful media of radio, television, films and host of other instructional aids and devices. Potentialities of the modern instructional technology will be fully exploited to improve and expand both formal and non-formal education (Government of Pakistan, 1960).

### **2.15.9 Audio-Visual Aids**

Audio-Video aids are very effective and helpful in teaching and learning process. These aids make the teaching learning process interesting, effective and meaningful. A Chinese proverb is that "If we hear we forget, if we see we remember." The experts of education say that if we hear we remember only 10% of it, and if we

see we remember 80 % of it and if we do we remember 90% of it. Apart from these arguments, following points show the importance of A.V. aids in a teaching learning process.

- 1) They make process of learning purposeful and create interest in it.
- 2) They develop continuity of thought.
- 3) They make abstract ideas and things concrete.
- 4) They give reality to the experiences of students and thus stimulate self-efficiency.

There are many kinds of A.V. aids which a teacher can use in classroom e.g. black/white board, flannel boards, charts, models, globes, pictures, projectors etc.

#### **2.15.10 Flannel Boards**

It is simple but versatile instructive device of presenting an idea by means of picture cut-outs. The progressive story is unfolded before the learners eyes by means of systematic presentation of picture cut-out on board. The action of the moving cut-outs attract attention and stimulate interest of learners. The flannel board consists of a piece of flannel or which is tightly stretched over a strong backing of lay-wood. The minimum size of the board should 30x10 inches and much larger, if needed. The flannel should be light in color for most uses. The flannel board can be combined with magnetic boards for greater flexibility and usefulness (Farooq, 1993).

#### **2.15.11 Flash Cards**

Flash cards are brief visual messages. They are used to emphasize important points in a talk. They are easy to carry and can be made easily and inexpensively from local materials. They should be planned to support the presentation step by step. They

visually summarize the important points of the lesson that the audience should remember.

Flash cards are like billboards. The worker holds the set of cards in his left hand at eye level of the audience and presents them one by one. Each card is directly related to a topic and designed to attract attention and motivate the observer to action or to change his attitudes. Effective flash cards:

- a. Drive home a single idea;
- b. Tell a story at a glance;
- c. Attract attention;
- d. Motivate action.

Flash cards are dynamic if they are carefully planned, brief in wording, simple in design and colorful (Farooq, 1993).

### **2.15.12 Pictures**

Pictures are very much liked by children and especially of lower classes, pictures provide an environment of “reality”. A lesson in history can be made interesting and stimulating by showing the pictures of kings and queens, costumes and dresses, forts and weapons, monuments and tombs, etc. similarly in a geography lesson we can show the pictures of animals, deserts, lakes, mountains and rivers etc., and also the various aspects of lives of people of other lands with great effect (Aggarwal, 1997).

### **2.15.13 Charts**

A chart is a combination of pictorial, graphic, numerical or vertical material which presents a clear visual summary. The most commonly used types of charts include outline charts, tabular charts, flow charts, and organization charts. Other types



of charts are technical diagrams and process diagrams. Flip charts and flow charts are also being used. Ready-made charts are available for use in teaching in almost all areas in all subjects. But charts prepared by a teacher himself incorporating his own ideas and lines of approach of the specific topic are more useful (Aggarwal, 1997).

#### **2.15.14 Maps**

In several subjects, especially social sciences, the learning of many geographical, historical and economic concepts remain unreal, inadequate and incomplete without map media. A resourceful teacher by motivating the pupils will turn the fear of map into genuine love for them. This, however, presupposes the invariable uses of maps at every possible opportunity by the teacher in the classroom, and the possession of individual atlases by the pupils. Every student should also know certain elementary aspects of map preparation such as copying, enlarging and reducing, symbolizing, coloring, and preparing key. Most of the students develop an aversion to maps because they do not know skills relating to map preparation (Aggarwal, 1997).

### **2.16 RESEARCH IN SECONDARY EDUCATION**

An Investigation of Effective Curriculum Practice in Secondary Education by Gatfield (1990) reported research which had four objectives. First, to ascertain whether practitioners agree on affective learner objectives and their importance on curriculum, second, to determine whether practitioners agree on affective curricular elements suggested in the literature to operationalize the affective domain, third, to determine the extent to which factors identified in the ideal curriculum impede operationalization of the affective outcomes in curriculum.

Edelebosch (1992) states that Educational programmes are more likely to be successful when there is significant community involvement and participation. Parental involvement allows the programme to reflect the needs or concerns of the community and gives parents more of a stake in the programmes overall success.

Commenting on the status of research in teacher education of secondary school teachers, especially in Pakistan, Farooq (1994) mentioned it to be a discouraging one. Teacher training institutions for secondary school teachers have some potential in terms of well-trained faculty but lack of resources result in absence of proper research activities in the institutions. Lack of interest of teachers affects quality of education at any level, because teachers and its training is an essential part of quality.

Khaliq (2000) studied the administrative problems of boys higher secondary school in Punjab and concluded the following aspects require marked improvement because they were directly associated with the performance of the scheme: library services, laboratory services, provision of instructional and furniture, curricula activities, quality of results of inter classes, providing complete teaching staff, co-operation from community, teacher's commitment towards professional obligations, provision of funds, grants and proper physical facilities, supervisory system, motivational and professional training of teaching staff. If the heads of institutions should be able to tackle all these problems in their intuitions, they can impart quality education at higher secondary level.

In a report on the examination system Deakin (1974) studied public examination system in Pakistan and made numerous suggestions for improvement. Deakin found the examination system in a state of near anarchy and suggested measures for possible intervention. He argued that the suggestions made by him would

cost money. However, if the examination and selection procedures are properly conducted they can play a vital part in bringing about the realization of the ideal of the carrier open to talent” an object, which in the long run, pay handsome dividends in way of higher productivity and social contentment as well as quality. He too suggested establishing a central unit for developing of tests and the use of computer in conduct of examinations, tabulations and preparing of results. In the conduct of examination, loopholes in the regulations against cheating and disorder should be closed. Regulations should be redrafted so that prescribed penalties are automatically imposed, leaving on scope of discretion. Leniency under no circumstances is allowed. Construction and development of objective type tests should be started with immediate effect. However, validation of the tests may take time. The concerned authority must demonstrate carefulness in initial stages not to underestimate the existing enthusiasm of objective tests Deakin found a determination to provide more meaningful and more efficient education and better ways of selecting students and of evaluating their performance. This system also discourages rote memorization and develops a critical thinking in students.

## **RESEARCH METHODOLOGY**

The major purpose of the study was to compare the quality of education in Public and Private secondary schools of Punjab.

For this, survey was conducted to get the opinions of the respondents. Hence the nature of study was descriptive type. Following methods and procedures were adopted to conduct this proposed research.

### **3.1 POPULATION**

All the secondary schools in public and private sector of Punjab, their heads, secondary school teachers and students of 10<sup>th</sup> class constituted the population of the study.

### **3.2 DELIMITATIONS OF THE STUDY**

Punjab is generally distributed in three different stratas, which are North Punjab, Central Punjab, and South Punjab. The study was delimited to the following nine districts of Punjab:

1. Rawalpindi
2. Chakwal
3. Lahore
4. Attock
5. Mianwali
6. Sargodha
7. Dera Ghazi Khan
8. Bahawalpur
9. Gujranwala

The study was delimited to only private schools other than Beacon House School System, The Educator School System, Divisional Public Schools, City School System, Grammar School System etc.

### 3.3 SAMPLE

Random sampling technique was used and description of sample was as followed.

#### 3.3.1 Sample of Schools

Total two hundred and sixteen secondary schools in public and private sector (twenty- four secondary schools from each sample district) were randomly selected. The proportion of public sector schools and private sector schools, boys and girls schools was fifty- fifty.

#### 3.3.2 Sample of Heads

All the heads of already sampled 216 secondary schools of public and private sector (the proportion of public sector schools and private sector schools, boys and girls schools was equal) included in sample.

#### 3.3.3 Sample of Teachers

One thousand and eighty teachers teaching secondary classes (120 teachers from each sample district) were randomly selected in which proportion of male female teachers was fifty fifty. In such a way that from each sample district, the proportion of the public and private and male and female teachers was equal. The description of sample of the teachers was as follows:

#### Sample of Teachers

<b>Total Number of Teachers = 1080</b>					
	<b>Public</b>		<b>Private</b>		
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Rawalpindi	30	30	30	30	120
Chakwal	30	30	30	30	120
Lahore	30	30	30	30	120
Attock	30	30	30	30	120
Mianwali	30	30	30	30	120
Sargodha	30	30	30	30	120
Dera Ghazi Khan	30	30	30	30	120
Bahawalpur	30	30	30	30	120
Gujranwala	30	30	30	30	120
Total	270	270	270	270	1080

### 3.3.4 Sample of Students

Four thousand three hundred and twenty students (480 students from each sampled district) were randomly selected in which proportion of male female students was fifty fifty. In such a way that from each sample district the proportion of the public and private and male and female students were equal. The descriptions of sample of the students were as follows:

#### Sample of Students

<b>Total Number of Students = 4320</b>					
	<b>Public</b>		<b>Private</b>		
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>Rawalpindi</b>	120	120	120	120	480
<b>Chakwal</b>	120	120	120	120	480
<b>Lahore</b>	120	120	120	120	480
<b>Attock</b>	120	120	120	120	480
<b>Mianwali</b>	120	120	120	120	480
<b>Sargodha</b>	120	120	120	120	480
<b>Dera Ghazi Khan</b>	120	120	120	120	480
<b>Bahawalpur</b>	120	120	120	120	480
<b>Gujranwala</b>	120	120	120	120	480
<b>Total</b>	1080	1080	1080	1080	4320

### 3.4 RESEARCH INSTRUMENTS

The researcher prepared three questionnaires using five-point scale after going through the related literature, consisting of books, journals, articles, reports, magazines with the help of honorable supervisor and members of supervisory committee. Their suggestions were incorporated in the questionnaires.

1. Questionnaire for Heads of Secondary Schools.
2. Questionnaire for Teachers of Secondary Schools.
3. Questionnaire for Students of Secondary Schools.

### 3.4.1 PILOT TESTING

For the pilot testing, ten secondary schools were taken from district Rawalpindi. It was further divided into five male and five female equally. The researcher personally visited and administered relevant questionnaires among ten heads, fifty teachers and two hundred students. They were requested to give their suggestions freely for the improvement of the questionnaires. They were also requested to amend the questions, if necessary in format and the language to make the questions simple and understandable. Accordingly questionnaires were revised and prepared by incorporating their suggestions and proposals. Then the final version of questionnaires was developed.

### 3.5 DATA COLLECTION

The investigator started data collection process w.e.f 17<sup>th</sup> of March, 2006 by visiting each sampled school and administering the questionnaire in person. It took about three months to collect data from the selected sample. The response rate was 100 percent.

### 3.6 DATA ANALYSIS

Data collected through above-mentioned instruments were tabulated, analyzed and interpreted category-wise as principals, teachers and students. To analyze the data, chi-square as a contingency test and percentage were used.

For statistical treatment chi-square as a contingency test was applied using the following formula:

$O_i$  = Frequency observed or experimental determined

$E_i$  = Frequency expected

df = Degree of freedom

$$\begin{aligned}
 P &= \text{Probability of exceeding the tabulated value of } X^2 = O_i - E_i \\
 &= (O_i - E_i)^2 \\
 &= \frac{(O_i - E_i)^2}{E_i}
 \end{aligned}$$

$$\chi^2_{Obs} = \sum_{\text{cells}} \frac{(O-E)^2}{E}$$

(Garrett, 1997)

Chi-square as contingency test was used to compare the frequencies of principals/teachers, teachers/students and principals/students. It was also used in comparisons of male and female principals, teachers and students responses.

The method can be illustrated as follows, using fictional data:

	<b>Responses as Frequencies</b>						<b>Expected Frequencies</b>				
	<i>Strongly Agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly Disagree</i>	<i>Totals</i>					
<i>Group 1</i>	10	23	47	21	33	134	15.7	25.9	49.7	17.8	24.9
<i>Group 2</i>	21	28	51	14	16	130	15.3	25.1	48.3	17.2	24.1
<i>Totals</i>	31	51	98	35	49	264					
<b>Chi-square = 11.8 (df4)</b>											

Here there are two samples, neither of which can be regarded as a control group. The samples need not be of the same size. The expected frequencies are found by taken the totals for each of the five choices as the best estimate of the control group and working out what proportion of each sample might be expected to make that choice. Thus, for 'strongly agree', 10 of the sample made that choice with group 1



and 21 with group 2. 31 overall made that choice. Thus, the expected frequencies are 15.7 and 15.3 (to the first decimal place). These are obtained as follows:

$$\text{Group 1} \quad \text{Expected frequency} = 31 \times 134/264 = 15.7$$

$$\text{Group 2} \quad \text{Expected frequency} = 31 \times 130/264 = 15.3$$

The value of the degree of freedom for any analysis is obtained from the following calculations:

$$df = (r-1) \times (c-1)$$

Having seen the significance of difference between male and female principals, teachers and students by Chi-square as a contingency test. Comparing the individual chi square value identified the sources of differences.

On the basis of the analysis and interpretation of data, conclusions were drawn and recommendations were made.

## RESULTS

The major purpose of the study was to compare the quality of secondary education in public and private sector institutions in Punjab.

This chapter deals with the analysis and interpretation of data obtained by the means of questionnaires. The analysis of data is given below:

### 4.1 ANALYSIS OF DESCRIPTIVE DATA

**Table 1. Academic Qualification of Administrators**

Qualification	Ph.D	M.Phil	M.A/M.Sc	B.A/B.Sc	Others	Total
Public	02	04	82	20	0	108
Private	0	0	41	49	18	108
<b>Total</b>	02	04	123	69	18	216

**Table 2. Professional Qualification of Administrators**

Qualification	M.Ed/ MS.Ed	B.Ed/BS.Ed	C.T	PTC	Others	Total
Public	20	88	0	0	0	108
Private	04	55	31	02	16	108
<b>Total</b>	24	143	31	2	16	216

**Table 3. Administrative experience of Administrators**

Period of Administrator experience	Number		
	Public	Private	Total
1 to 5 years	0	60	60
6 to 10 years	16	15	31
11 to 15 years	38	29	67
16 to 20 years	21	04	25
21 to 25 years	15	0	15
26 and above	08	0	8

<b>Total</b>	108	108	216
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Table 1 indicates that in public sector schools 02 administrators had Ph.D., 04 had M.Phil., 82 had Master degree, 20 had Bachelor degree as their academic qualification while in private sector schools 41 administrators had master degree and 49 had B.A/B.Sc degrees respectively. Eighteen were found qualification other than above.

Table 2 indicates that in public sector schools there were 88 and 20, 14, 12, 52, 24, 06, administrators had professional qualification of B.Ed/BS.Ed, and M.Ed/MS.Ed. and no administrator had CT or PTC as his professional qualification whereas in private sector schools there were 02, 31, 55 and 04 administrators had professional qualification of PTC, CT, B.Ed/BS.Ed, M.Ed./MS.Ed degrees respectively and 16 had professional qualification other than these.

Table 3 indicates that in public sector schools there were 16 administrators having administrative experience of 06-10 years, 38 administrators having 11-15 years, 21 administrators having 16-20 years, 15 administrators having 21-25 years and 08 administrators having above than 26 years whereas in private sector schools there were 60 administrators having administrative experience of 01-05 years, 15 administrators having 06-10 years, 29 administrators having 11-15 years, 04 administrators having 16-20 years, and no administrator had 21-25 years and above than 26 years administrative experience.

**Table 4. Academic Qualification of teachers**

Academic Qualification	Number		
	Public	Private	Total
F.A./F.Sc	10	26	36
B.A/B.Sc	63	58	121
M.A/M.Sc	22	22	44
M.Phil	10	02	12
Ph.D	03	0	03
<b>Total</b>	108	108	216

**Table 5. Professional Qualification of teachers**

Professional Qualification	Number		
	Public	Private	Total
PTC	14	12	26
C.T	12	16	28
B. Ed/BS.Ed	52	44	96
M.Ed /MS.Ed	24	22	46
Others	6	14	20
<b>Total</b>	108	108	216

**Table 6. Teaching experience of teachers**

Period of Teaching experience	Number		
	Public	Private	Total
1 to 5 years	08	36	44
6 to 10 years	21	33	54
11 to 15 years	42	34	76
16 to 20 years	13	05	18
21to 25 years	14	0	14
26 and above	10	0	10
<b>Total</b>	108	108	216

Table 4 indicates that in public sector schools there were 10,63,22,10,03, teachers had academic qualification of F.A/ F.Sc, B.A/B.Sc, M.A/ M.Sc, M.Phil and Ph.D, degrees respectively whereas in private sector schools there were 26,58,22,02 teachers had academic qualification of F.A/ F.Sc, B.A/B.Sc, M.A/ M.Sc,and M.Phil degrees respectively and no teacher had Ph.D. degree.

Table 5 indicates that in public sector schools there were 14, 12, 52, 24, 06, teachers had professional qualification of PTC, CT, B.Ed/BS.Ed, M.Ed/MS.Ed.and 06 teachers had others than these degrees respectively whereas in private sector schools there were 12, 16, 44, 22, 14, teachers had professional qualification of PTC, CT, B.Ed/BS.Ed, M.Ed/MS.Ed. degrees respectively

Table 6 indicates that in public sector schools there were 08 teachers having teaching experience of 01-05 years, 21 having 06-10 years, 42 teachers having 11-15 years, 13 teachers having 16-20 years, 14 teachers having 21-25 years and 10 teachers having above than 26 years whereas in private sector schools there were 36 teachers having teaching experience of 01-05 years, 33 teachers having 06-10 years, 34 teachers having 11-15 years, 05 teachers having 16-20 years, and no teacher had 21-25 years and above than 26 years teaching experience.

**Table 7. Status of building**

Nature of building	Number		
	Public	Private	Total
Own	0	45	45
Government	98	0	98
Rented	10	63	73
<b>Total</b>	108	108	216

**Table 8: Overall result of students in pass percentage in sampled public and private schools**

Year	Public Sector		Private Sector	
	Appeared	Pass Percentage	Appeared	Pass Percentage
2003	4428	63.85%	887	88.73%
2004	4646	62.77%	685	90%
2005	4989	69.03%	575	77.70%
2006	5423	69.50%	945	85.98%
Average	4871	66.29%	773	85.96%

**Table 9: Heads' opinion about average number of teachers in public and private schools**

Sector	Average number of teachers
Public	26
Private	3

**Table 10: Heads' opinion about enrollment of students in secondary classes teacher student ratio**

Sector	Average Enrollment	Teacher- student ratio
Public	158	1:70
Private	77	1:28

Table 7 indicates that the ownership of building were found 45, 98 and 73 own, government and rented building respectively.

It is clear from table 8 that number of students of public schools which appeared in Board's examination was higher than that of private schools. The average number of students of public schools which appeared in Board's examination was 4871 whereas the average number of students of private schools which appeared in Board's examination was 773.

The above table also indicates that pass percentage of private schools is higher than pass percentage of public schools. The average pass percentage of public schools is 66.29% whereas the pass percentage of private schools was 85.96%.

Table 9 indicates that average number of teachers teaching secondary classes in public schools was 26 and in private schools it was found to be 3.

The above table 10 indicates that public secondary schools had more number of students studying in secondary classes as compared to students studying in secondary classes in private schools. The average enrollment per sampled school of public sector was 158 whereas the average enrollment per sampled school of private sector was 77. Average teacher student ratio in public schools was 1:70 whereas in private schools it was 1:28.

## 4.2 ANALYSIS OF QUESTIONNAIRE OF HEADS

**Table 11: You involve your staff in decision-making.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	35	22	4	29	18	108	12.4*
		Percentage	32.41%	20.37%	3.70%	26.85%	16.67%	100	
	Private	Frequency	20	27	5	20	36	108	
		Percentage	18.52%	25.00%	4.63%	18.52%	33.33%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488

**Table 12: You like to be a part of team while leading teachers.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	25	32	2	32	17	108	22.5*
		Percentage	23.15%	29.63%	1.85%	29.63%	15.74%	100	
	Private	Frequency	52	32	4	12	8	108	
		Percentage	48.15%	29.63%	3.70%	11.11%	7.41%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488

**Table 13: Tasks being carried out in the institutions are well organized.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	27	33	5	31	12	108	10.6*
		Percentage	25.00%	30.56%	4.63%	28.70%	11.11%	100	
	Private	Frequency	36	25	2	20	25	108	
		Percentage	33.33%	23.15%	1.85%	18.52%	23.15%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488



**Table 14: The selection procedure for recruitment of teachers is fair.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	50	32	4	14	8	108	16.8*
		Percentage	46.30%	29.63%	3.70%	12.96%	7.41%	100	
	Private	Frequency	26	34	2	30	16	108	
		Percentage	24.07%	31.48%	1.85%	27.78%	14.81%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 15: There is coordination among the administrative staff**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	27	31	2	33	15	108	12.8*
		Percentage	25.00%	28.70%	1.85%	30.56%	13.89%	100	
	Private	Frequency	49	29	3	17	10	108	
		Percentage	45.37%	26.85%	2.78%	15.74%	9.26%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 16: Teachers have command over subject matter**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	52	24	2	18	12	108	12.6*
		Percentage	48.15%	22.22%	1.85%	16.67%	11.11%	100	
	Private	Frequency	28	32	1	26	21	108	
		Percentage	25.93%	29.63%	0.93%	24.07%	19.44%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 11 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools heads about the statement “you involve your staff in decision making” differed significantly in favour of public schools heads in the category of strongly agree.

Table 12 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools heads about the statement “You like to be a part of team while leading teachers” differed significantly in favour of private schools heads in the category of strongly agree.

Table 13 reveals that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools’ heads about the statement “Tasks being carried out in the institution are well organized differed significantly in favour of private schools’ heads in the category of strongly disagree.

Table 14 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools’ heads about the statement “The selection procedure for recruitment of teachers in fair” differed significantly in favour of public schools’ heads in the category of strongly agree.

Table 15 states that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools’ heads about the statement “There is coordination among the administrative staff” differed significantly in favour of private schools’ heads in the category of strongly agree.

Table 16 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools’ heads about the statement “Teachers have command over subject matter” differed significantly in favour of public schools’ heads in the category of strongly agree.

**Table 17: Teachers have command over teaching methodology.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	52	27	1	18	10	108	12.5*
		Percentage	48.15%	25.00%	0.93%	16.67%	9.26%	100	
	Private	Frequency	29	30	3	26	20	108	
		Percentage	26.85%	27.78%	2.78%	24.07%	18.52%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488****Table 18: Job security for teachers is ensured**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	52	30	2	16	8	108	19.5*
		Percentage	48.15%	27.78%	1.85%	14.81%	7.41%	100	
	Private	Frequency	24	32	2	34	16	108	
		Percentage	22.22%	29.63%	1.85%	31.48%	14.81%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488****Table 19: School environment is suitable for teaching.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	46	36	2	14	10	108	18.9*
		Percentage	42.59%	33.33%	1.85%	12.96%	9.26%	100	
	Private	Frequency	21	38	1	21	27	108	
		Percentage	19.44%	35.19%	0.93%	19.44%	25.00%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488**

**Table 20: Attention is given to the character building of students.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	45	18	3	22	20	108	6.6
		Percentage	41.67%	16.67%	2.78%	20.37%	18.52%	100	
	Private	Frequency	38	32	1	23	14	108	
		Percentage	35.19%	29.63%	0.93%	21.30%	12.96%	100	
Not Significant			df = 4			$\chi^2$ at 0.05 level = 9.488			

**Table 21: Religious ethics are maintained at the school**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	52	37	1	10	8	108	0.7
		Percentage	48.15%	34.26%	0.93%	9.26%	7.41%	100	
	Private	Frequency	48	39	1	13	7	108	
		Percentage	44.44%	36.11%	0.93%	12.04%	6.48%	100	
Not Significant			df = 4			$\chi^2$ at 0.05 level = 9.488			

**Table 22: The student assessment procedure is fair**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	22	18	2	26	40	108	10.2*
		Percentage	20.37%	16.67%	1.85%	24.07%	37.04%	100	
	Private	Frequency	36	16	3	32	21	108	
		Percentage	33.33%	14.81%	2.78%	29.63%	19.44%	100	
*Significant			df = 4			$\chi^2$ at 0.05 level = 9.488			

Table 17 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Teachers have command over teaching methodology" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 18 exhibits that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Job security for teachers is ensured" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 19 states that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "School environment is suitable for teaching" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 20 indicates that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Attention is given to the character building of students" does not differ significantly.

Table 21 shows that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Religious ethics are maintained at the school" does not differ significantly.

Table 22 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "The student assessment procedure is fair" differed significantly in favour of public schools' heads in the category of strongly disagree.

**Table 23: Students are admitted according to merits.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	42	28	4	22	12	108	12.9*
		Percentage	38.89%	25.93%	3.70%	20.37%	11.11%	100	
	Private	Frequency	26	24	1	30	27	108	
		Percentage	24.07%	22.22%	0.93%	27.78%	25.00%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 24: Student –teacher ratio is adequate.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	18	20	2	30	38	108	14.0*
		Percentage	16.67%	18.52%	1.85%	27.78%	35.19%	100	
	Private	Frequency	33	24	3	32	16	108	
		Percentage	30.56%	22.22%	2.78%	29.63%	14.81%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 25: Your school provides quality education**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	30	32	1	29	16	108	10.1*
		Percentage	27.78%	29.63%	0.93%	26.85%	14.81%	100	
	Private	Frequency	48	34	1	15	10	108	
		Percentage	44.44%	31.48%	0.93%	13.89%	9.26%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 26: The students of your school of the institution compete well with other school students**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	28	26	1	32	21	108	7.2
		Percentage	25.93%	24.07%	0.93%	29.63%	19.44%	100	
	Private	Frequency	38	34	2	22	12	108	
		Percentage	35.19%	31.48%	1.85%	20.37%	11.11%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 27: Merit is strictly followed in all matters.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	53	34	3	11	7	108	15.5*
		Percentage	49.07%	31.48%	2.78%	10.19%	6.48%	100	
	Private	Frequency	36	26	2	25	19	108	
		Percentage	33.33%	24.07%	1.85%	23.15%	17.59%	100	

\* Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 28: Building facility is adequate**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	44	28	2	24	10	108	29.5*
		Percentage	40.74%	25.93%	1.85%	22.22%	9.26%	100	
	Private	Frequency	16	20	2	37	33	108	
		Percentage	14.81%	18.52%	1.85%	34.26%	30.56%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 23 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Students are admitted according to merits" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 24 exhibits that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Student –teacher ratio is adequate" differed significantly in favour of public schools' heads in the category of strongly disagree.

Table 25 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Your school provides quality education" differed significantly in favour of private schools' heads in the category of strongly agree.

Table 26 indicates that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "The students of your school of the institution compete well with other school students" does not differ significantly.

Table 27 states that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Merit is strictly followed in all matters" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 28 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Building facility is adequate" differed significantly in favour of public schools' heads in the category of strongly agree.



**Table 29: Equipment is according to present and future needs**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	48	25	2	21	12	108	12.1*
		Percentage	44.44%	23.15%	1.85%	19.44%	11.11%	100	
	Private	Frequency	25	32	2	26	23	108	
		Percentage	23.15%	29.63%	1.85%	24.07%	21.30%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488****Table 30: Playground is available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	67	38	2	1	0	108	87.8*
		Percentage	62.04%	35.19%	1.85%	0.93%	0.00	100	
	Private	Frequency	24	18	3	35	28	108	
		Percentage	22.22%	16.67%	2.78%	32.41%	25.93%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488****Table 31: Proper fans are available in all rooms of school.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	22	26	3	30	27	108	11.5*
		Percentage	20.37%	24.07%	2.78%	27.78%	25.00%	100	
	Private	Frequency	42	27	2	23	14	108	
		Percentage	38.89%	25.00%	1.85%	21.30%	12.96%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488**

**Table 32: Gas facility is available in all rooms of school**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	25	16	2	25	40	108	10.3*
		Percentage	23.15%	14.81%	1.85%	23.15%	37.04%	100	
	Private	Frequency	44	14	1	26	23	108	
		Percentage	40.74%	12.96%	0.93%	24.07%	21.30%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 33: The school has well maintained boundary wall**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	40	36	2	18	12	108	15.3*
		Percentage	37.04%	33.33%	1.85%	16.67%	11.11%	100	
	Private	Frequency	26	22	2	35	23	108	
		Percentage	24.07%	20.37%	1.85%	32.41%	21.30%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 34: Sufficient furniture is available in rooms.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	42	26	2	25	13	108	11.6*
		Percentage	38.89%	24.07%	1.85%	23.15%	12.04%	100	
	Private	Frequency	26	24	1	26	31	108	
		Percentage	24.07%	22.22%	0.93%	24.07%	28.70%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 29 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Equipment is according to present and future needs" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 30 reveals that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Playground is available" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 31 exhibits that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Proper fans are available in all rooms of school" differed significantly in favour of private schools' heads in the category of strongly agree.

Table 32 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Gas facility is available in all rooms of school" differed significantly in favour of private schools' heads in the category of strongly agree.

Table 33 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "The school has well maintained boundary wall" differed significantly in favour of private schools' heads in the category of disagree.

Table 34 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Sufficient furniture is available in rooms" differed significantly in favour of public schools' heads in the category of strongly agree.

**Table 35: The school has separate staffroom for teachers.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	48	26	2	19	13	108	11.6*
		Percentage	44.44%	24.07%	1.85%	17.59%	12.04%	100	
	Private	Frequency	30	20	2	31	25	108	
		Percentage	27.78%	18.52%	1.85%	28.70%	23.15%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 36: Drinking water facility is available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	30	32	1	26	19	108	1.9
		Percentage	27.78%	29.63%	0.93%	24.07%	17.59%	100	
	Private	Frequency	38	30	2	22	16	108	
		Percentage	35.19%	27.78%	1.85%	20.37%	14.81%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 37: Science laboratories are well equipped**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	40	16	5	25	22	108	12.0*
		Percentage	37.04%	14.81%	4.63%	23.15%	20.37%	100	
	Private	Frequency	20	14	4	32	38	108	
		Percentage	18.52%	12.96%	3.70%	29.63%	35.19%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 38: Co-curricular activities are arranged regularly.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	30	18	1	34	25	108	19.0*
		Percentage	27.78%	16.67%	0.93%	31.48%	23.15%	100	
	Private	Frequency	52	26	2	18	10	108	
		Percentage	48.15%	24.07%	1.85%	16.67%	9.26%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488****Table 39: Needed A.V. aids are available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	36	20	3	26	23	108	19.2*
		Percentage	33.33%	18.52%	2.78%	24.07%	21.30%	100	
	Private	Frequency	13	17	2	30	46	108	
		Percentage	12.04%	15.74%	1.85%	27.78%	42.59%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488****Table 40: Teachers use A.V. aids effectively**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	10	14	1	35	48	108	18.1*
		Percentage	9.26%	12.96%	0.93%	32.41%	44.44%	100	
	Private	Frequency	22	26	2	36	22	108	
		Percentage	20.37%	24.07%	1.85%	33.33%	20.37%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488**

Table 35 states that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "The school has separate staffroom for teachers" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 36 exhibits that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Drinking water facility is available" does not differ significantly.

Table 37 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Science laboratories are well equipped" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 38 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Co-curricular activities are arranged regularly" differed significantly in favour of private schools' heads in the category of strongly agree.

Table 39 reveals that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Needed A.V. aids are available" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 40 states that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Teachers use A.V. aids effectively" differed significantly in favour of public schools' heads in the category of strongly disagree.

**Table 41: Computer lab. Is available in library**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	14	16	3	40	35	108	14.6*
		Percentage	12.96%	14.81%	2.78%	37.04%	32.41%	100	
	Private	Frequency	34	22	2	28	22	108	
		Percentage	31.48%	20.37%	1.85%	25.93%	20.37%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 42: Sufficient books are available in library**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	46	16	2	30	14	108	15.2*
		Percentage	42.59%	14.81%	1.85%	27.78%	12.96%	100	
	Private	Frequency	22	16	3	37	30	108	
		Percentage	20.37%	14.81%	2.78%	34.26%	27.78%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 43: The curricula being taught at school is according to growing needs of the society.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	36	19	1	35	17	108	7.2
		Percentage	33.33%	17.59%	0.93%	32.41%	15.74%	100	
	Private	Frequency	24	14	2	38	30	108	
		Percentage	22.22%	12.96%	1.85%	35.19%	27.78%	100	

Not-Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 44: The curricula is revised regularly**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	42	16	4	26	20	108	1.6
		Percentage	38.89%	14.81%	3.70%	24.07%	18.52%	100	
	Private	Frequency	36	14	3	30	25	108	
		Percentage	33.33%	12.96%	2.78%	27.78%	23.15%	100	

Not-Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 45: Subjects and content being taught is relevant to the present and future needs to society.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	46	35	1	18	8	108	2.7
		Percentage	42.59%	32.41%	0.93%	16.67%	7.41%	100	
	Private	Frequency	37	34	2	25	10	108	
		Percentage	34.26%	31.48%	1.85%	23.15%	9.26%	100	

Not-Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 46: Give reasons for deterioration of quality at secondary level:**

Category	Sector		%
Heads	Public	Majority of heads are not regular heads they are acting heads	75%
		Polices are not implemented well	67%
		Teachers pay structure is low	60%
	Private	Buildings are not available according to need.	72%
		Affiliation procedure with board is complex	66%
		Government attention towards private institutions is not proper	62%



Table 41 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Computer lab. Is available in library" differed significantly in favour of private schools' heads in the category of strongly agree.

Table 42 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Sufficient books are available in library" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 43 reflects that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "The curricula being taught at school is according to growing needs of the society" does not differ significantly.

Table 44 states that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "The curricula are revised regularly" does not differ significantly.

Table 45 reveals that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' heads about the statement "Subjects and content being taught is relevant to the present and future needs to society" does not differ significantly.

**Table 47: Give suggestions to improve quality of secondary education:**

<b>Category</b>	<b>Sector</b>		<b>%</b>
<b>Heads</b>	<b>Public</b>	Policies should be implemented effectively	74 %
		Curriculum should be revised and updated	69 %
		Proper monitoring system should be introduced	66 %
	<b>Private</b>	Govt. should cooperate with private schools management	79 %
		Curricula should be revised regularly	76 %
		Training should be given to private school teachers	59 %

## 4.2 ANALYSIS OF QUESTIONNAIRE OF TEACHERS

**Table 48: Teachers in your school are well qualified**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	240	140	10	80	70	540	23.5*
		Percentage	44.44%	25.93%	1.85%	14.81%	12.96%	100	
	Private	Frequency	180	130	22	120	88	540	
		Percentage	33.33%	24.07%	4.07%	22.22%	16.30%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488

**Table 49: Teachers in your school are professionally well-trained**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	220	162	12	90	56	540	12.9*
		Percentage	40.74%	30.00%	2.22%	16.67%	10.37%	100	
	Private	Frequency	190	141	10	112	87	540	
		Percentage	35.19%	26.11%	1.85%	20.74%	16.11%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488

**Table 50: In-service training is provided to teachers**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	225	140	11	108	56	540	25.8*
		Percentage	41.67%	25.93%	2.04%	20.00%	10.37%	100	
	Private	Frequency	160	130	23	147	80	540	
		Percentage	29.63%	24.07%	4.26%	27.22%	14.81%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488

**Table 51: The selection procedure for recruitment of teachers is standardized**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	205	123	14	120	78	540	42.2*
		Percentage	37.96%	22.78%	2.59%	22.22%	14.44%	100	
	Private	Frequency	120	115	23	192	90	540	
		Percentage	22.22%	21.30%	4.26%	35.56%	16.67%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 52: Teachers have command over subject matter**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	260	106	14	82	78	540	35.0*
		Percentage	48.15%	19.63%	2.59%	15.19%	14.44%	100	
	Private	Frequency	184	175	25	92	64	540	
		Percentage	34.07%	32.41%	4.63%	17.04%	11.85%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 53: Your teachers are well prepared before delivering the lecture.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	204	166	16	82	72	540	11.1*
		Percentage	37.78%	30.74%	2.96%	15.19%	13.33%	100	
	Private	Frequency	244	133	8	92	63	540	
		Percentage	45.19%	24.63%	1.48%	17.04%	11.67%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 48 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Teachers in your school are well qualified" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 49 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Teachers in your school are professionally well-trained" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 50 reveals that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "In-service training is provided to teachers" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 51 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The selection procedure for recruitment of teachers is standardized" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 52 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Teachers have command over subject matter" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 53 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Your teachers are well prepared before delivering the lecture" differed significantly in favour of private schools' heads in the category of strongly agree.

**Table 54: Teachers have command over teaching methodology.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	279	122	24	75	40	540	23.4*
		Percentage	51.67%	22.59%	4.44%	13.89%	7.41%	100	
	Private	Frequency	210	136	30	88	76	540	
		Percentage	38.89%	25.19%	5.56%	16.30%	14.07%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 55: Present is given for encouragement of good teachers.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	187	110	36	135	72	540	28.1*
		Percentage	34.63%	20.37%	6.67%	25.00%	13.33%	100	
	Private	Frequency	207	167	30	91	45	540	
		Percentage	38.33%	30.93%	5.56%	16.85%	8.33%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 56: Incentives are given for encouragement of good teachers**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	117	145	32	136	110	540	66.5*
		Percentage	21.67%	26.85%	5.93%	25.19%	20.37%	100	
	Private	Frequency	221	144	25	108	42	540	
		Percentage	40.93%	26.67%	4.63%	20.00%	7.78%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 57: The teacher communicates the subject matter effectively in the class**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	216	145	21	110	48	540	23.5*
		Percentage	40.00%	26.85%	3.89%	20.37%	8.89%	100	
	Private	Frequency	209	120	33	84	94	540	
		Percentage	38.70%	22.22%	6.11%	15.56%	17.41%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 58: Job security for teachers is ensured**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	202	119	2	116	101	540	20.1*
		Percentage	37.41%	22.04%	0.37%	21.48%	18.70%	100	
	Private	Frequency	180	115	22	134	89	540	
		Percentage	33.33%	21.30%	4.07%	24.81%	16.48%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 59: Facilities for teachers of qualifications for teachers within / outside the country are available**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	140	182	24	112	82	540	40.6*
		Percentage	25.93%	33.70%	4.44%	20.74%	15.19%	100	
	Private	Frequency	110	123	26	121	160	540	
		Percentage	20.37%	22.78%	4.81%	22.41%	29.63%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 54 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Teachers have command over teaching methodology" differed significantly in favour of public schools' heads in the category of strongly agree.

Table 55 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Present is given for encouragement of good teachers" differed significantly in favour of private schools' heads in the category of agree.

Table 56 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Incentives are given for encouragement of good teachers" differed significantly in favour of private schools' heads in the category of strongly agree.

Table 57 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The teacher communicates the subject matter effectively in the class" differed significantly in favour of public schools' heads in the category of agree.

Table 58 states that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "job security for teachers is ensured" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 59 reveals that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Facilities for teachers of qualifications for teachers within/outside the country are available" differed significantly in favour of public schools' teachers in category of agree.



**Table 60: Student –teacher ratio is adequate.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	115	120	5	140	160	540	52.4*
		Percentage	21.30%	22.22%	0.93%	25.93%	29.63%	100	
	Private	Frequency	204	124	6	126	80	540	
		Percentage	37.78%	22.96%	1.11%	23.33%	14.81%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 61: School environment is suitable for teaching.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	210	132	10	110	78	540	20.6*
		Percentage	38.89%	24.44%	1.85%	20.37%	14.44%	100	
	Private	Frequency	152	126	8	136	118	540	
		Percentage	28.15%	23.33%	1.48%	25.19%	21.85%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 62: Merit is strictly followed in all matters.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	182	132	8	124	94	540	10.3*
		Percentage	33.70%	24.44%	1.48%	22.96%	17.41%	100	
	Private	Frequency	154	132	11	110	133	540	
		Percentage	28.52%	24.44%	2.04%	20.37%	24.63%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 63: You are satisfied with present pay structure.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	124	84	1	121	210	540	18.4*
		Percentage	22.96%	15.56%	0.19%	22.41%	38.89%	100	
	Private	Frequency	80	120	4	112	224	540	
		Percentage	14.81%	22.22%	0.74%	20.74%	41.48%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 64: Attention is given to the character building of students.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	192	174	4	90	80	540	3.6
		Percentage	35.56%	32.22%	0.74%	16.67%	14.81%	100	
	Private	Frequency	210	180	2	84	64	540	
		Percentage	38.89%	33.33%	0.37%	15.56%	11.85%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 65: Religious ethics are maintained at the school**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	223	182	2	85	48	540	2.2
		Percentage	41.30%	33.70%	0.37%	15.74%	8.89%	100	
	Private	Frequency	241	172	1	74	52	540	
		Percentage	44.63%	31.85%	0.19%	13.70%	9.63%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 60 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Student –teacher ratio is adequate" differed significantly in favour of public schools' teachers in the category of strongly disagree.

Table 61 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "School environment is suitable for teaching" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 62 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Merit is strictly followed in all matters" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 63 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "You are satisfied with present pay structure" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 64 indicates that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Attention is given to the character building of students" does not differ significantly.

Table 65 exhibits that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Religious ethics are maintained at the school" does not differ significantly.

**Table 66: Facilities are provided to the secondary school teachers in Transport:**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	82	69	7	142	240	540	104.4*
		Percentage	15.19%	12.78%	1.30%	26.30%	44.44%	100	
	Private	Frequency	134	182	9	115	100	540	
		Percentage	24.81%	33.70%	1.67%	21.30%	18.52%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 67: Facilities are provided to the secondary school teachers in Medical**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	142	192	5	131	70	540	76.0*
		Percentage	26.30%	35.56%	0.93%	24.26%	12.96%	100	
	Private	Frequency	120	92	1	176	151	540	
		Percentage	22.22%	17.04%	0.19%	32.59%	27.96%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 68: The teachers are competent to use A.V aids.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	45	78	12	170	235	540	14.8*
		Percentage	8.33%	14.44%	2.22%	31.48%	43.52%	100	
	Private	Frequency	56	40	10	188	246	540	
		Percentage	10.37%	7.41%	1.85%	34.81%	45.56%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 69: Your Headmaster / Headmistress involves you in decision making.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	172	132	5	130	101	540	35.0*
		Percentage	31.85%	24.44%	0.93%	24.07%	18.70%	100	
	Private	Frequency	119	214	10	99	98	119	
		Percentage	22.04%	39.63%	1.85%	18.33%	18.15%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 70: Your Headmaster / Headmistress likes to be a part of team while leading teachers.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	140	113	3	142	120	540	22.4*
		Percentage	25.93%	20.93%	0.56%	26.30%	22.22%	100	
	Private	Frequency	216	101	5	130	88	540	
		Percentage	40.00%	18.70%	0.93%	24.07%	16.30%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 71: Tasks being carried out in the institution are well-organized.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	132	137	10	121	140	540	13.2*
		Percentage	24.44%	25.37%	1.85%	22.41%	25.93%	100	
	Private	Frequency	180	114	11	125	110	540	
		Percentage	33.33%	21.11%	2.04%	23.15%	20.37%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 66 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Facilities are provided to the secondary school teachers in Transport" differed significantly in favour of private schools' teachers in the category of agree.

Table 67 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Facilities are provided to the secondary school teachers in Medical" differed significantly in favour of public schools' teachers in the category of agree.

Table 68 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The teachers are competent to use A.V aids" differed significantly in favour of private schools' teachers in the category of agree.

Table 69 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Your Headmaster / Headmistress involves you in decision making" differed significantly in favour of private schools' teachers in the category of agree.

Table 70 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Your Headmaster / Headmistress likes to be a part of team while leading teachers" differed significantly in favour of private schools' teachers in the category of strongly agree.

Table 71 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Tasks being carried out in the institution are well-organized" differed significantly in favour of private schools' teachers in the category of strongly agree.

**Table 72: Proper planning is conducted before launching any activity in school**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	241	152	1	94	52	540	19.4*
		Percentage	44.63%	28.15%	0.19%	17.41%	9.63%	100	
	Private	Frequency	152	241	1	94	52	540	
		Percentage	33.70%	37.41%	0.74%	15.74%	12.41%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 73: The student assessment procedure is fair.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	114	170	22	124	110	540	11.8*
		Percentage	21.11%	31.48%	4.07%	22.96%	20.37%	100	
	Private	Frequency	110	125	32	144	129	540	
		Percentage	20.37%	23.15%	5.93%	26.67%	23.89%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 74: Students are admitted according to merits**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	142	129	6	140	123	540	11.2*
		Percentage	26.30%	23.89%	1.11%	25.93%	22.78%	100	
	Private	Frequency	120	100	5	180	135	540	
		Percentage	22.22%	18.52%	0.93%	33.33%	25.00%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 75: Your school focuses upon qualitative aspect of education.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	164	120	6	129	121	540	3.3
		Percentage	30.37%	22.22%	1.11%	23.89%	22.41%	100	
	Private	Frequency	178	134	6	120	102	540	
		Percentage	32.96%	24.81%	1.11%	22.22%	18.89%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 76: Creative thinking is encouraged in class.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	156	220	10	90	64	540	11.3*
		Percentage	28.89%	40.74%	1.85%	16.67%	11.85%	100	
	Private	Frequency	120	208	12	114	86	540	
		Percentage	22.22%	38.52%	2.22%	21.11%	15.93%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 77: Subjects and content being taught is relevant to the present and future needs to society.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	242	127	1	92	78	540	17.9*
		Percentage	44.81%	23.52%	0.19%	17.04%	14.44%	100	
	Private	Frequency	189	119	4	134	94	540	
		Percentage	35.00%	22.04%	0.74%	24.81%	17.41%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488



Table 72 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Proper planning is conducted before launching any activity in school" differed significantly in favour of private schools' teachers in the category of agree.

Table 73 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The student assessment procedure is fair" differed significantly in favour of public schools' teachers in the category of agree.

Table 74 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Students are admitted according to merits" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 75 exhibits that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, frequency of responses of public and private schools' teachers about statement "Your school focuses upon qualitative aspect of education" does not differ significantly.

Table 76 states that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Creative thinking is encouraged in class" differed significantly in favour of public schools' teachers in the category of agree.

Table 77 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Subjects and content being taught is relevant to the present and future needs to society" differed significantly in favour of public schools' teachers in the category of strongly agree.

**Table 78: The teachers show respect towards students and encourages class participation.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	184	132	5	133	86	540	20.7*
		Percentage	34.07%	24.44%	0.93%	24.63%	15.93%	100	
	Private	Frequency	231	140	6	120	43	540	
		Percentage	42.78%	25.93%	1.11%	22.22%	7.96%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 79: The teacher maintaining an environment that is conducive to learning.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	241	172	1	74	52	540	24.8*
		Percentage	44.63%	31.85%	0.19%	13.70%	9.63%	100	
	Private	Frequency	210	132	4	126	68	540	
		Percentage	38.89%	24.44%	0.74%	23.33%	12.59%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 80: The teachers arrive on time.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	132	118	10	134	146	540	6.7
		Percentage	24.44%	21.85%	1.85%	24.81%	27.04%	100	
	Private	Frequency	145	102	12	109	172	540	
		Percentage	26.85%	18.89%	2.22%	20.19%	31.85%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 81: The teachers leave class on time.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	142	100	1	117	180	540	3.6
		Percentage	26.30%	18.52%	0.19%	21.67%	33.33%	100	
	Private	Frequency	139	111	3	129	158	540	
		Percentage	25.74%	20.56%	0.56%	23.89%	29.26%	100	
Not Significant			df = 4			$\chi^2$ at 0.05 level = 9.488			

**Table 82: Questioning is encouraged in class.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	182	172	6	106	74	540	31.2*
		Percentage	33.70%	31.85%	1.11%	19.63%	13.70%	100	
	Private	Frequency	240	192	1	62	45	540	
		Percentage	44.44%	35.56%	0.19%	11.48%	8.33%	100	
*Significant			df = 4			$\chi^2$ at 0.05 level = 9.488			

**Table 83: The students of your school of the institution compete well with the students of other schools.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	135	184	10	140	71	540	20.7*
		Percentage	25.00%	34.07%	1.85%	25.93%	13.15%	100	
	Private	Frequency	145	235	10	84	66	540	
		Percentage	26.85%	43.52%	1.85%	15.56%	12.22%	100	
*Significant			df = 4			$\chi^2$ at 0.05 level = 9.488			

Table 78 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The teachers show respect towards students and encourages class participation" differed significantly in favour of private schools' teachers in the category of strongly agree.

Table 79 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The teacher maintaining an environment that is conducive to learning" differed significantly in favour of public schools' teachers in category of strongly agree.

Table 80 reveals that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The teachers arrive on time" does not differ significantly.

Table 81 states that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The teachers class on time" does not differ significantly.

Table 82 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Questioning is encouraged in class" differed significantly in favour of private schools' teachers in the category of strongly agree.

Table 83 reveals that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The students of your school of the institution compete well with the students of other schools" differed significantly in favour of private schools' teachers in the category of agree.

**Table 84: Building facility is adequate**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	135	224	10	107	64	540	36.0*
		Percentage	25.00%	41.48%	1.85%	19.81%	11.85%	100	
	Private	Frequency	131	165	13	95	136	540	
		Percentage	24.26%	30.56%	2.41%	17.59%	25.19%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 85: Equipment is according to present and future needs**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	182	142	10	124	82	540	18.7*
		Percentage	33.70%	26.30%	1.85%	22.96%	15.19%	100	
	Private	Frequency	156	121	15	112	136	540	
		Percentage	28.89%	22.41%	2.78%	20.74%	25.19%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 86: Play ground is available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	122	118	17	148	135	540	4.2
		Percentage	22.59%	21.85%	3.15%	27.41%	25.00%	100	
	Private	Frequency	112	123	21	127	157	540	
		Percentage	20.74%	22.78%	3.89%	23.52%	29.07%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 87: Proper fans are available in all rooms of school.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	180	145	2	131	82	540	10.4*
		Percentage	33.33%	26.85%	0.37%	24.26%	15.19%	100	
	Private	Frequency	210	165	2	103	60	540	
		Percentage	38.89%	30.56%	0.37%	19.07%	11.11%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 88: Gas facility is available in all rooms of school.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	210	142	2	152	34	540	81.5*
		Percentage	38.89%	26.30%	0.37%	28.15%	6.30%	100	
	Private	Frequency	222	240	1	47	30	540	
		Percentage	41.11%	44.44%	0.19%	8.70%	5.56%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 89: The school has well maintained boundary wall.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	212	253	9	44	22	540	56.2*
		Percentage	39.26%	46.85%	1.67%	8.15%	4.07%	100	
	Private	Frequency	200	175	7	126	32	540	
		Percentage	37.04%	32.41%	1.30%	23.33%	5.93%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 84 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Building facility is adequate" differed significantly in favour of public schools' teachers in the category of agree.

Table 85 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Equipment is according to present and future needs" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 86 shows that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Play ground is available" does not differ significantly.

Table 87 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Proper fans are available in all rooms of school" differed significantly in favour of private schools' teachers in the category of strongly agree.

Table 88 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Gas facility is available in all rooms of school" differed significantly in favour of private schools' teachers in the category of strongly agree.

Table 89 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The school has well maintained boundary wall" differed significantly in favour of private schools' teachers in the category of strongly agree.

**Table 90: Sufficient furniture in available in rooms.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	182	145	3	100	110	540	28.6*
		Percentage	33.70%	26.85%	0.56%	18.52%	20.37%	100	
	Private	Frequency	192	160	4	134	50	540	
		Percentage	35.56%	29.63%	0.74%	24.81%	9.26%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488****Table 91: Drinking water facility is available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	223	167	2	112	36	540	8.6
		Percentage	41.30%	30.93%	0.37%	20.74%	6.67%	100	
	Private	Frequency	240	189	1	78	32	540	
		Percentage	44.44%	35.00%	0.19%	14.44%	5.93%	100	

**Not Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488****Table 92: Science laboratories are well equipped.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	206	142	16	101	75	540	13.4*
		Percentage	38.15%	26.30%	2.96%	18.70%	13.89%	100	
	Private	Frequency	152	172	20	122	74	540	
		Percentage	28.15%	31.85%	3.70%	22.59%	13.70%	100	

**\*Significant****df = 4** **$\chi^2$  at 0.05 level = 9.488**



**Table 93: Instructional facilities are appropriate.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	162	142	6	134	96	540	68.1*
		Percentage	30.00%	26.30%	1.11%	24.81%	17.78%	100	
	Private	Frequency	78	106	4	245	107	540	
		Percentage	14.44%	19.63%	0.74%	45.37%	19.81%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 94: Needed A.V. aids are available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	226	131	1	100	82	540	24.7*
		Percentage	41.85%	24.26%	0.19%	18.52%	15.19%	100	
	Private	Frequency	176	104	2	124	134	540	
		Percentage	32.59%	19.26%	0.37%	22.96%	24.81%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 95: Teachers use A.V. aids effectively.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	110	132	20	145	133	540	18.9*
		Percentage	20.37%	24.44%	3.70%	26.85%	24.63%	100	
	Private	Frequency	92	130	12	206	100	540	
		Percentage	17.04%	24.07%	2.22%	38.15%	18.52%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 90 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Sufficient furniture is available in rooms" differed significantly in favour of public schools' teachers in the category of strongly disagree.

Table 91 depicts that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Drinking water facility is available" does not differ significantly.

Table 92 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Science laboratories are well equipped" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 93 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Instructional facilities are appropriate" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 94 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Needed A.V. aids are available" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 95 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Teachers use A.V. aids effectively" differed significantly in favour of public schools' teachers in the category of agree.

**Table 96: The school has well managed hostel facilities for students.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	0	10	0	230	300	540	439.0*
		Percentage	0.00	1.85%	0.00	42.59%	55.56%	100	
	Private	Frequency	182	130	6	142	80	540	
		Percentage	33.70%	24.07%	1.11%	26.30%	14.81%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 97: Computer lab. is available in library.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	90	108	8	170	164	540	36.2*
		Percentage	16.67%	20.00%	1.48%	31.48%	30.37%	100	
	Private	Frequency	132	162	10	126	110	540	
		Percentage	24.44%	30.00%	1.85%	23.33%	20.37%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 98: Sufficient books are available in library.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	145	165	2	110	118	540	38.1*
		Percentage	26.85%	30.56%	0.37%	20.37%	21.85%	100	
	Private	Frequency	123	130	34	140	113	540	
		Percentage	22.78%	24.07%	6.30%	25.93%	20.93%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 96 exhibits that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The school has well managed hostel facilities for students" differed significantly in favour of private schools' teachers in the category of strongly agree.

Table 97 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Computer lab. Is available in library" differed significantly in favour of private schools' teachers in the category of agree.

Table 98 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Sufficient books are available in library" differed significantly in favour of public schools' teachers in the category of agree.

**Table 99: Give reasons for deterioration of quality at secondary level:**

Category	Sector		%
Teachers	Public	Polices are not implemented well.	70 %
		Curricula is not updated regularly.	64 %
		Teachers students ratio is high and no. of pupils is much	58 %
	Private	Students are not admitted according to merit.	69 %
		Teacher Salary is low	60 %
		Teacher job security is uncertain.	57 %

**Table 100: How can quality of secondary education be improved? Give some suggestions.**

Category	Sector		%
Teachers	Public	Teachers pay scale should be revised	71 %
		Teachers work load be minimized	64 %
		Curriculum should be updated	61 %
	Private	Teachers job security should be ensured	67 %
		Training should be provided to private schools teachers	62 %
		Students in private schools should be selected on merit	59 %

### 4.3 ANALYSIS OF QUESTIONNAIRE OF STUDENTS

**Table 101: Teachers at your school are well qualified.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	712	950	60	336	102	2160	87.2*
		Percentage	32.96%	43.98%	2.78%	15.56%	4.72%	100	
	Private	Frequency	658	810	50	380	262	2160	
		Percentage	30.46%	37.50%	2.31%	17.59%	12.13%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488

**Table 102: Teachers have command over subject matter.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	846	812	35	345	122	2160	116.0*
		Percentage	39.17%	37.59%	1.62%	15.97%	5.65%	100	
	Private	Frequency	820	712	45	255	328	2160	
		Percentage	37.96%	32.96%	2.08%	11.81%	15.19%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488

**Table 103: Your teachers are well prepared before delivering the lecture.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	755	540	120	425	320	2160	144.0*
		Percentage	34.95%	25.00%	5.56%	19.68%	14.81%	100	
	Private	Frequency	842	801	78	260	179	2160	
		Percentage	38.98%	37.08%	3.61%	12.04%	8.29%	100	

\*Significant

df = 4

$\chi^2$  at 0.05 level = 9.488

**Table 104: Teachers have command over teaching methodology.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	765	881	30	276	208	2160	15.5*
		Percentage	35.42%	40.79%	1.39%	12.78%	9.63%	100	
	Private	Frequency	721	842	20	360	217	2160	
		Percentage	33.38%	38.98%	0.93%	16.67%	10.05%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 105: The teacher communicates the subject matter effectively in the class**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	890	720	42	202	306	2160	16.6*
		Percentage	41.20%	33.33%	1.94%	9.35%	14.17%	100	
	Private	Frequency	960	682	57	226	235	2160	
		Percentage	44.44%	31.57%	2.64%	10.46%	10.88%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 106: School environment is suitable for teaching.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	590	810	61	385	314	2160	34.7*
		Percentage	27.31%	37.50%	2.82%	17.82%	14.54%	100	
	Private	Frequency	658	712	56	310	424	2160	
		Percentage	30.46%	32.96%	2.59%	14.35%	19.63%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 101 exhibits that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Teachers at your school are well qualified" differed significantly in favour of public schools' students in the category of agree.

Table 102 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Teachers have command over subject matter" differed significantly in favour of public schools' students in the category of strongly agree.

Table 103 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Your teachers are well prepared before delivering the lecture" differed significantly in favour of private schools' students in the category of agree.

Table 104 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Teachers have command over teaching methodology" differed significantly in favour of public schools' students in the category of agree.

Table 105 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The teacher communicates the subject matter effectively in the class" differed significantly in favour of private schools' students in the category of strongly agree.

Table 106 depicts that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "School environment is suitable for teaching" differed significantly in favour of public schools' students in the category of agree.



**Table 107: Attention is given to the character building of students.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	852	715	35	310	248	2160	26.9*
		Percentage	39.44%	33.10%	1.62%	14.35%	11.48%	100	
	Private	Frequency	830	642	32	292	364	2160	
		Percentage	38.43%	29.72%	1.48%	13.52%	16.85%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 108: Religious ethics are maintained at the school.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	970	830	45	205	110	2160	19.2*
		Percentage	44.91%	38.43%	2.08%	9.49%	5.09%	100	
	Private	Frequency	920	804	40	216	180	2160	
		Percentage	42.59%	37.22%	1.85%	10.00%	8.33%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 109: Facilities are provided to the secondary school students in Hostel:**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	0	30	144	860	1126	2160	445.4*
		Percentage	0.00	1.39%	6.67%	39.81%	52.13%	100	
	Private	Frequency	140	285	230	560	945	2160	
		Percentage	6.48%	13.19%	10.65%	25.93%	43.75%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 110: Facilities are provided to the secondary school students in Transport:**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	340	452	40	633	695	2160	198.6*
		Percentage	15.74%	20.93%	1.85%	29.31%	32.18%	100	
	Private	Frequency	515	723	42	360	520	2160	
		Percentage	23.84%	33.47%	1.94%	16.67%	24.07%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 111: Facilities are provided to the secondary school students in Medical:**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	752	645	31	386	346	2160	25.9*
		Percentage	34.81%	29.86%	1.44%	17.87%	16.02%	100	
	Private	Frequency	669	635	76	426	354	2160	
		Percentage	30.97%	29.40%	3.52%	19.72%	16.39%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 112: The teachers are competent to use A.V aids.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	332	630	80	446	672	2160	198.1*
		Percentage	15.37%	29.17%	3.70%	20.65%	31.11%	100	
	Private	Frequency	706	420	70	322	642	2160	
		Percentage	32.69%	19.44%	3.24%	14.91%	29.72%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 107 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Attention is given to the character building of students" differed significantly in favour of private schools' students in the category of strongly agree.

Table 108 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Religious ethics are maintained at the school" differed significantly in favour of private schools' students in the category of strongly agree.

Table 109 reflects that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Facilities are provided to the secondary school students in Housing" differed significantly in favour of private schools' students in the category of strongly disagree.

Table 110 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "Facilities are provided to the secondary school students in Transport" differed significantly in favour of private schools' students in the category of agree.

Table 111 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Facilities are provided to the secondary school students in Medical" differed significantly in favour of public schools' students in category of strongly agree.

Table 112 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' teachers about the statement "The teachers are competent to use A.V aids" differed significantly in favour of private schools' students in the category of agree.

**Table 113: The student assessment procedure is fair.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	342	706	64	619	429	2160	150.6*
		Percentage	32.69%	2.96%	28.66%	19.86%	32.69%	100	
	Private	Frequency	658	642	90	438	332	2160	
		Percentage	29.72%	4.17%	20.28%	15.37%	29.72%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 114: Students are admitted according to merits.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	921	572	111	459	97	2160	335.2*
		Percentage	42.64%	26.48%	5.14%	21.25%	4.49%	100	
	Private	Frequency	460	642	131	547	380	2160	
		Percentage	21.30%	29.72%	6.06%	25.32%	17.59%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 115: Your school provides quality education.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	824	764	45	316	211	2160	46.7*
		Percentage	38.15%	35.37%	2.08%	14.63%	9.77%	100	
	Private	Frequency	724	703	70	318	345	2160	
		Percentage	33.52%	32.55%	3.24%	14.72%	15.97%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 116: Creative thinking is encouraged in class.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	684	674	12	338	452	2160	13.4*
		Percentage	31.67%	31.20%	0.56%	15.65%	20.93%	100	
	Private	Frequency	588	674	17	389	492	2160	
		Percentage	27.22%	31.20%	0.79%	18.01%	22.78%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 117: Subjects and content being taught is relevant to the present and future needs to society.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	620	564	130	456	390	2160	24.9*
		Percentage	28.70%	26.11%	6.02%	21.11%	18.06%	100	
	Private	Frequency	512	542	110	524	472	2160	
		Percentage	23.70%	25.09%	5.09%	24.26%	21.85%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 118: The teacher encourages class participation.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	742	811	10	288	309	2160	64.1*
		Percentage	34.35%	37.55%	0.46%	13.33%	14.31%	100	
	Private	Frequency	780	954	12	257	157	2160	
		Percentage	36.11%	44.17%	0.56%	11.90%	7.27%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 113 exhibits that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The student assessment procedure is fair" differed significantly in favour of public schools' students in the category of agree.

Table 114 exhibits that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Students are admitted according to merits" differed significantly in favour of public schools' teachers in the category of strongly agree.

Table 115 exhibits that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Your school provides quality education" differed significantly in favour of public schools' students in the category of strongly agree.

Table 116 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Creative thinking is encouraged in class" differed significantly in favour of public schools' students in the category of strongly agree.

Table 117 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, frequency of responses of public and private schools' students about statement "Subjects and content being taught is relevant to the present and future needs to society" differed significantly in favour of public schools' students in the category of strongly agree.

Table 118 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, frequency of responses of public and private schools' students about statement "The teacher encourages class participation" differed significantly in favour of private schools' students in the category of agree.

**Table 119: The teacher maintains an environment that is conducive to learning.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	640	654	32	422	412	2160	32.3*
		Percentage	29.63%	30.28%	1.48%	19.54%	19.07%	100	
	Private	Frequency	678	745	34	423	280	2160	
		Percentage	31.39%	34.49%	1.57%	19.58%	12.96%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 120: The teachers arrive on time.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	342	452	40	633	693	2160	8.7
		Percentage	15.83%	20.93%	1.85%	29.31%	32.08%	100	
	Private	Frequency	326	416	42	721	655	2160	
		Percentage	15.09%	19.26%	1.94%	33.38%	30.32%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 121: The teachers leave class on time.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	765	645	30	412	308	2160	7.4
		Percentage	35.42%	29.86%	1.39%	19.07%	14.26%	100	
	Private	Frequency	742	710	32	415	261	2160	
		Percentage	34.35%	32.87%	1.48%	19.21%	12.08%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 122: Questioning is encouraged in class.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	450	356	120	624	610	2160	186.9*
		Percentage	20.83%	16.48%	5.56%	28.89%	28.24%	100	
	Private	Frequency	586	620	147	452	355	2160	
		Percentage	27.13%	28.70%	6.81%	20.93%	16.44%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 123: The students of your school of the institution compete well with the students of private sectors schools.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	745	602	154	314	345	2160	105.6*
		Percentage	34.49%	27.87%	7.13%	14.54%	15.97%	100	
	Private	Frequency	845	645	119	406	145	2160	
		Percentage	39.12%	29.86%	5.51%	18.80%	6.71%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 124: Building facility is adequate.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	430	812	115	563	240	2160	438.7*
		Percentage	19.91%	37.59%	5.32%	26.06%	11.11%	100	
	Private	Frequency	410	596	149	242	763	2160	
		Percentage	18.98%	27.59%	6.90%	11.20%	35.32%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488



Table 119 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The teacher maintains an environment that is conducive to learning" differed significantly in favour of private schools' students in the category of agree.

Table 120 indicates that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The teachers arrive on time" does not differ significantly.

Table 121 indicates that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The teachers leave class on time" does not differ significantly.

Table 122 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The Questioning is encouraged in class" differed significantly in favour of private schools' students in the category of agree.

Table 123 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The students of your school of the institution compete well with the students of private sectors schools" differed significantly in favour of private schools' students in the category of strongly agree.

Table 124 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Building facility is adequate differed significantly in favour of public schools' students in the category of agree..

**Table 125: Equipment is according to present and future needs.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	773	403	115	587	282	2160	10.6*
		Percentage	35.79%	18.66%	5.32%	27.18%	13.06%	100	
	Private	Frequency	710	426	130	554	340	2160	
		Percentage	32.87%	19.72%	6.02%	25.65%	15.74%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 126: Play ground is available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	792	641	120	342	265	2160	344.6*
		Percentage	36.67%	29.68%	5.56%	15.83%	12.27%	100	
	Private	Frequency	342	534	182	610	492	2160	
		Percentage	15.83%	24.72%	8.43%	28.24%	22.78%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 127: Proper fans are available in all rooms of school.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	340	482	104	452	782	2160	24.8*
		Percentage	15.74%	22.31%	4.81%	20.93%	36.20%	100	
	Private	Frequency	316	426	130	574	714	2160	
		Percentage	14.63%	19.72%	6.02%	26.57%	33.06%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 128: Gas facility is available in all rooms of school**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	380	482	132	484	682	2160	213.6*
		Percentage	17.59%	22.31%	6.11%	22.41%	31.57%	100	
	Private	Frequency	714	513	120	467	346	2160	
		Percentage	33.06%	23.75%	5.56%	21.62%	16.02%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 129: The school has well maintained boundary wall.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	923	867	18	242	110	2160	12.7*
		Percentage	42.73%	40.14%	0.83%	11.20%	5.09%	100	
	Private	Frequency	850	862	14	310	124	2160	
		Percentage	39.35%	39.91%	0.65%	14.35%	5.74%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 130: Sufficient furniture in available in rooms.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	695	465	117	471	412	2160	112.5*
		Percentage	32.18%	21.53%	5.42%	21.81%	19.07%	100	
	Private	Frequency	435	510	121	452	642	2160	
		Percentage	20.14%	23.61%	5.60%	20.93%	29.72%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 125 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Equipment is according to present and future needs" differed significantly in favour of public schools' students in the category of strongly agree.

Table 126 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Play ground is available" differed significantly in favour of public schools' students in the category of strongly agree.

Table 127 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Proper fans are available in all rooms of school" differed significantly in favour of public schools' students in the category of agree.

Table 128 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Gas facility is available in all rooms of school" differed significantly in favour of private schools' students in the category of agree.

Table 129 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The school has well maintained boundary wall" differed significantly in favour of public schools' students in the category of strongly agree.

Table 130 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Sufficient furniture is available in rooms" differed significantly in favour of public schools' students in the category of strongly agree.

**Table 131: The school has separate staffroom for teachers.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	753	1119	10	154	124	2160	42.8*
		Percentage	34.86%	51.81%	0.46%	7.13%	5.74%	100	
	Private	Frequency	645	1089	12	272	142	2160	
		Percentage	29.86%	50.42%	0.56%	12.59%	6.57%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 132: Drinking water facility is available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	612	621	115	462	350	2160	6.0
		Percentage	28.33%	28.75%	5.32%	21.39%	16.20%	100	
	Private	Frequency	642	648	132	424	314	2160	
		Percentage	29.72%	30.00%	6.11%	19.63%	14.54%	100	

Not Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 133: Science laboratories are well equipped.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	569	692	18	535	346	2160	80.3*
		Percentage	26.34%	32.04%	0.83%	24.77%	16.02%	100	
	Private	Frequency	492	505	11	628	524	2160	
		Percentage	22.78%	23.38%	0.51%	29.07%	24.26%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

**Table 134: Instructional facilities are appropriate.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	485	407	62	642	564	2160	103.5*
		Percentage	22.45%	18.84%	2.87%	29.72%	26.11%	100	
	Private	Frequency	245	457	41	772	645	2160	
		Percentage	11.34%	21.16%	1.90%	35.74%	29.86%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 135: Needed A.V. aids are available.**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	550	580	116	534	380	2160	242.3*
		Percentage	25.46%	26.85%	5.37%	24.72%	17.59%	100	
	Private	Frequency	256	436	102	652	714	2160	
		Percentage	11.85%	20.19%	4.72%	30.19%	33.06%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488**Table 136: Computer lab. is available in library**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
Heads	Public	Frequency	382	540	33	623	582	2160	144.0*
		Percentage	17.69%	25.00%	1.53%	28.84%	26.94%	100	
	Private	Frequency	671	590	30	504	365	2160	
		Percentage	31.06%	27.31%	1.39%	23.33%	16.90%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 131 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "The school has separate staffroom for teachers" differed significantly in favour of public schools' students in the category of agree.

Table 132 indicates that the obtained  $\chi^2$  value is smaller than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Drinking water facility is available" does not differ significantly.

Table 133 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Science laboratories are well equipped" differed significantly in favour of public schools' students in the category of agree. Table 134 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Instructional facilities are appropriate" differed significantly in favour of public schools' students in the category of strongly agree.

Table 135 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Needed A.V. aids are available" differed significantly in favour of public schools' students category of agree.

Table 136 shows that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Computer lab. is available in library" differed significantly in favour of private schools' students category of agree.

**Table 137: Sufficient books are available in library**

Category	Sector	Responses	SA	A	UD	DA	SDA	Total	$\chi^2$
<b>Heads</b>	<b>Public</b>	<b>Frequency</b>	235	275	84	742	824	2160	<b>9.4*</b>
		<b>Percentage</b>	10.88%	12.73%	3.89%	34.35%	38.15%	100	
	<b>Private</b>	<b>Frequency</b>	196	236	82	752	894	2160	
		<b>Percentage</b>	9.07%	10.93%	3.80%	34.81%	41.39%	100	

\*Significant

df = 4

 $\chi^2$  at 0.05 level = 9.488

Table 137 indicates that the obtained  $\chi^2$  value is greater than the critical value at 0.05 level. Thus, the frequency of responses of public and private schools' students about the statement "Sufficient books are available in library" differed significantly in favour of public schools' students in the category of agree.



## DISCUSSION

Secondary education is the anchor bay of education. It holds pivotal position in entire education system. On one hand, it provides middle level work force for the economy and on the other hand it acts as an input for higher education. The higher education which is expected to produce high quality professionals in different fields of social, economic and political life of the country depends upon the quality of secondary education. The concept of quality should be reviewed and expanded so as to provide secondary education that is more relevant and innovative in its objectives, contents, means and processes. Most of the developing countries are concerned about the low quality of secondary education that is marked by a high percentage of failures, repeaters and dropouts. In addition, expansion in enrollment in secondary education demands increasing budgetary allocation.

According to Satijia (1998), although basic minimum infrastructure and qualified teachers are inevitable to improve the quality of secondary education, it cannot be said with certainty by making them available; The standards of education will improve only when these resources are managed well. Improvement of curricula, textbooks and teachers are undoubtedly important inputs to the package of quality improvement, yet the delivery system occupies a far more significant place to make these inputs yield the desired results. In fact, unless the traditional management and delivery system undergo a radical change to suit the needs of the fast expanding secondary education, as also to meet the challenge of inadequacy of resources, there seems to be little hope of raising the quality of secondary education. Government schools are better than private schools regarding infrastructure. This study also

manifested that public sector secondary schools were better than that of private sector secondary schools regarding infrastructure.

Quality of management has a central role in secondary education. It has remained neglected for long and it is time that it now receives special attention. But obviously, it would necessitate a new look at some of the basic issues relating to policy, planning and management of secondary education, especially in the third world countries. In western countries private sector schools are very much better than public schools. (Singh, 1995). This study contrasted with the above mentioned results of the study conducted by Singh (1995) as in our country heads of public sector secondary schools were highly qualified academically as well as professionally having more experience as compared to heads of private sector secondary schools.

Good quality education depends on the availability and effective use of (a) teaching methodologies designed to encourage independent thinking; (b) capable, motivated, well-trained teachers; (c) appropriate, well-designed curriculum; (d) effective learning materials including, but not limited to, textbooks; (e) a suitable, well-maintained learning environment; and (f) a valid and reliable examination system. The situation in Pakistan's secondary schools falls short in most aspects. Teaching is almost entirely in the lecture/recitation mode. Teachers are often poorly motivated and have few opportunities to keep themselves up-to-date in content or methodology; curriculum is outdated and poorly disseminated; textbooks do not match curriculum objectives, are badly organized, are of low production quality; learning materials, except for textbooks, are scarce; and examinations are technically flawed and their credibility is undermined by widespread cheating and other malpractices (Saeed, 1987). Results of the undertaken study showed that teachers of public sector secondary schools were

highly qualified academically as well as professionally having more experience as compared to teachers of private sector secondary schools.

Only motivated trained teachers can make the teaching learning process effective and meaningful. Proper training can motivate the teachers and enhance their performance (Hussain, 1997). The study showed that teachers of public sector secondary schools were well trained as compared to teachers of private secondary schools.

Proper physical facilities are necessary for creating conducive environment for teaching learning process. The study showed that position of public sector schools, were better than that of private sector secondary schools regarding physical facilities.

According to Farooq (1994), curriculum is needed to attain the objectives. So objectives have to be defined in terms of expected outcomes of pupil's-behaviour. If the curriculum is thus specified, we know the present status of the pupils and the expected outcomes and the gap between the two. Then we know where and how to guide the child through suitable experiences. If we do not have a well-defined curriculum, there is a possibility of the learner and the teacher to be engaged in purposeless activities. The element of ambiguity and vagueness will be avoided, if there is a clearly specified curriculum.

To improve the quality of education, two curriculum issues must be addressed: the number and range of courses offered and the content of the individual courses. The first issue is faced by high schools in all systems that include both compulsory and optional subjects: that is the appropriate tradeoff between responding to student: preferences and using facilities and teachers efficiently. The World Bank mission visited high schools in which as few as nine students opted for a particular subject.

Some schools use certain specialist teachers as little as two hours a day. The World Bank mission recommends that Pakistan authorities review carefully the cost of providing choice, with a view to reducing the range of subjects offered and making better use of teachers' time, perhaps by requiring that subject specialists be prepared to teach two subjects, whenever the number of hours required by their first subject does not constitute a full teaching load (Singh, 2000). The study showed that in both types of schools public as well as private neither curriculum being used were updated and according to the needs of the society nor it was revised regularly.

## CONCLUSIONS

1. The study revealed that private sector schools had actually less number of students and teachers at secondary level as compared to public sector schools. The results of 10<sup>th</sup> class students in boards' examinations of private schools were better than government schools. With respect to ownership of building almost 98% public sector schools had their own buildings while majority of private schools were running in rented buildings. In public schools, student teacher ratio was higher than private schools.
2. The quality of education is the most burning issue of the day. Administration is considered to be the most important ingredient of any organization, for it serves as the asset for the most precious assets of the nations which are educational institutions. The entire study revealed that heads of private sector secondary schools were better than heads of public sector secondary schools regarding involvement of other staff in decision making, keeping themselves as a part of team while leading them and carrying out the tasks in a well-organized fashion. But the heads of public sector secondary schools were more qualified academically as well as professionally having more administrative experience as compared to private sector secondary schools' heads.
3. It is no more rhetoric but a time tested reality that destiny of the nations is shaped in classrooms. It means that teachers are the central figure in education system of any country. The present research found that teachers of public secondary schools were more qualified academically as well as professionally

having command over teaching methodology as compared to the teachers of private secondary schools. In public schools, in service training was provided to teachers and their selection was done on merit. They had also job security and their pay structure was better. In contrast, private sector was lacking in these facilities. Behaviour of teachers of private schools was motivating who encouraged student questioning to enhance creativity among students whereas public schools were found lacking in these factors.

4. In the new world's scenario of technological changes and due to technological advancement, audio visual aids have become an important source of delivering lecture more efficiently and effectively. The study exhibited that availability of A.V. aids was excessive in public secondary schools as compared to private secondary schools but their use was more frequent in private secondary schools.
5. The quality of education is intrinsically integrated and directly proportional to the quality of infrastructure. The physical facilities hold paramount position in educational institutions. It was found that position of physical facilities was better in public secondary schools than in private secondary schools with respect to buildings, libraries, play grounds, furniture while position of private sector secondary schools was better in availability of computer labs and gas facilities.
6. The quality of education also owes a lot to the quality of curriculum. It was found that respondents of both the systems were of the view that curriculum of

both type of systems was not updated and revised regularly fulfilling emerging needs of society.

7. The quality of students of any educational institution also shows quality of that institution. The study showed that students in public schools were admitted according to merit but there were no specific merit criteria in private schools.

## RECOMMENDATIONS

On the basis of conclusions of the study, following recommendations were made:

1. The enrollment of students was higher in public sector than private sector. It is therefore recommended to establish more schools in the public sector. School mapping kept in mind before establishing new schools.
2. The heads and teachers of schools should take such necessary actions which may help to raise academic standard of these schools. The heads of public schools should take seriously into consideration the problem of their low pass percentage.
3. Teachers of public schools may be made accountable on showing poor result in examinations. They must also be rewarded with incentives for showing good results.
4. Teachers of both systems should be given opportunities to regular in-service training in order to improve their teaching methodology.
5. Libraries of public and private schools should be kept well maintained and all necessary books be available and students and teachers should be encouraged to get benefit from their library.
6. All necessary educational facilities such as well maintained buildings; science laboratories with standardized apparatus and needed audio visual aids be provided and maintained by school management.
7. Teachers should be encouraged to make use of A.V. aids more and more to make teaching process more effective.



8. The school curriculum should be updated according to the emerging needs of the society and it should be revised regularly.
9. The study indicates that due consideration was not given to merit in student admission procedure. Merit should be the sole consideration for entry to private universities. Access to higher education, therefore, be based on entry tests that measure the aptitude and ability of suitable candidates for higher learning. For construction of valid and reliable aptitude/ability tests, the services of National Testing Service be fully utilized.
10. Hostel and transport facilities should be provided to teachers as well as students in both the systems.

## SUMMARY

The quality education is an indispensable and inevitable agent for desired change as education is a process of civilization and development. The triangular shaped edifice of education has three tiers i.e. the elementary, the secondary and the tertiary tier. All the three have their own importance. The secondary stage is more pivotal and crucial stage, for it serves as a link between elementary and higher education and its importance is also vital as it is a terminal stage too. The issue of deterioration of quality in education in Pakistan, especially decline in quality of secondary education, was the slogan of the day. The major purpose of this research was to compare the quality of education in public and private schools of Punjab with these objectives: 1) To investigate the number and qualification of teachers, the enrollment of students as well as student-teacher ratio in both types of schools. 2) To compare the results of the students of both types of schools who appeared in boards' examination. 3) To compare the quality of education in terms of quality of management, quality of infrastructure, quality of teaching staff, quality of curricula etc. in both types of schools. 4) To make recommendations for improvement of the quality of education in both types of schools.

All the heads, secondary school teachers and students of 10<sup>th</sup> class of public and private sector secondary schools of the Punjab constituted the population of the study. Punjab is generally distributed in three different stratas, which are North Punjab, Central Punjab, and South Punjab. Due to limited time and resources available to the researcher, the study was delimited to the nine districts of Punjab namely Rawalpindi, Chakwal, Attock, Lahore, Gujranwala, Dera Ghazi Khan, Bahawalpur,

Mianwali and Sargodha. Two hundred and sixteen secondary schools (twenty-four secondary schools from each sample district) were randomly selected. The proportion of public sector schools and private sector schools, boys and girls schools was equal. All the heads of sampled 24 secondary schools of public and private sector from each district (the proportion of public sector schools and private sector schools, boys and girls schools was equal) were included in sample. One thousand and eighty teachers (one hundred and twenty from each sample district) constituted the sample of the study. The proportion of the public and private and male and female teachers was fifty fifty. Four thousand, three hundred and twenty students studying in 10th class in public and private high schools of already sampled district of Punjab were randomly selected as the sample of the study. The proportion of public and private and male and female students was fifty fifty. Three questionnaires, one each for heads, secondary school teachers and students prepared and validated through pilot-testing were used as the research instruments of the study. The researcher visited the target areas personally, distributed the questionnaires himself, and got filled questionnaires back from respondents. The data obtained was tabulated and analyzed by using simple percentage and two way chi square tests. Conclusions were drawn and recommendations were made in the light of the objectives of the study.

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