

**HIGHER SECONDARY EDUCATION IN MIZORAM:**

**AN ANALYTICAL STUDY**

**LALREMPUII**

**DEPARTMENT OF EDUCATION**

**MIZORAM UNIVERSITY**

HIGHER SECONDARY EDUCATION IN MIZORAM:

AN ANALYTICAL STUDY

BY

LALREMPUII

EDUCATION DEPARTMENT

Submitted in partial fulfillment for the requirement of the Degree of Doctor of  
Philosophy in Education of Mizoram University, Aizawl

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**MIZORAM UNIVERSITY**

**AIZAWL-796004: MIZORAM**

**Prof. Lalhmasai Chuaungo**  
**Department of Education**

**Mobile: 9436154401**  
**E-mail: lalhmasai.c@gmail.com**

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**Dated Aizawl, the 22<sup>th</sup> October, 2019**

**CERTIFICATE**

This is to certify that the thesis entitled “*Higher Secondary Education in Mizoram: An Analytical Study*” submitted by Lalrempuii, for the degree of Doctor of Philosophy in Education of the Mizoram University, Aizawl, India, embodies the record of original investigations carried out by her under my supervision. She has been duly registered and the thesis presented is worthy of being considered for the award of Ph.D. degree. This research work has not been submitted for any degree of any other university.

**(Prof. LALHMASAI CHUAUNGO)**  
**Supervisor**

**MIZORAM UNIVERSITY**  
**AIZAWL: MIZORAM – 796004**

**Month: October**

**Year: 2019**

**DECLARATION**

I, Lalrempuii hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or, to the best of my knowledge to anybody else; and that the thesis has not been submitted by me for any research degree in any other University/Institute.

This is being submitted to Mizoram University for the degree of Doctor of Philosophy in Education.

**(LALREMPUII)**  
**Candidate**

**(Prof. B.B. MISHRA)**  
**Head**  
**Department of Education**

**(Prof. LALHMASAI CHUAUNGO)**  
**Supervisor**

## **ACKNOWLEDGEMENT**

It is a matter of immense pleasure to write acknowledgement finally. First of all, I would like to thank God for His protection and giving me the ability and opportunity to undertake this research study.

I would like to express my deep sense of gratitude and a thousand thanks to my research supervisor Prof. Lalhmasai Chuaungo, Department of Education, Mizoram University, Aizawl, who amidst her busy hours, took a genuine, keen and personal interest at each and every stage of my study. Her expert and scholarly guidance coupled with her calm, serene, approachable manner and continuous guidance acted as guiding forces behind the successful completion of my research work. Without her supervision, the study would not have come out in its present form.

I convey my sincere gratitude to all the Professors and staff of the Department of Education for their constant guidance, support and cooperation throughout the course of the study.

I offer my heartfelt thanks and gratitude to the staff of School Education Department, Government of Mizoram and Mizoram Board of School Education who were most cooperative and for providing me with the necessary materials, annual reports and other information in connection with my study. Their help had facilitated my research study leading it to a successful completion.

I am thankful to the principals, teachers and students of higher secondary schools in Mizoram who responded to my questionnaires and for placing all the available records at my disposal during data collection. I am indeed grateful to them

for without their help, it would not have been possible for me to complete this work.

I would also like to thank all my friends for their moral support throughout this study.

Last, but not the least, I convey my heartfelt thanks to my family for their faith in me and for instilling in me the courage to strive and achieve higher goals in life. I am also thankful to my sons for being so good during my study and to my husband for his support, love, understanding and encouragement to complete this research work.

(LALREMPUII)

**CHAPTER I**  
**INTRODUCTION**



## **CHAPTER – I**

### **INTRODUCTION**

#### **1.1 Theoretical Framework**

Higher secondary education implies the stage of education that comprises Classes XI and XII. A ten-year general education is followed by two years of higher secondary school to provide specialized courses of studies in classes XI and XII. The majority of students exit school after Class-X (approximately age 15). For those who stay, schooling becomes differentiated. Based on performance on the 10<sup>th</sup> Class examinations, students enter higher secondary stream for their last two years (Classes XI and XII) of schooling before college. At this stage, the students will be provided with general and vocational courses in conformity with their aptitudes and abilities. Education at this stage would be divided into two streams – Academic (which consists of Arts, Science and Commerce) and Vocational. The most prestigious stream (which also has the highest cut-off in terms of marks required in the Class X examinations) is the Science stream, the second is Commerce, and the third is Arts. Students in the Science stream almost always study mathematics, physics and chemistry. Additional subjects may include biology/botany/zoology for those intending to take medical entrance examinations and computer science for those pursuing engineering degrees. Those in the Commerce stream study economics, accounting, mathematics, and commerce. Students in the Arts stream study options that include history, geography, political science, education, philosophy, psychology, languages, arts, music, etc. Most schools only offer a few of these subjects, which

obviously restrict student latitude in selecting area of focus (Cheney, Ruzzy & Muralidharan, 2006).

It is presumed that at the end of 10 years about 30% students would be siphoned off into vocational courses. For most students it will be the terminal stage or the stepping-stone to careers. It will introduce students to numerous vocational courses in art, crafts, commerce, agriculture, horticulture, technology, pharmacy, medicine etc. This stage will improve the occupational competence of students and prepare them as middle engineers, technicians. It is believed that vocationalization at this stage would not only provide the country with the technical skills it sorely needs but also put a brake on the proliferation of universities (Khongwir, 2004).

Higher secondary education is conducted in schools. Some of these institutions are privately operated while others are government-operated institutions. The curricula for higher secondary institutions are determined by State or Central Boards of Secondary Education and students sit for examinations at the conclusion of Class- XII. After completing their schoolwork, students sit for another set of exams (the Higher Secondary Certificate Examinations) which determines their higher education options. The colleges or universities specify cut-off marks for admission in various courses of study. The cut-off marks can vary between courses in the same university/college, between similar courses in different universities/colleges and from year to year in the same course. Some courses and some universities/institutions/colleges are in greater demand than others and therefore acceptance is more competitive.

The top students wanting to pursue professional school (medical, engineering, law) sit for additional school-based entrance examinations to determine their admissions into these specific programmes. Most Science stream students try to get into the engineering or medical colleges as these have the most prestige within India. For the Commerce line, students typically try to get admissions into a commerce, accounting, business, or technology programme of study. Most students in the Arts stream aim to enter the arts colleges.

Vocational and technical education is also an option in higher secondary schools. The aim of vocational education is to gain a broad knowledge about occupations, not training in specialized subjects. The courses consist of a language course (15%), general foundation courses (15%) and vocational electives (70%), of which about half consists of practical work. Electives are chosen from a wide variety of areas including agriculture, engineering and technology, business and commerce, home science, health and para-medical services, and humanities. Courses are employment-oriented, but also can provide access to courses in related areas of higher education. Examinations at this level are conducted by the All India and State Boards of Vocational Education.

Only few students are opting for the vocational stream. This is attributed to the lack of industry-school linkages and the system has not convinced students that this stream can prepare them for real jobs and careers (Cheney, Ruzzy & Muralidharan, 2006).

The aims and objectives of higher secondary education are as follows:-

1. *Scientific Basis of Education – increasing Productivity.*
  - (a) Science education to become an integral part of school education and ultimately a part of all courses at university stage.
  - (b) Work experience also to become an integral part of all education.
  - (c) Orienting work-experience to technology and industrialization.
  - (d) Extending application of science to agriculture.
  - (e) Vocationalization of secondary education.
  - (f) Technical education to be stressed.
  
2. *Strengthening Social and National Integration.*
  - (a) Development of community life in every educational institution.
  - (b) Adoption of a common school system of public education as the national goal.
  - (c) Continuation of N.C.C. on its present basis.
  - (d) Development of alternate programme of social service.
  - (e) Formation of an appropriate language policy.
  - (f) Continuation of the use of English as the medium of instruction at the All- India institutions.

3. *Education and Consolidation of Democracy.*

- (a) Provision of free and compulsory education of good quality for all children up to the age of 14 years as envisaged in Article 21 (A) of the Constitution.
- (b) Strengthening social education.
- (c) Training of efficient leadership.
- (d) Provision of equal opportunities to all children of merit and promise.
- (e) Equal opportunities to all.

4. *Development of Social, Moral and Spiritual Values.*

- (a) Setting apart of a few periods in the time-table for moral instruction.
- (b) Promotion of tolerant study of all religions so that citizens can understand each other better and live amicably together.
- (c) To forge a society with a wider look through secular education (Khanna, Lamba, Saxena & Murthy, 1985).

## **1.2 History and Development of Higher Secondary Education in India**

The present system of Higher Secondary Education is the outcome of intensive researches made by numerous Education Commissions and eminent educationists, brainstorming deliberations and discussions by different Committees and Conferences during the last 100 years. Prior to the introduction of the Higher

Secondary Education, the duration of the school course was 11 years and the 2 years Intermediate Education was exclusively a part of collegiate education that offered 2 years degree course. Thus, the dividing line between the School and University courses was drawn at Matriculation.

The journey of the Higher Secondary Education started way back in 1917 with the appointment of the Calcutta University Commission popularly known as the Saddler Commission. It was the first Commission that suggested to make the duration of school education to 12 years and to put forward the idea of restructuring of education in the shape of 10 + 2+ 3 ( Nelloyappan, 2015). It had come to the conclusion that the two years intermediate course really belonged to schools. It did not however suggest vocationalization of education (Khongwir, 2004).

The University Education Commission (1948-49) also known as the Radhakrishnan Commission under the Chairmanship of Dr S. Radhakrishnan also recommended for adoption of a uniform pattern of 10 + 2 + 3 for the entire country. It also added to them the vocational plans at the +2 level.

The Government of India set up the Secondary Education Commission (1952-53) under the chairmanship of Dr. A. Lakshmanaswami Mudaliar popularly known as the Mudaliar Commission recommended adding the first year of the Intermediate course to the Schools and the second year to the 2 year under graduate degree course so as to create the 3 year degree course (which means education should commence after a four year or five years' period of primary or Junior Basic education and should include: (a) the middle or senior basic or junior secondary stage of 3 years, and (b) higher secondary stage of four years) ( Nelloyappan, 2015).

The origin of Higher Secondary Education in India can be traced back to the report of this Commission. In reviewing the problems of secondary education in India, the Commission considered the basic shortcomings of the then secondary schools of the country. The Commission observed the traditional curriculum and methods of teaching, excessive emphasis on the study of English Language, lack of personal contact of teacher and taught, growing indiscipline, increase in the size of classes, etc. The Commission opined for the reorientation of secondary education as a whole and suggested for bringing about a greater diversity and comprehensiveness in educational courses at the secondary stage.

Further the Commission recommended for 5 years primary, 3 years lower-secondary, 4 years multipurpose higher secondary and 3 years of first degree course. According to the suggestions of the Commission, initiative was taken by the central government for the conversion of existing secondary schools to higher secondary multipurpose schools, therefore, in the first plan 250 multipurpose schools were established.

Gradually, steps were taken to convert more and more schools to higher secondary multipurpose schools. As such, by the end of second plan the number of higher secondary schools was 3121. During the third plan, the programmes initiated in the second plan continued and greater stress was laid on the conversion of high schools into higher secondary schools with scope for a number of elective subjects, expansion and improvement of facilities for the teaching of science, provision of educational and vocational guidance, reform in evaluation system etc.

It was hoped to increase the number of higher secondary schools to 6390, by the end of the plan and to strengthen such schools already converted during second plan (Disha, 2016).

The Planning Commission Panel (1960), the third conference of the Vice-Chancellors of Indian Universities (1961), The Central Advisory Board of Education Meeting (1962), The Conference of the State Education Ministers, Vice-Chancellors and eminent educationists (1963) had all recommended the same 12 years of school education up to the higher secondary level and 3 years of first degree course (Nellayappan, 2015).

The most significant feature during the period was the appointment of Indian Education Commission or the Kothari Commission (1964-66) under the chairmanship of Dr. D. S. Kothari. This Commission gave much emphasis to the higher secondary stage of education. It also recommended the present structure of 10+2+3 pattern of education. It held a comprehensive review of educational development during the preceding 18 years and prepared a perspective plan of development spread over the next two decades (Khanna, Lamba, Saxena & Murthy, 1985).

The Education Commission found it highly desirable to adopt the uniform pattern of 10+2+3 for school and college classes throughout the country. The National Integration Committee set up by the Education Ministry 1966 under the chairmanship of Dr. Sampurnand recommended that from the point of view of National Integration, the uniform pattern of 10+2+3 should be adopted for school and college classes in all parts of the country. The recommendations of the Education



Commission, 1964-66 regarding restructuring of education were considered at various levels and incorporated in the National Policy on Education, 1968. National Policy on Education reads as, “It will be advantageous to have broadly uniform educational structure in all parts of the country. The ultimate objective should be to adopt the 10+2+3 pattern, the higher secondary stage of two years located in schools, colleges or both according to local conditions” (NPE, 1974). The Central Advisory Board on Education in 1974 also strongly supported the 10+2+3 System and expressed the view that it should be implemented on a priority basis.

The epoch-making changes suggested in the Kothari Commission document regarding the new pattern of education 10+2+3 gained intellectual acceptance. It ushered in a new way of thinking of the new challenges in the field of education (Disha, 2016).

The Kothari Commission in their report recommended introduction of 10+2 education in the schools. The report stipulated that the task of implementing 10+2 stage of education in the schools should be completed within the Fifth Plan period. The Kothari Commission report, having been accepted by the Government of India, all the State Governments of the country were requested to introduce the +2 stage of education in schools in the manner suggested in their report within the time-frame fixed for the purpose. In the year 1995, while some of the States have introduced the 10+2 education in schools; quite a number of States could not implement the new system fully. While switching over to the new educational system, some States have accomplished the task partially by way of simultaneously allowing Pre-University courses to continue side by side (Minutes of the meeting held in the Office Chamber

of Hon'ble Minister, Education on 7<sup>th</sup> July, 1995 at 1:00 p.m. regarding taking over of +2 stage of education by the State Government).

The National Policy of Education (1968 & 1986) and its revised formulation (1992) envisaged a uniform pattern of school education (10+2) across all Indian States and Union Territories (UTs ) (Shimame, 2007).

Therefore, a uniform structure of school education, the 10+2 system has been adopted by all the States and UTs of India. However, within the States and the UTs, there remain variations in the number of classes constituting the elementary, secondary and higher secondary school stages, age for admission to Class I, medium of instruction, public examinations, teaching of Hindi and English, number of working days in a year, academic session, vacation periods, fee structure, compulsory education, etc (Babu, 2009).

Iswarbhai Patel Committee was appointed in 1975 to review the syllabus and textbooks prepared by the National Council of Educational Research and Training (NCERT) for 10+2 pattern of school education (Aggarwal, 2004).

The Education Commission of 1964-66 has recommended the 10+2+3 system of education as a national structure for the entire nation. The recommendations of the Education Commission (1964-66) were considered by the Government of India and a resolution on the National Policy on Education was adopted after consulting both Houses of Parliament (1968). Among other things the resolution laid great emphasis on the fulfillment of the Directive Principle contained in Article 45 of the Constitution regarding the provision of universal and free education for all children

in the age-group 6-14. At the secondary stage, it highlighted the urgency to adopt the new pattern of 10+2+3 for school and college classes with an intensive effort to diversify and vocationalize the +2 stage (CABE, 1976). Based on these recommendations, the Government of India had issued a policy statement approving this structure (10+2+3) as a national structure in 1968.

After long years of deliberations and recommendations of different Education Commissions, the Government of India had notified the National Policy on Education 1968 and the National Structure of Education (10 + 2 + 3) came in to existence. Thus the process of upgrading of High Schools into Higher Secondary schools began from the implementation of NPE 1968. But, the two year higher secondary course at the beginning was conducted both at the schools and the colleges. Later, the objectives of the school education covering the +2 stage of last two years were redrafted under the National Policy on Education 1986.

The new policy of 1986 clearly recommended the +2 stage or the senior secondary education to be properly belongs to the school education and the colleges offering +2 stage of education were asked to transfer those classes to the schools (Nellayappan, 2015).

As a result, the new pattern was first introduced in Delhi in 1975 and in all secondary schools affiliated to the Central Board of Secondary Education. By the end of 1977 - 78, the new pattern had been introduced in 19 States/Union Territories, namely, Assam, Andhra Pradesh, Gujarat, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Sikkim, Tamil Nadu, Tripura, West Bengal, Andaman and Nicobar Islands, Arunachal Pradesh, Chandigarh, Dadra and Nagar Haveli, Delhi, Goa,

Daman and Diu, Lakshadweep and Pondicherry. Though the States of Meghalaya, Uttar Pradesh and the Union Territory of Mizoram have a 10-year school pattern followed by a 2 - year pre - university Intermediate, they have not as yet introduced the new pattern.

The states of Haryana, Himachal Pradesh, Punjab and Rajasthan have accepted in principle to adopt the new pattern. With the fall of the Congress Government at the Centre in 1977, the Janata Government under the Chairmanship of Shri. Ishwarbhai J. Patel formulated its own educational policy on education. The committee was of the opinion that the scheme of the 10+2+3 was not practical and the Curriculum too heavy (Pandey1977). The Report of the Ishwarbhai J. Patel Review Committee on 10 year school curriculum, recommended the introduction of Socially Useful Productive Work as an essential component in classes VI to X. The consequences of the recommendations had to be reflected in the curriculum for classes XI and XII. In July 1978, there was a conference of Education Ministers of all the states of the country that proposed the abolition of the 10+2+3 pattern of education. However, with the fall of the Janata Government in 1980, it was again felt that the 10+2+3 scheme was useful for all round development of the country and it should be properly implemented. Today, the situation, as viewed from the national angle, is that the + 2 Stage is accepted everywhere but there is a certain degree of ambiguity, even ambivalence, in regard to the various other issues connected with it (Singh, 1995). After the implementation of the new pattern in all the states, it is hope that revolutionary changes will take place in the field of education.

In 1977, just before the Government instituted the 10+2+3 system, India had four patterns of school leaving exams in operation in India: 10+2+3, 10+2+2+2, 11+3, and 11-12+1+3. A national system was required, one which brought uniformity into the school system, ensured mobility across states, comparability with the rest of the world, and insisted on eight years of elementary school.

The idea was born in the Education Commission of 1964-66, headed by former physics Professor D. S. Kothari, who went to become Chairperson of University Grants Commission, and was assisted by J.P. Naik, the scholar who set up the Indian Council of Social Science Research. But over 30 years later, a lot remains unchanged.

Though almost all states have introduced the +2 system, in some cases it is administered by colleges, not school boards such as the CBSE. Vocational education after Class X is still a distant dream though a subsequent committee headed by Ishwarbhai Patel recommended that 50 % of Class X students be sent to the vocational stream. And there is still little clarity on the three-language formula. The one lasting legacy though is that children receive general education till Class 10, making science compulsory.

An *India Today* article said in 1977 that the idea behind the +2 system was to "weed out some students at the end of the first stage of schooling giving such students a certificate. And by adding one more year to school education, the system hopes to improve the standard of university education". Clearly, it has not happened. As NUEPA's R. Govinda says three things are a must: "Structural harmony in

schools, a national curriculum framework in consultation with states, and a common national database."

What the Union Minister for Education and Social Welfare P.C. Chunder said in 1977 – "There is always room for improvement"– is valid even now. Nowhere was it more evident than in the suggestion that school boards could scrap the Class X board exam. What may work for CBSE, which administers the exam, for over 10,000 schools, may not be right for the over 1.5 million schools in the country (Bamzai, 2009).

The history of Higher Secondary Education described above makes it crystal clear that the higher secondary classes (11 & 12) are integral part of the school education and it needed no explanation why the finest brains of the country had brought this system into existence.

The higher secondary stage of education is a crucial stage in the academic career of children as diversion of professional selection takes place during this stage. The educational administrators and teachers should remember one thing at this juncture. Even though the diversification of course of studies starts after passing of Class X, children should be helped to identify their natural aptitude and inclination towards the different courses when they are in Classes IX and X (Nellayappan, 2015).

The importance of higher secondary stage of education as a terminal stage for a large number of the student population as also feeder stage to professional education cannot be under scored. Almost in all the states and Union territories,

Classes IX to XI constituted the composite secondary as well as higher secondary stage and in some states it was attached with the general colleges.

In the sixth five year plan, in the field of higher secondary education facilities were extended to rural and backward areas and access provided to the weaker and more backward sections of the people with consolidation of existing facilities and improvement of standard. Even then the progress was not encouraging. Therefore, in the fifth All India Educational Survey an assessment of educational facilities at this stage had been attempted separately.

According to the survey the higher secondary institutions were available in 8,940 habitations out of 9, 81,864 in rural areas, within a distance of eight kilometers. Most of the habitations pre-dominantly populated by the scheduled castes and scheduled tribes were not served by the higher secondary education facilities within eight kilometers. The number of habitations was 36,942 and 1, 64,129 respectively.

By the year 1973, there were 9505 higher secondary schools in the country. But the number increased to 10,429 and 15,465 by the year 1978 and 1986 respectively. The enormous growth was mainly due to the adoption of the new pattern of 10+2 education. In a large number of schools, classes XI-XII were introduced, thus increasing the number of higher secondary schools much more between 1978 and 1986.

Out of the total number higher secondary schools, 7136 in rural areas and 8329 were in urban areas, and the schools were under the management of

government, local body, private-aided and private-unaided respectively. To speak the truth maximum number of schools were privately managed.

Besides, the numbers of pupils in rural and urban schools were 13, 28,726 and 21, 80,845 respectively. However, the expansion of educational facilities had also helped to some extent in correction of regional and other imbalances during the seventh plan. During the plan period the 10+2 pattern of education had been adopted by 20 States and 9 Union Territories.

By the year 1986, there were 52, 06,814 pupils in classes XI and XII in the country. Out of 15,465 higher secondary schools, 13,399 (86.64%), 10,775 (69.67%) and 5,722 (36.99%) schools respectively had teaching facility in Arts, Science and Commerce streams for students. Computer Science was available in only 94(0.61%) schools. Besides, there was provision of teaching in Home Science, Agriculture, Technical courses in some higher secondary schools.

It is needless to mention that the higher secondary stage is a crucial stage of school education as after this stage students become eligible to compete for professional courses to be future engineers, technologists, doctors, and teachers or for pursuing academic courses at the tertiary stage. A large number of them also join the world of work.

Therefore, it is at this stage the students are exposed to the structure of individual subject disciplines such as Physics, Chemistry, Biology, Mathematics, Geology, History, Geography, Political Science, Economics, Sociology, Philosophy, Psychology, Languages etc.



Therefore, ‘the programme of reorientation of content and process needs to be worked out for higher secondary stage as it marks the beginning of differentiation and diversification’ opined NPE, 1986. Moreover, it advocated and emphasized for the “revising the syllabi and instructional materials in the light of the revised policy formulations wherever necessary; study of state level curriculum materials from the stand point of implementation of the NPE thrusts; semesterization of the +2 stage curricula and development of exemplar materials”. However, keeping in view the suggestions of NPE, the national curricular frame work for higher secondary education prepared by NCERT was finalized. Accordingly the educational authorities in the states/UTS were advised to initiate the implementation of the new frame work. With the passing of time number of higher secondary schools increased to 43,951 by the year September 2002-2003, along with 10,37,455 teachers (Disha, 2016).

According to the Concise Report of the Eight All India School Education Survey (AISES) published on January, 2016, at higher secondary stage 1,59,26,278 are enrolled including 45.46% girls and 54.54% boys. In comparison to the Seventh Survey, the enrolment at higher secondary stage has increased by 62.40% in which maximum children (41.23%) are enrolled in Government (36.08%) and Local Body (5.15%) schools. In private aided schools and private unaided schools, the enrolment percentages are 32.11% and 21.67% respectively. The total enrolment in higher secondary schools is 4, 71, 10,081 (Eight All India School Education Survey, 2016).

### **1.3 History and Development of Higher Secondary Education in Mizoram**

The Kothari Commission recommended the transfer of the Pre-University course to secondary school by 1975-76. In 1975, the Mizoram Board of School Education (MBSE) Act was enacted by the State Legislative Assembly. Rules and regulations were framed and promulgated under this Act. As a result, Mizoram Board of School Education was established in 1975 by the MBSE Act. The act was approved by the Legislative Assembly of the Mizoram Union Territory, at that time the administrative head was the Chief Executive Member Ch. Chhunga. The board as an autonomous authority in education started functioning on 2 December 1976. The Mizoram Board of School Education (MBSE) is an autonomous governmental body for academic administration in Mizoram, India, having its jurisdiction from elementary to higher secondary education. It was established by the Government of Mizoram (then the Union Territory of India) in 1975 by the Mizoram Board of School Education Act. It has the power to regulate, supervise and control school education in Mizoram. Its primary function is to prepare academic programmes and organize examinations, especially for state level High School Leaving Certificate (HSLC) and Higher Secondary School Leaving Certificate (HSSLC).

Mizoram attained statehood in 1987. However, the State Education Department did not bring forth any new education acts or codes immediately. The rules and regulations as already available were being followed in the form of norms or guidelines. In 1989-90, these rules and regulations were placed before the State Legislative Assembly and were passed in 1991 (Lalnuntluangi, 2008).

Although the new system of education recommended by the Education Commission ought to have been implemented in Mizoram during the early 90's, it could not be done for one reason or the other because the North-Eastern Hill University (NEHU) which managed the Pre-University education for so long did not insist for the same. But, the situation changed when NEHU decided to hand over the management of +2 stage of education to the respective State Governments from the academic session 1995 in consonance with the National Policy of Education.

A meeting for the purpose was convened by NEHU on 12<sup>th</sup> June, 1995 at Shillong to work out the detailed modalities of handing over of +2 education with the representatives of the State Government. Since NEHU was firm in their decision, there was no scope of deferring the taking over of +2 education by the State Government. While accepting this in principle, a meeting regarding taking over of +2 stage of education by the State Government was held on 7<sup>th</sup> July, 1995 to discuss in detail the total implication of the take over and to consider the appropriate measures to be taken in the matter of actual taking over of the +2 education. After taking all the relevant factors into account, the meeting was of the view that since NEHU has decided to transfer the management of the +2 education to the State Government for taking over the +2 education with effect from the academic session of 1995, there was no other alternative but to take over +2 education by the Government immediately (Minutes of the Meeting held in the Office Chamber of Hon'ble Minister, Education on 7th July, 1995 at 1 p.m. regarding taking over of +2 stage of education by the State Government).

After NEHU, Shillong handed over the management of +2 education to the state government with effect from 1995 academic session and in pursuance of the decisions taken by the Council of Ministers in their meeting held on 25th July, 1995, it has been decided by the government to take over the management of +2 education with effect from 1995 academic session (Office Memorandum No. B. 17011/13/(A)/95 - EDS of 2nd August, 1995. Govt. of Mizoram. Education and Human Resources Department).

In the initial stage, the State Government faced serious financial constraints and it was not possible to constitute a new Board of Higher Secondary Education to take over the management of +2 education. The then Hon'ble Education Minister and other officials who were in charge of school education thought that it would be better to suitably strengthen the existing MBSE and entrust the Board with the responsibility of managing the affairs of +2 education. For this purpose, the MBSE Act had to be amended immediately. The MBSE was requested to submit a comprehensive proposal for strengthening their organization by way of creating more manpower and building up necessary infrastructure and modification of the MBSE Act, 1975 for the purpose of taking over the management of +2 education. The meeting was of the view that the existing syllabus followed at that time by NEHU to be adapted until a new syllabus is worked out by the MBSE. It also advised the board to work out the new syllabus keeping in view the standard and requirement of higher secondary education. When the new syllabus has been finalized, planning was made to introduce the new syllabus with effect from 1997 academic session.

The existing system of examination followed by NEHU at that time was continued to start the +2 education. The annual examination at the end of Eleventh Class was proposed to be conducted by the institution on the basis of a common question paper set by the Board. The final examination for Class-XII was also to be conducted by the Board.

It was observed that the Text Books for the schools were prepared by the Board, examined by the Board and also approved by the Board. This system does not provide necessary requirement of checks and balances. It was, therefore, considered that responsibility of preparing the Primary School Text Books may be entrusted to State Council for Educational Research and Training (SCERT). The prepared text books were examined and approved by the Board.

The Board was also directed to take necessary action in registering the students who have taken admission from the academic session, 1995. The process of registration of students may be done only after the Board is strengthened and the management of +2 education is formally taken over by the Board. The students so registered may be given registration number in the same manner as was given by the Universities.

During that time, there was no Higher Secondary School in Mizoram excepting 4 (four) schools having vocational courses only. Moreover, students have already taken admission in the existing colleges for undergoing Pre-University courses. Under such circumstances, it was considered that those colleges duly affiliated to NEHU continued to function as usual with the change that existing Pre-University courses of those colleges will henceforth come under the purview of +2

system of education. In other words, 1<sup>st</sup> year students of the then academic session was treated at par with the Class-XI students of any Higher Secondary School and their examination was to be conducted by the MBSE. The syllabus remains the same and the teaching continues in colleges as per the existing syllabus.

NEHU has furnished a list of colleges affiliated to them either on regular or provisional basis. The status of the colleges having Pre-University courses remains the same under the Board. No new colleges shall be given permission or grant for P.U. (Pre-University) Courses any more.

In view of limited higher education facilities available in Mizoram, it was agreed that Pachhunga University College, Aizawl should continue to provide +2 education facilities till such time the position is reviewed and a decision is taken otherwise by NEHU or the State Government. However, in the meeting at Shillong on 12<sup>th</sup> June, 1995, it was decided that Pachhunga University College be given some financial assistance by the State Government to meet the essential expenditure in connection with the functioning of the classes. It was also proposed that NEHU be requested to intimate the financial requirements for holding the examination, maintenance of laboratory facilities and the structure of fees to the State Government.

For effective taking over of +2 education by the State Government, a need for converting the existing High Schools into Higher Secondary Schools was felt. Due to limited financial resources, it was not possible to convert the High Schools to Higher Secondary Schools all at a time. Besides, as the existing colleges will also continue to function, it was also not necessary to set up too many Higher Secondary

Schools during that period (Minutes of the Meeting held in the Office Chamber of Hon'ble Minister, Education on 7th July, 1995 at 1 p.m. regarding taking over of +2 stage of education by the State Government).

Therefore, 26 High Schools were converted into Higher Secondary Schools in three phases during 1995-1998. In the First Phase (1995-1996), 13 High Schools were converted into Higher Secondary Schools, 7 and 6 High Schools in the Second Phase (1996-97) and the Third Phase (1997-98) respectively.

The Education and Human Resources Department under the State Government took necessary action in creating teaching and non-teaching posts and built up the entire required infrastructure in respect of all the High Schools which had been converted into Higher Secondary Schools.

With the gradual conversion and up-gradation of the existing High Schools into Higher Secondary Schools and the introduction of +2 stage of education, Pre-University classes being taught in Colleges were abolished correspondingly (Office Memorandum No. B. 17011/13/(A)/95 - EDS of 2nd August, 1995. Govt. of Mizoram. Education and Human Resources Department).

As a result, the taking over of +2 education by the State Government requires additional funds on account of creation of additional posts for teaching and non-teaching staff as well as recurring and non-recurring expenditure for construction of additional classrooms, purchase of furniture and the procurement of laboratory equipments because the existing fund was not adequate to meet the requirement. In connection with the taking over of +2 education, the Planning Department, Finance

Department and DP&AR under the Government of Mizoram gave special consideration to meet all the financial requirements for setting up more Higher Secondary Schools in Mizoram.

In 1996, the Mizoram Board of School Education (First Amendment) Act was enacted. This amendment was necessitated by the handing over of the responsibility for Classes XI and XII stage by North-Eastern Hill University (NEHU) to the State Board. Under these circumstances, Mizoram has introduced the 10+2+3 structure in 1996 and thus transferring +2 classes to the school system which was at that time attached to the degree colleges. A number of high schools were thus converted into higher secondary schools.

On the 7<sup>th</sup> of April 1997, the Competent Authority of the CBSE approved the adaption/adoption of the Senior School Curriculum (Classes XI & XII) of the CBSE by the MBSE. The CBSE authorities were very particular about proper transaction of their curricula and had desired that some officers of the MBSE and other concerned agencies of the State should be deputed to the CBSE Office in New Delhi for 4/5 days to have proper orientation about the mechanism of curricula implementation, evaluation (examination) and other incidental matters.

As desired by the CBSE authorities, two officers each of the MBSE and SCERT were deputed to study and get orientation in the whole mechanism of curricula implementation, evaluation practices and related issues in the CBSE Office at New Delhi, India.



Thereafter, the CBSE curricula were introduced, with minor modifications to suit the requirements of Mizoram, in selected schools in Mizoram to come at par with the students in the other states. Since it was way time that the education in Mizoram at +2 stage to be upgraded and revamped by introducing CBSE curricula and textbooks in selected schools in Mizoram from the 1997 academic school session in place of the curricula and textbooks which were prescribed by NEHU for its erstwhile Pre-University stage and were adopted in Mizoram for use during the transition period when the management of the +2 stage of education was transferred to the State by NEHU authorities abruptly in 1995 (Minutes of the Meeting held on 5th May, 1997 in the Office Chamber of the Hon'ble Minister of School Education, Mizoram).

With a view to promoting the standard of education and by the progressive measures to improve the entire school system of Mizoram, the Mizoram Education Act, 2003 was enacted by the State Legislative Assembly. To carry out the various provisions of this Act, rules and regulations were framed and notified by the Government.

The MBSE provides recognition to various higher secondary schools and institutions. At present, there are 81 higher secondary schools affiliated under Mizoram Board School Education. ([www.mbse.edu.in/affiliated\\_sr-secondary-schools](http://www.mbse.edu.in/affiliated_sr-secondary-schools)).

#### **1.4 Rationale of the Study**

Higher Secondary Education is a crucial stage in the educational hierarchy as it prepares the students for higher education and also for the world of work. With the liberalization and globalization of the Indian economy, the rapid changes witnessed in the scientific and technological world, and the general need to improve the quality of life and to reduce poverty, it is essential that school leavers acquire a higher level of knowledge and skills than is provided in the 8 years of elementary education particularly when the average earning of a secondary school certificate holder is significantly higher than that of a person who has studied only up to class VIII (Press Information Bureau).

While Primary Education is a basic enabling factor for participation and freedom, for trading a life with dignity and overcoming basic deprivation, secondary education is the gateway for prosperity, for transforming the economy and establishing social justice in any country. It opens the world of work to the youth of the country and contributes to socio economic development of the Community (MHRD, India).

Data from the National Family Health Survey (2006) shows that 54 % of all children of secondary school age (11-17 years) attend secondary school. In addition, there are large disparities between different groups of children. Boys and children from urban areas are more likely to be in secondary school than girls and children from rural areas (World Bank Group).

Preparing young people for life, advancing science education and learning to learn and communicate effectively in the society are considered additional forces affecting higher secondary education across the globe. In fact, at this level, two main functions of education (i.e., individual and social) converge (Alvarez, 2000). At the individual level, higher secondary education empowers and prepares youth for life in respects such as personal development, preparation for the labor market, training for higher cognitive functioning, and as part of its social function, advances 'human and social capital' for nation building, redistributes income and wealth and alleviates income poverty. Its development, therefore, can greatly contribute towards acquiring global competitiveness and achieving the MDGs (Millennium Development Goals) (Biswal, 2011).

The Higher Secondary Education (10+2) in Mizoram has been functioning since 1996 and yet no analytical study has been conducted. To identify the status, development, its students and teachers, problems and to suggest measures for improvement of higher secondary education in Mizoram, an intensive research needs to be undertaken. How much development has taken place in higher secondary education in Mizoram? What is the enrolment pattern? are the questions that come into the mind of the investigator.

As the quality of education depends to a great extent on the quality of the teachers, the following questions has also been raised :

- a) Who are the teachers of higher secondary schools in Mizoram?
- b) What are their recruitment procedures?

Regarding the conditions of higher secondary schools in the state, the investigator is curious to know answers to the following questions :

- a) What types of physical infrastructure and facilities are available in higher secondary schools in Mizoram?
- b) What courses are being offered?
- c) What are the teaching-learning processes and methods of evaluation?
- d) What activities are organized? In what types of activities do they participate?
- e) What is the outcome of the education in terms of Board Examination Results?

It is anticipated that teachers and students are confronted with some problems. To know what those problems are is also the concern of the investigator. The answers to all the questions that have been raised can be found only through an intensive research.

### **1.5 Statement of the Problem**

In order to obtain satisfactory answers to all the questions stated above and also to fill the research gap, an analytical study of higher secondary education in Mizoram has been conducted. The problem of the present study has therefore, been stated as: **“Higher Secondary Education in Mizoram: An Analytical Study.”**

## **1.6 Objectives of the Study**

1. To study the development of higher secondary education in Mizoram in a historical perspective.
2. To analyze students' enrolment in terms of gender, types of institutions and academic streams.
3. To prepare and analyze profile of teachers in terms of types of institutions, educational and professional qualifications, age, teaching experience, gender and academic streams.
4. To examine the recruitment procedures of higher secondary school teachers in Mizoram.
5. To examine the physical infrastructure and facilities available in higher secondary schools in Mizoram.
6. To analyze the teaching-learning processes and methods of evaluation.
7. To examine the activities (academic and non-academic) organized for higher secondary classes in Mizoram.
8. To analyze the HSSLC Examination results of eight consecutive years i.e., 2011-2018.
9. To examine the problems faced by teachers of higher secondary schools in Mizoram.

10. To examine the problems faced by students of higher secondary schools in Mizoram.

11. To suggest measures for improvement of higher secondary education in Mizoram.

### **1.7 Operational Definitions of the Terms Used**

Some of the important terms used in this study are defined as under:-

#### ***Higher Secondary Education:***

In the present study, higher secondary education implies the stage of education comprising classes XI and XII.

#### ***Analytical Study:***

The term ‘Analytical Study’ as used in the present study refers to breaking up of higher secondary education in Mizoram into different aspects, studying the aspects and interpreting the results or findings.

### **1.8 Organization of the Report**

The present study has been organized as follows in order to meet the various objectives and enable the scholar to present them in a precise manner:-

Chapter - I : The first chapter deals with theoretical framework, history and development of higher secondary education in India, history and development of higher secondary education in Mizoram, rationale of the study,

statement of the problem, objectives of the study, operational definitions of the terms used and organization of the report.

Chapter - II : The second chapter is concerned with the review of related studies conducted in India and abroad. The research works and findings of various researchers were recorded and presented in this chapter.

Chapter - III : The third chapter is titled "Methodology of the Study" and deals mainly with method of study, population, sample, sources of data, construction of tools, collection of data, tabulation of data and statistical treatment of data.

Chapter - IV : The fourth chapter is on Analysis and Interpretation of Data relating to the development of higher secondary education in Mizoram, status of higher secondary education in Mizoram and problems in higher secondary education.

Chapter - V : The fifth chapter is focused on the major findings, discussions, recommendations and suggestions.

**CHAPTER II**  
**REVIEW OF RELATED STUDIES**



## **CHAPTER – II**

### **REVIEW OF RELATED STUDIES**

The research study required the Investigator to find out the studies that were related to this present study. It was necessary to correlate the views and opinions of past studies done by eminent educationists, historians and other social researchers towards the growth and development of education as found in a number of books, reviews, reports, journals, articles and other published and unpublished works. Having found out the views that were related with the present study, the Investigator has taken into consideration the different views as expressed by the various researchers that focused school education in its true perspective.

A number of studies have been conducted in the area of Higher Secondary Education in India and abroad and there is enormous literature on analysis of higher secondary education system. A review of related studies conducted earlier gives a theoretical orientation to the empirical study. In this chapter, the findings of research studies and other literature relevant to the present study were presented. An attempt was made to review the related literature highlighting the development of Higher Secondary Education conducted in the country and abroad. Then the findings of different researchers have been divided under different categories such as:

- (i) Studies relating to Development of Higher Secondary Education
- (ii) Studies relating to Status of Higher Secondary Education
- (iii) Studies relating to Problems in Higher Secondary Education.

The review is presented as follows:

## **2.1 Studies relating to Development of Higher Secondary Education**

International Bureau of Education (1970) conducted a study on educational trends in 1970: An international survey that revealed that at the point where upper secondary joins higher education, new institutions were developing, some regarded as second level and others as junior colleges reported to be the fastest growing type of institutions in the U.S.A. Other countries like the Philippines and Singapore were also adopting it.

Devegowda and Parameswaran (1971) studied the Progress of Education in Mysore State from 1956 – 57 to 1968 – 69 and found that educational pattern, administration, availabilities of facilities for education and the percentage of children attending schools and colleges varied from area to area. The percentage of enrolment and their proportion with potential population also varied from area to area. To bring out a balance, the first state level educational survey was conducted in 1957 – 58. The recommendations made by the survey were given effect to during the Second and Third Five Year Plan periods. On the basis of this survey, larger provisions were made in the state budget for creating large facilities at all levels in the field of education. After studying the growth of education in different fields, like pre – primary education, primary education, secondary education, higher secondary education, university education, vocational, technical and special education and administration and control, it was concluded that the progress in the field of education at all levels of the state was very satisfactory.

Chakravarti (1979) in a study of history of education in Assam 1826-1919 pointed out that the secondary education was excessively literary and insufficiently vocational in character. The industrial, technical, agricultural and other professional education did not progress due to financial stringency. The progress in the field of Higher education was negligible, though there were two colleges in the province.

Desai (1979) conducted a critical study of the growth of secondary education in Kaira district, 1947-1962. The study revealed that the strength of school going boys and girls increased steadily over the years. In case of boys the increase was 12.4 per cent; 37.0 per cent; 62.5 per cent in the year 1952, 1957 and 1962 respectively. In case of girls, it increased by 11.5 per cent in 1952; by 13.4 per cent in 1957 and 27.2 per cent in 1962; while the total increase had been 16.6 per cent in 1952, 49.7 in 1957 and 73.2 per cent in 1962.

Desai and Devegowda (1979) in their study of the history of education in the districts of Dharwar, Belgaun, Bijapur and North Kanara from 1800 to 1956 found that Secondary education was a matter of purely private effort according to the policy of the British Government. The local bodies with their foresight took initiative in opening secondary schools but could not give a lead in higher education as it was beyond their jurisdiction as well as beyond the financial capabilities.

Bajpai (1981) conducted a study on progress of higher secondary education in Uttar Pradesh in the post independence period and has cited that the number of teachers in 1947-48 was 12,210, which increased to 1,01,718 in 1975-76. The percentage increase for teachers was 73.3 per cent. The findings also revealed that in 1947-48, there were 499 higher secondary schools in Uttar Pradesh. The increase in

the number of higher secondary schools in the post independence period was 796 per cent.

Phadke (1982) studied role of the government of Maharashtra in the development of secondary education. The main findings of the study were: (i) the state government was committed to promoting the education of girls and backward classes, development of Marathi, modernization of curricula and syllabi, training of teachers, reforming the system of examinations, provision of better textbooks, search for talented students and improvement in the quality of supervision (ii) the government did not give priority to education in its development programmes and did not provide for adequate financial support to schools for improvement under the new pattern of education, i.e., 10+2+3 (iii) the number of students in secondary schools increased from 8.58 lakhs in 1960 – 61 to 27.08 lakhs in 1977 – 78 (iv) some changes were introduced with a view to decentralizing the administration of education (v) the state government succeeded in publishing textbooks which were quite cheap for all the students (vi) the state government achieved remarkable success in improving the professional qualifications of secondary school teachers through network of colleges of education and a system of deputing teachers for trainings and giving them stipends (vii) the scheme introduced by the government to give awards annually to outstanding secondary school teachers acted as an incentive for teachers to put in better work.

Singh (1984) from a study of the development of education in Arunachal Pradesh with special emphasis on school education reported that during 1972-73

there were only 18 High/Higher Secondary schools in the territory and by the end of 1981-82, this number rose to 53.

Zote (1984) in a study of development of secondary education in Mizoram observed that secondary education was not given due attention during the missionary period. The missionary activities remained confined to primary education alone. The only high school that started in Mizoram on the eve of Independence was due to a private enterprise undertaken by the Mizo people themselves.

Hluna (1986) conducted a study on education in Mizoram 1894-1947, a historical study with special reference to the role of the Christian missionaries and found that: (i) the Christian missionaries who came from the West were the harbingers of western and modern formal education in these areas; (ii) They were also pioneers in many fields, like female and vocational education; (iii) They played an important role in the progress of education and due to their initiatives there has been a qualitative improvement and quantitative expansion of education. The common people responded most favorably to education.

NCERT (1992) revealed that out of the total of 15,456 higher secondary schools, 39.56%, 2.17%, 52.00% and 6.27% schools belong to Government, local body, private- aided and private-unaided management, respectively. This showed that the maximum number and proportion of the higher secondary schools were privately managed, followed by Government, private-unaided, and local body managed schools. It also revealed that among the 15,456 Higher Secondary Schools, 13,399 (86.64 %), 10,755 (69.67 %), and 5,722 (36.99 %) schools, respectively, have Arts, Science and Commerce Streams for students. Further, 1,662 (10.75 %) and

1,007 (6.51 %) schools have the provision of Home Science and Agriculture, respectively. Technical courses are available in 993 (6.42 %) schools and education in Computer Science is available in only 94 (0.61 %) schools.

Bharati (2000) in her study history of higher secondary education in modern Assam (1968 - 1990): A historical perspective revealed certain facts about the situation in Higher Secondary education in Assam. They were: (i) the logical setting of Higher Secondary education in Assam was yet to be decided and implemented; (ii) the curriculum for Higher Secondary Education was rigid and not fitted in different situations prevailed in different environment; (iii) the vocational bias so far stressed and implemented was more on theory than on practice; (iv) the existing system of examination was not sound and needed to be transformed to effect better quality and standard of education; (v) the educational planning so far made and implemented failed to incorporate the factor influencing development of educational system with its objectives such as social demand, economic and political needs, etc., (vi) the Higher Secondary schools of Assam were being run with poor facilities of building, equipment and trained personnel; and (vi) sufficient efforts were not made by the State Government to train teachers of Higher Secondary Education on the new system of teaching, evaluation and administration.

Chaudhari (2000) conducted a study on higher secondary education in the state of Gujarat: development and problems which reveals that there was an adequate supply of educational literature and other materials but the pupils were found not using those properly and the results were also found to be not satisfactory.

Mahmood and Saeed (2000) studied the status of higher secondary schools scheme in the Punjab province of Pakistan and the results show that the pedagogical and pastoral environment of the Higher Secondary Schools Scheme (HSSS) gradually improved between 1987-94, although various factors like financial constraints, lack of physical facilities etc. prevailed in these institutions. It further explores the fact that not only has enrolment in grade XI increased in these institutions, but pass rates in XII have also been improving annually. The analysis of Boards' results indicates that the achievement of students in arts subjects was better than that of students in science subjects. Gender did not appear to be a significant indicator in this regard. High correlation was found between enrolment and passing.

Khongwir (2004) conducted a study on development of higher secondary education in Meghalaya: an analytical study found out the following in terms of development of higher secondary education: (1) seventeen progressive secondary schools in the State - both Government and Private - were upgraded to the level of Higher Secondary schools during the academic year 1994-95. It was found that 10 colleges were established before the attainment of Statehood, 12 colleges during the 1980's and 17 colleges during the 1990's. By 2001- 02 there were 69 higher secondary schools and parallel +2 stage course as pre University course run in 46 colleges as compared to 17 Higher Secondary schools and 30 colleges in 1995-96 (2) the year 1995-96 was another landmark in the history of Higher Secondary Education in the Meghalaya for in that year vocational stream was introduced in: (i) Rongrengiri Government Higher Secondary School, Williamnagar, (ii) Government Boys' Higher Secondary school, Shillong and (iii) St. Michael's Higher Secondary

School, Umsning. These vocational streams continued only for three years (3) in 2002, the enrolment of students was 3030 when compared to 852 in 1996. The annual growth rate of enrolment at the Secondary and Higher Secondary stage was recorded at 51.12 per cent. The growth rate at the Pre-University stage was 11.12 per cent; 9.12 per cent; and 3.71 per cent in 1996-97; 1999-2000 and 2001-02 respectively. The number of students enrolled in Arts stream account for the largest population of students in Higher Secondary (P.U.) level varying from 72.94 per cent to 80.02 per cent. Students enrolled in Science and Commerce streams varying from 12.79 per cent to 19.75 per cent and 6.28 cent to 8.46 per cent respectively followed this. The students enrolled in vocational stream shared the lowest population of students' enrolment varying from 0.007 per cent to 0.19 per cent (4) the Meghalaya Board of School Education conducted the first ever Higher Secondary and Pre-University level final examinations for all the courses in the year 1996-97. The number of students who appeared in the year 2002 was 9957; 1761; 1084 and 1; in Arts, Science, Commerce and Vocational streams respectively. The percentage of pass was 100 per cent in vocational stream, while it was 81.99 per cent; 77.21 per cent and 58.83 per cent in Science, Commerce and Arts respectively (5) in connection with the number of students and teachers at the initial stage, it was found that there were 346 (51.33%) boys and 328 (38.66%) girls whereas there were 95 (39.58%) male and 145 (60.41%) female teachers. The number of students who appeared for the first time in the Examinations, were 4143, 1122, 404 and 11 in Arts, Science, Commerce and vocational respectively. And the percentages of pass were 51.05 per cent; 77.18 per cent; 64.1 per cent and 100 per cent in the above streams



respectively. The highest 100 per cent pass was in the vocational course and the least was in Arts stream with 51.05 per cent.

Chan (2010) in his study a review of educational reform – new senior secondary (NSS) education in Hong Kong found that: (i) under the NSS educational reform, teachers were required to plan, organize and implement the Other Learning Experiences (OLE) activities and responsible to capture the students' learning experience in the Student Learning Profile (SLP). This is to be done within the control of the Quality Assurance (QA) process focusing on the efficiency and quality standard (ii) the control over the teaching profession gives rise to the behaviour of 'Managerialism' —a stress on procedures at the expense of educational purpose and values and the Government put their emphasis on managerial efficiency rather than the goals and objectives of education. Control is indeed the central concept of all management systems. There is comment that teachers were difficult to complete the quantified students' evaluation when they even have no time to see them .

Alabi (2014) studied implementing the new senior secondary school curriculum for the realization of the objective of entrepreneurship education in Ondo State, Nigeria. The findings of the study reveal that variations exists on the perception of teachers in the implementation of the new senior secondary school curriculum between public and private secondary schools in Ondo State. The level of implementation is perceived as significantly higher in public than in private secondary schools. Most private schools used for the study have no functional trade workshops hence, students are not exposed to regular wrkshop practice, this could be attributable to the high cost of building and ineffective monitoring of the curriculum

implementation in the private schools by the Government as revealed in this study. the study also reveals that there is no significant difference in the level of implementation of the new curriculum in the urban and rural secondary schools. the findings also reveals that there is inadequate relevant text books for the new subjects on the curriculum.

Chuaungo (2014) conducted an analytical study on school education in Mizoram and found that the numbers of primary, middle/upper primary, secondary (popularly called high schools in Mizoram) and higher secondary schools are 1499, 1423, 583 and 114 respectively. Total number of schools is 3619. Schools in the state form only 0.17 per cent, 0.24 per cent, 0.32 per cent and 0.11 per cent of primary, upper primary, secondary and higher secondary schools respectively in the country.

Ohia and Obasi (2014) studied repositioning senior secondary education in Nigeria for producing entrepreneurial-oriented students. Their findings were: (i) students are availed the opportunity of learning practically Agriculture (3.55), Technical drawing (2.75), and Food & Nutrition (2.70). But Fashion designing, Fine Arts, Metal work and Music are rarely taught practically as the weighted mean opinion scores for these skills range between 2.00 and 2.34 (ii) the students were imparted communication skills, digital literacy skills and personality skills (Mean scores = 2.79, 2.71 and 2.92 respectively). Sales skills, leadership skills and innovative skills had mean scores less than the criterion mean of 2.50. The students do not receive practical teaching on these skills (iii) role playing, as a teaching/learning exercise is used in teaching the students, the mean score is

2.69. The traditional method of “listen and take” note is still being practiced. Simulations and student focused-learning feedbacks are not explored too.

Shams and Ahmed (2014) conducted research on exploring the role of Aga Khan and Fatimiyah higher secondary schools in the development of education at Karachi, Pakistan. The findings show that Aga Khan and Fatimiyah schools are playing a great role for the development of education, their schools provide different educational training to teachers to enhance their teaching skills and they are actively participated in these training. Fatimiyah schools provide better facilities and opportunities in education to all the members. Fatimiyah Education plays an important role for the development of education, it is a nonprofit organization. It is working for the process of continuous improvement within the organization which is the result of better performance at all level. The main conclusion of the study could be that Aga Khan and Fatimiyah Education Network have a great role in the development of education.

Baidya, Saha and Mondal (2015) studied the inclusion of project work in higher secondary education in West Bengal: an initiative towards educational reforms. It has been found that inclusion of project work in higher secondary education has many merits though there are some problems too. It is unnecessary to tell that project work is very useful for involving pupils in physical activities. Not only physical activities but also problem solving abilities increases through project work. Students are solving many problems relating to their project work and it helps them to think freely. Another findings were (i) 85% involves in physical activities, (ii) 75% pupils benefitted from this method for solving problems, (iii) 90% pupils

gained field experiences through this method, (iv) 87% pupils developed positive attitudes towards team work, (v) cooperation, sympathy, unity, responsibility and leadership attributes developed among 72% learners, (vi) 50% pupils were found who developed critical thinking, (vii) 93% pupils are able to increase social interaction, (viii) 96% are of the view that it helps them to achieve good marks in the examination, and (ix) 15% pupils are unable to attempt the field trip, 67% pupils said that it is time consuming, 25% pupils are of the view that there are lack of proper materials for doing project.

## **2.2 Studies relating to Status of Higher Secondary Education**

Bose, Banerjee and Mukherjee (1965) studied the educational facilities available in the higher secondary schools of West Bengal (1963 - 64) and found that library facilities very poor. There were no libraries in most of the schools. They also found that in a large percentage of schools especially in urban areas, there were no playgrounds for the students.

Ta Ngoc Chau (1969) on a study demographic aspects of educational planning revealed that the rapid increase in the number of students in urban schools was counter balanced by a decline in the numbers of students in rural schools – with the result that there was practically no change in the total number of primary and secondary school students in the USSR during that eleven-year period.

Adaval, Swami and Agarwal (1979) in their studies secondary school libraries in uttar pradesh reported that library facilities were very poor in many of the schools. In very few schools full time librarians were appointed. In some of the

schools, there were no separate library rooms and books were kept inside the office room or teachers' common room or headmaster's room.

Bahuguna (1979) studied education of commerce education up to higher secondary level in Rajasthan and found that the standard of commerce education at the secondary level was not very high and also the commerce syllabus was not related to the employment market.

Kumar (1979) conducted a study of the development of educational administration in India through various committees appointed between 1854 to 1966 concluded that: (i) the various commissions of education appointed by the British Government and later by the Indian government after Independence have discussed the same problems and have recommended the same changes with a little variety according to the political, social and educational need and demand of that particular time; (ii) any problems pertaining to educational administration in India today cannot be tackled or solved unless it is traced back to the various commissions appointed by the government from time to time. In fact, these commissions have served as landmarks in the history of educational administration in India; and iii) the latest innovation of 10+2+3 pattern of educational administration could also be traced back to the previous commissions.

Amarnath (1980) conducted a comparative study of the organizational climate of government and privately managed higher secondary schools in Jullundur District. The major findings of the study were: (i) the government and privately managed schools, as a group, did not differ significantly in their organizational climate but differed from school to school and no schools had similar organizational

climate, which was attributed to the differences in the personality traits of the principals and the teachers (ii) the principals of both types of schools did not differ in their behavior as leaders (iii) the teachers too did not differ significantly in their behavior as a group, except in the variables of disengagement, spirit, aloofness and trust (iv) there was no difference in the dominance of principals' behavior and teachers' behavior accounting for variations in the organizational climate of the schools (v) there were no significant differences between the relationship of organizational climate with the job satisfaction of the principals as well as of the teachers of both the types of schools (vi) the organizational climate of a school did affect the job satisfaction of the teachers (vii) there was no positive relationship between the organizational climate and the academic achievement of the students.

Joshi (1980) found out from an investigation into organizational climate of higher secondary schools of Rajkot City, that the number of higher secondary schools with closed climate was maximum, the familiar climate type schools ranked second and the number of schools with controlled climate was minimum.

General Committee of Public Instruction (GCPI) (1981) reported that the conditions of air, light and ventilation were very unsatisfactory. In most of the libraries, the cataloguing and classification was done in some haphazard manner that suited their convenience but not adhering to the principles of library science. They reported of faulty methods of issue and return of books. The absence of annual stock checking resulted in annual lost and damaged of library books.

Shib (1982) conducted a study on secondary and higher secondary education and indicated that there were 10,429 higher Secondary sections in the country

excluding those attached to Universities and degree colleges. There were 39.16% Higher secondary sections having 'below 20' pupil-teacher ratio. In '20-39' pupil-teacher ratio slab there were 46.62% sections while 14.22% sections have '40 and above' pupil-teacher ratio.

Verma (1984) in his study modern education : its growth and development in Rajasthan has found out that in 1950-51 the enrolment at the High/Higher Secondary Stage was 17,661 (15,641 boys and 2020 girls) that which increased in 1981-82 to 4 lakhs and 44 thousand students (3 lakhs 70 thousand boys and 74 thousand girls) Accordingly, the percentage of school going children of the Higher Secondary Stage was 1.8 (3.1 per cent boys and 0.5 percent girls) as against the Indian figure of 5.3 per cent (8.7 per cent for boys and 1.8 per cent girls) in 1950- 51 which rose to 20.1 per cent (19.4 per cent for boys and 4.1 per cent for girls) in 1981-82. It was also found out that found that: (i) the newly established Board of Higher Secondary Education, Rajasthan prescribed the syllabus, approved text-books and conducted the Examinations at the end of the High / Higher Secondary School stage; and (ii) an Evaluation Unit under the centrally Sponsored Scheme was established at Bikaner in 1963. The study also revealed that the number of teachers in the High schools in Rajasthan in 1949 was 2630. It increased to 3367 in High/Higher Secondary School (3133 males and 234 females) in 1950-51. During the next three decades the number increased to 50,400 (39,100 males and 11,300 females) in 1981- 82. The percentage of trained teachers in High/Higher Secondary Schools was 36.6% in 1950-52 which increased to 100 per cent in 1981-82.

Kaur (1985) conducted a study on education in India and found that: (i) the number of pupils from classes IX-XII increased from 12.2 lakhs in 1951 to 118.2 lakhs in 1982-83; and (ii) the number of High/Higher Secondary Schools increased from 7288 in 1951 to 52,279 in 1982-83. It was also pointed out that the number of High/Higher Secondary schools teachers increased from 1,26,504 in 1951 to 9,93,115 in 1983.

UNESCO (1985) in a study reflections on future development of education maintained that although the enrolment in secondary and higher education in the developed industrialized countries increased considerably during these twenty year period, the increase in total enrolment at all levels was only 31 per cent for these countries as compared with 177 per cent for developing countries.

Bhagabati (1987) conducted a study on co-curricular activities organized in the secondary schools of Assam and its relevance on physical, social, emotional aspects of adolescent girls and boys and found that the prevailing conditions of co-curricular activities in secondary schools of Assam was very disappointing and the existing number of co-curricular activities in secondary schools were not sufficient.

NCERT (1992) reported that according to the Third Survey there were 9505 higher secondary schools in the country in 1973. The number rose to 10,429 at the time of the Fourth Survey, registering an increase of 9.72%. As per the Fifth Survey (1986) this number increased to 15,456, which was 48.28% more than the number of schools in 1978 as per the Fourth Survey. The reason for this abnormal increase may be that the States tried to uniformly adopt 10+2 pattern of education, as recommended by the Education Commission. The study also revealed that there were



52,06,814 pupils in Classes XI and XII in the country of whom 67.40% and 32.60%, respectively, were enrolled in Higher Secondary Schools and Pre-University classes attached to degree colleges. Further, 32.79% of them were in rural areas and remaining 67.21% in urban areas. Again, 35,91,290 (68.97%) of these were boys and 16,15,524 (31.03)% girls.

Gautam (1997) conducted a study of productivity-oriented education with reference to the new pattern of education (10+2+3) and the findings were, schools were found to have no linkages with industrial and commercial centres, the majority of the educational institutions were found not keeping abreast of the current trends and developments in education, and the existing system of 10+2+3 pattern of education has failed to implement the desired productivity-oriented curriculum.

Veena (1998) conducted a study on education system and found out that in Gujarat since its formation in 1960, the number of teachers in primary schools increased from 58.8 thousand to 1.38 lakh during 1960-61 and 1983 - 84. In Secondary schools, it increased from 14.2 thousand to 45.6 thousand and in higher educational institutions it increased from 2.9 thousand to 9.4 thousand during the accounted period. The numbers of teachers in primary, secondary and higher institutions have increased at the annual rates of 6.24 per cent, 8.81 per cent and 9.93 per cent respectively. The ratio of students to teachers at primary, secondary and higher educational institutions were more or less stable. It was in between 38 and 41 in the case of primary schools, between 26 and 27 in the secondary schools and between 17 and 23 in the higher educational institutions during 1960-84.

Amirthalingam (2000) conducted a study on involvement of parents of underachievers in the government higher secondary schools, found that on all the demographic and other criterion variables, most of the parents of underachievers did not devote any time to their wards' educational development, they did not pay attention to inculcating good study habits, they did not take interest in their physical and intellectual development and they did not neither provide adequate facilities for studies nor did they show any interest in their wards' co-curricular activities.

Mohanty (2000) in his study a study of staff relations in higher secondary schools found out that when analyzed school-wise, staff relationships were not found to be very congenial, there was a poor relationship between principals and teachers, some of the teachers were disturbed, expedient, suspicious and undisciplined, and nearly half of the teachers were found to be mentally unhealthy..

Khongwir (2004) conducted a study on development of higher secondary education in Meghalaya: an analytical study. The findings were as follows: (i) the majority of schools were privately managed as 72.85 per cent of the private school teachers were recruited by the concerned Schools' Managing Committees in accordance with the rules and regulations prescribed from time to time by the Education Department while 14 per cent of the teachers in the Government schools were appointed by the Meghalaya Public Service Commission and 12.57 per cent by the Directorate of Public Instruction. This implied that the Education Department has entrusted such an important duty of recruiting trained and qualified teachers to both the Meghalaya Public Service Commission and the Managing Committees of the schools. In order to have better staff in the schools, there is need of recruiting

efficient young men and women. Selection of teachers should be made on the basis of sound principles. In order to secure the best-qualified teachers for teaching position, selection procedure need to be refined. No positive device can do the job by itself but several can contribute to a sound selection programme (ii) in connection with the required educational qualification, it was found that 81.71 per cent and 0.85 per cent of the respondents maintained that a Master Degree and Ph.D. respectively were the required educational qualifications for teachers in the Higher Secondary schools. Though a Master Degree was enough for the job, a well- trained and experienced teacher with moral integrity may be able to exercise greater influence over the students (iii) regarding the number of trained and untrained teachers, it was found that the percentage of female trained teachers, 60.21 per cent and 52.38 per cent was higher than the male trained teachers of 39.28 per cent and 47.61 per cent throughout the period 1994 and 1999 respectively. The percentage of male untrained teachers was higher than the percentage of female untrained teachers throughout the years 1995 and 1999 except during 1994 when the female untrained teachers recorded a 56.25 per cent higher than the male untrained teachers of 43.75 per cent (iv) in connection with the separate vocational stream, 33.33 per cent favoured separate vocational stream with general subjects, 26.66 per cent expressed the view that it should be part of the general stream while 20 per cent maintained that both should completely be independent from each other. In the 10+2 scheme, vocational courses were to be introduced at + 2 stage. Proper methodology has to be found to develop suitable course in relation to the regional developmental plans (v) as per the findings, 62 per cent adopted the traditional methods of Lecture and Discussion; 60.28 per cent Question Answer methods; 52.28 per cent Dictating notes; 42.85 per

cent and Lecture; 37.42 per cent Lecture and Demonstration; 16.85 per cent Self study and 2.57 per cent Field study. The teachers need however experiment with other various methods and share their experience with their colleagues in the schools. This would result in everyone becoming richer in experience and the end product, which will benefit the child greatly (vi) in the study, 46.66 per cent of the respondents replied that textbooks prescribed for the Higher Secondary School level were suitable with modifications; 33.33 per cent not suitable and 20 per cent suitable. With regards to suggestions, 33.33 per cent specified development of character; 33.33 per cent related to life and 33.33 per cent to stress on national outlook. Other suggestions with 13.33 per cent each were provision of workbook for all subjects, related to culture and environment and cater to the need of the pupils respectively. Since textbooks were suitable with modifications, it might be said that textbooks, which were taught to the students, could be of a standard type. This implied that books should be scientifically and psychologically planned and written. In order to achieve this objective, it was necessary on the part of the education Department to have a uniform policy in this regard.

Babu and Gnanaguru (2006) in their study teacher effectiveness and involvement in teaching of commerce at higher secondary level in Tamil Nadu determined the relationship between teacher effectiveness and involvement in teaching of commerce of higher secondary school teachers in respect of locality, sex and qualification.

Das and Panda (2006) aimed at finding out the job satisfaction of college and higher secondary teachers in terms of their sex and experience.

Krishnan and Singh (2006) investigated into the main and interactive effects of sex, locale and socio-economic status of higher secondary school teachers' effectiveness in his research impact of teachers' sex, socio-economic status and locale on teacher effectiveness.

Kulkarni (2006) carried out an investigation into the classroom management behaviors of teachers and its implications for the teacher training which involves 84 students and 168 teachers of higher secondary schools in Kolhapur to study teachers' role and behavior in classroom management during teaching.

Mohan Raju (2006) made a study of factors, which contribute to stimulate and sustain the commitment of senior secondary school teachers of Delhi to the teaching profession.

Patil (2006) studied the administrative role and behavior of secondary school headmasters.

Sabesan and Raghavan (2006) in their study self-esteem in higher secondary school teachers used the Rosenberg Self-Esteem Scale to compare self-esteem between male/female, arts/science secondary school teachers.

Sugirtham and Krishnan (2006) measured the teacher effectiveness of girls' higher secondary schools in Tuticorin.

Sundarajan and Williams (2006) using a Likert type scale measured teachers' attitude towards vocational education in the higher secondary schools

Thyagrajan *et al.* (2006) undertook a study of teaching competency and achievement in which the relationship between teaching competency of secondary school teachers as perceived by the students and students' achievement in economics with reference to demographic variables and sex was studied.

Astalin (2011) in a study of environmental awareness among higher secondary students and some educational factors affecting it found that students of 11th and 12th Standard were identical as far as their environmental awareness was concerned because Science students had more environmental awareness in comparison to arts students because their curriculum framing pattern gives more importance on environmental awareness and their way of social relationship between members of the family may give lots of values to them. CBSE students had more environmental awareness in comparison to UP Board students because of the rich educational climate of CBSE schools with compared to the UP board schools. Students belonging to undergraduate, post graduate and research parent's group had more environmental awareness in comparison to high school students and also students belonging to literate parent's group had more environmental awareness in comparison to high school and intermediate students. Finally the male students had more environmental awareness in comparison to female students because the male students of higher secondary students are normally more attached with the society.

Ahmed and Lodhi (2012) conducted a comparative study of the role of public higher secondary schools in rural and urban Sindh. From the study, it was observed that: (i) the High School Teachers (B-16) working in Public secondary schools of Sindh are promoted as Head Masters (B-17) according to service seniority only but

the HST's, who possessed Master's degree are promoted as Subject Specialist (B-17) for teaching to higher secondary classes according to subject seniority and not only by the general seniority. In some cases HST's enjoy the promotion as subject specialist (B-17) before their seniors who were only B.A/B.Sc, B.Ed. It sometimes creates in the staff of higher secondary schools (ii) most of the educational authorities did not like these higher secondary schools because they belonged to Head Master cadre (B.A., B.Ed.), so they had professional jealousy with the Subject Specialists (M.Sc., B.Ed.) (iii) Headmasters were against the subject specialists and the higher secondary school system so they tried with their full capacity to fail this higher secondary scheme. All the education officers like District officer education, Executive district officer education, Director Literacy, Chairman and Secretary Boards of Education and some officers in Sindh secretariat education department belong to HM cadre and they consciously planned to prove this scheme as a failed scheme (iv) the implementation of this scheme was highly opposed by Sindh Professors and Lecturers Association due to vested interests as they were going to lose its main street power (i.e. Students of XI and XII) because they pressurized the Education Department time to time by the threat of classes boycott in favor of their demands (v) proper awareness was not provided so the higher secondary schools system was not understand properly by the community. The students and their parents prefer collages for admission so the higher secondary schools were facing less admission and enrolled students had poor educational background (vi) mostly up gradation of higher secondary schools were made on political pressures. Some higher secondary schools up graded in a locality which was not suitable and no secondary school was near to it to feed it. In some cases higher secondary schools established in

an area where colleges were also working (vii) 206 higher secondary schools were established up till November 2010; in those public higher secondary schools 3708 Subject Specialist teachers were to be posted at 18 Subject specialist/schools. Up till July 2010 only 1482 Subject Specialists and Assistant Professors were working in rural and urban higher secondary schools of Sindh (viii) subject specialist teachers avoid to take metric classes and expect HST's to take Intermediate classes of those subjects in which Subject Specialist were not available This behavior of Subject Specialist has to be changed.

Alimi, Ehinola and Alabi (2012) conducted a study on school types, facilities and academic performance of students in senior secondary schools in Ondo State, Nigeria. The findings of this study revealed significant difference in the facilities availability between private and public secondary schools. Government should therefore inject more funds into the system for the procurement of teaching and learning facilities. This responsibility lies on the educational planners and administrators in the Ministry of Education. Also, corporate organizations and individuals should be encouraged by the government to donate generously in cash and kind for the provision of educational facilities especially the needed one for the core subjects in public schools. Apart from school and public libraries, education resource centres should be established by government such as teacher centres and audio visual centres. Teachers' centres could serve as place where teachers could work together in groups to generate ideas that would make them more competent in the profession. Also, teachers should be made to use instructional facilities while teaching and where they are not available improvisation should be adopted. It could



be concluded that government did not inject facilities into public schools when compared with facilities available in private schools. Therefore, government should give priority to public schools in the provision of facilities.

Ara and Malik (2012) studied gender discrimination in education- a barrier in development of female education at higher secondary level. Their findings were as follows (i) the enrolment ratio is significant and higher in number at primary level as compare to secondary and higher secondary education level for girl students. The ratio is 62596 girls at primary level in district Swat but tremendously decreases to 288 for higher secondary level for girls (ii) there were also a declined number of female students in the educational institutions of district Swat as compare to male students in this district (iii) early marriage of girls, poverty, lack of awareness of parents about the importance of female education, domestic work prevented female new generations from entering into further higher education

Choi, Lam and Wong (2012) studied the process and factors shaping the new senior secondary mathematics curriculum decision making in Hong Kong. The findings show that factors such as the influence of parents, support from the government, and mathematical beliefs of teachers were not important in shaping curriculum decisions in schools. Students were the main focus of all the four major groups of stakeholders (i.e., students, mathematics teachers, mathematics panel heads, and principals) in the decision-making process. The findings also illustrate how students, mathematics teachers, mathematics panel heads and principals were interrelated, and how they influenced each other in the curriculum decision process. Nevertheless, the mathematics teachers were found to be passive in that they were

only consulted rather than being actively involved in the decision process. The mathematics panel head and the principal were the two key players in the curriculum decision-making process. The interactions between these two players were the closest in that they worked together to make the curriculum decisions that were considered to be best suited to their school context.

Ganesh (2012) conducted research on a study of secondary and higher secondary mathematics teachers' opinions towards the mathematics laboratory. The findings were: (i) most of the teachers have shown positive gesture towards the establishment of mathematics lab (ii) positive response of the teachers demonstrates that establishment of mathematics lab is an effective means of reinforcing learning process particularly for those students who are not able to understand concepts of mathematics by the traditional methods of teaching (iii) standard of education and marks in the subject of mathematics are expected to improve (iv) mathematics lab will increase students' interest in the subject (v) few teachers insisted that effective combination of both conventional and mathematics lab will give more insight into the subject (vi) teaching community is reluctant in answering whether the management support will be provided.

Chaudhari (2013) in his research study habits of higher secondary school students in relation to their academic achievement found that there is significant difference positive relationship between study habits and academic achievement of higher secondary school students. It is suggested that parents should get appropriate guidance and counseling about dealing with higher secondary school students to develop a good study habits for the educational development of their kids. Healthy

and sympathetic teacher's and student's relationship should be made to upgrade the level of academic self - esteem of students. Emphasis should be given on social cognitive develop of the students to increase the level of self - esteem. Self-study should be encouraged and emphasized. The teachers should ask the students to keep the record of their progress towards their set goals. The teachers should make an effort to develop a conducive social climate in the class so that every student should feel that he/she belongs to a group.

Emmanuel and Hammed (2013) conducted a study on home and school factors as determinants of students' achievement in senior secondary school economics in Botswana. The study indicated that the combined contribution of home and school factors in the prediction of students' achievement in Economics is not significant. It was discovered that the home, which is the first socializing agent, has a considerable effect on the child's later development and academic achievement. It was also found that parental education has a positive relationship with academic pursuits of their children. In the educated home, there is likely to be achievement press, good language model, and academic guidance, stimulation to explore various aspects of the larger environment, the intellectual interest and activities in the home. It was also believed that there exists a relationship between the home and academic performance of students. It stated that there exists a link between parental attitude to education and academic performance of their children. Interest in schooling seemed to be a motivator that affected the students' attitude, which influenced achievement in English language.

Goswami and Barman (2013) in their study training status of teachers belonging to higher secondary level – a case study found that the training of teachers of higher secondary level is not satisfactory. All the aspects of the educational system at this stage have been changing as per recommendations of Commissions, Conferences and Committees. Teachers training in the changing system facilitates for better and effective management of education with better learning by students. The teachers being the key personnel to innovate new system of education with the changes in teaching methods, evaluation of students and introduction of new subjects or devices, training of teachers is an essential part of a stage of education.

Mary and Selvakumar (2013) conducted research on study organizational climate in commerce of higher secondary students. Findings of the study were as follows (i) the levels of study organizational climate in commerce as perceived by higher secondary students are average in nature (ii) gender does not affect organizational climate in Commerce and all its dimensions: goal orientation, infrastructure facilities, delivery of instruction, credibility of teacher, peer relation, study practices, instructional facilities, parenting, teacher - student interaction and school discipline (iii) birth order influences the study organizational climate.

Sekar and Mani (2013) on their study parental encouragement to higher secondary students in Thiruvannamalai District: an empirical analysis found out that in parental encouragement, the urban higher secondary school students have gained more parental encouragement when compared to the parental encouragement of rural higher secondary school students. However, urban and rural adolescents feel equally accepted and protected by their parents. In the parental encouragement, the Tamil

medium and English medium higher secondary students significantly differed. Moreover, English medium students get more parental encouragement than the Tamil medium students. In this aspect, the English medium students have gained more parental encouragement than the Tamil medium students.

Sekar and Mani (2013) also conducted a study on science attitude of higher secondary students. The investigation reveals the significant difference in science attitude of higher secondary students with respect to the location of permanent residence. Similarly, they also significantly differ in science attitude with regards to the type of management of school. However, science attitude is a vital factor in determining the students' day-to-day life and future career. Hence, a positive attitude towards science need to be developed among higher secondary students and the initiation should start from the beginning of the school education. Therefore, teachers and teacher educators need to inculcate the science attitude among students' community, as it is very much essential for the present-day scientific and technological world. Science teachers have to incorporate appropriate scientific facts during the teaching of science to develop interest in science and develop positive attitude in students towards science learning, so that students may be able to work better in such a way to adjust themselves in the fast developing scientific world.

Agu and Onah (2014) conducted a study on improving the quality of commerce teaching and learning in senior secondary schools in Enugu Education Zone. The findings of the study includes: 9i) the problems confronting effective implementation of commerce in senior secondary schools include the inability to engage students in field trip, lack of qualified teachers, over - loaded curriculum,

curriculum not relevant to the current societal needs, lack of equipment and ineffective teaching strategies (ii) areas such as teaching strategies, skill development in students, material resources, curriculum content, ICT, quality of teachers and teachers' attitude to work needed urgent reforms. The teachers were poorly trained in either content or pedagogy and therefore lacked adequate knowledge of content and pedagogy.

Awoyemi and Odeniyi (2014) in their study evaluation of career knowledge of senior secondary schools students in Oyo State, Nigeria finds that majority of the guidance counsellors were aware of career knowledge as one of the objectives of guidance and counselling programme. This is an indication that the guidance counsellors have not forgotten what they learnt at the University and attached importance to career choice. It also shows that they are conscious of the fact that education is a means to an end and not an end in itself. It also reveals that the knowledge that is acquired in school is to be utilized for productive purposes which can be realized through career counselling. The study also shows that both private and public secondary schools students had moderate and high knowledge of career counselling. The research also shows that there was significant difference in the career knowledge of students in schools with guidance counsellors and those schools without guidance counselors. Many secondary schools lacked necessary information on career knowledge and opportunities available to them in the world of work.

Beri and Beri (2014) conducted a study on teaching effectiveness of senior secondary school teachers in relation to their organizational commitment and emotional intelligence and their findings were: (i) there is significant difference in

emotional intelligence of male and female teachers of senior secondary school (ii) there is no significant difference in organization commitment of male and female teachers of senior secondary school (iii) there is no significant difference in teaching effectiveness of male and female teachers of senior secondary school (iv) there is no significant difference in emotional intelligence of government & private senior secondary school teachers (v) there is no significant difference in organizational commitment of government and private teachers of senior secondary school (vi) there is no significant difference in teaching effectiveness of government and private teachers of senior secondary school (vii) there is no significant relationship between teaching effectiveness and organizational commitment of senior secondary school teachers (viii) there is no significant relationship between emotional intelligence and teaching effectiveness of senior secondary school teachers (ix) there is no significant relationship between emotional intelligence and organizational commitment of senior secondary school teachers.

Ching lian Mawi and Maisnam (2014) conducted a study on attitude and perception of the students towards higher secondary education in Churachandpur District of Manipur. The result of the study showed that students' attitude and perception towards higher secondary education were at low level. The results that could be drawn were that attitudes and perception on the basis of motivational level in studies, co - curricular activities and curriculum were at high level, while on the basis of choice of subjects and learning, teachers and instructors, physical infrastructure and level of satisfaction on academic performance were at low level.

Devi (2014) in her study present scenario of student – teacher ratio of higher secondary schools at Imphal East and West Districts of Manipur found that the five government schools of the study area have very low enrolment of students as a result of which per student expenditure has become high in this socio - economic scenario of Manipur. Another important finding was the number of teachers in the schools has been found to be not on rational basis indicating the need for rationalization. Regarding these factors different backgrounds are available, which are not official, – like teachers are not interested to go to the rural and hilly areas. Push and pull factors were so high in connection with the posting of the teachers. Parents were interested with the enrolment of their children to the private higher secondary schools where student- teacher- parent contact was very good which was quite nil in the governmental schools. These few findings here may be of extreme relevance in policy formulation by the government. If they are taking proper steps regarding the above few conditions, the vast human resources will not be wasted in vain because higher secondary stage is the important crossroad in connection with the utilization of the proper potentials of a person.

Devi and Singh (2014) in their study unit cost of education in government higher secondary schools of Imphal, Manipur found that: (i) in the context of Government Higher Secondary Schools, the State Government bears all the expenditure on education in both Plan and Non-Plan structure. Plan expenditure helps in the development of education system while Non-Plan expenditure maintains the development. The social unit cost per student has been calculated on some items of expenditure, such as salaries and allowances of teaching and non-teaching staff



and foregone rental values of the buildings and infrastructures. The plan expenditure includes the salaries of part times, casual, contract teaching and non-teaching staffs. Non-Plan is the most important items in the estimation of cost of education. It includes the pay enjoyed by the permanent/regular teaching and non-teaching staff. The foregone rental value is taken as a fixed cost as there was not much variation during the years of study period in respect to the location where the particular school is located. The school which has the highest social cost (Rs.23,841/-) has the lowest student enrolment (1989) with the highest teacher strength. Whereas, the school with the highest enrolment of student (4094) has the lowest social cost (Rs.12,941/-).It is also seen that the social cost is decreasing in the year 2004-05 due to the increase in the student enrolment (ii) the total student cost is calculated with reference to the following fees: Admission, Library, Examination, Games and Sports, Development, Magazine, cost of books and stationery. The cost of books and stationery for Science and Arts/Commerce subjects in respect of the prescribed syllabus of the schools are also included in the student cost. Thus, the student cost is the sum total of the expenses by the student and the family which has been calculated separately for science and arts/commerce. The overall average for science student is Rs.2,616/- and that of artsRs.1,792/-. The existing cost shows not much variation among the schools. It also reveals that the science student expense more than the arts/commerce student (iii) the opportunity cost has been calculated from the possible foregone income which can be earned by a matriculate during the two years of higher secondary education if not continued to further study. For the present study, the average income- (A matriculate may not get a regular job so he has to work as a labour for earning as a semi-skilled or unskilled. Thus, there is 50% chance of

working as a semi-skilled or an unskilled labour) of semi-skilled labour and unskilled labour is treated as the opportunity cost. During the study period from 2002-03 to 2006-07, the average earning of a semi-skilled labour is Rs.25,794/- per annum and that of unskilled labour is Rs.23,828/- per annum. Hence, the average earning has been Rs.24811/-. During five years, the overall average cost per student in Science stream is Rs.46,011/- and Rs.44,975/- in Arts/Commerce stream. The unit cost ranges from the lowest of Rs.40,168/- to the highest of Rs.49,999/- in Arts/Commerce whereas in science it is from the lowest of Rs.41,219/- to the highest of Rs.51,030/-. The cost of science student is found to be a bit higher than the cost of arts student.

Jayakumar and Krishnakumar (2014) conducted a study on e-learning and achievement in chemistry among higher secondary students in terms of usage of internet and number of concepts viewed and the findings of this study reveal that the students who have exposure technology have better academic achievement.

Khan, Mohiuddin, Baig and Minai (2014) conducted a study on Statistical Analysis of Constraints Acquiring Higher Secondary Education. Their findings were: (i) the two main reasons for the students to drop their education in a mid-way are “Poverty” and “Unawareness about the importance of education”. The first and the leading factor that influences dropout (i.e., Poverty) cannot be resolve rapidly but second major factor (i.e., Unawareness about the importance of education) can be reduce on taking quick and appropriate steps. For this, the key aspect for the educationist is to educate people about the importance of education effectively and adequately so that the students may be able to keep continuing their education and

also show quality performance in their academics (ii) the education of parents also has major effects on students' academic performance. Since the data which was collected from different institutions of Karachi show some biasness towards those students, which belongs to the families in which the highest individual qualification is Graduation or more (iii) it was also revealed that students of private schools acquired good grades in matriculation examination rather than the students of government schools; this is because the standard of the government schools is very low (iv) it was expected that in the cosmopolitan city like Karachi the education level should be of good standard. But data analysis disclosed that more than 50% of the respondents know such students in their domain are actually the dropouts (v) it was also being observed that the normal curve against the responses of the question showing that the education level of Karachi is not of good standard (vi) it was claimed that the students who take part in political activities during studies did not give proper attention to their studies. Their first priority is to support the political party from which they belong rather than to focus on their studies. The data analysis proved the above claim to be true, and found that the most harmful factors which affect the performance of the students were Cheating and Politics.

Pachaiyappan and Raj (2014) conducted a study on evaluating the teacher effectiveness of secondary and higher secondary school teachers. The major findings of the study were: (i) the male and female school teachers do not differ significantly in their teacher effectiveness (ii) the urban school teachers are more effective in their teaching than compared to rural teachers (iii) the higher secondary school teachers are more effective in their teaching than compared to secondary school teachers (iv)

the science teachers are more effective in their teaching than compared to arts teacher (v) it was found that there is a significant difference in teacher effectiveness among the school teachers with respect to teaching experience (vi) the study reveals that there is a significant difference in teacher effectiveness among the school teachers with respect to type of school management.

Prasida (2014) conducted a study on Influence of Study Habits on Academic Achievement in Science among Higher Secondary Students. The findings were: (i) the correlation between study habits and academic achievement in science was 0.676 which is higher than the value set for significance at 0.01 levels. Hence, the relationship between study habits and academic achievement in science is considered to be positive (ii) the relationship between Study habits and Academic Achievement in Science is found to be significance at 0.01 levels for the total sample and for the subsample of the study. It can be inferred that there exist a significant positive relationship between Study Habits and Academic Achievement in Science.

Kaur (2015) conducted a study of emotional maturity of senior secondary school students in relation to their socio-economic status. The results revealed that there is significant difference in the emotional maturity of boys and girls of senior secondary schools. It may be the reason that boys are more emotionally mature as compared to girls. They have much control on their emotion than girls. It was found that there is significant difference in the emotional maturity of senior secondary school students with respect to socio-economic status of the parents. The finding was due to the influence of family background and type of family since family structure greatly influences the emotional maturity of the students. Emotional maturity was

also largely influenced by education, professional and economic conditions of the family. The result shows that there is significant interaction effect of socio-economic status and gender on emotional maturity of senior secondary school students. The girls of senior secondary school in the urban area belong to higher socio economic status family were well established in terms of job and profession and emotionally matured than the girls of senior secondary school in the rural area that belong to middle or lower socio economic status family who were not well established in terms of job and profession.

Maidaura and Ahmed (2016) studied the relationship between parental socio-economic status and academic performance of students of senior secondary schools in Katagum Local Government, Bauchi State, Nigeria. The findings of the study reveal that parents' occupation has link with students 'academic performance. Students or children whose parents are civil servant or has a private business, like doctor, lawyer, farmer or whatever type of occupation you practice will influence your children academic performance .Similarly, the level of income also does influence student academic performance, whatever parents earn every day or monthly has positive relationship with academic performance. On the other hand, parents' level of education also influences academic performance of their children. A student from a graduate or semi graduate family may perform far better academically, unlike his counterpart from semi-or less educational advantage parents or families.

Nadeem and Ahmad (2016) conducted a study on the emotional intelligence and academic achievement of higher secondary students. the findings of the study

revealed that: (i) 13% of higher secondary students fall in category of high emotional intelligence, 68.5% in average emotional intelligence and 13.5% fall in the category of below average emotional intelligence (ii) 22% of higher secondary students fall in the category of distinction, 33.5% fall in the category of 1st division, 41% of the students fall in the category of 2nd division and 3.5% of the higher secondary students fall in the category of 3<sup>rd</sup> division (iii) 21% of male higher secondary students fall in the category of high emotional intelligence while as only 5% of female higher secondary students fall in the category of high emotional intelligence, 68% of male higher secondary students fall in the category of average emotional intelligence while as 69% of female higher secondary students fall in this category and 11% of male higher secondary students and 26% of female higher secondary students fall in the category of below average emotional intelligence (iv) male and female higher secondary students differ significantly on self awareness dimension of emotional intelligence. The male higher secondary students in comparison to female higher secondary students are more aware of themselves. They have clear perception of their personality including beliefs, thoughts, strengths, weaknesses, motivation and emotions. They have more emotional awareness, accurate self assessment and self confidence than female higher secondary students (v) both the male higher secondary students and female higher secondary students are better at self regulation dimension of emotional intelligence. Both the groups can intentionally elicit an emotion, even an unpleasant one. Both the groups showed the qualities of self control, trustworthiness, conscientiousness, adaptability and innovation (vi) the male and female higher secondary students differ significantly on the motivation dimension of emotional intelligence. The male higher secondary students have more

motivation of reaching to their goals than female higher secondary students. Male higher secondary students are found to be more responsible, better able to make intelligent decisions, recognizing their weaknesses and making efforts to overcome them (vii) the male and female higher secondary students differ significantly on the empathy dimension of emotional intelligence. The results make it clear that male higher secondary students pay more attention to the worries and concerns of others and can listen to someone without an urge to say something. They feel it difficult to describe themselves but they love themselves. So they are good at understanding and developing others. (viii) the male and female higher secondary students differ significantly on the social skills dimension of emotional intelligence the results make it clear that the male higher secondary students are able to express their feelings easily, consider loneliness impossible as they have their own company; consider teamwork good way of bringing on and instructing the less able. They manage the social situations very skillfully. They pay respect to their elders. They do love the change. Thus they are good at communication, conflict management, leadership, change catalyst, building bonds, collaboration and cooperation and team capabilities. The male and female higher secondary students differ significantly on the composite score of emotional intelligence. the male higher secondary students showed higher level of emotional intelligence than female higher secondary students (x) 26% male and 18% female higher secondary students fall in the category of distinction, 36% male and 31% female higher secondary students fall in the category of 1st division, 37% male and 45% female higher secondary students fall in the category of 2nd division and 01% male and 06% female higher secondary students fall in the category of 3<sup>rd</sup> division (xi) the findings of the study further revealed that male

higher secondary students have higher academic achievement than female higher secondary students.

### **2.3 Studies relating to Problems in Higher Secondary Education**

Shah (1968) conducted a study on some problems of educational administration in India maintained that: (i) the Indian Educational Administration under the British was centralized and bureaucratic; and (ii) that there were many problems with regards to the financing of education and their funds could not meet the requirements of education.

Desai and Desai (1974) in their study 'An investigation into the wastage of secondary education in Gujarat' found that wastage was due to the absence of proper plans and planning machinery.

Gupta (1974) in a study problems of higher secondary schools of Agra district found that: (i) 9.34 per cent of the schools were under private management and private management were found to be responsible for many of the problems; (ii) working and teaching days were insufficient; (iii) the administrative load of work of Principal was heavy because of lack of helping hands and interference of managers; and (iv) 40 per cent of the students failed at High school and 50 per cent at Intermediate Stage because of lack of interest, poor mathematics and over emphasis on English.

Sailo (1977) conducted a study of the institutional problems faced by the heads of secondary school in Shillong and found that among the teachers employed in schools as on 1.6.1977, trained graduates constitute 22 per cent, untrained



graduates 35 per cent, non-graduate trained 1 per cent and non-graduate untrained 43 per cent.

Karmyogi (1979) from an investigation into the problems of educational administration in Madhya Pradesh from 1947 with reference to secondary education revealed that: (i) the qualifications, pay scales and working conditions of divisional and district educational administrators were not found satisfactory; (ii) there was no provision for training of educational administrators; (iii) methods of promotions were not scientific; (iv) the selection procedures and transfers of lecturers and teachers were not objective; (v) sixty percent of schools lacked adequate facilities; (vi) schools were rarely inspected; (vii) there were no means by which effective and ineffective teachers were differentiated ; (viii) working of extension departments were not effective ; (ix) there were no provision for moral education in school curriculum; (x) there was no cooperation between school and community; (xi) there were no alumni associations existing in schools; ( xii) quarterly and half yearly examinations were not given due credit; (xiii) promotion rules in the schools were incoherent; and (xiv) invigilators of examinations faced threat to personal security.

Rai (1979) in a critical study of the progress and problems of secondary education in Bihar after Independence found that: (i) though there was some progress, the prevailing situation was not satisfactory due to the laissez-faire policy of the Government. Mushroom growth of educational institutions took place. All the financial input had proved ineffective in the face of expansion and all effort at qualitative improvement were abortive. The government had tried to check the rate of expansion but the problem persists; and (ii) the system of education had become

complex. The administrative machinery could not meet the challenge of the fast expanding system. From time to time attempts were made to streamline the administrative machinery but without success.

Balieh (1984) conducted a study of the problems of educational administration in the secondary schools of Meghalaya and some of the problems identified in the study were: (i) lack of good and standard building, playground facilities, teaching aids, etc. (ii) problem of teaching languages was acutely felt (iii) problem of unplanned persecution of studies without specific goals (iv) the dearth and complete lack of school libraries.

Maheshan (1997) investigated in his study, a critical study of some problems of the +2 stage of education in Karnataka, the strengths and weaknesses of the +2 stage located in three types of institutions namely, the composite junior colleges, the composite degree colleges and the independent junior colleges in the state of Karnataka. The study established a definite advantage in delinking the +2 stage from the higher education institutions to ensure its quality. The study also established the need for upgrading the pedagogic skills of teachers and worked out a diploma level programme catering to the professional needs of teachers at the +2 stage.

Lalsangliani (1999) conducted a study of the progress of secondary education in Mizoram in the post - independence period: curricular, organizational and financial aspects. The findings of the study were: (i) the period loads of the teachers in private schools were more than that of the teachers in government and deficit schools. Obviously, private school teachers were having less number of off -

periods per week. Scrutiny of the period load indicated that there was no uniformity of the period load among the teachers in different secondary schools and that nothing was prescribed by the Department regarding the total number of periods to be taken by a teacher per week (ii) due to inadequate facilities for workshop on examination reform, only 17.58 per cent of the teachers were found attended workshop on examination reform, while a large majority (82.42 per cent) of teachers did not attend such programmes (iii) it was found that only a few schools provided co-curricular activities like N.C.C. (16.88%); Girls Guides and Boys Scouts (17.50%) mostly in urban schools. In rural areas such activities were not provided (iv) only four government schools having higher secondary classes were provided with vocational education in Classes XI and XII. Majority of the heads of schools (77.50%) were interested in introducing vocational courses at +2 level. They, however, pointed out that lack of fund, dearth of qualified teachers, lack of buildings and equipments were the main difficulties in this regard (v) only 45.75% of the schools deputed teachers so far for undergoing professional training and that among those teachers deputed, majority were from the government schools.

Vasava (1999) from a study progress and problems of higher education in the state of Gujarat reported that the problems of higher education in the region were inadequate teaching staff, poor attendance due to tuition classes, teachers' unfamiliarity with effective reference books, teaching only through lecture method and lack of funds.

Chaudhari (2000) conducted a study on higher secondary education in the state of Gujarat: development and problems which reveals that there was an adequate

supply of educational literature and other materials but the pupils were found not using those properly and the results were also found to be not satisfactory.

Mattoo (2000) identified a number of problems in a study Identification of Teachers' Problems. They were: (i) a majority of schools were functioning in partly pucca or kuchha buildings; (ii) a majority of schools were not having drinking water facility, school ground facility, school furniture, boxes/trunk, school medical checkups; and (iii) approximately half of the schools were not having adequate black boards or library facilities.

Lyndem and Laltanpuia (2001) in their study literacy status of Mizoram with reference to Chhimtuipui District found that: (i) literacy was low in Chhimtuipui District of Mizoram; (ii) 53% of respondents pointed out that the reason for low literacy in the district was due to the existence of a good number of minority groups who speak different dialects; and (iii) the difficult terrain, poor transport and communication had also stood on the way of the all round development of the District.

Khongwir (2004) conducted a study on development of higher secondary education in Meghalaya: an analytical study. Some of the major findings were: (i) from the available information with regards to the difficulties that would arise while implementing 10 + 2 pattern in the State, it was found that 83.14 per cent and 69.71 per cent of the respondents were of the opinion that financial problem and upgrading the secondary schools would be the great difficulties respectively. However, 64 per cent, 59.14 per cent and 54.57 per cent of them were apprehensive about the reorganization of administrative and supervisory machinery, ill equipped schools and

heavy curriculum. The problem of finance was probably the greatest obstacle in the expansion and development of education in the State. Thus it was high time for Meghalaya to take serious note of this and concerted efforts should be directed towards improving this poor condition. (ii) it was found that the majority of 42.85 per cent and a minority of 36.85 per cent of the teachers and students had to cover a walking distance of above 2 kilometers and within 1-2 kilometers respectively to reach the schools. The lack of communication network prevented a greater number of children to come to the school, which in turn hinder the progress of the school. It would be of great help to the students, if perhaps the school authorities could make an effort to provide school buses wherever possible (iii) the finding showed that 26.28 per cent of the respondents considered poverty of parents; 14.85 per cent lack of facilities; 14.85 per cent indifferent attitude of parents and 9.71 per cent children lack of interest were the reasons for poor enrolment of the students in the schools. Unfavourable conditions at home due to poverty and indifferent attitude of parents were the main factors leading to drop outs in the schools. This was perhaps because parents in the interior villages have an ambivalence attitude. They were neither against sending their children to school nor did they compel their children to attend school. The education they received was not relevant in terms of their environment or because the need was not apparent or felt. (iv) another finding of the study was that there were various problems that hindered the growth and development of Higher Secondary Education in the State. The most prominent problems stated by 46.28 per cent of the respondents were poor educational facilities; 41.42 per cent paucity of funds and 31.71 per cent insufficient number of teachers due to lack of sanction from the Government (v) referring to the opinion as to whether the +2 stage

should form part of the existing school or constitute an independent institution, it was found that 60 per cent, 26.66 per cent and 13.33 per cent of the respondents were of the opinion that the + 2 stage should form part of the existing schools, should be in a separate institution and attach them to the colleges respectively. The location of +2 stage in the schools or colleges had become controversial. There were arguments for locating the same in the schools, in colleges or in both. In the meantime, in keeping with the far-sighted suggestion of the Fifth Five Year Plan, Meghalaya did well in bringing the +2 level of education whether located in schools or colleges, under the supervision and control of the Meghalaya Board of the School Education.

Sundarajan and Nelliappan (2006) in their study problems impeding effective role performance by higher secondary teachers studied problems under seven heads (like pupils, facilities, parents, etc) impeding effective role performance by higher secondary male/female, government/private higher secondary teachers.

Deuri (2012) in evaluative study of text book in English at higher secondary level found out the following: (i) two main defects are found in the size of the text books which are large in size and inconvenient in size. (ii) the main defects pointed out regarding the binding of the text books are weak binding and thin card board (iii) the difficulty level of the contents does not suited to the class (iv) there are no proper illustrations, pictures etc. Most of the teachers and students have demanded pictures for further clarification (v) the assignments are mostly neglected by students due to the lack of resources (vi) the book is not produced with latest information.

Devgan, Singh, Singh, Kaur, and Ahluwalia (2012) studied effectiveness of health education among female teachers of senior secondary school regarding

problems in adolescence. Result shows majority 145(63%) teachers said they were consulted by the adolescents for their problems and 127(55.2%) teachers had partial knowledge about adolescent problems. Maximum 87(37.8%) teachers said that they counselled the girls. It can be concluded from the present study that the overall knowledge of teachers regarding adolescent health problems is less.

Gupta (2013) studied a study of problems of adjustment of senior secondary school students and the findings were (i) the boys of senior secondary school possessed a good level of home adjustment in terms of the mean and girls of senior secondary school possessed a moderate level of home adjustment (ii) the boys of senior secondary school possessed a good level of health adjustment in terms of the mean and girls of senior secondary school possessed a good level of health adjustment (iii) the boys of senior secondary school possessed a moderate level of home adjustment in terms of the mean and girls of senior secondary school possessed a good level of social adjustment (iv) the boys of senior secondary school possessed a good level of emotional adjustment in terms of the mean and girls of senior secondary school possessed a good level of emotional adjustment.

Gupta and Joshi (2013) conducted research on a study on problem solving ability of senior secondary school students. The findings of the study were: (i) students of Government and Private Schools do not differ significantly in their problem solving ability. (ii) there exists significance difference in problem solving ability among senior secondary school students in relation to their stream (iii) the problem solving ability of female students is higher than the male students.

Ikebude, Modebelu and Ogochukwu (2013) studied the impact of poverty on senior secondary school girls' prospect for tertiary education in Nigeria. The results revealed poverty shows negative relationship exists between poverty and senior secondary school girls' prospect for tertiary education, which implies that a one percent reduction in the level of poverty will increase senior secondary school girls' prospect for tertiary education in Nigeria. unemployment indicates also that there is a negative relationship between unemployment and senior secondary school girls' prospect for tertiary education in Nigeria.

Reddy and Anuradha (2013) in their study occupational stress of higher secondary teachers working in Vellore District found that it was found that, around 88 percent of higher secondary teachers are experiencing moderate and high levels of occupational stress. This indicates the need for interventions in strengthening and reinforcing teacher's self-confidence and positive attitude, and weakening the stress creating factors. The first step towards tackling stress is to acknowledge its existence. Recognizing the manifestation of stress among teachers and identifying the major stressors could go a long way in ameliorating the menace of occupational stress while designing suitable stress coping mechanism for teachers. Both 'direct action' and/or 'palliative techniques' could be employed. Direct action or problem focused approach concerns itself with the stressors and is a powerful proactive way of handling stress related problems. Palliative techniques or emotion focused strategy involves attempting to limit the emotional fallouts of stress. Here one accepts the stress causing situation but makes efforts to minimize its impact though some level of stress becomes inevitable. Some other measures which could prove beneficial to



teachers in coping with stress are: improve self esteem, build self confidence, work on building emotional intelligence competencies, develop a good sense of humor, eat well balanced meals, get adequate sleep, practice yoga and meditation, exercise regularly, foster a supportive friend circle, cultivate hobbies, develop effective communication skills, engage in creative activities, review priorities on a regular basis and seek professional help, if necessary. These coping strategies need to be incorporated on a priority basis so that the teachers are well prepared to deal with job stress as and when it surfaces. These measures can go a long way in reducing stressful work situations and improving the effectiveness of the teachers. Stresses of job life can be conveniently managed, to a large extent, at different stages through various institutional interventions such as; a) prevention of stress through organizational interventions at the management level, like, selection of suitably qualified teachers, proper job designing and training, adequate work conditions, effective supervision and incentive system, effective communication system, participative management, etc. b) minimizing the frequency and intensity of stressful situations integral to the job at the organizational level. c) moderating the intensity of integral job stressors and their consequent strains through the effect of other variables of positive values, such as high or extra salary, non-financial incentives, social support, generating team feeling, participative decision making, etc.

Bala (2014) studied values and adjustment problems of high achievers and low achievers and the findings were: (i) high achievers are more theoretical and social in comparison to low achievers. They have dominant interest in knowledge, learning and believe more in kindness, charity and love (ii) high achievers and low

achievers are similar as for as religious value is concerned (iii) low achievers are more economic in comparison to high achievers. They believe more in materialistic life than high achievers (iv) high achievers are more political in their approach in comparison to low achievers (v) low achievers are superior on aesthetic value in comparison to high achievers (vi) high achievers and low achievers are similar as for as social and home adjustment is concerned (vii) high achievers are superior on school adjustment in comparison to low achievers, whereas, low achievers have more adjustment problems on school adjustment scale (viii) low achievers have more adjustment problems on health and emotional area in comparison to high achievers. High achievers were found adjusted on health and emotional area than low achievers.

Balamurugan (2014) studied creative problem - solving ability among the higher secondary students: description and analysis and found that the higher secondary students possess 'above average level' in their creative problem solving ability. The male and female higher secondary students and the students from Rural and Urban Locality differ in their Creative Problem Solving ability. The male students are higher in their problem solving ability than the female students. It is noteworthy that, the study shows the students problem solving ability increases with increase in age. Surprisingly the 'rural' area students possess higher in problem-solving ability than the urban area students. The creative problem solving ability of the higher secondary students differs with respect to their demographic variables 'Types of School and 'Parental Occupation' also. The study also shows that the male students are better than the female students in their problem solving ability.

Chuaungo (2014) conducted a research on school education in Mizoram: an analytical study and some of the findings were: (i) there is no single classroom school at the secondary and higher secondary levels whereas the percentages of such schools in the country are 1.30 and 1.82 respectively (ii) secondary and higher secondary schools are much in a worse position with regard to library facility when compared with that in the rest of the country. The percentages of all the schools except secondary schools having ramps are lower than the national percentages. The condition of higher secondary schools is worse than that of other schools in both the library and ramp facilities (iii) in terms of computer and internet facility, the position of secondary and higher secondary schools in the state is far from satisfactory as only 2.92 per cent of secondary and 7.02 per cent of higher secondary schools have the facility while the national averages for the same are 33.69 and 43.99.

Ekpo (2014) studies issues of implementing the senior secondary school curriculum in Nigeria and found out the following:-

- (i) **Limited Funding Capacities:** It is very difficult to implement a curriculum successfully if the education system has limited funding capacities. Under funding raise a lot of other implications on the part of curriculum. The economy of a nation will determine the success of curriculum implementation. In developing countries including Nigeria, the numbers of students and teachers have kept on rising but government money available for education is less.
- (ii) **Unavailability of School Facilities and Equipment:** Absence of school facilities and equipment such as functional classrooms, resource

centres, offices, school halls, well equipped libraries, laboratories, workshops, etc can hinder curriculum implementation.

- (iii) Staffing Issues: First, a high staff turnover would threaten curriculum implementation. Second, new or inexperienced teachers can find it difficult to cope with the flexible nature of the curriculum, perhaps feeling a need for more detailed direction so as to what they should teach. Third, staff who had been teaching perhaps for many years in a more traditional way might be apathetic or resistant to the idea of wholesale change.
- (iv) Overload in Curriculum content
- (iv) Large class sizes

Ganal and Guiab (2014) in their study problems and difficulties encountered by students towards mastering learning competencies in mathematics found that:-

- (i) The respondents encountered personal problems relating to school expenses, lack of interest and negative attitude towards the subject. The emotional problems encountered are excessive stress in doing academic tasks and low self - esteem or not believing in one's capabilities.
- (ii) On problems relating to teacher's instruction, these are no effective motivation and introduction, and not creative enough to adapt his/her method to the learner's capability.

- (iii) As to problems with school adjustment, the most frequent are difficulty in adjusting to life/role of a college student, and not doing the tasks well. The problems in adjusting to classmates/board mates are how to be accepted by classmates and board mates, and working effectively with different kinds of classmates.
- (iv) With regard to problems arising from over - extended schedule/workloads for practice in different competitions, the most common problems are too many academic tasks and projects assigned, and studying and reviewing too many subjects every day.

Lukman and Hamadi (2014) in their study disciplinary measures in Nigerian senior secondary schools: issues and prospects, found that:-

- (i) Truancy, absenteeism, fighting, stealing and drug addiction among others are typical examples of disciplinary problems experienced in Nigerian secondary schools.
- (ii) Parental/home, political, social and economic, school environment, school curriculum and peer group influence among others are the causes of disciplinary problems.

Mohamedayupkhan and Mani (2014) conducted a study on higher secondary students' personal problems, study involvement and academic achievement and the findings were (i) the higher secondary school students have only moderate level of personal problems, study involvement and academic achievement. Therefore, the higher secondary school students who are also the basic pillars of the educational

system of India need to be provided all kinds of support from the family, school, society and the nation, to establish a strong community bond desirable for the progress of human kind (ii) the girls are experiencing more personal problems, so the teachers can provide supportive measures to reduce the stress and anxiety experienced by them. Although girls, according to girls are experiencing more personal problems, so the teachers can provide supportive measures to reduce the stress and anxiety experienced by them. Although girls, according to the present study, out-perform the boys in academics, such problems that may be physical or mental persisting in them can affect their studying in the co-education schools show significantly less study involvement than that of the other two types of schools. The teachers in such schools can encourage group involvement in the academic activities, with the group involving both the genders, thereby allowing them to share the best advantages of all the students in planning and organizing the study materials, proper management of time while involving in such academic activities etc. It is important for the teachers to have a private conversation with the students and collect information related to their personal problem. Based on it they have to direct the students either for personal counseling or academic counseling. Keeping in mind the campus resources and better understanding of the student's situation the teacher can either provide help personally or make use of the professional services on the campus to provide the required support to the students with the personal problems. It is also important for the school management and the teachers to communicate with the parents of the students by providing motivation for educational achievement.

Mumthas and Muhsina (2014) conducted a study on psycho-social problems of adolescents at higher secondary Level. The major findings were:- (i) Almost 50 percent of the adolescents feel that they are impatient and shy. Only 9 percent of the adolescents feel that they are not respecting others. One third of the total sample each is talkative, unorganized, hyperactive and introverts. On an average 27 percent of adolescents are having behavioural problems. (ii) Almost 61 percent of the adolescents feel that they are very anxious and hot tempered. Nearly four percent of the adolescents have suicidal feelings. On an average approximately 32 percent of adolescents are suffering from emotional problems. (iii) 57 percent of the adolescents feel that they are academic underachievers. About 50 percentage of the sample have difficulties from over expectation of parents, lack of concentration and strict rules of school. Three percent of the adolescents have learning disabilities. On an average 34 percent of the adolescents are having educational problems. (iv) 40 percent of the adolescents feel that they have low self esteem, attraction to opposite sex and lack of leadership ability. Only 8 percent of the adolescents feel that they are isolated from family. One third of the total sample has difficulties from lack of self concept and self confidence. On an average approximately 24 percent of the adolescents are facing social problems. (v) Adolescents at higher secondary level face more problems from educational and emotional aspects. Problems like anxiety, hot temperedness, academic under-achievements and strict rules of school have a highest percent of occurrence among adolescents. (vi) The emotional problems are also high in adolescent due to the physical and physiological changes that occur as a part of their development and (vii) Adolescents of today have an intense desire for

independence and freedom for self expression that they deserve. If this need is not satisfied, they will start to deviate from the social norms and social values.

Sa'ad, Adamu and Sadiq (2014) studied the causes of poor performance in mathematics among public senior secondary school students in Azare Metropolis of Bauchi State, Nigeria. The results of the investigation show that:- (i) Students' negative attitude toward mathematics, anxiety and fear, inadequate qualified teachers of mathematics, poor teaching methods, inadequate mathematics teaching materials, overcrowded or mathematics classes, lack of libraries and mathematical laboratories, lack of supervision and inspection of mathematics teachers as well as lack of parental participation in the education of children are some of the main causes of poor performance in mathematics among public senior secondary school students in Azare metropolis of Bauchi state. (ii) Developing positive attitude, motivation and proper guidance toward mathematics, provision of qualified and adequately trained mathematics teachers, using child - centered approaches in teaching mathematics, provision of adequate mathematics teaching materials, provision of more classrooms and furniture, provision of libraries and mathematical laboratories, proper supervision and inspection of mathematics teachers, developing good school - community relationship and, adoption and use of computer assisted instruction are some of the ways of improving mathematics performance among public senior secondary school students in Azare metropolis of Bauchi state.

Abdul and Sumangala (2015) in their study counselling needs of higher secondary school students of Kerala: an exploration into the teacher perception found out that there are counselling needs among higher secondary school students of



Kerala as perceived by their teachers. Results also show that there is no significant difference in the perception on the counselling needs of higher secondary school students between male and female teachers. It can thus be concluded that higher secondary school students are highly in need of counselling support for need to tackle behavioural problems, need for understanding, need for love and belongingness, need for security, need for approval, need to tackle emotional problems, need for achievement, need for freedom and need for vocation. It is high time to implement counselling programmes considering students, teachers and parental needs in higher secondary schools. The current system of school counselling programmes in Kerala is to be revamped and a more systematic counselling support system is inevitably provided in schools.

Mangad and Nath (2015) conducted a study on problems of higher secondary school principals in Kerala – dual role of classroom teaching and school administration. The findings were: (i) 94.59 % of government higher secondary principals face difficulties to attend office work along with teaching 90.9 % of male principals are also agree with the existence of difficulties to attend office work along with teaching and 100 % female teachers also face difficulties to do office work along with daily classroom teaching. (ii) 50 (90.9%) principals are unable to complete portion in time due to the need to attend the office work along with teaching. (iii) No time to evaluate students is faced by 42(76.36 %) principals. (iv) 16.67 % principals find difficulties in disbursing scholarship (v) For 68.57 % principals one of the hurdles is with regard to routine interaction with top level authority (vi) Never ending process of admission and related work is the problem

confronted by 32(58.18 %) principals. (vii) Physical and mental physical strain due to overwork burden is the problem faced by 39.53 % principals. Salary disbursement problem is faced by 6(10.9 %) principals. (viii) Management problem is the problem confronted by 18 (32.72 %) principals. (ix) 37.14 % principals find difficulties to make arrangements to open and close classrooms. (x) 54.29 % principals find difficulties in keeping files properly.

Shehu (2015) conducted a study on the effect of problem - solving instructional strategies on students' learning outcomes in senior secondary school chemistry and found that that students' taught using explicit problem - solving method had a higher achievement mean score than their counterparts taught using lecture method. This showed that students taught using explicit problem-solving strategy improved better in achievement than those taught using lecture method. Therefore, this means that explicit problem-solving strategy was better than lecture method in improving students' achievement in the mole concept. This implies that students taught using problem-solving approach had mastered the strategy of solving chemical problem in chemistry, particularly in the mole concept which is a central theme in chemistry.

Syiem (2015) conducted a study on problem solving ability of higher secondary school students of East Khasi Hills District, Meghalaya . Major findings were: (i) In the case of male student's majority (69.67%) of them are found to have average problem solving ability followed by (5.43%) low problem solving ability and a small percentage (24.25%) falls in the high problem solving ability. In the case of female students' majority (66.54%) of them are found to have average problem

solving ability followed by (20.30%) low problem solving ability and a small percentage (13.52%) falls in the high problem solving ability. It is evident that male students are superior in problem solving ability. (ii) In the case of rural students majority (67.31%) of them fall under the average problem solving ability, (25.31%) of them have high problem solving ability, the remaining (7.38%) have low problem solving ability. As for urban students, majority (68.29%) fall under the average problem solving ability, only (12.37%) have high problem and the rest (19.34%) have low problem solving ability. It can be observed that rural students have better problem solving ability where 25.31% have high problem solving ability in comparison to only 12.37% of urban students. The probable reason may be that rural students have a good foundation of Arithmetic, concepts are clear and have a higher aptitude in dealing with mathematical problems. (iii) There is significant difference in problem solving ability between male and female students at 0.01 level. Male students have higher problem solving ability than their female counterparts.

Srimadevi and Saraladevi (2016) conducted a study on decision making and self - confidence on problem - solving ability among higher secondary students studying mathematics and they found that there was a significant difference was observed between male and female adolescents. In terms of decisional self-esteem and stress, it was observed that male adolescents had more self-esteem and that they experienced less stress in decision making than female adolescents. Female adolescents are less self-esteemed in decision-making and they feel more stressful.

## **2.4 Relevance of the Present Study in Relation to the Studies Reviewed**

The review of related studies reveals that few studies have been conducted on higher secondary education in different states of India. The studies were mainly on development, problems, parents' involvement, teaching behavior and competency, teacher effectiveness and others. It appears that no analytical study on higher secondary education as a whole has ever been conducted in the country particularly in Mizoram. Therefore, the researcher thinks it necessary to have an analytical study of higher secondary education in Mizoram.

It is also evident from the reviews that the aspects covered under these studies were very small and do not give a complete picture of the status and development of higher secondary education, especially in the north eastern region of India. The review also portrays that no in-depth study of higher secondary education in Mizoram has been undertaken even though it has been functioning since 1996. No detail and concise information regarding higher secondary education in Mizoram is available hence the need to conduct this study.

Further, the availability of only very few studies for review concerning problems faced by the teachers as well as the students of higher secondary education also indicates that this area has not yet been fully explored. The present study, therefore, assumes significance as it examines all the problems faced by the teachers and the students in terms of school administration and their relationship between each other.

**CHAPTER III**  
**METHODOLOGY OF THE STUDY**

## **CHAPTER – III**

### **METHODOLOGY OF THE STUDY**

This chapter describes the method and procedure adopted to obtain necessary data with reference to the objectives of the present study. They are discussed and presented under the following heads:-

1. Method of the Study
2. Population of the Study
3. Sample of the Study
4. Sources of Data
5. Construction of Tools
6. Collection of Data
7. Tabulation of Data
8. Statistical Treatment of Data

#### **3.1 Method of Study**

The investigator followed a descriptive survey method to collect data for the present study. This method describes and interprets what exist at present. This kind of investigation is concerned with conditions and relationships that exist, practices that prevail, points of view or attitude that are held and processes that are going on. The present study also adopted a historical research approach as the investigator was

required to study the development of higher secondary education in Mizoram in a historical perspective to fulfill one of the objectives of the study.

### **3.2 Population of the Study**

Since the present study was focused on the analytical study of higher secondary education in Mizoram, the study comprises of the following categories of population :

1. Population of higher secondary schools
2. Population of teachers of higher secondary schools
3. Population of students of higher secondary schools

#### **3.2.1 Population of Higher Secondary Schools**

All the government, deficit and private higher secondary schools in Mizoram constituted the first category of population. There were altogether 98 higher secondary schools in the state as per school education statistics, 2013-14 Department of School Education, Government of Mizoram which formed the category of population for the present study.

#### **3.2.2 Population of Teachers of Higher Secondary Schools**

All the teachers of government, deficit and private higher secondary schools in Mizoram formed the population of teachers. According to school education statistics 2013-14, Department of School Education, Government of Mizoram, the

number of such teachers was 1225 which constituted the second category of population.

### 3.2.3 Population of Students of Higher Secondary Schools

The entire students enrolled in government, deficit and private higher secondary schools in Mizoram constituted the third category of population.

**Table 3.2.3**

**Population of Higher Secondary Schools, Teachers and Students (2013-14)**

Management	No. of Schools	No. of Teachers			No. of Students		
		Male	Female	Total	Boys	Girls	Total
<b>Government</b>	20	195	238	<b>433</b>	3979	4022	<b>8001</b>
<b>Deficit</b>	7	98	68	<b>166</b>	1580	1549	<b>3129</b>
<b>Private</b>	71	378	248	<b>626</b>	4303	4076	<b>8379</b>
<b>Total</b>	<b>98</b>	<b>671</b>	<b>554</b>	<b>1225</b>	<b>9862</b>	<b>9647</b>	<b>19509</b>

*Source: Statistical Cell, Directorate of School Education*

Table 3.2.3 shows that there were 98 higher secondary schools comprising of 20 government, 7 deficit and 71 private higher secondary schools in Mizoram. There were 1225 teachers out of which 433 were teachers of government schools, 166 were teachers of deficit schools and 626 were private school teachers. There were 19509 students out of which 8001 were students from government schools, 3129 from deficit schools and 8379 were students from private schools. The investigator obtained all these information after consulting the Statistical Cell, Directorate of School Education, Government of Mizoram.



### **3.3 Sample of the Study**

The following samples were taken by following purposive and random sampling techniques :-

1. Sample of higher secondary schools
2. Sample of teachers of higher secondary schools
3. Sample of students of higher secondary schools

#### **3.3.1 Sample of Higher Secondary Schools**

Out of the existing 98 higher secondary schools in Mizoram, a sample of 43 schools (44 per cent) was purposively selected to include higher secondary schools offering arts, science and commerce subjects.

Since all these schools spread all over the state, the investigator took utmost care to see that all the eight districts were represented for the study. The following table shows the district-wise distribution of sample schools.

**Table 3.3.1**

**District – Wise Distribution of Sample Higher Secondary Schools (2013-14)**

<b>Name of District</b>	<b>Population</b>	<b>Sample in figures</b>	<b>Sample in percentages</b>
Mamit	2	2	100%
Kolasib	3	3	100%
Aizawl	49	14	28%
Champhai	10	4	40%
Serchhip	3	3	100%
Lunglei	21	11	52%
Lawngtlai	7	3	43%
Saiha	3	3	100%
Total	98	43	44%

*Source: Statistical Cell, DSE*

**3.3.2 Sample of Teachers of Higher Secondary Schools**

55 per cent of the teachers in the sample schools constituted the sample of teachers.

**3.3.3 Sample of Students of Higher Secondary Schools**

24 per cent of students from sample schools were randomly taken as sample students.

The distribution of the samples in terms of management of the schools is as shown in the following table (Table 3.3.3).

**Table 3.3.3****Distribution of Sample of Higher Secondary Schools, Teachers and Students****(2013-14)**

<b>SAMPLE</b>											
<b>No. &amp; % of Schools</b>				<b>No. &amp; % of Teachers</b>				<b>No. &amp; % of Students</b>			
<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>
12	6	25	43	289	154	228	671	1904	882	1983	4769
(60)	(86)	(35)	(44)	(67)	(93)	(36)	(55)	(24)	(28)	(24)	(24)

After availing the list of higher secondary schools in Mizoram from Statistical Cell of Directorate of School Education, location of the schools were studied since the population for the present study covers all over the state. It was found that almost all schools were spread in the urban and semi-urban areas of different districts. To draw an adequate and representative sample, the investigator adopted the stratified random sampling to draw the sample of higher secondary schools from all eight districts of Mizoram.

List of higher secondary schools selected as sample for the present study is attached in Appendix – I.

### **3.4 Sources of Data**

For the present study, both secondary and primary sources were used in order to collect pertinent information regarding higher secondary education in Mizoram. These are briefly described below :

#### **3.4.1 Secondary Sources**

The investigator collected data from all available sources such as letters of correspondences, meeting minutes, documents and records from the offices of Directorate of School Education and Mizoram Board of School Education. Annual Publications 2009-10, 2010-11, 2011-12, 2012-13, 2014-15, 2015-16 and 2016-17 prepared by Statistical Cell, Directorate of School Education and Result Books of HSSLC Examinations 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018 were also utilized.

For studying the development of higher secondary education in Mizoram, relevant documents obtained from the Mizoram Board of School Education were consulted. Besides this, the investigator also made use of unstructured interview with the Secretary of MBSE to have a more in-depth understanding of the status of higher secondary education in Mizoram.

Annual Publications prepared by Statistical Cell, Directorate of School Education were also consulted for analyzing the enrolment of students in terms of gender, types of institutions and academic streams.

The recruitment procedures of higher secondary schools in Mizoram were obtained from Mizoram Board of School Education, the State Council of Educational Research and Training (SCERT) and Directorate of School Education.

HSSLC Examination results for eight consecutive years i.e. 2011 to 2018 were analyzed using the Result Books published by the Mizoram Board of School Education.

#### **3.4.2. Primary Sources**

The investigator constructed Observation – cum- Interview Schedule to examine the physical infrastructure and facilities available and to study the academic and non – academic activities organized by higher secondary schools in Mizoram.

Personal Data Sheet for preparing and analyzing profile of teachers in terms of educational and professional qualifications, age, teaching experience, gender, types of institutions and academic streams was also constructed.

To analyze the teaching-learning processes and methods of evaluation, questionnaire was developed by the investigator.

Separate questionnaires for the teachers and the students were also developed by the investigator to examine the problems faced by them.

### **3.5 Construction of Tools**

The instruments which are employed for gathering new facts for exploring new fields are called tools.

In order to gather unknown information and data, the investigator employed four sets of tools according to the requirements of the study and to make the investigation more accurate. As such, information had to be collected from the principals, teachers and students of higher secondary schools in Mizoram. The tools constructed were :

1. Observation – cum – Interview Schedule for the principals
2. Personal Data Sheet for teachers
3. Questionnaire for the teachers
4. Questionnaire for the students.

#### **3.5.1 Observation – cum – Interview Schedule**

The investigator developed Observation – cum – Interview Schedule to collect certain information from the principals of higher secondary schools in Mizoram regarding institutional data, physical infrastructure and facilities, and the academic and non – academic activities organized for higher secondary classes.

In the first part of the schedule, the respondent was asked to furnish institutional data which includes name, address, date of establishment of the school, type of school and streams offered by such schools.

The second part includes certain questions for examining the physical infrastructure and facilities available in the schools. Questions regarding nature of the school building, physical condition of the school building, and provision of hostel facilities, separate rooms in the schools, classroom facilities, science laboratory facilities, library facilities, safe drinking water, sanitation facilities, condition of power supply and other facilities provided in the schools were included.

The third part of the schedule was concerned with questions which ask whether the schools have organized the different academic and non – academic activities namely excursion/study tour, science exhibition, debate, quiz, essay writing competition, elocution, assignments, class test, seminar, NCC, NSS, Adventure Club and Scouts and Guides.

This schedule was meant for the principals of sample higher secondary schools. A copy of this schedule is attached in Appendix – II.

### **3.5.2 Personal Data Sheet**

The investigator constructed Personal Data Sheet for preparing profile of teachers which includes information regarding their educational qualifications, professional qualifications, age, teaching experience, gender, types of institutions and academic streams. The tool was prepared for administration to teachers of sample schools. A copy of this data sheet is attached in Appendix – III.

### 3.5.3 Questionnaire for Teachers

Questionnaire is one of the most important and extensively used research tools. As its name indicates, it is a device for securing information by administering a set of questions to the respondents.

As there was no ready – made questionnaire available for the present study, the investigator developed questionnaire for the teachers of higher secondary schools in Mizoram.

The first part of the questionnaire includes questions to analyze the teaching-learning processes and methods of evaluation. All questions are close-ended type with probable answers to tick (✓) mark in the boxes provided with a “Yes” or “No” option.

The second part contains questions for examining the problems faced by the teachers. This covered areas such as:

- (i) Problems they faced in terms of physical infrastructure and facilities.
- (ii) Problems they faced in respect to their service conditions
- (iii) Problems they faced with their colleagues
- (iv) Problems they faced with their students.

All these questions were closed type which include probable answers to tick (✓) mark the most appropriate answers. Additional item “Any other” was given at the end of the multiple choice items.



The copy of this questionnaire for the teachers is attached in Appendix – IV.

#### **3.5.4 Questionnaire for Students**

Due to the non-availability of ready-made questionnaire that could be used straightaway for this study, there was a need for developing questionnaire for students to examine their problems. The questionnaire for students included closed type questions which asked the problems faced by them in schools. This asked the students whether they faced problems with physical infrastructure and facilities and if they had relationship problems with their teachers as well as with their peers. All questions were of closed type and the respondents were required to give their responses by putting tick (✓) marks in the boxes provided against each item. Additional item such as “Any other” was given at the end of the items.

The copy of this questionnaire for the students is attached in Appendix – V.

#### **3.6. Collection of Data**

The required data for the present study were collected by the investigator through her personal visits. Primary data were collected from Higher Secondary Schools offering Arts, Science and Commerce subjects, the teachers and the students of higher secondary schools in Mizoram.

The investigator personally went to different higher secondary schools in all the eight districts of Mizoram. Before going to schools for collecting data, letter regarding request to conduct research was sent to the principals of the institutions and accordingly, dates were set for the conduct of research in such schools.

The investigator personally distributed the schedule and questionnaires to sample schools. The respondents were made to understand that their responses to the items in the questionnaires were intended to use only for research purpose and that their responses would be treated as confidential. The investigator also took extra care to reassure the schools that this study was not meant to check the capabilities of the school but to understand the real situation and status of higher secondary education in Mizoram.

Instead of leaving behind the schedule and questionnaires, the investigator took extra time to wait for their responses so that they could return the schedule and questionnaires as soon as they finished answering them. Therefore, filled schedule and questionnaires could be collected on the same day when the study was administered.

Fortunately, almost all schools allowed the investigator to conduct research among their students. Questionnaires were distributed to the students and the items/statements in the questionnaire were explained one by one in Mizo language to them. As soon as they finished giving their responses, the answered questionnaire was then collected. Hence, the investigator did not encounter any problem regarding non-receipt of schedule and questionnaires.

Secondary data were also collected from books, journals, annual reports of School Education Department, office documents, etc.

After that, data collected through the observation – cum – interview schedule administered to principals of 43 schools, personal data sheet and questionnaire returned by 671 teachers and questionnaire returned by 4769 students of sample schools were arranged for analysis.

### **3.7. Tabulation of Data**

The data regarding the physical infrastructure and facilities of the schools, academic and non-academic activities organized by the schools, profile of teachers and problems faced by the teachers as well as the students were first arranged in master tables to make analysis easier.

### **3.8. Statistical Treatment of Data**

Since the present study is descriptive in nature, descriptive statistics such as frequency and percentages were applied for the treatment of data.

**CHAPTER IV**  
**ANALYSIS AND INTERPRETATION OF DATA**

## **CHAPTER – IV**

### **ANALYSIS AND INTERPRETATION OF DATA**

This chapter deals with the analysis and interpretation of the data regarding students' enrolment, teachers' profile, physical infrastructure and facilities available in higher secondary schools, teaching-learning processes, methods of evaluation, academic and non-academic activities organized for higher secondary classes, HSSLC Examination results of eight consecutive years and problems faced by the teachers as well as the students. They are presented under different heads as follows:

- 4.1. Development of Higher Secondary Education in Mizoram in a Historical Perspective
- 4.2. Students' Enrolment in Terms of Gender, Types of Institutions and Academic Streams
- 4.3. Profile of Teachers in Terms of Types of Institutions, Educational and Professional Qualifications, Age, Teaching Experience, Gender and Academic Streams
- 4.4. Recruitment Procedures of Higher Secondary School Teachers in Mizoram.
- 4.5. Physical Infrastructure and Facilities Available in Higher Secondary Schools in Mizoram
- 4.6. Teaching – Learning Processes and Methods of Evaluation

- 4.7. Activities (Academic and Non – Academic) Organized for Higher Secondary Classes in Mizoram
- 4.8. HSSLC Examination Results of Eight Consecutive Years i.e. 2011 to 2018
- 4.9. Problems Faced by Teachers of Higher Secondary Schools in Mizoram
- 4.10. Problems Faced by Students of Higher Secondary Schools in Mizoram

#### **4.1 Development of Higher Secondary Education in Mizoram in a Historical Perspective**

Documents and data collected for studying the development of higher secondary education in Mizoram from officials of the Directorate of School Education and Mizoram Board of School Education are analyzed and presented as under:

##### **4.1.1 Steps Taken Before the Implementation of Higher Secondary Education in Mizoram**

The various steps taken before the implementation of higher secondary education in Mizoram are presented in the following table:

**Table 4.1.1**

**Steps Taken Before the Implementation of Higher Secondary Education in Mizoram**

<b>Steps</b>	<b>Steps Taken by</b>
Decision of handing over the management of +2 stage of education to Mizoram from 1995 academic session	NEHU
Decision to take over the management of Pre-University Classes from the college and to start +2 education in schools from 1995 academic session	State Government
Decision to adapt/adopt the existing NEHU Syllabus until working out new syllabus	State Government
Planning to introduce a new syllabus with effect from 1997 academic session	MBSE

The above table (4.1.1) shows the steps taken before the implementation of higher secondary education in Mizoram as follows:

a) Decision of handing over the management of +2 stage of education to Mizoram from 1995 academic session: Although the new system of education (10+2+3) recommended by the Education Commission of 1964-66 ought to have been implemented in Mizoram during the early 90's, it could not be done for one reason or the other because the North-Eastern Hill University (NEHU) which managed the Pre-University education for so long did not insist for the same. But, the situation changed when NEHU decided to hand over the management of +2 stage of education to the respective State Governments from the academic session 1995 in consonance with the National Policy of Education.

b) Decision to take over the management of Pre-University Classes from the college to +2 education in schools from 1995 academic session: After NEHU, Shillong handed over the management of +2 education to the state government with effect from 1995 academic session and in pursuance of the decisions taken by the Council of Ministers in their meeting held on 25th July, 1995, it has been decided by the government to take over the management of +2 education with effect from 1995 academic session (Office Memorandum No. B. 17011/13/(A)/95 - EDS of 2nd August, 1995. Govt. of Mizoram. Education and Human Resources Department).

c) Decision to adapt/adopt the existing NEHU Syllabus until working out new syllabus: In pursuance of the decisions taken by the Council of Ministers in their meeting held on 25th July, 1995, it has been decided by the government that schools to adapt/adopt the existing NEHU Syllabus until a new syllabus is worked out by the MBSE. It also advised the board to work out the new syllabus keeping in view the standard and requirement of higher secondary education.

(d) Planning to introduce a new syllabus with effect from 1997 academic session: When the new syllabus has been finalized, planning was made to introduce the new syllabus with effect from 1997 academic session.

#### **4.1.2. Conversion of High Schools into Higher Secondary Schools:**

For effective taking over of +2 education by the State Government, a need for converting the existing High Schools into Higher Secondary Schools was felt. Due to limited financial resources, it was not possible to convert the High Schools to Higher Secondary Schools all at a time. Besides, as the existing colleges will also continue



to function, it was also not necessary to set up too many Higher Secondary Schools during that period (Minutes of the Meeting held in the Office Chamber of Hon'ble Minister, Education on 7th July, 1995 at 1 p.m. regarding taking over of +2 stage of education by the State Government).

Therefore, 26 High Schools were converted into Higher Secondary Schools in three phases during 1995-1998.

**Table 4.1.2 (a)**

**List of Converted High Schools into Higher Secondary Schools**

**(First Phase: 1995-1996)**

<b>Sl.No.</b>	<b>Name of Schools</b>	<b>Academic Streams</b>
1	Government Higher Secondary School, Aizawl	Commerce/Arts/Home Science
2	Republic High School, Aizawl	Arts
3	St. Paul's High School, Aizawl	Science
4	St. John's High School, Kolasib	Arts/Science
5	Govt. Higher Secondary School, Lunglei	Commerce/Arts/Home Science
6	Chaltlang Govt. High School	Arts
7	Synod High School, Aizawl	Science
8	Govt. Higher Secondary School, Champhai	Arts
9	Govt. High School, Serchhip	Arts
10	Govt. Higher Secondary School, Saiha	Arts/Science
11	Govt. High School, Kawthah	Arts
12	St. Peter's High School, Chhingchhip	Science
13	Kristian High School, Serkawn	Arts/Science

*Source: Mizoram Board of School Education (MBSE)*

Table 4.1.2 (a) shows that 13 high schools are converted into higher secondary schools in the first phase during 1995-1996.

**Table 4.1.2 (b)**

**List of Converted High Schools into Higher Secondary Schools  
(Second Phase: 1996-1997)**

<b>Sl.No.</b>	<b>Name of Schools</b>	<b>Academic Streams</b>
1	Darlawn High School	Arts
2	Saitual High School	Arts
3	Khawzawl High School	Arts
4	Mamit High School	Arts
5	Hnahthial High School	Arts
6	Lawngtlai High School	Arts
7	Kamalanagar High School, Chawngte	Arts

*Source: Mizoram Board of School Education (MBSE)*

Table 4.1.2 (b) shows that 7 high schools are converted into higher secondary schools. in the first phase during 1996-1997.

**Table 4.1.2 (c)**

**List of Converted High Schools into Higher Secondary Schools**

**(Third Phase: 1997-1998)**

<b>Sl.No.</b>	<b>Name of Schools</b>	<b>Academic Streams</b>
1	Ngopa High School	Arts
2	North Vanlaiphai High School	Arts
3	Venglai High School, Lunglei	Arts
4	West Phaileng High School	Arts
5	Kawnpui High School	Arts
6	K.M. High School	Arts

*Source: Mizoram Board of School Education (MBSE)*

Table 4.1.2 (c) shows that 6 high schools are converted into higher secondary schools in the first phase during 1997-1998.

**4.1.3. Steps Taken After the Implementation of Higher Secondary Education in Mizoram**

The various steps taken after the implementation of higher secondary schools in Mizoram are presented in the following table:

**Table 4.1.3**

**Steps Taken After the Implementation of Higher Secondary Education in Mizoram**

<b>Steps</b>	<b>Steps Taken by</b>
Abolition of Pre-University Classes	State Government
Enactment of Mizoram Board of School Education (First Amendment) Act and Introduction of 10+2+3 Structure	State Government
Approval to adapt/adopt Senior School Curriculum of the Central Board of School Education (CBSE)	Central Board of School Education
Enactment of Mizoram Education Act, 2003	State Government

The above table (4.1.3) shows the steps taken after the implementation of higher secondary education in Mizoram as follows:

a) Abolition of Pre-University Classes: With the gradual conversion and up-gradation of the existing High Schools into Higher Secondary Schools and the introduction of +2 stage of education, Pre-University classes being taught in Colleges were abolished correspondingly (Office Memorandum No. B. 17011/13/(A)/95 - EDS of 2nd August, 1995. Govt. of Mizoram. Education and Human Resources Department).

b) Enactment of Mizoram Board of School Education (First Amendment) Act and the Introduction of 10+2+3 Structure: In 1996, the Mizoram Board of School Education (First Amendment) Act was enacted. This amendment was necessitated

by the handing over of the responsibility for Classes XI and XII stage by North-Eastern Hill University (NEHU) to the State Board. Under these circumstances, Mizoram has introduced the 10+2+3 structure in 1996 and thus transferring +2 classes to the school system which was at that time attached to the degree colleges. A number of high schools were thus converted into higher secondary schools.

c) Approval to adapt/adopt Senior School Curriculum of the Central Board of School Education (CBSE): On the 7<sup>th</sup> of April 1997, the Competent Authority of the CBSE approved the adaption/adoption of the Senior School Curriculum (Classes XI & XII) of the CBSE by the MBSE. The CBSE authorities were very particular about proper transaction of their curricula and had desired that some officers of the MBSE and other concerned agencies of the State should be deputed to the CBSE Office in New Delhi for 4/5 days to have proper orientation about the mechanism of curricula implementation, evaluation (examination) and other incidental matters.

As desired by the CBSE authorities, two officers each of the MBSE and SCERT were deputed to study and get orientation in the whole mechanism of curricula implementation, evaluation practices and related issues in the CBSE Office at New Delhi, India.

d) Enactment of Mizoram Education Act, 2003: With a view to promoting the standard of education and by the progressive measures to improve the entire school system of Mizoram, the Mizoram Education Act, 2003 was enacted by the State Legislative Assembly. To carry out the various provisions of this Act, rules and regulations were framed and notified by the Government.

#### 4.1.4. Expansion of Higher Secondary Education from 1996 – 2017

In Mizoram, the numbers of higher secondary schools have been expanding over the years. The following table shows the number of schools during 1996 – 2017.

**Table 4.1.4**  
**Number of Higher Secondary Schools**  
**(1996 – 2017)**

<b>Year</b>	<b>No. of Higher Secondary Schools</b>
1996	16
1997	18
1998	18
1999	20
2000	30
2001	33
2002-03	47
2003-04	71
2004-05	67
2005-06	76
2006-07	80
2007-08	83
2009-10	86
2010-11	95
2011-12	98
2012-13	113
2013-14	118
2014-15	127
2015-16	132
2016-17	163

*Source: Statistical Cell, Directorate of School Education*

Table 4.1.4 shows the rising number of higher secondary schools in Mizoram. In 1996, at the beginning of the implementation of higher secondary schools, there were 16 schools and it keeps on increasing almost every year. The most recent data available is the 2016-17 academic session where there were 163 higher secondary schools in Mizoram (Statistical Cell, Department of School Education, Government of Mizoram. Annual Publications 2016-17).

#### **4.2. Students' Enrolment in Terms of Gender, Types of Institutions and Academic Streams**

The enrolment of higher secondary school students in Mizoram is presented for analysis and interpretation under the following heads:

4.2.1. Students' Enrolment in Terms of Gender

4.2.2. Students' Enrolment in Terms of Types of Institutions

4.2.3. Students' Enrolment in Terms of Academic Streams



**Table 4.2.1: Students' Enrolment in Terms of Gender**

<b>Enrolment of Students in Terms of Gender (2011 - 2016)</b>					
<b>Year</b>	<b>Total No. of Students</b>	<b>Gender</b>			
		<b>Male</b>		<b>Female</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
2011	18437	9274	50.30	9163	49.70
2012	20250	10194	50.34	10056	49.66
2013	21472	10851	50.54	10621	49.46
2014	22087	11152	50.49	10935	49.51
2015	22562	11352	50.31	11210	49.69
2016	22986	11237	48.89	11749	51.11
Total	127794	64060	50.13	63764	49.87

*Source: Statistical Cell, Department of School Education*

From the above table (Table 4.2.1.), it can be seen that the number of students enrolled in higher secondary schools during 2011 to 2016 varied from 18437 to 22986. A cursory glance at the table also reveals that there is an increase in the enrolment each year. During the years 2011 and 2015, the enrolment of male students in each year is higher as compared with the female students but in 2016, enrolment of female students is higher than that of male students.

In 2011, there were 50.30 percent male students and 49.70 female students. In 2012, out of 20250 students, 50.34 per cent were male students and 49.66 per cent were female students. In 2013, the percentage of male students and girl students were 50.54 per cent and 49.46 per cent respectively. In 2014, enrolment of male students

was 50.49 per cent that was higher than the enrolment of female students that was 49.51 per cent. In 2016, 50.31 per cent were male students whereas 49.69 were female students. For the first time in 2016, enrolment of female students was higher than male students. 51.11 per cent were female students and 48.89 per cent were male students.

During the whole period, male students constitute 50.13 per cent and female students 49.87 per cent of enrolment.

It is also clear from the above table that there is no gender disparity in terms of students' enrolment in the higher secondary schools of Mizoram.

**Table 4.2.2: Students' Enrolment in Terms of Types of Institutions**

<b>Students' Enrolment in Terms of Types of Institutions (2011 - 2016)</b>							
<b>Year</b>	<b>Total No. of Students</b>	<b>Types of Institutions</b>					
		<b>Central Government</b>	<b>State Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Adhoc Aided</b>	<b>Lumpsum Aided</b>
		<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>
2011	18437	179 (0.97)	8113 (44.00)	2804 (15.21)	5137 (27.86)	1340 (7.27)	864 (4.69)
2012	20250	193 (0.95)	8178 (40.39)	2948 (14.56)	6671 (32.94)	1392 (6.87)	868 (4.29)
2013	21472	221 (1.03)	8325 (38.77)	2891 (13.46)	7737 (36.03)	1438 (6.70)	860 (4.01)
2014	22087	289 (1.31)	8001 (36.22)	3129 (14.17)	8379 (37.94)	1350 (6.11)	939 (4.25)
2015	22562	346 (1.53)	8627 (38.24)	3388 (15.02)	7823 (34.67)	1551 (6.87)	827 (3.67)
2016	22986	387 (1.68)	8506 (37.01)	3365 (14.64)	8316 (36.18)	1550 (6.74)	862 (3.75)
Total	127794	1615 (1.26)	49750 (38.93)	18525 (14.50)	44063 (34.48)	8621 (6.75)	5220 (4.08)

*Source: Statistical Cell, Department of School Education*

Table 4.2.2 shows that during 2011 to 2016, out of 127794 students being enrolled in higher secondary schools of Mizoram, majority of the students (38.93 per cent) were enrolled in schools run by the state government. Private schools and deficit schools had 34.48 per cent and 14.50 per cent of the students respectively. 6.75 per cent and 4.08 per cent of the students were enrolled in adhoc aided and

lumpsum aided schools respectively. Schools run by the Central Government had the lowest enrolment of students with a percentage of only 1.26.

It is also evident from the above table that majority of the students favoured state government schools and private schools than those other schools such as deficit schools, adhoc aided schools, lumpsum aided schools and central government schools.

**Table 4.2.3: Students' Enrolment in Terms of Academic Streams**

<b>Students' enrolment in terms of academic streams (2011 - 2016)</b>					
<b>Year</b>	<b>Total No. of Students</b>	<b>Academic streams</b>			
		<b>Arts</b>	<b>Science</b>	<b>Commerce</b>	<b>Vocational</b>
		<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>
2011	18437	12534 (67.98)	3591 (19.48)	1426 (7.73)	886 (4.81)
2012	20250	13753 (67.92)	4381 (21.63)	1181 (5.83)	935 (4.62)
2013	21472	14757 (68.73)	4688 (21.83)	1218 (5.67)	809 (3.77)
2014	22087	15674 (70.96)	4460 (20.19)	1209 (5.47)	744 (3.37)
2015	22562	15638 (69.31)	4083 (18.10)	1091 (4.84)	1750 (7.76)
2016	22986	15924 (69.28)	4195 (18.25)	1114 (4.85)	1753 (7.63)
Total	127794	88280 (69.08)	25398 (19.87)	7239 (5.66)	6877 (5.38)

*Source: Statistical Cell, Department of School Education*

A cursory glance at Table 4.2.3 shows that during the years 2011-2016, 69.08 per cent were students from arts stream. They constitute the highest percentage of students' enrolment. 19.87 per cent were science students, 5.66 per cent students were commerce students and 5.38 per cent were vocational students who constituted the lowest percentage of students' enrolment.

In 2011, 67.98 per cent were enrolled in arts stream, 19.48 per cent in science stream and 7.73 per cent in commerce. In 2012, 67.92 per cent were enrolled in arts stream, 21.63 per cent in science stream and 5.83 per cent in commerce. In 2013, 68.73 per cent were enrolled in arts stream, 21.83 per cent in science stream and 5.67 per cent in commerce. In 2014, 70.96 per cent were enrolled in arts stream, 20.19 per cent in science stream and 5.47 per cent in commerce. In 2015, 69.31 per cent were enrolled in arts stream, 18.1 per cent in science stream and 4.84 per cent in commerce. In 2016, 69.28 per cent were enrolled in arts stream, 18.25 per cent in science stream and 4.85 per cent in commerce.

#### **4.3. Profile of Teachers in Terms of Types of Institutions, Educational and Professional Qualifications, Age, Teaching Experience, Gender and Academic Streams**

The profile of higher secondary school teachers in Mizoram are presented for analysis and interpretation under the following heads:

4.3.1. Profile of Teachers in Terms of Types of Institutions

4.3.2. Profile of Teachers in Terms of Educational and Professional Qualifications

4.3.3. Profile of Teachers in Terms of Age

4.3.4. Profile of Teachers in Terms of Teaching Experience

4.3.5. Profile of Teachers in Terms of Gender

4.3.6. Profile of Teachers in Terms of Academic Streams

**Table 4.3.1: Profile of Teachers in Terms of Types of Institutions**

<b>Teachers</b>	<b>Types of Educational Institutions</b>			
	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>
<b>No.</b>	289	154	228	671
<b>%</b>	43.07%	22.95%	33.98%	100%

The above table, Table 4.3.1 shows the overall profile of higher secondary school teachers in Mizoram in terms of types of institutions. Out of 671 higher secondary school teachers under study, government schools have the highest number of teachers (43.07 per cent), private schools stood second having 33.98 per cent teachers and deficit schools have the lowest number of teachers, only 22.95 per cent during the time of study.

Therefore, it can be seen that the state government worked very hard so that there are adequate number of teachers in government schools but there still remained a big room for improvement.

**Table 4.3.2: Profile of Teachers (Management Wise) in Terms of Educational and Professional Qualifications**

Educational and Professional Qualifications		Management Wise Distribution of Teachers			
		Government N=289	Deficit N=154	Private N=228	Total N=671
		No. & %	No. & %	No. & %	No. & %
Educational Qualifications	M.A.	216 (74.74)	70 (45.45)	176 (77.19)	462 (68.85)
	M. Sc	63 (21.80)	58 (37.66)	28 (12.28)	149 (22.21)
	M.Com	10 (3.46)	22 (14.29)	24 (10.53)	56 (8.35)
	MBA	0 (0)	1 (0.65)	0 (0)	1 (0.15)
	MCA	0 (0)	3 (1.95)	0 (0)	3 (0.45)
Professional Qualifications	B. Ed	289 (100)	91 (59.09)	16 (7.02)	396 (59.02)
	M. Ed	2 (0.69)	1 (0.65)	0 (0)	3 (0.45)

The above table (4.3.2) shows the educational and professional qualifications of higher secondary school teachers as follows:

- a) Master of Arts (M.A): 68.85 per cent of 671 teachers are Master of Arts in their own particular subjects. Among these, 74.74 are from government schools, 45.45 per cent are from deficit schools and 77.19 per cent are from private schools.



Those teachers who have a degree of Master of Arts teach different subjects under arts stream and all of them have the required educational qualifications as per norms.

- b) Master of Science (M. Sc): There are 22.21 per cent of teachers who are Master of Science in which 21.80 per cent belong to government schools, 37.66 per cent are from deficit schools and private schools have 12.28 per cent of teachers who have the degree of Master of Science.

Those teachers who have a degree of Master of Science teach different subjects under science stream and all of them have the required educational qualifications.

- c) Master of Commerce (M. Com): Out of 671 teachers, 8.35 per cent are Master of Commerce in which there are 3.46 per cent in the government schools, 14.29 per cent in deficit schools and the remaining 10.53 per cent in private schools.

Those teachers who have a degree of Master of Commerce teach different subjects under commerce stream and all of them have the required educational qualifications as per norms.

- d) Master of Business Administration (MBA): Among the 671 teachers, only 0.15 per cent has the degree of Master of Business Administration and these teachers teach commerce subjects in one deficit school and have the required educational qualifications as per norms.

- e) Master of Computer Application (MCA): 0.45 per cent of the teachers have the degree of Master of Computer Application. They teach the subject of Computer Science under science stream in one deficit school.

All the Computer Science teachers have the required educational qualifications as per norms.

- f) Bachelor of Education (B. Ed): Out of 671 teachers, 59.02 per cent have the required professional qualifications. Only government schools have 100 per cent of the teachers having this qualification. 59.09 per cent from deficit schools have the required professional qualification and only 7.02 per cent of private school teachers have the required professional qualification. This shows that deficit schools and private schools need to take immediate steps so that all teachers possess the required professional qualification as per norms.
- g) Master of Education (M. Ed): Although this is not the required professional qualification for higher secondary school teachers, there are 0.45 per cent of the teachers who are Master of Education (M. Ed).

**Table 4.3.3: Profile of Teachers (Management Wise) in Terms of Age**

Age	Management Wise Distribution of Teachers			
	Government N=289	Deficit N=154	Private N=228	Total N=671
<b>29 &amp; below</b>	12 (4.15)	14 (9.09)	101 (44.30)	127 (18.93)
<b>30-39</b>	96 (33.22)	64 (41.56)	86 (37.72)	246 (36.66)
<b>40-49</b>	164 (56.75)	65 (42.21)	39 (17.11)	268 (39.94)
<b>50 &amp; above</b>	17 (5.88)	11 (7.14)	2 (0.88)	30 (4.47)

Table 4.3.3 shows the profile of teachers in terms of age as follows:

- a) 29 years & below: Among the 671 teachers, 18.93 per cent of the teachers are 29 years old and below. In this age group, 44.30 per cent belong to private schools forming the highest percentage, deficit schools have 9.09 per cent and government schools have 4.15 per cent of teachers.
- b) 30 – 39 years: Out of 36.66 per cent of teachers who are 30 – 39 years old, 41.56 per cent are from deficit schools, 37.72 per cent and 33.22 per cent from private and government schools respectively. These teachers are mature and active in their work. They are still at a productive age and are expected to be most enthusiastic in their profession.
- c) 40 – 49 years: There are 39.94 per cent of teachers who are in ages between 40 and 49 in which 56.75 per cent are government school teachers, 42.21 per cent are deficit school teachers and 17.11 per cent are private school teachers. Teachers who fall between the ages of 40 to 49 are maximum in number and constitute 39.94 per cent in the state. According to educational psychology, individuals in this age group are mature and stable in their outlook once they have found their vocation in life. It is, thus, expected that these teachers would lend the right amount of maturity of thought and professionalism in their profession.
- d) 50 years & above: Out of 671 teachers, only 4.47 per cent are 50 years and above. There are 7.14 per cent deficit school teachers, 5.88 per cent government school teachers and 0.88 per cent private school teachers.

**Table 4.3.4: Profile of Teachers (Management Wise) in Terms of Teaching Experience**

Teaching Experience in Years	Management Wise Distribution of Teachers			
	Government N=289	Deficit N=154	Private N=228	Total N=671
<b>5 years &amp; below</b>	2 (0.69)	3 (1.95)	80 (35.09)	85 (12.67)
<b>5-9 years</b>	3 (1.04)	21 (13.64)	99 (43.42)	123 (18.33)
<b>10-14 years</b>	74 (25.61)	57 (37.01)	30 (13.16)	161 (23.99)
<b>15-19 years</b>	142 (49.13)	33 (21.43)	8 (3.51)	183 (27.27)
<b>20 years &amp; above</b>	68 (23.53)	40 (25.97)	11 (4.82)	119 (17.73)

The above table (4.3.4) shows profile of teachers in terms of teaching experience as follows:

- a) 5 years and below: There are 12.67 per cent of teachers who have teaching experience of 5 years and below in which 35.09 per cent are private school teachers, 1.95 per cent and 0.69 per cent are deficit and government schools respectively.

This clearly indicates that the state has not been recruiting teachers on a large scale basis for quite some time. This could be due to the unavailability of posts. But the enrolment of students had been growing tremendously and there could be an

imbalance in teacher-pupil ratio. Hence, there is an urgent need to recruit more teachers to avoid these problems.

- b) 5 – 9 years: There are 18.33 per cent teachers who have teaching experience for 5-9 years among which 43.42 per cent are from private schools forming the highest percentage followed by deficit and private schools with percentages of 13.64 and 1.04 respectively.
- c) 10 – 14 years: 23.99 per cent of the teachers have teaching experience for 10-14 years in which teachers from deficit schools constitute 37.01 per cent, government schools constitute 25.61 per cent and 13.16 per cent are private school teachers.
- d) 15 – 19 years: There are 27.27 per cent teachers who have 15 to 19 years of teaching experience in which 49.13 per cent are government school teachers, 21.43 per cent are deficit school teachers and 3.51 per cent are private school teachers. From this, it can be seen that higher secondary education in Mizoram has a stable educational system and this trend may continue for at least 15 years or so. If this is the case, it can be assumed that higher secondary education in Mizoram is in good hands.
- e) 20 years and above: 17.73 per cent teachers have teaching experience for more than 20 years out of which 25.97 per cent are deficit school teachers and 23.53 per cent and 4.82 per cent teachers are government and private school teachers.

**Table 4.3.5: Profile of Teachers (Management Wise) in Terms of Gender**

<b>Gender</b>	<b>Management Wise Distribution of Teachers</b>			
	<b>Government N=289</b>	<b>Deficit N=154</b>	<b>Private N=228</b>	<b>Total N=671</b>
<b>Male</b>	158 (54.67)	85 (55.19)	137 (60.09)	380 (56.63)
<b>Female</b>	131 (45.33)	69 (44.81)	91 (39.91)	291 (43.37)

Table 4.3.5 shows that out of 671 teachers, 56.63 per cent are male teachers and 43.37 per cent are female teachers.

Private schools have the largest percentage of male teachers constituting 60.09 per cent followed by deficit schools and government schools with percentages of 55.19 and 54.67 respectively.

Regarding female teachers, government schools have the largest percentage of female teachers constituting 45.33 per cent followed by deficit schools and private schools with percentages of 44.81 and 39.91 respectively.

**Table 4.3.6: Profile of Teachers (Management Wise) in Terms of Academic Streams**

Academic Streams	Management Wise Distribution of Teachers			
	Government N=289	Deficit N=154	Private N=228	Total N=671
Arts	216 (74.74)	70 (45.45)	176 (77.19)	462 (68.85)
Science	63 (21.80)	61 (39.61)	28 (12.28)	152 (22.65)
Commerce	10 (3.46)	23 (14.94)	24 (10.53)	57 (8.49)

The above table (4.3.6) shows that 68.85 per cent are arts teachers, 22.65 per cent are science teachers and 8.49 per cent are commerce teachers. Arts teachers constitute the highest percentage of higher secondary school teachers followed by science and commerce teachers.

Regarding arts stream, private schools have the largest number of teachers with 77.19 per cent followed by government schools with 74.74 per cent and 45.45 per cent are from deficit schools.

With regards to science stream, 39.61 per cent are from deficit schools, 21.80 per cent from government schools and 12.28 per cent are from private schools.

Looking at commerce stream, 14.94 per cent are from deficit schools, 10.53 per cent are from private schools and government schools have only 3.46 per cent of commerce teachers.

#### **4.4. Recruitment Procedures of Higher Secondary School Teachers in Mizoram**

In order to recruit higher secondary school teachers, the Directorate of School Education, Government of Mizoram makes a proposal for filling up the posts and then sends it to the DP&AR (ARW) for approval. Upon approval, the proposal is sent to Planning Department and Finance Department (E). When the file goes through all these departments, the Mizoram Public Service Commission (MPSC) publishes an advertisement. Advertisement is then floated in the newspaper for at least one week and is also posted in the internet. This Commission conducts an examination and makes recommendations for the selected teachers and after that, notification regarding posting is made.

Higher secondary school teachers for Government schools are recruited based on the Mizoram School Education Department (Group 'A' posts) Recruitment Rules as per the Mizoram Public Service Commission (MPSC) Regulations. The Governor of Mizoram, in exercise of the powers conferred by the provision of Article 309 of the Constitution of India, makes these rules for regulating the method of recruitment to the post(s) of Lecturer, Government Higher Secondary School under School Education Department, Government of Mizoram.

Regarding the recruitment of deficit and private school teachers, they are recruited by the managing committee of the schools in accordance with the rules and regulations prescribed from time to time by the state government.



**Table 4.4.1**

**Classification of Post and Modes of Recruitment of  
Higher Secondary School Teachers of Mizoram**

<b>Name of Post</b>	<b>Classification of Post</b>	<b>Modes of Recruitment</b>
Lecturer	Junior Grade	100 % direct recruitment
	Senior Grade	Promotion after regular continuous service for eight years of Junior Grade
	Selection Grade	Promotion after regular continuous service for sixteen years of Junior Grade

*Source: School Education Department, Government of Mizoram*

From the above table (4.4.1), it can be seen that the post of Lecturer for higher secondary schools in Mizoram is categorized into three grades namely Junior Grade, Senior Grade and Selection Grade. Each of these posts is classified under General State Service (Group 'A' Gazetted) (Non-Ministerial).

Lecturers (Junior Grade) are 100 per cent directly recruited. When these junior grade lecturers are in a regular continuous service for eight years, they are eligible for promotion to Lecturer (Senior Grade). Again, when they are in regular continuous service for sixteen years which is calculated from the date of entry in the junior grade, they are eligible for promotion to Lecturer (Selection Grade).

**Table 4.4.2**

**Pay Matrix of Higher Secondary School Teachers of Mizoram**

<b>Grade</b>	<b>Pay Matrix</b>
Junior Grade	Level 10: Basic pay of Rs. 56,100/- with all other allowances as admissible from time to time.
Senior Grade	Level 10 A: Basic pay of Rs. 64,700/- with all other allowances as admissible from time to time.
Selection Grade	Level 11: Basic pay of Rs. 67,700/- with all other allowances as admissible from time to time.

*Source: School Education Department, Government of Mizoram*

Table 4.4.2 shows the pay matrix of higher secondary school teachers of Mizoram. Pay of the teachers are fixed as per the Seventh Central Revision of Pay (as modified and extended to the employees under the Government of Mizoram) Rules, 2018. This pay matrix is approved by the Deputy Director of Accounts, Directorate of School Education, Aizawl vide No G. 12011/1/2017-DSE (Pay) on 12<sup>th</sup> October, 2018 in pursuance of Finance Department (PRU) Notification No. G. 12011/2/2017-FIN (PRU) of 16<sup>th</sup> August, 2018.

**Table 4.4.3**

**Age Limit, Educational Qualifications and Period of Probation of  
Higher Secondary School Teachers of Mizoram**

<b>Age Limit</b>	<b>Educational Qualifications</b>	<b>Period of Probation</b>
Between 18 and 35 years. Upper age limit relaxable by 5 years for Scheduled Tribe/Scheduled Caste.	(a) 2nd Class Master Degree from recognized university in the relevant subject with Bachelor of Education or its equivalent from institutions recognized by National Council for Teacher Education (NCTE)  'OR'  Two years integrated M.Sc.Ed course or equivalent course recognized by NCTE.  (b) Working knowledge of Mizo language at least Middle School Standard	The period of probation for junior grade lecturers is for 2 years. In the case of senior and selection grade lecturers, probation is not necessary as they are selected and promoted according to their period of regular continuous service.

***Source: School Education Department, Government of Mizoram***

Table 4.2.2 depicts that the age limit for direct recruits of higher secondary school teachers of Mizoram is between 18 years and 35 years. However, upper age limit is relaxable by five years for candidates from Scheduled Caste/ Scheduled Tribes.

The table also portrays the educational qualification and other qualifications required for direct recruits as follows:

- (a) At least 2<sup>nd</sup> Class Master Degree from recognized university in the relevant subject with Bachelor of Education or its equivalent from institutions recognized by National Council for Teacher Education (NCTE) 'OR' Two years integrated M.Sc.Ed course or equivalent course recognized by NCTE.
- (b) Working knowledge of Mizo language at least Middle School Standard.

It can also be seen that the period of probation for junior grade lecturers is for 2 years. In the case of senior and selection grade lecturers, probation is not necessary as they are selected and promoted according to their period of regular continuous service (School Education Department, Government of Mizoram).

#### **4.5. Physical Infrastructure and Facilities Available in Higher Secondary Schools in Mizoram**

The physical infrastructure and facilities available in higher secondary schools in Mizoram are presented for analysis and interpretation under the following heads:

4.5.1. Nature of School Building

4.5.2. Physical Condition of the School Building

4.5.3. Provision of Hostel Facilities

4.5.4. Provision of Separate Rooms in the School

4.5.5. Provision of Classroom Facilities

4.5.6. Provision of Science Laboratory Facilities

4.5.7. Provision of Library Facilities

4.5.8. Provision of Safe Drinking Water

4.5.9. Provision of Sanitation Facilities

4.5.10. Condition of Power Supply

4.5.11. Other Facilities Provided in the Schools

**Table 4.5.1: Nature of School Building**

S.No	Nature of School Building	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Owned	12 (100)	6 (100)	7 (28)	25 (58.14)
2	Rented	0	0	18 (72)	18 (41.86)

It can be seen from Table 4.5.1 that 58.14 per cent of higher secondary schools have their own buildings while the other 41.86 per cent run their schools in

rented buildings. It is also clear that government and deficit schools have their own buildings while private schools rent buildings for running their schools.

According to the Mizoram Board of School Education (Conditions for Affiliation of Institutions) Regulations, 2012 Section 13 (b) (ii) which states, “The school shall not be accommodated in rented building except with special permission of the Board’, still 72 per cent of private schools are accommodated in rented buildings.

**Table 4.5.2: Physical Condition of the School Building**

S.No	Physical Condition of School Building	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	School building in good condition	12 (100)	6 (100)	19 (76)	37 (86.05)
2	Satisfactory classroom size	10 (83.33)	6 (100)	15 (60)	31 (72.09)
3	School surrounded by walls	8 (66.67)	6 (100)	19 (76)	33 (76.74)
4	Design of the school is child friendly	9 (75)	6 (100)	6 (24)	21 (48.84)
5	Site and building of the school is well-landscaped	11 (91.67)	6 (100)	14 (56)	31 (72.09)

Table 4.5.2 reveals that 86.05 per cent of the school buildings are in good condition. The school buildings of all government and deficit schools are in good condition whereas 76 per cent of private school buildings are in good condition.

In terms of size of the classroom, 72.09 per cent of the schools have satisfactory classroom size. All deficit schools have satisfactory classroom size while the size of the classrooms of 83.33 per cent government schools and 60 per cent private schools are satisfactory.

76.74 per cent of the schools are surrounded by walls. All deficit schools are surrounded by walls whereas 76 per cent private schools and 66.67 per cent government schools are surrounded by walls

In terms of the design of the school, only 48.84 per cent design their schools in a child-friendly manner. Deficit schools are the best as they design all their schools in a child-friendly manner whereas 75 per cent government schools and only 24 per cent private schools are designed in a child-friendly manner.

In terms of the site and building of the schools, 72.09 per cent are well-landscaped. Deficit schools are the best as the entire site and buildings of their schools are well-landscaped followed by 91.67 government schools and 56 per cent private schools.

Therefore, it can be concluded that in terms of physical condition of the school building such as good condition of the school building, satisfactory classroom size, schools surrounded by walls, child-friendly design of the school and well-

landscaped site and buildings of the schools, deficit schools are the best followed by government schools and private schools.

**Table 4.5.3: Provision of Hostel Facilities**

S.No	Provision of Hostel Facilities	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Hostel is provided	4 (33.33)	5 (83.33)	19 (76)	28 (65.12)
2	Separate hostel for boys and girls	4 (33.33)	5 (83.33)	19 (76)	28 (65.12)

The above table (Table 4.5.3) indicates that out of 43 schools, 65.12 per cent provide hostel facilities for their students in which there are separate hostel for boys and girls.

It can also be seen that 83.33 per cent deficit schools followed by 76 per cent private schools and 33.33 per cent government schools provide separate hostel facilities for boys and girls.



**Table 4.5.4: Provision of Separate Rooms in the School**

S.No	Provision of Separate Rooms	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Principal's Room	12 (100)	6 (100)	22 (88)	40 (93.02)
2	Teachers' Common Room	12 (100)	6 (100)	25 (100)	43 (100)
3	Office Room	12 (100)	6 (100)	13 (52)	31 (72.09)
4	Students' Common Room	0	0	0	0
5	Science Laboratory	6 (50)	6 (100)	8 (32)	20 (46.51)
6	Computer Laboratory	1 (8.33)	3 (50)	1 (4)	5 (11.63)
7	Hall for physical education	8 (66.67)	5 (83.33)	7 (28)	20 (46.51)
8	Recreational Centre	4 (33.33)	4 (66.67)	2 (8)	10 (23.26)
9	Conference Hall	0	4 (66.67)	0	4 (9.30)

Table 4.5.4 shows the provisions that are made for separate rooms for principals, teachers' common room, office, students' common room, science laboratory, computer laboratory, hall for physical education, recreational centre and conference hall. There is a separate room for the principals in government and deficit schools whereas 88 per cent of private schools have separate principals' room. All

schools provide separate room for teachers' common room. A separate room for office is available at government and deficit schools while 52 per cent of private schools have separate office room. It can also be seen that none of the schools have students' common room.

All deficit schools have science laboratory whereas 50 per cent government schools and 32 per cent private schools make provisions for separate science laboratory. There are separate computer laboratory in 50 per cent of deficit schools, 8.33 per cent of government schools and 4 per cent of private schools.

The table also reveals that halls for physical education are available at 83.33 per cent of deficit schools, 66.67 per cent of government schools and only 28 per cent of private schools. Recreational centres are also available in 66.67 per cent of deficit schools, 33.33 per cent of government schools and only 8 per cent of private schools. 66.67 per cent of deficit schools have conference hall while government schools and private schools have none.

The Mizoram Board of School Education (Conditions for Affiliation of Institutions) Regulations, 2012 Section 13 (b) (iii) states that, "Provision shall be made for separate rooms for (a) Principal (b) Office (c) Teachers' common room (d) Library (e) Work Experience (f) Laboratory for subjects having practicals and (g) Computer room (for schools offering computer) in addition to classrooms for all classes/sections", it can be concluded that deficit schools are the best in terms of making these provisions for different separate rooms while private schools do not fulfill most of these conditions.

**Table 4.5.5: Provision of Classroom Facilities**

S.No	Provision of Classroom Facilities	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Teachers' Chair and Table	12 (100)	6 (100)	25 (100)	43 (100)
2	Students' Desks and Benches	12 (100)	6 (100)	25 (100)	43 (100)
3	Black/White/Green Boards	12 (100)	6 (100)	25 (100)	43 (100)
4	Well-lighted and ventilated Classroom	8 (66.67)	6 (100)	20 (80)	34 (79.07)

Table 4.5.5 portrays that all schools (100 per cent) have the required classroom furniture such as teachers' chair and table, students' desks and benches, and blackboards/whiteboards/green boards that are in good condition.

Even though the Mizoram Board of School Education (Conditions for Affiliation of Institutions) Regulations, 2012 Section 13 (b) (iv) states that, "Each classroom shall be well-lighted and well-ventilated", only deficit schools meet with these conditions whereas 66.67 per cent of the classrooms in government schools and 80 per cent of the classrooms in private schools are well-lighted and well-ventilated.

**Table 4.5.6: Provision of Science Laboratory Facilities**

S.No	Provision of Science Laboratory Facilities	Management Wise Distribution of Schools with Science Stream			
		Government N=6	Deficit N=5	Private N=11	Total N=22
		No. & %	No. & %	No. & %	No. & %
1	Separate science laboratory	6 (100)	5 (100)	8 (72.73)	19 (86.36)
2	No. of laboratory equipments is sufficient	3 (50)	4 (80)	4 (36.36)	11 (50)

Table 4.5.6 shows the number of schools which offer science stream. Out of 22 schools that offer science stream, 86.36 per cent of the schools have separate science laboratory. Out of this, all government and deficit schools have science laboratory whereas 72.73 per cent of private schools make provisions for separate science laboratory.

It can also be seen that 80 per cent of deficit schools, 50 per cent of government schools and 36.36 per cent of private schools have sufficient number of laboratory equipments.

**Table 4.5.7: Provision of Library Facilities**

S.No	Provision of Library Facilities	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Availability of library	1 (8.33)	3 (50)	1 (4)	5 (11.63)
2	Separate reading rooms	0	3 (50)	0	3 (6.98)
3	Library facilities adequate, well-equipped and easily accessible	0	3 (50)	0	3 (6.98)
4	Students have access to latest books/journals	1 (8.33)	3 (50)	1 (4)	5 (11.63)

A look at Table 4.5.7 defines that only 11.63 per cent of higher secondary schools have library in their schools in which only 6.98 per cent have separate reading rooms. Library is available in 50 per cent of deficit schools, 8.33 per cent of government schools and 4 per cent of private schools in which separate reading room is available only in deficit schools. This shows that none of the schools meet with the Mizoram Board of School Education (Conditions for Affiliation of Institutions)

Regulations, 2012 Section 13 (b) (iii) which states that “Provision shall be made for separate rooms for library”.

The table also shows that the library facilities of 6.98 per cent of schools are adequate, well-equipped and easily accessible and the students of 11.63 per cent of schools have access to latest books/journals.

**Table 4.5.8: Provision of Safe Drinking Water**

S.No	Provision of Safe Drinking Water	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Availability of safe drinking water	12 (100)	6 (100)	25 (100)	43 (100)
2	PHE water as source of drinking water	12 (100)	6 (100)	25 (100)	43 (100)
3	Water available all year round from this source	12 (100)	6 (100)	25 (100)	43 (100)

It can be seen from Table 4.5.8 that safe drinking water is available in all schools. The source of drinking water is PHE water which is available all year round for all these schools. As laid down in the Mizoram Board of School Education (Conditions for Affiliation of Institutions) Regulations, 2012 Section 13 (b) (vi) which states that, “Provision shall be made for easy availability of clean drinking

water both for staff and students”, all higher secondary schools of Mizoram fulfill these conditions.

**Table 4.5.9: Provision of Sanitation Facilities**

S.No	Provision of Sanitation Facilities	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Proper sanitation facilities	12 (100)	6 (100)	25 (100)	43 (100)
2	Toilets are well-lighted & well-ventilated	2 (16.67)	3 (50)	13 (52)	18 (41.86)
3	Enough working toilets for students	7 (58.33)	3 (50)	17 (68)	27 (62.79)
4	Separate toilet for teachers	12 (100)	6 (100)	24 (96)	42 (97.67)
5	Separate toilet for boys and girls	12 (100)	6 (100)	24 (96)	42 (97.67)

Looking at Table 4.5.9, it can be seen that all schools have proper sanitation facilities. However, only 41.86 per cent of the toilets are well-lighted and well-ventilated in which 52 per cent, 50 per cent and only 16.67 per cent of the toilets of private schools, deficit schools and government schools respectively have well-lighted and well-ventilated toilets.

62.79 per cent of the schools have enough working toilets for the students in which there are 68 per cent in private schools, 58.33 per cent in government schools and 50 per cent in deficit schools.

The table also shows that out of the 97.67 per cent of schools that have separate toilet for teachers, all government and deficit schools have them whereas there are 96 per cent of private schools that have separate toilet for teachers.

According to the Mizoram Board of School Education (Conditions for Affiliation of Institutions) Regulations, 2012 Section 13 (b) (v) which states, “Provision shall be made for separate toilets for boys and girls”, it can be seen from the table that 97.67 per cent of the schools have separate toilet for boys and girls. Out of this, all government and deficit schools have them whereas there are 96 per cent of private schools that have separate toilet for boys and girls.



**Table 4.5.10: Condition of Power Supply**

S.No	Condition of Power Supply	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Availability of power supply in the schools	12 (100)	6 (100)	25 (100)	43 (100)
2	Availability of sufficient electrical outlets in classrooms	11 (91.67)	6 (100)	24 (96)	41 (95.35)
3	Experiencing some kind of power shortage	12 (100)	6 (100)	25 (100)	43 (100)

Table 4.5.10 reveals that power supply is available in all schools but sufficient electrical outlets are available in 95.35 per cent schools. It is also evident from the table that some kind of power shortage is experienced by all the schools.

**Table 4.5.11: Other Facilities Provided in the Schools**

S.No	Other Facilities	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Computers	12 (100)	6 (100)	25 (100)	43 (100)
2	Telephones	12 (100)	6 (100)	25 (100)	43 (100)
3	Internet Connection	4 (33.33)	5 (83.33)	7 (28)	16 (37.21)
4	Fans in Principal's Office	12 (100)	6 (100)	22 (88)	40 (93.02)
5	Fans in the Teachers' Common Room	12 (100)	6 (100)	25 (100)	43 (100)
6	Fans in the office	12 (100)	6 (100)	13 (52)	31 (72.09)
7	Fans in the classrooms	0	0	0	0

Table 4.5.11 shows the other facilities provided in the schools. Computers and telephones are available in all the schools. However, only 37.21 per cent have internet connection in their schools. Regarding cooling fans, all teachers' common room have fans whereas 93.02 per cent of the principal's room and 72.09 per cent of

the schools have fans inside the office. It can also be seen that there are no fans in all classrooms of the schools.

Analysis of the physical infrastructure and facilities available in higher secondary schools of Mizoram indicates that majority of the schools provide the required facilities. It can also be inferred from all these analyses that deficit schools are the best followed by government schools and private schools.

#### **4.6. Teaching - Learning Processes and Methods of Evaluation**

The teaching - learning processes and methods of evaluation followed by higher secondary school teachers in Mizoram are presented for analysis and interpretation under the following heads:

4.6.1. Methods of Teaching Followed in Class

4.6.2. Efforts Made by Teachers to Improve Teaching-Learning Processes

4.6.3. Methods of Evaluation

**Table 4.6.1: Methods of Teaching Followed in Class**

S. No	Methods of Teaching	Management Wise Distribution of Teachers			
		Government	Deficit	Private	Total
		N=289	N=154	N=228	N=671
1	Lecture	289 (100)	289 (100)	289 (100)	671 (100)
2	Discussion	147 (50.87)	87 (56.49)	86 (37.72)	320 (47.69)
3	Demonstration	0	0	0	0
4	Dictating Notes	245 (84.78)	88 (57.14)	178 (78.07)	511 (76.15)
6	Question & Answer Method	59 (20.42)	31 (20.13)	52 (22.81)	142 (21.16)
7	Seminar	0	0	0	0
8	Project/Field Work	13 (4.50)	7 (4.55)	23 (10.09)	43 (6.41)

*Note: Figures in parentheses indicate the corresponding percentages*

Table 4.6.1 shows the different methods of teaching adopted by teachers of government, deficit and private higher secondary schools of Mizoram:

- a) Lecture: All teachers of higher secondary schools in Mizoram follow lecture method in the class.
- b) Discussion: In addition to lecture method, 47.69 per cent of the teachers also use discussion method for teaching students. 50.87 per cent of the

government school teachers, 56.49 per cent of deficit school teachers and 37.72 per cent of private school teachers follow discussion method. Teachers who use discussion the most as one of the methods of teaching are teachers from deficit schools.

- c) Demonstration: None of the higher secondary school teachers use demonstration method of teaching.
- d) Dictating Notes: Apart from lecture method, 76.15 per cent of the teachers dictate notes to their students. Teachers from government schools are the ones who use this method the most with 84.78 per cent followed by 78.07 per cent and 57.14 per cent from private and deficit schools respectively.
- e) Question and Answer Method: Only 21.16 per cent of higher secondary school teachers use question and answer method apart from lecture method.
- f) Seminar: None of the higher secondary school teachers follow seminar method in schools.
- g) Project/Field Work: Project/ Field Work Method are used by only 6.41 per cent of higher secondary school teachers of Mizoram.

It is also evident from Table 4.6.1 that most teachers follow the traditional lecture method of teaching mostly accompanied by discussion methods and dictating notes.

**Table 4.6.2: Efforts Made by Teachers to Improve  
Teaching-Learning Processes**

S.No	Methods of Teaching	Management Wise Distribution of Teachers			
		Government	Deficit	Private	Total
		N=289	N=154	N=228	N=671
1	Adopting innovative practices	199 (68.86)	101 (65.58)	118 (51.75)	418 (62.30)
2	Motivating students to learn	252 (87.20)	108 (70.13)	190 (83.33)	550 (81.97)
3	Monitoring students' progresses	266 (92.04)	110 (71.43)	189 (82.89)	565 (84.20)
4	Using power point presentation	41 (14.19)	29 (18.83)	20 (8.77)	94 (14.01)

*Note: Figures in parentheses indicate the corresponding percentages*

Table 4.6.2 shows the efforts made by teachers of government, deficit and private higher secondary schools of Mizoram:

- a) Innovative Practices: 62.30 per cent of the teachers adopt innovative practices out of which the majority is constituted by government school teachers with 68.86 per cent followed by 65.58 per cent of deficit school teachers and 51.75 per cent of private school teachers. This shows that majority of higher secondary school teachers of Mizoram adopt innovative practices to improve teaching – learning processes.

- b) Motivation of Students: Out of the 81.97 per cent of the teachers who motivate their students to learn, there are 87.20 per cent of government school teachers, 83.33 per cent of private school teachers and 70.13 per cent of deficit school teachers. This shows that majority of higher secondary school teachers of Mizoram motivate their students to learn.
- c) Monitoring Students' Progresses: There are 84.20 per cent of higher secondary school teachers who monitor the progresses of their students. Teachers from government schools constitute the majority by 92.04 per cent followed by private school teachers with 82.89 per cent and deficit school teachers with 71.43 per cent. This also shows that majority of the higher secondary school teachers of Mizoram monitor the progresses of their students so as to improve the teaching – learning processes.
- d) Power Point Presentation: Out of 671 higher secondary school teachers, only 14.01 per cent are using power point presentation in the classroom. 18.83 per cent of deficit school teachers, 14.19 per cent of government school teachers and 8.77 per cent of private school teachers use this method. This shows that only a few teachers use power point presentation.

**Table 4.6.3: Methods of Evaluation**

S. No	Methods of Evaluation	Management Wise Distribution of Teachers			
		Government	Deficit	Private	Total
		N=289	N=154	N=228	N=671
1	Class Test	198 (68.51)	93 (60.39)	178 (78.07)	469 (69.90)
2	Assignment	117 (40.48)	72 (46.75)	91 (39.91)	280 (41.73)
3	Terminal Examination (First Term & Second Term)	289 (100)	154 (100)	228 (100)	671 (100)
4	Promotion Examination (at the end of academic session for Class XI)	289 (100)	154 (100)	228 (100)	671 (100)
5	Practical Works (Science)	63 (100)	61 (100)	28 (100)	152 (100)
6	Field Works	3 (1.04)	4 (2.60)	11 (4.82)	18 (2.68)

**Note: Figures in parentheses indicate the corresponding percentages**

Table 4.6.3 shows the different methods of evaluation adopted by teachers of government, deficit and private higher secondary schools of Mizoram:

- a) Class Test: 69.90 per cent of the teachers use class test for evaluating the progresses of the students in which majority is constituted by private school



teachers with 78.07 per cent followed by government school teachers with 68.51 per cent and deficit school teachers with 60.39 per cent. This indicates that class test is adopted by the majority of higher secondary school teachers of Mizoram to evaluate the students.

- b) Assignment: Out of 671 higher secondary school teachers of Mizoram, 41.73 adopt the method of assignment to evaluate the students in which 46.75 per cent are deficit school teachers, 40.48 per cent are government school teachers and 39.91 per cent are private school teachers. This shows that only few teachers are using assignment for evaluating the students.
- c) Terminal Examination: Terminal Examination is used by 100 per cent of the higher secondary school teachers of Mizoram to evaluate the progresses of the students.
- d) Promotion Examination: Promotion Examination is used by 100 per cent of the higher secondary school teachers of Mizoram to evaluate the progresses of the students.
- e) Practical Works: Practical Works are used by 100 per cent of science teachers of the higher secondary school teachers of Mizoram to evaluate the progresses of the students. Teachers belonging to arts and commerce streams do not use this method for evaluating their students.
- f) Field Works: Out of 671 higher secondary school teachers of Mizoram, there are only 2.68 per cent who use field works for evaluating students in which

4.82 per cent are from private schools, 2.60 per cent are from deficit schools and 1.04 per cent are from government schools.

#### **4.7. Activities (Academic and Non – Academic) Organized for Higher Secondary Classes in Mizoram**

The activities organized for higher secondary classes in Mizoram are presented for analysis and interpretation under the following heads:

4.7.1. Academic Activities

4.7.2. Non - Academic Activities

**Table 4.7.1: Academic Activities**

S. No.	Academic Activities	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Science Exhibition	4 (33.33)	4 (66.67)	3 (12)	11 (25.58)
2	Essay Writing Competition	10 (83.33)	6 (100)	6 (24)	22 (51.16)
3	Class Test	12 (100)	6 (100)	25 (100)	43 (100)
4	Assignment	12 (100)	5 (83.33)	24 (96)	41 (95.35)
5	Seminar	6 (50)	4 (66.67)	14 (56)	24 (55.81)

The above table (Table 4.7.1) shows the different types of academic activities that are organized for higher secondary classes in Mizoram. It can be seen that out of 43 schools, 100 per cent of the schools organize class test for their students.

A cursory glance at the table also shows that 95.35 per cent of the schools organize assignment for their students. Out of these, all government schools mention that they organize assignment and almost all deficit and private schools organize it for higher secondary classes.

55.81 per cent of the schools state that seminar is also one of the academic activities organized for higher secondary classes in Mizoram and 51.16 per cent of schools also state that they conduct essay writing competition as one of the academic activities for students.

It can also be seen from the above table that only 25.58 per cent of schools cite that they take their students for science exhibition.

It is very evident from Table 4.7.1 that majority of the schools consider class test and assignments to be the most important academic activities organized for higher secondary classes in Mizoram.

Among all the schools, deficit schools are the best in organizing different academic activities while private schools are the worst.

**Table 4.7.2: Non - Academic Activities**

S. No.	Non - Academic Activities	Management Wise Distribution of Schools			
		Government N=12	Deficit N=6	Private N=25	Total N=43
		No. & %	No. & %	No. & %	No. & %
1	Excursion	8 (66.67)	4 (66.67)	18 (72)	30 (69.77)
2	Debate	11 (91.67)	3 (50)	15 (60)	29 (67.44)
3	Quiz	11 (91.67)	6 (100)	19 (76)	36 (83.72)
4	Elocution	2 (16.67)	3 (50)	3 (12)	8 (18.60)
5	NCC	4 (33.33)	4 (66.67)	2 (8)	10 (23.26)
6	NSS	10 (83.33)	5 (83.33)	2 (8)	17 (39.53)
7	Scouts & Guides	1 (8.33)	4 (66.67)	0	5 (11.63)
8	Adventure Club	0	1 (16.67)	2 (8)	3 (6.98)

A perusal of the above table (Table 4.7.2) reveals that 83.72 per cent of the schools organize quiz and all deficit schools organize it. 69.77 per cent of schools

also organize excursion for their students and 67.44 per cent also organize debate for higher secondary classes. Only a few percentages (18.60) organize elocution as one of the non - academic activities.

The table also reveals that 39.53 per cent of schools have National Service Scheme (NSS), 23.26 per cent have National Cadet Corps (NCC), 11.63 have Scouts & Guides and only 6.98 per cent of the schools have adventure club in their schools.

As a whole, quiz, debate and excursion form the most significant non - academic activities organized for higher secondary classes in Mizoram as stated by majority of the schools.

It can also be seen from the table that among all the schools, deficit schools are the best in organizing different non-academic activities while private schools are the worst.

#### **4.8. HSSLC Examination Results of Eight Consecutive Years i.e. 2011 to 2018**

The results of students in Higher Secondary School Leaving Certificate Examinations in Mizoram are presented for analysis and interpretation under the following heads:

##### **4.8.1. Overall Results of Students in the Higher Secondary School Leaving Certificate (HSSLC) Examinations for Eight Consecutive Years i.e. 2011 to 2018**

4.8.2. Results of Students in the Higher Secondary School Leaving Certificate (HSSLC) Examinations for Eight Consecutive Years i.e. 2011 to 2018 in Terms of Academic Streams i.e.Arts, Science and Commerce.

4.8.3. Results of Students in the Higher Secondary School Leaving Certificate (HSSLC) Examinations Eight Consecutive Years i.e. 2011 to 2018 in Terms of Management of Schools.

#### **4.8.1. Overall Results of Students in the HSSLC Examinations 2011-2018**

The overall (Arts, Science & Commerce) results of students in the Higher Secondary School Leaving Certificate Examinations during 2011 – 2018 are presented in the following table:-

**Table – 4.8.1**

**Overall Abstract of HSSLC Results during 2011 – 2018**

<b>YEAR</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>TOTAL</b>
<b>Details of Candidates' Performance</b>									
<b>Distinction</b>	52	54	45	149	144	188	287	438	<b>1357</b>
<b>I Division</b>	833	792	591	1381	1317	1597	1768	3092	<b>11371</b>
<b>II Division</b>	2276	1874	1837	2760	2370	2748	2553	3888	<b>20306</b>
<b>III Division</b>	2947	3700	3266	3923	3508	3976	3295	1840	<b>26455</b>
<b>Total</b>	<b>6108</b>	<b>6420</b>	<b>5739</b>	<b>8213</b>	<b>7339</b>	<b>8509</b>	<b>7903</b>	<b>9258</b>	<b>59489</b>
<b>Pass Percentage</b>	60.30	59.47	58.45	72.13	74.59	77.07	75.16	81.06	<b>70.03</b>
<b>Compartmental chance</b>	387	581	311	249	118	192	261	188	<b>2287</b>
<b>Candidates failed</b>	3634	3794	3768	2925	2382	2339	2351	1975	<b>23168</b>

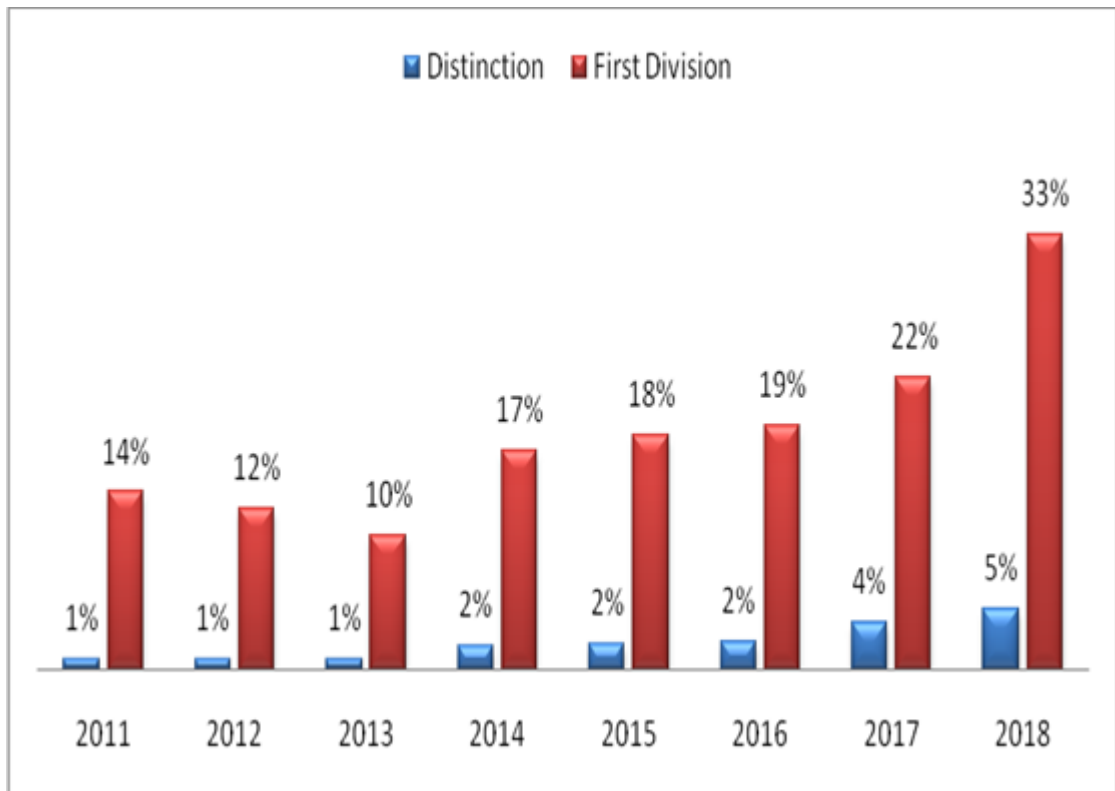
*Source: MBSE*



During the years 2011-2018, 59489 students passed the examinations out of which 1357 were placed in Distinction, 11371 in First Division, 20306 in Second Division and 26455 in Third Division and the overall pass percentage was 70.03. Meanwhile, 2287 students were given compartmental chance and 23168 students failed the examinations. For better understanding, the classification of results especially the Distinction Division and the First Division is presented in percentages in Figure 1 below:

**Figure – 1**

**Year – Wise Achievement of Students in Distinction and First Division in HSSLC Examinations 2011 to 2018**



With regards to the category of divisions particularly the Distinction Division, only 1 per cent of the students attained the Distinction division in 2011,

2012 and 2013 but the percentages increased to 2 since 2014 till 2016. It keeps on increasing to 4 and 5 in 2017 and 2018 respectively. Therefore, it can be seen that there is a slight improvement over these last two years in terms of achievement of students in Distinction Division.

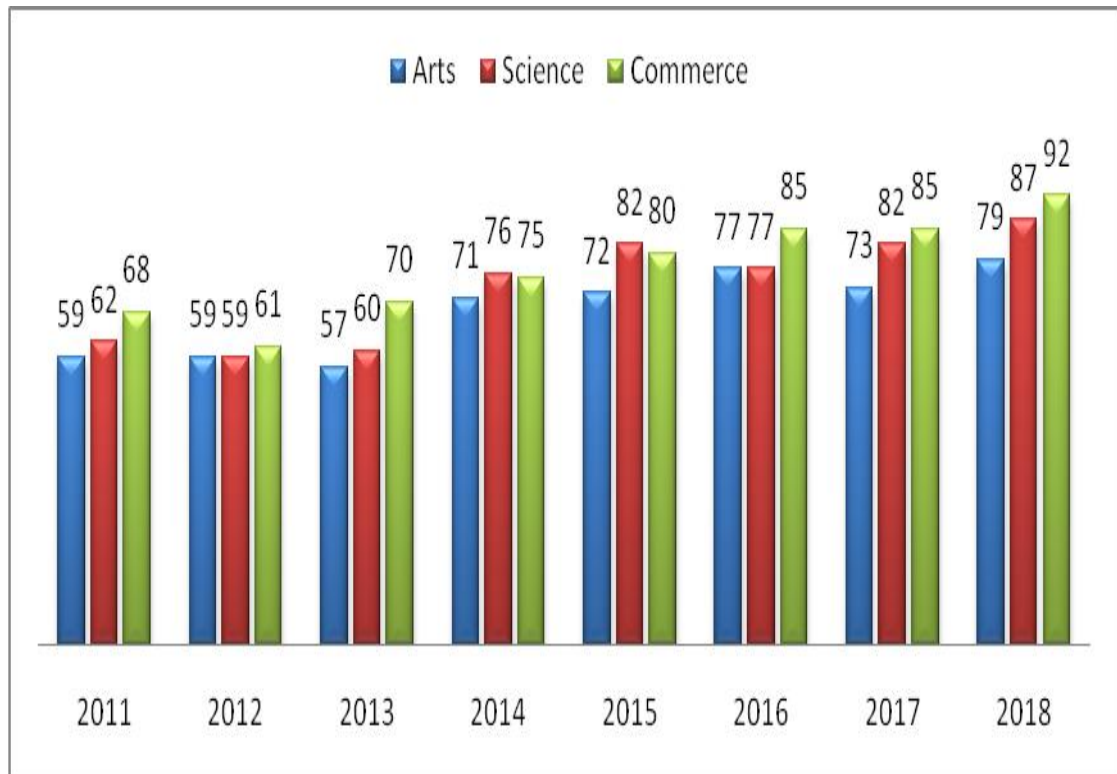
In 2011, 14 per cent of the students achieved First Division but there were slight downturns in 2012 and 2013 when the percentages went down to 12 and 10 respectively. However, gradual improvements were seen in 2014, 2015, 2016, 2017 and 2018 when the percentages went up to 17, 18, 19, 22 and 33 respectively. Therefore, a major leap can be seen in the achievement of students in First Division in the HSSLC Examinations during the last two years.

#### **4.8.2. Results of Students in the HSSLC Examinations 2011-2018 in terms of Academic Streams i.e.Arts, Science and Commerce**

Analysis of the results of students in HSSLC examinations 2011 to 2018 in terms of academic streams are presented in the following figures:

**Figure- 2**

**Students' Pass Percentage in HSSLC Examinations during 2011 to 2018 in  
Terms of Academic Streams i.e.Arts, Science and Commerce**



From the above figure, it can be seen that in 2011, commerce stream had the highest pass percentage of 68 seconded by science stream with 62 per cent followed by arts stream with 59 per cent.

No improvement in the pass percentage was seen from all streams in 2012. The pass percentage of arts stream remained the same as it was again 59 per cent, science stream went down to 59 per cent and commerce stream also went down to 61 per cent.

In 2013, commerce stream ranked the top having a pass percentage of 70

seconded by science stream with 60 pass percentage followed by arts stream whose pass percentage went down again to 57.

The years 2011, 2012 and 2013 had the same trend in the results in that commerce stream performed the best followed by science stream and arts stream. A new trend was found when science stream superseded commerce stream by having the highest pass percentages of 76 and 82 in 2014 and 2015 respectively. Second position was bagged by commerce stream with pass percentages of 75 and 80 in 2014 and 2015 respectively and third position by arts stream with pass percentages of 71 and 72 in 2014 and 2015 respectively.

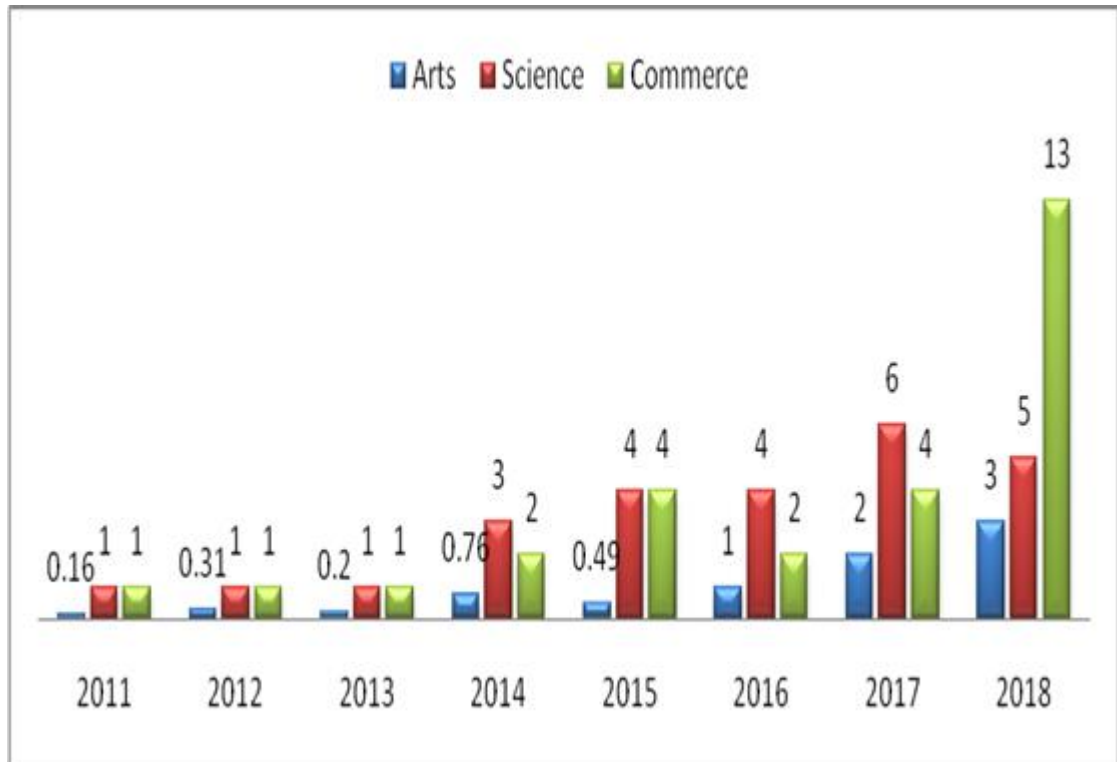
During the last three years, commerce stream again had the highest percentages. In 2016 and 2017, commerce stream had the highest pass percentages of 85 each followed by science stream with pass percentages of 77 and 82 respectively. Arts stream had the lowest pass percentages of 77 and 73 in 2016 and 2017 respectively.

In 2018, commerce stream again stood first with a pass percentage of 92 seconded by science stream with 87 per cent followed by arts stream with a pass percentage of 79.

The pass percentages of students from the three academic streams were highest in the year 2018. During these eight years i.e. 2011 to 2018, students from arts stream performed poorer than students from science and commerce streams. Therefore, it can be concluded that students from arts stream need a lot of improvements so that they may be able to match up with their peers from science and commerce streams.

**Figure- 3**

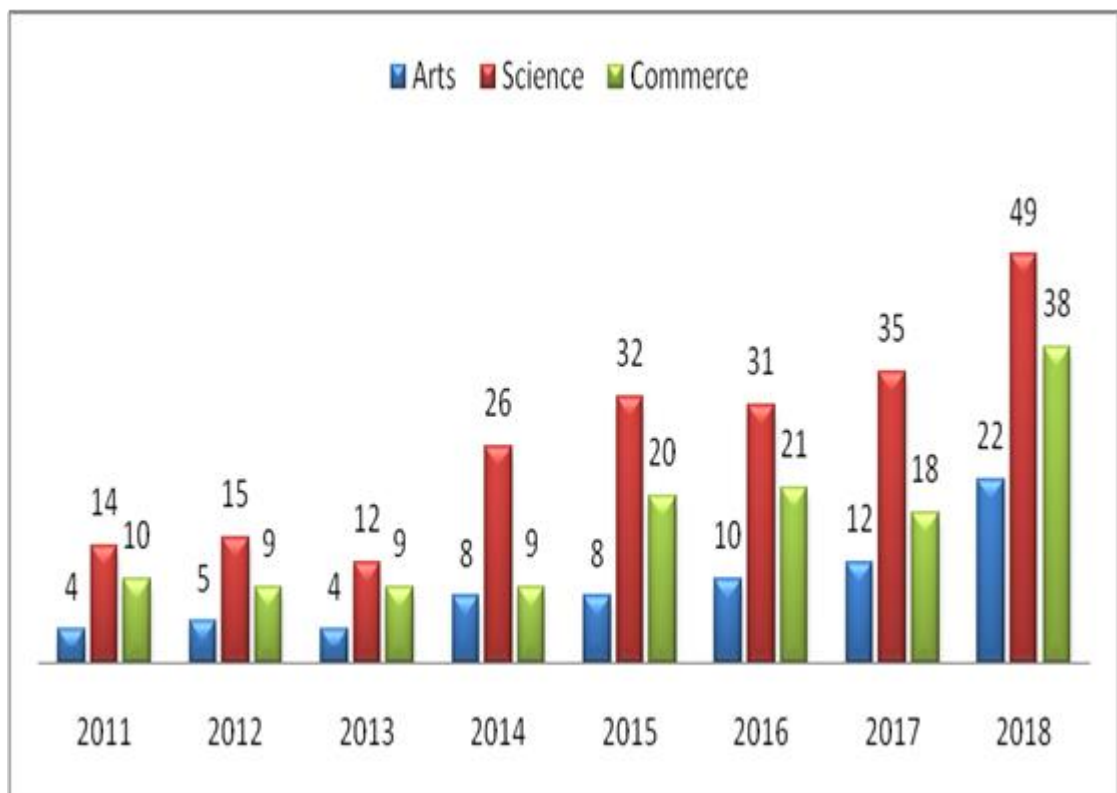
**Stream-Wise Achievement of Students in Distinction Division in  
HSSLC Examinations 2011 to 2018**



The above figure illustrates the pass percentages in distinction obtained by students from arts, science and commerce streams. Students from arts stream had 3 per cent of students who obtained distinction in 2018, 2 per cent in 2017, 1 per cent in 2016, 0.76 per cent in 2014, 0.49 per cent in 2015, 0.31 per cent in 2012, 0.16 per cent in 2011 and 0.2 per cent in 2013. Science stream had 6 per cent of students obtaining distinction in 2017, 5 per cent in 2018, 4 per cent both in 2015 and 2016, 3 per cent in 2014 and 1 per cent each in 2011, 2012 and 2013 respectively. Commerce stream had 13 per cent of students obtaining distinction in 2018 which was the highest among them, 4 per cent both in 2015 and 2017, 2 per cent both in 2014 and 2016 and 1 per cent each in 2011, 2012 and 2013 respectively.

It can also be seen from the figure that there was slight improvements in the percentages of students who obtained distinction in the HSSLC examinations held during 2011 to 2018.

**Figure- 4**  
**Stream-Wise Achievement of Students in First Division in**  
**HSSLC Examinations 2011 to 2018**



From the above figure, it can be seen that in the HSSLC Examinations held during 2011 to 2018, students from science stream always had the highest pass percentage in first division every year, commerce stream came second and arts stream always stayed at the bottom. Science stream had 49 per cent of students obtaining first division in 2018 which was highest during these years, 35 per cent in

2017, 32 per cent in 2015, 31 per cent in 2016, 26 per cent in 2014, 15 per cent in 2012, 14 per cent in 2011 and 12 per cent in 2013 whereas commerce stream had 38 per cent in 2018, 21 per cent in 2016, 20 per cent in 2015, 18 per cent in 2017, 10 per cent in 2011, 9 per cent thrice in 2012, 2013 and 2014. The percentages in the case of arts streams were 22 in 2018, 12 in 2017, 10 in 2016, 8 both in 2014 and 2015, 5 in 2012 and 4 both in 2011 and 2013.

The above figure also depicts that progressive improvements can be seen in the percentages of students obtaining first division in the HSSLC Examination over these eight years.

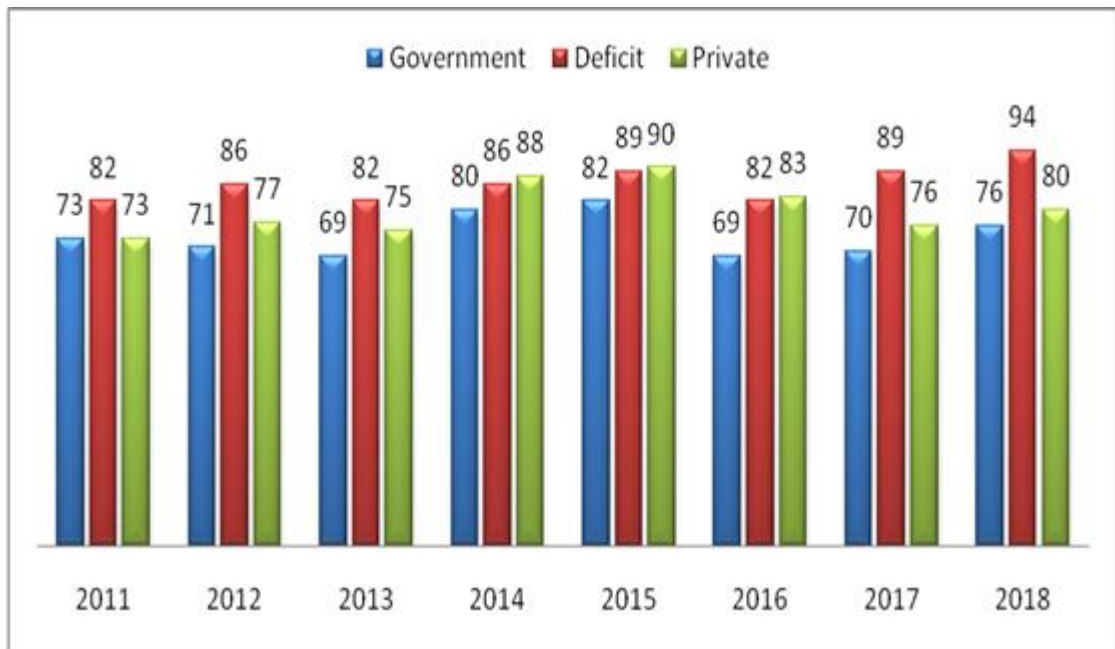
The results of the HSSLC Examinations in Mizoram during the years 2011 to 2018 indicate that majority of the students still struggle to get higher marks and percentages making it hard for them to get on merit lists across the colleges for higher studies. They also indicate that only a meager number of students were in Distinction Division and majority of the students were placed in Third Division. For students taking the HSSLC Examination under MBSE, the problem lies in matching up to their peers from other central education boards, such as the Central Board of Secondary Education (CBSE) and Indian School Certificate (ISC).

#### **4.8.3. Results of Students in the HSSLC Examinations 2011-2018 in terms of Management of Schools**

Analysis of the results of students in HSSLC examinations 2011 to 2018 in terms of management of schools are presented in the following figures:

**Figure- 5**

**Students' Pass Percentage in HSSLC Examinations during 2011 to 2018 in  
Terms of Management of Schools**



From the above figure, it can be seen that in 2011, deficit schools had the highest pass percentage of 82 and both government and private schools had 73 per cent each.

No improvement from government schools was seen in 2012 when the pass percentage went down to 71 whereas the pass percentages of the deficit schools and private schools improved with 86 and 77 respectively.

In 2013, deficit schools again ranked the top having a pass percentage of 82 seconded by private schools with 75 pass percentage followed by government schools whose pass percentage went down to 69.

The years 2012 and 2013 had the same trend in the results in that deficit schools performed the best followed by private schools and government schools performed the poorest. A new trend was found when private schools superseded



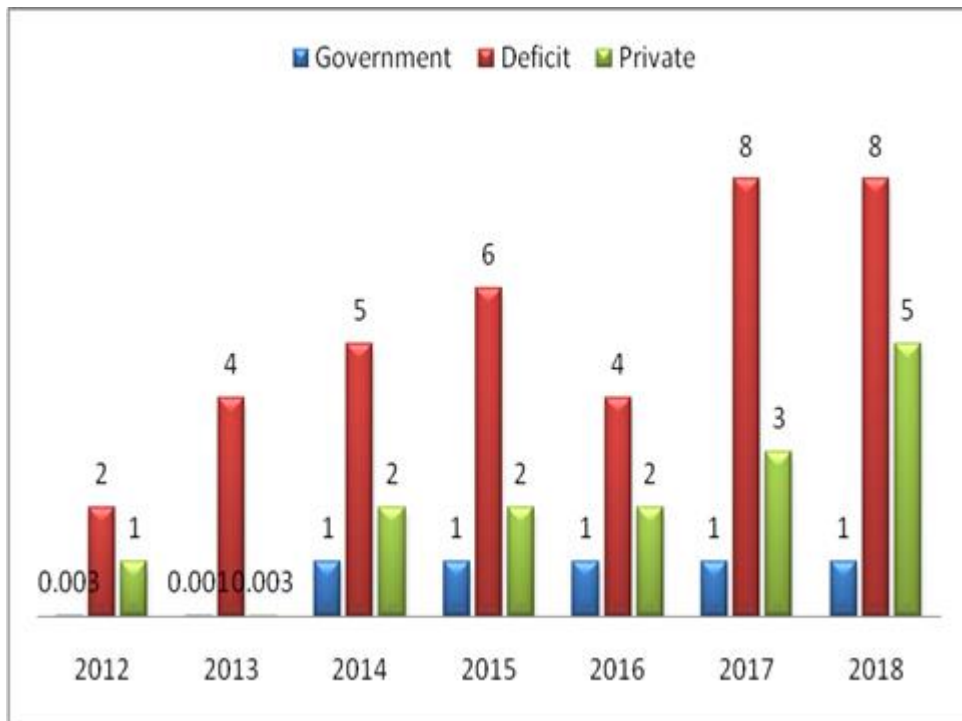
deficit schools by having the highest pass percentages of 88, 90 and 83 in 2014, 2015 and 2016 respectively. Second position was bagged by deficit schools with pass percentages of 86, 89 and 82 in 2014, 2015 and 2016 respectively and third position by government schools with pass percentages of 80, 82 and 69 in 2014, 2015 and 2016 respectively.

In 2017 and 2018, deficit schools again have the highest percentages of 89 and 94 respectively. Private schools came second with percentages of 76 and 80 followed by government schools with percentages of 70 and 76 in 2017 and 2018 respectively.

Pass percentages of students from the three types of schools were highest in the year 2015. There was a sharp decline in the pass percentage of students in 2016 from 2015 in the case of government schools. During the last seven years, government school students performed poorer than students from deficit and private schools. Hence, it can be concluded that government schools need a lot of improvement so that their students may be able to match up with their peers from private and deficit schools.

**Figure- 6**

**Management-wise Achievement of Students in Distinction Division in  
HSSLC Examinations 2012 to 2018**



The above figure illustrates that deficit schools always had the highest pass percentage in Distinction every year, private schools came second and government schools always stayed at the bottom. Deficit schools had 8 per cent of students obtaining Distinction both in 2017 and 2018, 6 per cent in 2015, 5 per cent in 2014, 4 per cent in 2013 and 2016 and 2 per cent in 2012 whereas private schools had 5 per cent in 2018, 3 per cent in 2017, 2 per cent in 2014, 2015 and 2016; 1 per cent in 2012 and 0.003 per cent in 2013. The percentages in the case of government schools are 1 per cent in 2014, 2015, 2016, 2017 and 2018; 0.003 in 2012 and 0.001 in 2013.

In this figure, the pass percentages in 2011 were not included because no data regarding the classification of division was available.

**Figure 7**

**Management –wise Achievement of Students in First Division in  
HSSLC Examinations 2012 to 2018**

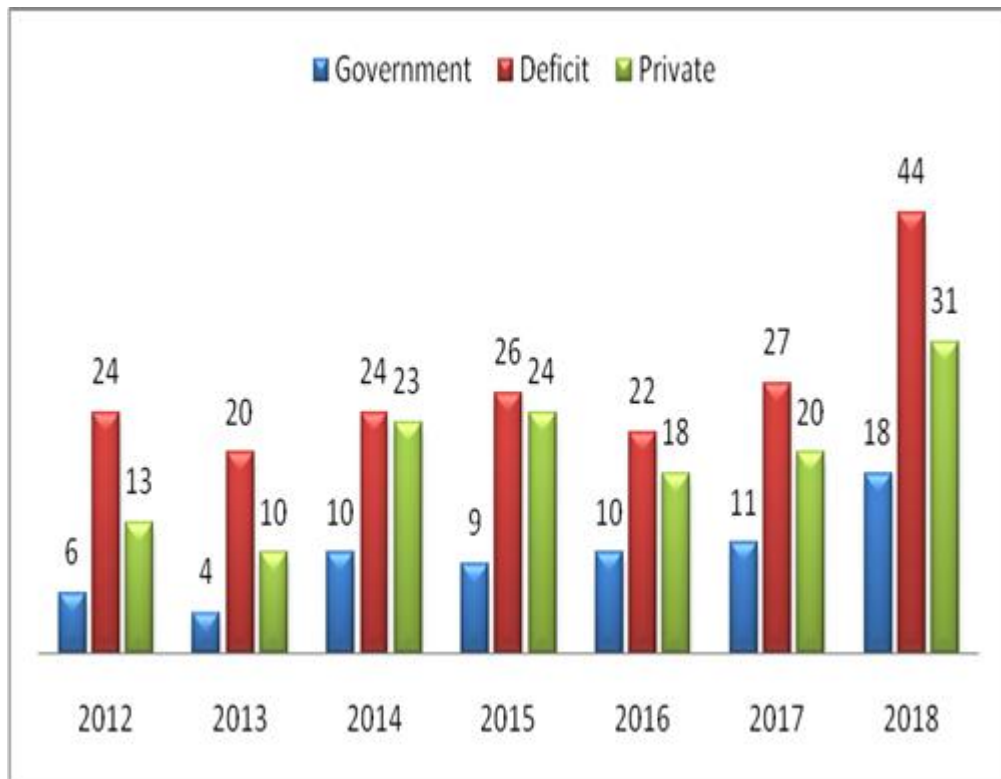


Figure-10 reveals that in terms of students' achievement of First Division in HSSLC Examinations held during 2012 to 2018, deficit schools performed the best followed by private schools and government schools performed the poorest. Deficit schools had 44 per cent of students getting First Division in 2018, 27 per cent in 2017, 26 per cent in 2015, 24 per cent both in 2012 and 2014, 22 in 2016 and 20 in 2013 whereas private schools had 31, 24, 23, 20 and 18 per cents in 2018, 2015, 2014, 2017 and 2016 respectively and 13 and 10 per cents in 2012 and 2013 respectively. The percentages for government schools were 18 in 2018, 11 in 2017, 10 both in 2014 and 2016, 9 in 2015, 6 in 2012 and 4 in 2013.

The biggest gap between the percentages of deficit school students and government school students securing First Division was found in 2018 when the percentage was 44 for deficit schools and 18 for government schools. The smallest gap was seen in 2014 when the percentages were 24 in the case of deficit schools and 23 in the case of private schools.

From the present study, it may be assumed that majority of the higher secondary school students in Mizoram were not serious enough in their studies or teaching learning environment in the schools and the examination system itself were not conducive for students. Out of 84,944 students who appeared the HSSLC Examinations, only 1 per cent managed to secure 75 per cent + (Distinction), a mere 13 per cent were placed in the First Division and 27 per cent failed the examinations. Their low percentages stood as a problem to continue higher studies as all the colleges have limited seats. Therefore, students should know that the only way to do well in the examinations is to study throughout the year and not wait till the countdown starts and for the last minute. They should be taught how to address their areas of weakness and not accumulate a backlog. The teachers should help the students not only to prepare well but also to perfect the art of presenting the information they have in the best possible manner. It is important that the students know how to write their answers in the right frame of mind.

The schools should also ask themselves about the teaching they have been providing and the steps needed to be taken in order to make students' performance in examinations better. The teachers should also regularly check their students' performance to enable them to secure higher marks in the HSSLC Examinations. It

is also recommended that the schools give question banks (past question papers) to their students at the beginning of the school session so that they can practice and prepare throughout the year.

#### **4.9. Problems Faced By Teachers of Higher Secondary Schools in Mizoram**

The problems faced by teachers of higher secondary schools in Mizoram are presented for analysis and interpretation under the following heads:

4.9.1. Problems of Teachers Related to Condition of School Buildings and Classrooms

4.9.2. Problems of Teachers Related to Facilities

4.9.3. Problems of Teachers Related to Science Laboratory

4.9.4. Problems of Teachers Related to Safe Drinking Water and Sanitation

4.9.5. Problems of Teachers Related to School Administration

4.9.6. Problems of Teachers Related to Service Conditions

4.9.7. Problems of Teachers Related to Students

**Table 4.9.1: Problems of Teachers Related to Condition of  
School Buildings and Classrooms**

<b>Problems Faced</b>	<b>Management Wise Distribution of Teachers</b>			
	<b>Government (N=289)</b>	<b>Deficit (N=154)</b>	<b>Private (N=228)</b>	<b>Total (N=671)</b>
Deplorable condition of the school building	21 (7.27)	0	35 (15.35)	56 (8.35)
Undersized classrooms	27 (9.34)	0	32 (14.04)	59 (8.79)
Poor quality of teachers' tables and chairs	22 (7.61)	0	29 (12.72)	51 (7.60)
Bad black/white/green boards	35 (12.11)	0	27 (11.84)	62 (9.24)
Insufficient number of desks and benches	21 (7.27)	0	7 (3.07)	28 (4.17)
Poor lighting of the classroom	40 (13.84)	7 (4.55)	47 (20.61)	94 (14.01)
Poor ventilation	45 (15.57)	8 (5.19)	52 (22.81)	105 (15.65)
Improper fencing and railing	25 (8.65)	0	22 (9.65)	47 (7)

It can be seen from Table 4.9.1 that 15.65 per cent of the teachers face problems due to poor ventilation of the classrooms, 14.01 per cent due to poor

lighting of the classroom, 9.24 per cent due to bad condition of black/white/green boards and 8.79 per cent due to undersized classrooms. The deplorable condition of the school building also causes problem to 8.35 teachers and poor quality of teachers' tables and chairs creates difficulty for 7.60 per cent. 7.00 per cent of the teachers also states that they have a problem with improper fencing and railing and 4.17 per cent mentions that they have a problem with the insufficient number of desks and benches for students, which hamper classroom instruction.

The table also reveals that concerning problems related to the condition of school buildings and classrooms, private school teachers constitute the highest percentages of teachers stating these problems as a whole.

It can also be seen that deficit school teachers do not face any problems with deplorable condition of the school building, undersized classrooms, poor quality of teachers' tables and chairs, bad black/white/green boards, insufficient number of desks and benches for students which hamper classroom instruction and improper fencing and railing.

Looking at the percentages of teachers who state that they have problems with the condition of school buildings and classrooms, it can be inferred that there exists no serious problem since majority of the teachers do not mention them.

**Table 4.9.2: Problems of Teachers Related to Facilities**

Problems Faced	Management Wise Distribution of Teachers			
	Government (N=289)	Deficit (N=154)	Private (N=228)	Total (N=671)
	No. & %	No. & %	No. & %	No. & %
Inadequate storage for the teachers' materials	28 (9.69)	6 (3.90)	26 (11.40)	60 (8.94)
Computers that are not easily accessible	31 (10.73)	13 (8.44)	30 (13.16)	74 (11.03)
No internet connection	55 (19.03)	18 (11.69)	44 (19.30)	117 (17.44)
Unavailability of halls/areas	57 (19.72)	12 (7.79)	55 (24.12)	124 (18.48)
Unavailability of restaurant/cafeteria within the school premises	0	0	60 (26.32)	60 (8.94)
Unavailability of cooling fans in the teachers' common room	0	0	18 (7.89)	18 (2.68)
Insufficient parking area	17 (5.88)	0	37 (16.23)	54 (8.05)

The above table (Table 4.9.2) reveals that unavailability of halls/areas for things such as teachers' meetings, parents' conferences or faculty planning sessions for 18.48 per cent, no internet connection for 17.44 per cent, computers that are not



easily accessible for 11.03 per cent, inadequate storage for the teachers' materials for 8.94 per cent, unavailability of restaurant/cafeteria within the school premises for 8.94 per cent, insufficient parking area to accommodate the vehicles of the teachers for 8.05 per cent and the unavailability of cooling fans in the teachers' common room for 2.68 per cent are the main problems faced by teachers of higher secondary schools in Mizoram.

It can also be seen that teachers belonging to deficit schools have no problems with the unavailability of restaurant/cafeteria within the school premises, unavailability of cooling fans in the teachers' common room and insufficient parking area to accommodate the vehicles of the teachers.

The table also shows that government school teachers do not face any problems with the unavailability of restaurant/cafeteria within the school premises and unavailability of cooling fans in the teachers' common room.

Since the percentages of the teachers who are faced with the problems related to facilities are quite small ranging from 4.17 per cent to 15.65 per cent only, these problems are not considered as significant.

**Table 4.9.3: Problems of Teachers Related to Science Laboratory**

<b>Problems Faced</b>	<b>Management Wise Distribution of Teachers</b>			
	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>
	<b>(N=289)</b>	<b>(N=154)</b>	<b>(N=228)</b>	<b>(N=671)</b>
	No. & %	No. & %	No. & %	No. & %
Unavailability of separate science laboratory	0	0	0	0
Insufficient number of science equipments	6 (2.08)	9 (5.84)	13 (5.70)	28 (4.17)

Table 4.9.3 depicts that none of the teachers face problems with the unavailability of separate science laboratory in schools since schools which offer science streams have their own separate science laboratory. The table also reveals that insufficient number of science equipments is a problem for 4.17 per cent of the teachers.

It can also be seen that the highest percentage of teachers stating the problems of insufficiency of science equipments is from deficit schools. However, this problem appears to be not that serious as majority of the teachers do not mention them

**Table 4.9.4: Problems of Teachers Related to  
Safe Drinking Water and Sanitation**

<b>Problems Faced</b>	<b>Management Wise Distribution of Teachers</b>			
	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>
	<b>(N=289)</b>	<b>(N=154)</b>	<b>(N=228)</b>	<b>(N=671)</b>
	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>
Unavailability of safe drinking water	0	0	0	0
Insufficient number of toilets	0	0	0	0
Unavailability of separate toilet for female teachers	11 (3.81)	6 (3.90)	17 (7.46)	34 (5.07)
Unavailability of well – ventilated toilets	78 (26.99)	36 (23.38)	64 (28.07)	178 (26.53)

Looking at the problems of teachers related to safe drinking water, Table 4.9.4 portrays that none of the teachers has problem with the unavailability of safe drinking water.

With regards to sanitation, unavailability of well - ventilated toilets is a problem for 26.53 per cent. The highest percentage who states this problem is from private schools with a percentage of 28.07. Unavailability of separate toilet for female teachers is also a problem for 5.07 per cent whereas none of the teachers has problems with the insufficient number of toilets. It is also evident from the table that there exists no serious problem related to safe drinking water and sanitation.

**Table 4.9.5: Problems of Teachers Related to School Administration**

Problems Faced	Management Wise Distribution of Teachers			
	Government (N=289)	Deficit (N=154)	Private (N=228)	Total (N=671)
	No. & %	No. & %	No. & %	No. & %
Bad relationship between Principal and staff	0	0	0	0
Bad relationship between colleagues	0	0	0	0
Bad relationship between teachers and students	0	0	0	0
Lack of instructional facilities	35 (12.11)	9 (5.84)	28 (12.28)	72 (10.73)
Insufficient number of teachers	6 (2.08)	1 (0.65)	8 (3.51)	15 (2.24)
Inadequate non – teaching staff	0	0	2 (0.88)	2 (0.30)
Heavy workload of staff	2 (0.69)	8 (5.19)	36 (15.79)	46 (6.86)
High enrolment and over - crowded classes	13 (4.50)	0	9 (3.95)	22 (3.28)

The above table (Table 4.9.5) depicts that none of the teachers faces problems relating to bad relationship between principal and staff, bad relationship between colleagues and bad relationship between teachers and students.

It can also be seen that lack of instructional facilities is a problem for 10.73 per cent of the teachers, heavy workload of staff for 6.86 per cent, high enrolment and over-crowded classes for 3.28 per cent and only 0.30 per cent have problems due to inadequate non - teaching staff.

The table also reveals that teachers do not face a big problem regarding school administration as majority of the teachers are free from this problem.

**Table 4.9.6: Problems of Teachers Related to Service Conditions**

<b>Problems Faced</b>	<b>Management Wise Distribution of Teachers</b>			
	<b>Government (N=289)</b>	<b>Deficit (N=154)</b>	<b>Private (N=228)</b>	<b>Total (N=671)</b>
	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>
Unsatisfactory service conditions	8 (2.77)	1 (0.65)	15 (6.58)	24 (3.58)
Lack of facilities for in – service education of teachers	1 (0.35)	1 (0.65)	4 (1.75)	6 (0.89)
Poor salary	14 (4.84)	19 (12.34)	67 (29.39)	100 (14.90)
Lack of recognition by the society and government	1 (0.35)	1 (0.65)	4 1.75)	6 (0.89)
Lack of competency	0	0	0	0
Lack of incentive	2 (0.69)	3 (1.95)	5 (2.19)	10 (1.49)
Lack of teaching aids	13 (4.50)	2 (1.30)	10 (4.39)	25 (3.73)
Lack of promotional facilities for teachers	0	1 (0.65%)	4 (1.75%)	5 (0.75%)
Lack of funds for higher secondary education	2 (0.69%)	1 (0.65%)	3 (1.32%)	6 (0.89%)
Unavailability of programmes like refreshers' course and training	2 (0.69%)	1 (0.65%)	12 (5.26%)	15 (2.24%)
No opportunities for teachers' professional development	1 (0.35%)	1 (0.65%)	6 (2.63%)	8 (1.19%)

Regarding problems of teachers related to service conditions, 14.90 per cent of them have the problem due to poor salary in which private school teachers constitute the highest percentage. For 3.73 per cent of teachers, lack of teaching aids is a problem for them and 3.58 per cent of teachers have the problem of unsatisfactory service conditions.

It is also clear from the table that unavailability of programmes like refreshers' course and training is a problem for 2.24 per cent of teachers, lack of incentive for 1.49 per cent and no opportunities for teachers' professional development for 1.19 per cent of the teachers.

The table also reveals that lack of facilities for in – service education of teachers, lack of recognition by the society and government and lack of funds for higher secondary education are problems for 0.89 per cent of the teachers. 0.75 per cent of teachers also face the problem due to lack of promotional facilities for teachers. It is also evident that none of the teachers has a problem with lack of competency.

From the above table, it can be inferred that there exists no serious problem in terms of teachers' problems related to service conditions.

**Table 4.9.7: Problems of Teachers Related to Students**

Problems Faced	Management Wise Distribution of Teachers			
	Government (N=289)	Deficit (N=154)	Private (N=228)	Total (N=671)
	No. & %	No. & %	No. & %	No. & %
Late arrival of the students	2 (0.69%)	8 (5.19%)	2 (0.88%)	12 (1.79%)
Frequent unjustified absences of the students	13 (4.50%)	18 (11.69%)	5 (2.19%)	36 (5.37%)
Students skipping your classes	0	1 (0.65%)	0	1 (0.15%)
Classroom disturbances caused by the students	103 (35.64%)	72 (46.75%)	46 (20.18%)	221 (32.94%)
Continuous cheating of the students	3 (1.04%)	1 (0.65%)	0 (0.00)	4 (0.60%)
Vandalism	0	0	0	0
Theft	0	0	0	0
Intimidation or verbal abuse of students	0	2 (1.30%)	0 (0.00)	2 (0.30%)

Analyzing the above table (Table 4.9.7) relating to problems of teachers with the students, it is found that 32.94 per cent of teachers face the problem of



disturbances caused by the students in the classroom and 5.37 per cent of teachers face problem with the frequent unjustified absences of the students. For 1.79 per cent of teachers, late arrival of the students is a problem. Also, 0.60 per cent of the teachers face a problem of continuous cheating of the students, 0.30 per cent have problem due to intimidation or verbal abuse of students and 0.15 per cent of teachers face problem with the students who skipped classes. None of the teachers face problem with vandalism and theft.

**Table 4.9.8: Problems Most Frequently Stated by Teachers**

<b>S.No.</b>	<b>Areas of Problems of Teachers</b>	<b>Problems Most Frequently Stated by Teachers</b>	<b>%</b>
1	Problems related to condition of school buildings and classrooms	Poor ventilation	15.65
2	Problems related to facilities	Unavailability of halls/areas for things such as teachers' meetings, parents' conferences or faculty planning sessions	18.48
3	Problems related to science laboratory	Insufficiency of science equipments	4.17
4	Problems related to safe drinking water and sanitation	Unavailability of well – ventilated toilets	26.53
5	Problems related to school administration	Lack of instructional facilities	10.73
6	Problems related to service conditions	Poor salary	14.90
7	Problems related to students	Classroom disturbances caused by the students	32.94

Table 4.9.8 portrays the problems most frequently stated by the teachers of higher secondary schools in Mizoram in each area of problem. The percentage of teachers highlighting each problem is not high and ranges from 4.17 per cent to 32.94 per cent.

**Table 4.9.9: Overall Top 10 Problems Stated by Teachers**

<b>S.No.</b>	<b>Top 10 Problems of Teachers</b>	<b>%</b>
1	Classroom disturbances caused by the students	32.94
2	Unavailability of well – ventilated toilets	26.53
3	Unavailability of halls/areas for things such as teachers' meetings, parents' conferences or faculty planning sessions	18.48
4	No internet connection	17.44
5	Poor ventilation	15.65
6	Poor salary	14.90
7	Poor lighting of the classroom	14.01
8	Computers that are not easily accessible	11.03
9	Lack of instructional facilities	10.73
10	Bad black/white/green boards	9.24

Table 4.9.9 shows the overall top 10 problems faced by the teachers of higher secondary school students in Mizoram. The percentages of these problems range from 9.24 per cent to 32.94 per cent.

#### **4.10 Problems Faced By Students of Higher Secondary Schools in Mizoram**

The problems faced by the students of higher secondary schools in Mizoram are presented for analysis and interpretation under the following heads:

- 4.10.1 Problems of Students Related to Condition of School Buildings and Classrooms
- 4.10.2 Problems of Students Related to Facilities
- 4.10.3 Problems of Students Related to Science Laboratory
- 4.10.4 Problems of Students Related To Safe Drinking Water and Sanitation
- 4.10.5 Problems of Students Related to Teachers
- 4.10.6 Problems of Students Related to High Enrolment and School Timing
- 4.10.7 Problems of Students Related to Other Students

**Table 4.10.1: Problems of Students Related to Condition of  
School Buildings and Classrooms**

<b>Problems faced</b>	<b>Management Wise Distribution of Students</b>			
	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>
	<b>N=1904</b>	<b>N=882</b>	<b>N=1983</b>	<b>N=4769</b>
	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>
Deplorable condition of the school building	240 (12.61)	8 (0.91)	35 (1.77)	283 (5.93)
Undersized classrooms	380 (19.96)	60 (6.80)	32 (1.61)	472 (9.90)
Bad black/white/green boards	240 (12.61)	18 (2.04)	29 (1.46)	287 (6.02)
Insufficient number of desks and benches for students which hamper classroom instruction	195 (10.24)	28 (3.17)	27 (1.36)	250 (5.24)
Poor lighting of the classroom	395 (20.75)	109 (12.36)	47 (2.37)	551 (11.55)
Poor ventilation	480 (25.21)	66 (7.48)	52 (2.62)	598 (12.54)
Improper fencing and railing	105 (5.51)	7 (0.79)	22 (1.11)	134 (2.81)

The above table (Table 4.10.1) shows the problems of students relating to the condition of school buildings and classrooms. Poor ventilation is a problem for 12.54 per cent of students, poor lighting of the classroom for 11.55 per cent, undersized classrooms for 9.90 per cent, bad condition of black/white/green boards for 6.02 per cent, deplorable condition of the school building for 5.93 per cent, insufficient number of desks and benches for students which hamper classroom instruction for 5.24 per cent and improper fencing and railing for 2.81 per cent of the students. However, it can also be seen that these problems are not that serious since they do not seem to create problems for majority of the students. The highest percentage of students stating these problems is government school students.

**Table 4.10.2: Problems of Students Related to Facilities**

Problems faced	Management Wise Distribution of Students			
	Government N=1904	Deficit N=882	Private N=1983	Total N=4769
	No. & %	No. & %	No. & %	No. & %
Lack of hostel facilities	92 (4.83)	41 (4.65)	7 (0.35)	140 (2.94)
Inadequate storage for the students' materials	410 (21.53)	117 (13.27)	26 (1.31)	553 (11.60)
Computers that are not easily accessible	427 (22.43)	203 (23.02)	30 (1.51)	660 (13.84)
No internet connection	442 (23.21)	202 (22.90)	44 (2.22)	688 (14.43)
Unavailability of recreation centre for games and sports	468 (24.58)	150 (17.01)	55 (2.77)	673 (14.11)
Unavailability of restaurant/cafeteria within the school premises	29 (1.52)	0	60 (3.03)	89 (1.87)
Unavailability of cooling fans in the classrooms	327 (17.17)	125 (14.17)	18 (0.91)	470 (9.86)
Insufficient parking area to accommodate the vehicles of the students	174 (9.14)	0	37 (1.87)	211 (4.42)
Lack of instructional facilities	157 (8.25)	95 (10.77)	203 (10.24)	455 (9.54)

With regards to problems related to facilities, 14.43 per cent of the students have problems with the unavailability of internet connection and for 13.84 per cent of students, computers that are not easily accessible are problems. The table also indicates that unavailability of recreation centre for games and sports is a problem for 14.11 per cent, 11.60 per cent for inadequate storage for students' materials, 9.86 per cent for unavailability of cooling fans in the classrooms, 9.54 per cent for lack of instructional facilities, 4.42 per cent for insufficient parking area to accommodate the vehicles of the students, 2.94 per cent for lack of hostel facilities and 1.87 per cent for unavailability of restaurant/cafeteria within the school premises. This data also shows that these problems are not faced by the majority of the students.

The table also reveals that in terms of problems related to facilities, government school students are the ones who face these problems the most as compared to deficit and private school students.

**Table 4.10.3: Problems of Students Related to Science Laboratory**

Problems faced	Management Wise Distribution of Students			
	Government N=1904	Deficit N=882	Private N=1983	Total N=4769
	No. & %	No. & %	No. & %	No. & %
Unavailability of separate science laboratory	0	0	0	0
Insufficiency of science equipments	73 (3.83)	101 (11.45)	13 (0.66)	187 (3.92)



Table 4.10.3 depicts that none of the students faces problems with regards to the unavailability of separate science laboratory in schools since schools offering science streams have their own separate science laboratory. The table also reveals that insufficiency of science equipments is a problem for 3.92 per cent of the students.

It can also be seen that the highest percentage of students stating the problems of insufficiency of science equipments is from deficit schools. However, this problem appears to be not that serious as majority of the students do not mention them.

**Table 4.10.4: Problems of Students Related to Safe Drinking Water and Sanitation**

<b>Problems faced</b>	<b>Management Wise Distribution of Students</b>			
	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>
	<b>N=1904</b>	<b>N=882</b>	<b>N=1983</b>	<b>N=4769</b>
	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>
Unavailability of safe drinking water	86 (4.52)	31 (3.51)	6 (0.30)	123 (2.58)
Insufficient number of toilets	667 (35.03)	325 (36.85)	25 (1.26)	1017 (21.33)
Unavailability of separate toilet for boys and girls	4 (0.21)	12 (1.36)	17 (0.86)	33 (0.69)
Unavailability of well – ventilated toilets	821 (43.12)	324 (36.73)	64 (3.23)	1209 (25.35)

Looking at the problems of students related to safe drinking water, Table 4.10.4 portrays that only 2.58 per cent states that they have a problem with the unavailability of safe drinking water. Government school students constitute the highest percentage of students facing this problem.

With regards to sanitation, unavailability of well - ventilated toilets is a problem for 25.35 per cent. The highest percentage who states this problem is from government schools with a percentage of 43.12 whereas this causes problems for only 3.23 per cent of private school students. Insufficient number of toilets is also a problem for 21.33 per cent students and only 0.69 per cent has a problem with the unavailability of separate toilet for boys and girls.

It is also evident from the table that unavailability of well - ventilated toilets is mostly faced by the students.

**Table 4.10.5: Problems of Students Related to Teachers**

Problems faced	Management Wise Distribution of Students			
	Government N=1904	Deficit N=882	Private N=1983	Total N=4769
	No. & %	No. & %	No. & %	No. & %
Poor relationship between teachers and students	95 (4.99)	71 (8.05)	89 (4.49)	255 (5.35)
Unfriendly attitude of the teachers	302 (15.86)	136 (15.42)	154 (7.77)	592 (12.41)
Insufficient number of teachers	14 (0.74)	5 (0.57)	78 (3.93)	97 (2.03)
Teachers having poor teaching skills	80 (4.20)	35 (3.97)	60 (3.03)	175 (3.67)
Incompetency of teachers	25 (1.31)	16 (1.81)	28 (1.41)	69 (1.45)
Late arrival of the teachers	33 (1.73)	10 (1.13)	23 (1.16)	66 (1.38)
Frequent unjustified absences of the teachers	3 (0.16)	13 (1.47)	12 (0.61)	28 (0.59)
Intimidation or verbal abuse by teachers	64 (3.36)	18 (2.04)	68 (3.43)	150 (3.15)
Physical injury by teachers	0 (0.00)	1 (0.11)	36 (1.82)	37 (0.78)
Occurrence of mental or emotional abuse	33 (1.73)	13 (1.47)	50 (2.52)	96 (2.01)
Favouritism of a particular student by the teacher	102 (5.36)	105 (11.90)	179 (9.03)	386 (8.09)

Table 4.10.5 reveals that the highest problem that the students face with regards to teachers is the unfriendly attitude of the teachers. This is stated by 12.41 per cent of the students. It can also be seen from the table that the highest percentage of students who faces this problem is government school students. Favouritism of a particular student by the teacher is the second highest problem stated by 8.09 per cent of the students. Besides, 5.35 per cent states that they have a problem with the poor relationship between teachers and students.

The table also depicts that teachers having poor teaching skills is a problem for 3.67 per cent, intimidation or verbal abuse by teachers for 3.15 per cent, insufficient number of teachers for 2.03 per cent, occurrence of mental or emotional abuse for 2.01 per cent, incompetency of teachers for 1.45 per cent, late arrival of the teachers for 1.38 per cent, physical injury by teachers for 0.78 per cent and frequent unjustified absences of the teachers for 0.59 per cent.

It can also be inferred from the above table that majority of the students do not face the problems relating to teachers.

**Table 4.10.6: Problems of Students Related to High Enrolment  
and School Timing**

<b>Problems faced</b>	<b>Management Wise Distribution of Students</b>			
	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>
	<b>N=1904</b>	<b>N=882</b>	<b>N=1983</b>	<b>N=4769</b>
	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>	<b>No. &amp; %</b>
High enrolment and over - crowded classes	289 (15.18)	124 (14.06)	112 (5.65)	525 (11.01)
School timing	791 (41.54)	313 (35.49)	393 (19.82)	1497 (31.39)

With regards to problems related to high enrolment and over - crowded classes, 11.01 per cent states that they face a problem with this. Out of all the students, government school students constitute the highest percentage followed by deficit and private school students. It can also be seen that there exists no serious problem related to high enrolment and over-crowded classes.

The above table also reveals that 31.39 per cent of the students face problem with regards to school timing. Out of the students claiming to have problems with school timing, students from government schools constitutes the highest percentage (41.54 per cent) followed by private and deficit school students with percentages of 35.49 per cent and 19.82 per cent respectively.

It can also be inferred from the above table that a large number of the students face a problem with school timing.

**Table 4.10.7: Problems of Students Related to Other Students**

Problems faced	Management Wise Distribution of Students			
	Government N=1904	Deficit N=882	Private N=1983	Total N=4769
	No. & %	No. & %	No. & %	No. & %
Poor relationship between peers	66 (3.47)	28 (3.17)	25 (1.26)	119 (2.50)
Classroom disturbances caused by other students	812 (42.65)	327 (37.07)	358 (18.05)	1497 (31.39)
Vandalism	0	0	0	0
Theft	49 (2.57)	10 (1.13)	31 (1.56)	90 (1.89)
Bullying	54 (2.84)	13 (1.47)	40 (2.02)	107 (2.24)
Intimidation or verbal abuse by other students	51 (2.68)	14 (1.59)	48 (2.42)	113 (2.37)
Physical injury by other students	0	0	3 (0.15)	3 (0.06)

The above table (Table 4.10.7) represents that in terms of students' problems related to other students, 31.39 per cent have a problem with classroom disturbances

caused by other students. It can also be seen from the table that it is also a big problem for 42.65 per cent of students belonging to government schools followed by 37.07 per cent from deficit schools and 18.05 per cent from private schools.

It can also be seen from the table that only few students have problems with poor relationship between peers (2.50 per cent), intimidation or verbal abuse by other students (2.37 per cent), bullying (2.24 per cent), theft (1.89 per cent) and physical injury by other students (0.06 per cent).

The above table also reveals that none of the students faces a problem with regards to vandalism. It can also be concluded that in terms of problems related to other students, there exists no serious problem except for classroom disturbances caused by other students.



**Table 4.10.8: Problems Most Frequently Stated by Students**

<b>S.No.</b>	<b>Areas of problems of students</b>	<b>Problems most frequently stated by students</b>	<b>%</b>
1	Problems related to condition of school buildings and classrooms	Poor ventilation	12.54
2	Problems related to facilities	No internet connection	14.43
3	Problems related to science laboratory	Insufficiency of science equipments	3.92
4	Problems related to safe drinking water and sanitation	Unavailability of well – ventilated toilets	25.35
5	Problems related to teachers	Unfriendly attitude of the teachers	12.41
6	Problems related to high enrolment and school timing	School timing	31.39
7	Problems related to other students	Classroom disturbances caused by other students	31.39

Table 4.10.8 portrays the problems most frequently stated by the students of higher secondary schools in Mizoram in each area of problem. It is evident that majority of the students has problems with school timing and classroom disturbances caused by other students.

**Table 4.10.9: Overall Top 10 Problems Stated by Students**

<b>S.No.</b>	<b>Top 10 problems of students</b>	<b>%</b>
1	Classroom disturbances caused by other students	31.39
2	School timing	31.39
3	Unavailability of well – ventilated toilets	25.35
4	Insufficient number of toilets	21.33
5	No internet connection	14.43
6	Unavailability of recreation centre for games and sports	14.11
7	Computers that are not easily accessible	13.84
8	Poor ventilation	12.54
9	Unfriendly attitude of the teachers	12.41
10	Inadequate storage for the students’ materials	11.60

Table 4.10.9 shows the overall top 10 problems faced by the students of higher secondary school students in Mizoram. The percentages of these problems range from 11.60 per cent to 31.39 per cent.

**CHAPTER – V**

**FINDINGS, DISCUSSIONS OF MAJOR FINDINGS, RECOMMENDATIONS  
AND SUGGESTIONS FOR FURTHER RESEARCH**

## **CHAPTER – V**

### **FINDINGS, DISCUSSIONS OF MAJOR FINDINGS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH**

In this chapter, findings, discussions of major findings, recommendations and suggestions for further research are presented.

The findings of the study are arranged as under:

1. Findings related to the development of higher secondary education in Mizoram in a historical perspective.
2. Findings related to students' enrolment in terms of gender, types of institutions and academic streams.
3. Findings related to profile of teachers in terms of types of institutions, educational and professional qualifications, age, teaching experience, gender and academic streams.
4. Findings related to recruitment procedures of higher secondary school teachers in Mizoram.
5. Findings related to physical infrastructure and facilities available in higher secondary schools in Mizoram.
6. Findings related to teaching - learning processes and methods of evaluation.

7. Findings related to the activities (academic and non-academic) organized for higher secondary classes in Mizoram.
8. Findings related to HSSLC Examination results of eight consecutive years i.e. 2011-2018.
9. Findings related to problems faced by teachers of higher secondary schools in Mizoram.
10. Findings related to problems faced by students of higher secondary schools in Mizoram.

#### **5.1 Findings Related to the Development of Higher Secondary Education in Mizoram in a Historical Perspective**

- a) As North-Eastern Hill University (NEHU) which managed pre-university education in colleges decided to hand over the management of +2 education to Mizoram Government as per the recommendations of the Education Commission 1964-66 and in pursuance of the decisions taken by the Council of Ministers in their meeting held on 25th July, 1995, the state government decided to take over the management of +2 education in schools with effect from 1995 academic session.
- b) Regarding the syllabus, the Council of Ministers in their meeting held on 25<sup>th</sup> July, 1995 decided that schools should adapt/adopt the existing NEHU Syllabus until a new syllabus was worked out by the Mizoram Board of School Education. It also advised the board to work out the new

syllabus keeping in view the standard and requirement of higher secondary education. When the new syllabus had been finalized, planning was made to introduce the new syllabus with effect from 1997 academic session.

- c) The responsibility of preparing the Higher Secondary School Text Books was entrusted to State Council for Educational Research and Training (SCERT) which was then examined and approved by the Mizoram Board of School Education.
- d) During 1995-96, 13 High Schools were converted into Higher Secondary Schools.
- e) During 1996-97, 7 High Schools were converted into Higher Secondary Schools.
- f) During 1997-98, 6 High Schools were converted into Higher Secondary Schools.
- g) The Education and Human Resources Development Department under the State Government took necessary action in creating teaching and non-teaching posts and built up the entire required infrastructure in respect of all the High Schools which had been converted into Higher Secondary Schools.
- h) With the gradual conversion and up-gradation of the existing High Schools into Higher Secondary Schools and the introduction of +2 stage

of education, Pre-University classes being taught in Colleges were abolished correspondingly.

- i) In 1996, the Mizoram Board of School Education (First Amendment) Act was enacted. This amendment was necessitated by the handing over of the responsibility for Classes XI and XII stage by North-Eastern Hill University (NEHU) to the State Board. Under these circumstances, Mizoram introduced the 10+2+3 structure in 1996 and thus transferring +2 classes to the school system which was at that time attached to the degree colleges. A number of high schools were thus converted into higher secondary schools.
- j) The Higher Secondary Schools came into existence only in the year 1996 when the Pre-University class equivalent to Class XI & XII was shifted from Colleges to Schools. From this year onward, Class XI and Class XII were under the purview of School Education from Higher Education accordingly.
- k) On the 7<sup>th</sup> of April 1997, the Competent Authority of the Central Board of School Education (CBSE) approved the adoption of the Senior School Curriculum (Classes XI & XII) of the Central Board of School Education (CBSE) by the Mizoram Board of School Education (MBSE).
- l) In 2003, the Mizoram Education Act, 2003 was enacted by the State Legislative Assembly with a view to promoting the standard of education

and by the progressive measures to improve the entire school system of Mizoram

- m) Higher Secondary School Leaving Certificate (HSSLC) was computerized from 2005. The software for such was carefully planned and made by EXXON Automation Team of Bombay. Since computerization requires careful handling, trainings were conducted by MBSE for all the school authorities throughout the state on 29<sup>th</sup> September, 2004 at Aizawl and 1<sup>st</sup> October, 2004 at Lunglei.
- n) Integrated Evaluation Scheme (IES) for Higher Secondary Stage was implemented on 14<sup>th</sup> August, 2017 by the Mizoram Board of School Education. Thus, all higher secondary schools in Mizoram started using IES from 2017-18 academic session.
- o) The number of higher secondary schools has been expanding over the years. In 1996 when higher secondary schools came into existence, there were only 16 schools which kept on increasing almost every year and according to the Annual Publication 2016-17 (List of Schools with Number of Teachers and Enrolment of Students) published by the Statistical Cell, Directorate of School Education, Government of Mizoram, the most recent data available, there were 163 higher secondary schools in which there were 1661 teachers and 22540 students.
- p) According to 2016-17 statistics, out of 163 higher secondary schools, there were 25 schools run by the government (5 Schools by the Central



Government and 20 by the State Government), 20 private schools aided by the State Government or Local Body (7 Deficit Schools and 13 Adhoc Aided Schools) and 118 Private Unaided Schools (11 Lump-sum Aided Schools and 107 Purely Private Schools). Out of 1661 teachers, there were 36 teachers from Central Government Schools, 473 from State Government Schools, 179 from Deficit Schools, 177 from Adhoc Aided Schools, 70 from Lump-sum Aided Schools and 726 from Purely Private Schools). Out of 22540 students, there were 448 students from Central Government Schools, 7869 from State Government Schools, 3325 from Deficit Schools, 1542 from Adhoc Aided Schools, 924 from Lump-sum Aided Schools and 8432 from Purely Private Schools).

## **5.2 Findings Related to Students' Enrolment in Terms of Gender, Types of Institutions and Academic Streams**

### **5.2.1 Students' Enrolment in Terms of Gender**

- a) There was an increase in the enrolment of students each year.
- b) During the years 2011 and 2015, the enrolment of male students was higher as compared with the female students. The percentages of male students enrolled in 2011, 2012, 2013, 2014 and 2015 were 50.30, 50.34, 50.54, 50.49, and 50.31 respectively.
- c) In 2016, enrolment of female students was higher than that of male students in which the percentage was 51.11.

- d) During 2011-16, male students constitute 50.13 per cent and female students 49.87 per cent of enrolment. Thus, there was no gender disparity in terms of students' enrolment in higher secondary schools in Mizoram.

### **5.2.2 Students' Enrolment in Terms of Types of Institutions**

- a) During the period 2011 to 2016, the percentages of students enrolled in state government, private, deficit, adhoc aided, lumpsum aided and central government schools were 38.93, 34.48, 14.50, 6.75, 4.08 and 1.26 per cents respectively.
- b) In 2011, 2012, 2013, 2015 and 2016, schools run by the state government had the highest percentage of students' enrolment while schools run by the central government had the lowest.
- c) In 2014, private schools had the highest percentage of students' enrolment whereas central government schools had the lowest.

### **5.2.3 Students' Enrolment in Terms of Academic Streams**

- a) The highest percentage of students' enrolment during 2011 to 2016 belonged to arts stream followed by science and commerce streams.
- b) The percentages of arts students enrolled in 2011, 2012, 2013, 2014, 2015 and 2016 were 67.98, 67.92, 68.73, 70.96, 69.31 and 69.28 respectively.

- c) The percentages of science students enrolled in 2011, 2012, 2013, 2014, 2015 and 2016 were 19.48, 21.63, 21.83, 20.19, 18.1 and 18.25 respectively.
- d) The percentages of commerce students enrolled in 2011, 2012, 2013, 2014, 2015 and 2016 were 7.73, 5.83, 5.67, 5.47, 4.84 and 4.85 respectively.

### **5.3 Findings Related to Profile of Teachers in Terms of Types of Institutions, Educational and Professional Qualifications, Age, Teaching Experience, Gender, and Academic Streams**

#### **5.3.1 Profile of Teachers in Terms of Types of Institutions**

43.07 per cent of the teachers were government school teachers, 22.95 per cent were deficit school teachers and 33.98 per cent were private school teachers.

#### **5.3.2 Profile of Teachers in Terms of Educational and Professional Qualifications**

- a) In terms of educational qualifications, all the teachers of higher secondary schools had the required educational qualifications as laid down in the Mizoram School Education Department (Group 'A' posts) Recruitment Rules.
- b) In terms of professional qualifications, only government school teachers had the required qualifications. Deficit schools had 59.09 per cent of

professionally trained teachers whereas private schools had only 7.02 per cent of professionally trained teachers. Private schools were the worst among them as they had only a few per cent of teachers who had the required professional qualifications.

### **5.3.3 Profile of Teachers in Terms of Age**

- a) The age of teachers as shown by the records revealed that the largest percentages (39.93) of teachers were between 40 to 49 years of age followed by 36.66 per cent of teachers who were between 30 to 39 years of age. 18.93 per cent of them were below 29 years whereas 4.47 per cent were above 50 years.
- b) Among the teachers, the highest percentages in the age groups 29 years & below, 30 to 39, 40 to 49, and 50 years & above were formed by private school teachers (44.30), deficit school teachers (41.56), government school teachers (56.75) and deficit school teachers (7.14) respectively.

### **5.3.4 Profile of Teachers in Terms of Teaching Experience**

- a) In terms of teaching experience, 12.67 per cent had less than 5 years teaching experience, 18.33 per cent of the teachers had 5 to 9 years experience, 23.99 per cent had 10 to 14 years, 27.27 per cent had 15 to 19 years and 17.73 per cent had 20 and more years of teaching experience.
- b) Deficit schools had the highest percentage of teachers who had teaching experience of 20 years and above which was 25.97 per cent whereas there

were 35.09 per cent from private schools who had an experience of less than 5 years.

### **5.3.5 Profile of Teachers in Terms of Gender**

- a) Against 56.63 per cent male teachers, there were 43.37 per cent of female teachers.
- b) Private schools had the largest percentage of male teachers constituting 60.09 per cent followed by deficit schools and government schools with percentages of 55.19 and 54.67 respectively.
- c) Regarding female teachers, government schools had the largest percentage of female teachers constituting 45.33 per cent followed by deficit schools and private schools with percentages of 44.81 and 39.91 respectively.

### **5.3.6 Profile of Teachers in Terms of Academic Streams**

- a) 68.85 per cent were arts teachers, 22.65 per cent were science teachers and 8.49 per cent were commerce teachers. Arts teachers constitute the highest percentage of higher secondary school teachers followed by science and commerce teachers.
- b) Regarding arts stream, private schools had the largest number of teachers with 77.19 per cent followed by government schools with 74.74 per cent and 45.45 per cent were from deficit schools.

- c) With regards to science stream, 39.61 per cent were from deficit schools, 21.80 per cent from government schools and 12.28 per cent were from private schools.
- d) Looking at commerce stream, 14.94 per cent were from deficit schools, 10.53 per cent were from private schools and government schools had only 3.46 per cent of commerce teachers.

**5.4 Findings Related to Recruitment Procedures of Higher Secondary School Teachers in Mizoram.**

- a) The recruitment rules of higher secondary school teachers under the Government of Mizoram were called the Mizoram School Education Department (Group 'A' posts) Recruitment Rules, 2012.
- b) Regarding the recruitment of deficit and private school teachers, they were recruited by the managing committee of the schools in accordance with the rules and regulations prescribed from time to time by the state government.
- c) The post of Lecturer for higher secondary schools in Mizoram was categorized into three grades namely Junior Grade, Senior Grade and Selection Grade. Each of these post were classified under General State Service (Group 'A' Gazetted) (Non-Ministerial).
- d) Lecturers (Junior Grade) were 100 per cent directly recruited. When these junior grade lecturers were in a regular continuous service for eight years,

they were eligible for promotion to Lecturer (Senior Grade). Again, when they were in regular continuous service for sixteen years which is calculated from the date of entry in the junior grade, they were eligible for promotion to Lecturer (Selection Grade).

- e) According to the Seventh Central Revision of Pay (as modified and extended to the employees under the Government of Mizoram) Rules, 2018, junior grade lecturers were in Level 10 of the pay matrix with basic pay of Rs. 56,100/-, senior grade lecturers in Level 10A with basic pay of Rs. 64,700/- and selection grade lectures in Level 11 with basic pay of Rs. 67,700/- with all other allowances as admissible from time to time.
- f) The age limit for direct recruits of higher secondary school teachers of Mizoram was between 18 years and 35 years. However, upper age limit was relaxable by five years for candidates from Scheduled Caste/ Scheduled Tribes.
- g) Regarding the educational qualification and other qualifications required for direct recruits, the criteria were: (i) At least 2<sup>nd</sup> Class Master Degree from recognized university in the relevant subject with Bachelor of Education or its equivalent from institutions recognized by National Council for Teacher Education (NCTE) 'OR' Two years integrated M.Sc.Ed course or equivalent course recognized by NCTE and (ii) Working knowledge of Mizo language at least Middle School Standard.

- h) The period of probation for junior grade lecturers was for 2 years. In the case of senior and selection grade lecturers, probation was not necessary as they were selected and promoted according to their period of regular continuous service.

## **5.5 Findings Related to Physical Infrastructure and Facilities available in Higher Secondary Schools in Mizoram**

### **5.5.1 Nature of school building**

- a) 58.14 per cent of higher secondary schools had their own buildings while the other 41.86 per cent were running their schools in rented buildings.
- b) Government schools and deficit schools had their own buildings while most private schools rented buildings for running their schools.

### **5.5.2 Physical condition of the school building**

- a) Of all the schools, deficit schools had the best percentage in terms of good condition of the school building, satisfactory classroom size, schools surrounded by wall or fence, child-friendly design of the school and a well-landscaped building, government schools came second and then followed by private schools.
- b) The physical conditions of private schools were worst among them.



### **5.5.3 Provision of hostel facilities**

65.12 per cent provided hostel facilities for their students in which there were separate hostel for boys and girls

### **5.5.4 Provision of separate rooms in the school**

- a) While all schools had teachers' common room, 93.02 per cent had separate principal's room and 72.09 had separate office room due to congested space.
- b) Schools which offered science stream had separate science laboratory which was 46.51 per cent.
- c) Only few schools had separate computer laboratory (11.63 per cent), recreational centre (23.26 per cent) and conference hall (13.95 per cent).
- d) None of the schools had students' common room.
- e) Deficit schools had the best space in terms of different separate rooms followed by government schools and private schools.

### **5.5.5 Provision of classroom facilities**

- a) All schools had the required classroom facilities such as chairs, tables, desks, benches, and blackboards/whiteboards/green boards.
- b) 79.07 per cent of the classrooms were well – lighted and well – ventilated.

### **5.5.6 Provision of science laboratory facilities**

While 86.36 per cent of the schools had separate science laboratory, only 50 per cent of the schools had sufficient number of laboratory equipments. 80 per cent of deficit schools had sufficient number of equipments whereas 50 per cent of government schools and only 36.36 per cent of private schools had a limited number of science equipments.

### **5.5.7 Provision of library facilities**

- a) Majority of the schools did not have a library in their schools.
- b) Even though 11.63 per cent of the schools mentioned that they had a library, there were no proper libraries in any of the schools.

### **5.5.8 Provision of safe drinking water**

- a) Safe drinking water was available in all schools.
- b) The source of drinking water was PHE water which was available all year round for all these schools.

### **5.5.9 Provision of sanitation facilities**

- a) All schools had proper sanitation facilities.
- b) Of the 62.79 per cent toilets for the students, only 41.86 per cent of them were well-lighted and well-ventilated.

- c) Majority of the schools had separate toilet for the teachers as well as for the female students.

#### **5.5.10 Condition of power supply**

- a) Power supply was available in all schools and sufficient electrical outlets were available in 95.35 per cent schools.
- b) Some kind of power shortage was experienced by all the schools.

#### **5.5.11 Other facilities provided in the schools**

- a) All schools had computers and telephones but only 37.21 per cent of the schools had an internet connection.
- b) All schools had cooling fans in the teachers' common room whereas 93.02 per cent and 72.09 per cent had cooling fans in the principal's room and office room respectively.
- c) No fans and air conditioners were available in the classrooms.

### **5.6. Findings Related to Teaching-Learning Processes and Methods of Evaluation**

#### **5.6.1 Methods of Teaching Followed in Class**

- a) In terms of methods of teaching, all teachers were following the traditional lecture method accompanied by 47.69 per cent of discussion

method, 76.15 per cent of notes dictation, 21.16 per cent of question-answer method and 6.41 per cent of project/field works.

- b) In addition to lecturing, the highest percentages of teachers who used discussion method, dictating notes, question-answer method and project/field work were deficit school teachers (56.49), government school teachers (84.78), private school teachers (22.81) and again private school teachers (10.09) respectively.
- c) None of the higher secondary school teachers used demonstration and seminar as method of teaching.

#### **5.6.2 Efforts Made by Teachers to Improve Teaching-Learning Processes**

- a) 62.30 per cent of the teachers adopted innovative practices out of which the majority was constituted by government school teachers with 68.86 per cent followed by 65.58 per cent of deficit school teachers and 51.75 per cent of private school teachers.
- b) Out of the 81.97 per cent of the teachers who motivated their students to learn, there were 87.20 per cent of government school teachers, 83.33 per cent of private school teachers and 70.13 per cent of deficit school teachers.
- c) There were 84.20 per cent of higher secondary school teachers who monitored the progresses of their students. Teachers from government schools constituted the majority by 92.04 per cent followed by private

school teachers with 82.89 per cent and deficit school teachers with 71.43 per cent.

- d) Out of 671 higher secondary school teachers, only 14.01 per cent were using power point presentation in the classroom. 18.83 per cent of deficit school teachers, 14.19 per cent of government school teachers and 8.77 per cent of private school teachers were using this method

### **5.6.3 Methods of Evaluation**

- a) In terms of evaluating students, all teachers used terminal and promotion examination to evaluate the progress of their students.
- b) Apart from using examinations for evaluating students, the highest percentages of teachers who employed class test, assignment and practical works were private school teachers (78.07). This is followed by deficit school teachers (46.75) and private school teachers (26.75).

## **5.7. Findings Related to Activities (Academic and Non-Academic) Organized for Higher Secondary Classes in Mizoram**

### **5.7.1 Academic Activities**

- a) All schools organized class test for their students whereas 95.35, 55.81, 51.16 and 25.58 per cents of the schools were organizing other activities such as assignment, seminar, essay writing competition and science exhibition respectively.

- b) Majority of the schools considered class test and assignments to be the most important academic activities organized for higher secondary classes in Mizoram.
- c) Among all the schools, deficit schools were the best in organizing different academic activities while private schools were the worst.

### **5.7.2 Non-Academic Activities**

- a) Non-Academic activities such as excursion, debate, quiz and elocution were organized by 69.77 per cent, 67.44 per cent, 83.72 per cent and 18.60 per cent of the schools.
- b) 39.53 per cent of schools had National Service Scheme (NSS), 23.26 per cent had National Cadet Corps (NCC), 11.63 had Scouts & Guides and only 6.98 per cent of the schools had adventure club in their schools.
- c) Among all the schools, deficit schools are the best in organizing different non-academic activities while private schools are the worst.

## **5.8 Findings Related to HSSLC Examination Results of Eight Consecutive Years i.e., 2011-2018**

### **5.8.1 Overall Results of Students in the Higher Secondary School Leaving Certificate (HSSLC) Examinations for Eight Consecutive Years i.e. 2011 to 2018**

- a) During the years 2011-2018, 59489 students passed the examinations out of which 1357 were placed in Distinction, 11371 in First Division, 20306 in Second Division and 26455 in Third Division and the overall pass percentage was 70.03. Meanwhile, 2287 students were given compartmental chance and 23168 students failed the examinations.
- b) With regards to the category of divisions particularly the Distinction Division, only 1 per cent of the students attained the Distinction division in 2011, 2012 and 2013 but the percentages increased to 2 since 2014 till 2016. It keeps on increasing to 4 and 5 in 2017 and 2018 respectively. Therefore, there was a slight improvement over these last two years in terms of achievement of students in Distinction Division.
- c) In 2011, 14 per cent of the students achieved First Division but there were slight downturns in 2012 and 2013 when the percentages went down to 12 and 10 respectively. However, gradual improvements were seen in 2014, 2015, 2016, 2017 and 2018 when the percentages went up to 17, 18, 19, 22 and 33 respectively. Therefore, a major leap can be seen in the achievement of students in First Division in the HSSLC Examinations during the last two years.

### **5.8.2 Results of Students in the HSSLC Examinations 2011-2018 in terms of Academic Streams i.e.Arts, Science and Commerce**

- a) In 2011, commerce stream had the highest pass percentage of 68 seconded by science stream with 62 per cent followed by arts stream

with 59 per cent.

- b) No improvement in the pass percentage was seen from all streams in 2012. The pass percentage of arts stream remained the same as it was again 59 per cent, science stream went down to 59 per cent and commerce stream also went down to 61 per cent.
- c) In 2013, commerce stream ranked the top having a pass percentage of 70 seconded by science stream with 60 pass percentage followed by arts stream whose pass percentage went down again to 57.
- d) The years 2011, 2012 and 2013 had the same trend in the results in that commerce stream performed the best followed by science stream and arts stream. A new trend was found when science stream superseded commerce stream by having the highest pass percentages of 76 and 82 in 2014 and 2015 respectively. Second position was bagged by commerce stream with pass percentages of 75 and 80 in 2014 and 2015 respectively and third position by arts stream with pass percentages of 71 and 72 in 2014 and 2015 respectively.
- e) During the last three years, commerce stream again had the highest percentages. In 2016 and 2017, commerce stream had the highest pass percentages of 85 each followed by science stream with pass percentages of 77 and 82 respectively. Arts stream had the lowest pass percentages of 77 and 73 in 2016 and 2017 respectively.



- f) In 2018, commerce stream again stood first with a pass percentage of 92 seconded by science stream with 87 per cent followed by arts stream with a pass percentage of 79.
- g) The pass percentages of students from the three academic streams were highest in the year 2018. During these eight years i.e. 2011 to 2018, students from arts stream performed poorer than students from science and commerce streams. Therefore, it can be concluded that students from arts stream need a lot of improvements so that they may be able to match up with their peers from science and commerce streams.
- h) Students from arts stream had 3 per cent of students who obtained distinction in 2018, 2 per cent in 2017, 1 per cent in 2016, 0.76 per cent in 2014, 0.49 per cent in 2015, 0.31 per cent in 2012, 0.16 per cent in 2011 and 0.2 per cent in 2013. Science stream had 6 per cent of students obtaining distinction in 2017, 5 per cent in 2018, 4 per cent both in 2015 and 2016, 3 per cent in 2014 and 1 per cent each in 2011, 2012 and 2013 respectively. Commerce stream had 13 per cent of students obtaining distinction in 2018 which was the highest among them, 4 per cent both in 2015 and 2017, 2 per cent both in 2014 and 2016 and 1 per cent each in 2011, 2012 and 2013 respectively.
- i) There was slight improvements in the percentages of students who obtained distinction in the HSSLC examinations held during 2011 to 2018.

- j) In the HSSLC Examinations held during 2011 to 2018, students from science stream always had the highest pass percentage in first division every year, commerce stream came second and arts stream always stayed at the bottom. Science stream had 49 per cent of students obtaining first division in 2018 which was highest during these years, 35 per cent in 2017, 32 per cent in 2015, 31 per cent in 2016, 26 per cent in 2014, 15 per cent in 2012, 14 per cent in 2011 and 12 per cent in 2013 whereas commerce stream had 38 per cent in 2018, 21 per cent in 2016, 20 per cent in 2015, 18 per cent in 2017, 10 per cent in 2011, 9 per cent thrice in 2012, 2013 and 2014. The percentages in the case of arts streams were 22 in 2018, 12 in 2017, 10 in 2016, 8 both in 2014 and 2015, 5 in 2012 and 4 both in 2011 and 2013.
- k) Progressive improvements can be seen in the percentages of students obtaining first division in the HSSLC Examination over these eight years.

### **5.8.3 Results of Students in the HSSLC Examinations 2011-2018 in terms of Management of Schools**

- a) In 2011, deficit schools had the highest pass percentage of 82 and both government and private schools had 73 per cent each.
- b) No improvement from government schools was seen in 2012 when the pass percentage went down to 71 whereas the pass percentages of the deficit schools and private schools improved with 86 and 77 respectively.

- c) In 2013, deficit schools again ranked the top having a pass percentage of 82 seconded by private schools with 75 pass percentage followed by government schools whose pass percentage went down to 69.
- d) The years 2012 and 2013 had the same trend in the results in that deficit schools performed the best followed by private schools and government schools performed the poorest. A new trend was found when private schools superseded deficit schools by having the highest pass percentages of 88, 90 and 83 in 2014, 2015 and 2016 respectively. Second position was bagged by deficit schools with pass percentages of 86, 89 and 82 in 2014, 2015 and 2016 respectively and third position by government schools with pass percentages of 80, 82 and 69 in 2014, 2015 and 2016 respectively.
- e) In 2017 and 2018, deficit schools again have the highest percentages of 89 and 94 respectively. Private schools came second with percentages of 76 and 80 followed by government schools with percentages of 70 and 76 in 2017 and 2018 respectively
- f) Pass percentages of students from the three types of schools were highest in the year 2015. There was a sharp decline in the pass percentage of students in 2016 from 2015 in the case of government schools. During the last seven years, government school students performed poorer than students from deficit and private schools. Hence, it can be concluded that government schools need a lot of improvement so that their students may be able to match up with their peers from

private and deficit schools.

- g) Deficit schools always had the highest pass percentage in Distinction every year, private schools came second and government schools always stayed at the bottom. Deficit schools had 8 per cent of students obtaining Distinction both in 2017 and 2018, 6 per cent in 2015, 5 per cent in 2014, 4 per cent in 2013 and 2016 and 2 per cent in 2012 whereas private schools had 5 per cent in 2018, 3 per cent in 2017, 2 per cent in 2014, 2015 and 2016; 1 per cent in 2012 and 0.003 per cent in 2013. The percentages in the case of government schools are 1 per cent in 2014, 2015, 2016, 2017 and 2018; 0.003 in 2012 and 0.001 in 2013.
- h) In terms of students' achievement of First Division in HSSLC Examinations held during 2012 to 2018, deficit schools performed the best followed by private schools and government schools performed the poorest. Deficit schools had 44 per cent of students getting First Division in 2018, 27 per cent in 2017, 26 per cent in 2015, 24 per cent both in 2012 and 2014, 22 in 2016 and 20 in 2013 whereas private schools had 31, 24, 23, 20 and 18 per cents in 2018, 2015, 2014, 2017 and 2016 respectively and 13 and 10 per cents in 2012 and 2013 respectively. The percentages for government schools were 18 in 2018, 11 in 2017, 10 both in 2014 and 2016, 9 in 2015, 6 in 2012 and 4 in 2013.
- i) The biggest gap between the percentages of deficit school students and government school students securing First Division was found in 2018

when the percentage was 44 for deficit schools and 18 for government schools. The smallest gap was seen in 2014 when the percentages were 24 in the case of deficit schools and 23 in the case of private schools.

## **5.9 Findings Related to Problems Faced by Teachers of Higher Secondary Schools in Mizoram**

### **5.9.1 Problems of Teachers Related to Condition of School Buildings and Classrooms**

- a) Poor lighting and poor ventilation were the main problems that the teachers faced in regards to condition of school buildings and classrooms and this was not even huge, only 15.65 per cent of the teachers and 14.01 per cent faced this problem respectively.
- b) Private school teachers were the ones who faced this problem the most.
- c) As the percentages of teachers who stated that they had problems with the condition of school buildings and classrooms were low, it can be inferred that there exists no serious problem since majority of the teachers do not mention them.

### **5.9.2 Problems of Teachers Related to Facilities**

- a) Unavailability of halls/areas for things such as teachers' meetings, parents' conferences or faculty planning sessions was a problem for 18.48 per cent, unavailability of internet connection for 17.44 per cent and computers that were not easily accessible for 11.03 per cent

- b) Since the percentages of the teachers who are faced with the problems related to facilities are quite small ranging from 4.17 per cent to 15.65 per cent only, these problems are not considered as significant.

### **5.9.3 Problems of Teachers Related to Science Laboratory**

Insufficiency of science equipments was a problem for 4.17 per cent of the teachers.

### **5.9.4 Problems of Teachers Related to Safe Drinking Water and Sanitation**

With regards to sanitation, unavailability of well - ventilated toilets was a problem for 26.53 per cent. The highest percentage who stated this problem was from private schools with a percentage of 28.07. Unavailability of separate toilet for female teachers was also a problem for 5.07 per cent whereas none of the teachers had problems with the insufficient number of toilets

### **5.9.5 Problems of Teachers Related to School Administration**

Lack of instructional facilities was a problem for 10.73 per cent of the teachers, heavy workload of staff for 6.86 per cent, high enrolment and over-crowded classes for 3.28 per cent and only 0.30 per cent faced problems due to inadequate non - teaching staff. Therefore, the teachers did not face a big problem regarding school administration as majority of the teachers are free from this.

### **5.9.6 Problems of Teachers Related to Service Conditions**

- a) Regarding problems of teachers related to service conditions, 14.90 per cent of them were having problem due to poor salary in which private school teachers constituted the highest percentage.
- b) Other small problems include lack of teaching aids, unsatisfactory service conditions, unavailability of programmes like refreshers' course and training, lack of incentive, no opportunities for teachers' professional development, lack of facilities for in – service education of teachers, lack of recognition by the society and government, lack of funds for higher secondary education and lack of promotional facilities for teachers.

### **5.9.7 Problems of Teachers Related to Students**

- a) The main problem faced by teachers with the students was disturbances caused by the students in the classroom. 32.94 per cent of teachers faced this problem and among them, deficit school teachers formed the highest percentage (46.75)
- b) Majority of the teachers did not have problems with regards to their students.

## **5.10 Findings and Conclusions Related to Problems Faced by Students of Higher Secondary Schools in Mizoram**

### **5.10.1 Problems of Students Related to Condition of School Buildings and Classrooms**

Poor ventilation and poor lighting of the classroom were the main problems faced by 12.54 per cent and 11.55 per cent of students respectively in terms of condition of school buildings and classrooms. The highest percentage of students stating these problems were government school students.

#### **5.10.2 Problems of Students Related to Facilities**

- a) With regards to problems related to facilities, 14.43 per cent of the students expressed that they had problems with the unavailability of internet connection and 13.84 per cent also stated that computers that were not easily accessible caused problems.
- b) Unavailability of recreation centre for games and sports was a problem for 14.11 per cent and 11.60 per cent for inadequate storage for the students' materials.
- c) Government school students were the ones who faced these problems the most as compared to deficit and private school students.

#### **5.10.3 Problems of Students Related to Science Laboratory**

Insufficiency of science equipments was a problem for only 3.92 per cent of the students.

#### **5.10.4 Problems of Students Related to Safe Drinking Water and Sanitation**

- a) With regards to sanitation, unavailability of well - ventilated toilets was a problem for 25.35 per cent. The highest percentage who states this



problem was from government schools with a percentage of 43.12 whereas this caused problems for only 3.23 per cent of private school students.

- b) Insufficient number of toilets was also a problem for 21.33 per cent students and only 0.69 per cent stated that they had a problem with the unavailability of separate toilet for girls.

#### **5.10.5 Problems of Students Related to Teachers**

- a) The highest problem that the students faced with regards to their relationship with the teachers was the unfriendly attitude of the teachers. Among the 12.41 per cent of students facing this problem, government school students constituted the highest percentage.
- b) Other problems include favouritism of a particular student by the teacher poor relationship between teachers and students and teachers having poor teaching skills

#### **5.10.6 Problems of Students Related to High Enrolment and School Timing**

- a) With regards to problems related to high enrolment and over - crowded classes, 11.01 per cent stated that they were facing a problem with this. Out of all the students, government school students constitute the highest percentage followed by deficit and private school students.

b) 31.39 per cent of the students faced problem with regards to school timing. Out of the students claiming to have problems with school timing, students from government schools constituted the highest percentage (41.54 per cent) followed by private and deficit school students with percentages of 35.49 per cent and 19.82 per cent respectively.

#### **5.10.7 Problems of Students Related to Other Students**

In terms of students' problems related to other students, 31.39 per cent were having problem with classroom disturbances caused by other students. This was faced by 42.65 per cent of students belonging to government schools followed by 37.07 per cent from deficit schools and 18.05 per cent from private schools.

### **5.11 Discussion of Major Findings**

The discussion on the major findings based on the objectives are presented below:

#### **5.11.1 Higher Secondary Education in Mizoram in a Historical Perspective**

The present study reveals that the responsibility of preparing the Higher Secondary School Text Books was entrusted to State Council for Educational Research and Training (SCERT) which was then examined and approved by the Mizoram Board of School Education. However, the study conducted by Verma (1984) reported that the Board of Higher Secondary Education, Rajasthan prescribed the syllabus, approved text-books and conducted the Examinations at the end of the

High / Higher Secondary School stage. The present study found that during the academic year 1995-96, 13 high schools were converted into higher secondary schools. Similar findings have also been reported by Khongwir (2004) in his study that 17 progressive secondary schools in Meghalaya were upgraded to the level of Higher Secondary schools during the academic year 1994-95. This study also highlights that the number of higher secondary schools has been expanding over the years. This finding has the support of Bajpal (1981), Singh (1984), Kaur (1985) and NCERT (1992).

The present study also reveals that out of the 163 higher secondary schools in Mizoram, the maximum number of the schools were purely private schools followed by government schools and deficit schools. This has the support of NCERT (1992) which found that the maximum number and proportion of the higher secondary schools were privately managed, followed by Government, private-unaided, and local body managed schools.

It is also evident from the study that higher secondary education in Mizoram is still quite young and has completed 24 years of its existence. From just only 13 higher secondary schools converted from high schools in 1995-96, the number of higher secondary schools have now come up to 163.

#### **5.11.2 Students' Enrolment in Terms of Gender, Types of Institutions and Academic Streams**

The study reveals that there was an increase in the enrolment of students each year. It also indicates that there exists no gender disparity in terms of enrolment. This

has the support of studies conducted by Verma (1984), Kaur (1985), UNESCO (1985) and NCERT (1992). In terms of types of institutions, government schools had the largest number of students followed by private schools and deficit schools. In terms of students' enrolment according to academic streams, it was found that till the last academic session covered by the study, the majority of enrolment was dominated by arts stream as a large number of students opted arts perhaps because of lack of aptitude for science and commerce.

### **5.11.3 Profile of Teachers in Terms of Types of Institutions, Educational and Professional Qualifications, Age, Teaching Experience, Gender, and Academic Streams**

The study reveals that out of 671 teachers, 43.07 per cent were government school teachers, 22.95 per cent were deficit school teachers and 33.98 per cent were private school teachers. The study also found out that all teachers have the required educational qualifications as laid down in the Mizoram School Education Department (Group 'A' posts) Recruitment Rules whereas only government school teachers had the required professional qualifications. Approximately half of the deficit school teachers had the required professional qualifications while only 7.02 per cent of private school teachers had the required professional qualifications. Khongwir (2004) on the other hand, reveals in his study that in connection with the required educational qualification, 81.71 per cent and 0.85 per cent of the respondents maintained that a Master Degree and Ph.D. respectively were the required educational qualifications for teachers in the Higher Secondary schools.

In terms of the age of the teachers and the experience they had, the study revealed that the state government had not been recruiting teachers on a large scale basis for quite some time. It has also been found out that in terms of gender, private schools had the largest percentage of male teachers while government schools had the largest number of female teachers. This may be because teachers were recruited on merit basis and females were much better in academics than males or it may be because more males opted for engineering and business as they were mostly better than females in this matter. In terms of academic streams, arts stream had the highest percentage of teachers followed by science and commerce streams as majority of the higher secondary schools offered more arts than science and commerce.

Review chapter of the present study shows that no study has ever touched profile of higher secondary school teachers as has been covered by the study which indicates that the present study has filled the research gap in this regard.

#### **5.11.4 Recruitment Procedures of Higher Secondary School Teachers in**

##### **Mizoram**

The present study also reveals that government teachers were recruited according to the Mizoram School Education Department (Group 'A' posts) Recruitment Rules whereas private and deficit school teachers were recruited by the managing committee of the schools in accordance with the rules and regulations prescribed from time to time by the state government. Similar findings were reported by Khongwir (2004) in his study that government school teachers were appointed by the Meghalaya Public Service Commission whereas private school teachers were

recruited by the concerned Schools' Managing Committees in accordance with the rules and regulations prescribed from time to time by the Education Department.

#### **5.11.5 Physical Infrastructure and Facilities Available in Higher Secondary Schools in Mizoram**

Government and deficit schools had their own school buildings with satisfactory landscape and surroundings while most of the private schools rented buildings for running their schools which results in poor landscaping of the schools and congested classrooms. Among these three schools, deficit schools constitute the highest percentage in terms of physical infrastructure and facilities as compared with government and private schools. The study also revealed that even though all schools that offer science stream had separate science laboratory, these schools mentioned that they had limited number of science equipments. It also indicates that majority of the schools did not have a library. Bose, Banerjee and Mukherjee (1965) also found in their study that library facilities in the higher secondary schools of West Bengal (1963 - 64) were very poor, they also reported that there were no libraries in most of the schools. Adaval, Swami and Agarwal (1979) also reported that library facilities were very poor in many of the schools in Uttar Pradesh. In terms of toilets for the students, majority of the toilets were well-lighted and well-ventilated. In today's world where computers and internet are a basic necessity, still a large number of schools (37.21 per cent) do not have internet connection in their schools. Similar finding was reported by Chuaungo (2014) in her study that only 7.02 per cent of higher secondary schools had internet facility at the time of conducting the study.

### **5.11.6 Teaching-Learning Processes and Methods of Evaluation**

The present study revealed that in terms of methods of teaching, all teachers followed the traditional method of lecturing sometimes accompanied by discussion method, notes dictation, question-answer method and project or field works. The study also pointed out that none of the teachers used demonstration and seminar as methods of teaching. It has been found out from the study that only 14.01 per cent of 671 teachers used power point presentation method in the classroom. This has the support of Khongwir (2004) who found that 62 per cent adopted the traditional methods of Lecture and Discussion; 60.28 per cent Question Answer methods; 52.28 per cent Dictating notes; 42.85 per cent and Lecture; 37.42 per cent Lecture and Demonstration; 16.85 per cent Self study and 2.57 per cent Field study.

Mere lecturing is boring and the attention span of the students is short. The amount of time a student spends in listening and understanding the teacher affects how much he/she has taken from the lesson. Therefore, it is vital for the teachers to adopt different kinds of teaching methods so as to attract the attention and the interest of the students and thereby producing successful students. In terms of evaluating students, all teachers used terminal and promotional examination to evaluate the progress of their students. From the academic session 2017-18, all schools started using the Integrated Evaluation Scheme (IES) implemented on 14th August, 2017 by the Mizoram Board of School Education. This new evaluation scheme helps the teacher to evaluate their students formatively, to keep track of the development of their pupils continuously and also to pass judgement on their achievements at the end of the year. Apart from the study of Khongwir (2004), no

study is found to have been conducted in the area of methods of teaching and evaluation in higher secondary schools.

#### **5.11.7 Activities (Academic and Non-Academic) Organized for Higher Secondary Classes in Mizoram**

The study portrays that all schools had organized class test for their students in addition to assignment, seminar, essay writing competition and science exhibition. It is evident from the findings that majority of the schools considered class test and assignments as the most important academic activities organized for the students. The findings also revealed that deficit schools were the best in organizing such activities whereas private schools were the worst. The findings also shows that non-academic activities such as excursion, debate, quiz and elocution were organized by 69.77 per cent, 67.44 per cent, 83.72 per cent and 18.60 per cent of the schools. The present study again fills the research gap in this regard as no study has been found in this area of higher secondary education.

#### **5.11.8 HSSLC Examination Results of Eight Consecutive Years i.e., 2011-2018**

The results of the HSSLC Examinations in Mizoram during the years 2011 to 2018 indicate that majority of the students still struggle to get higher marks and percentages making it hard for them to get on merit lists across the colleges for higher studies. They also indicate that only a meagre number of students were in Distinction Division and majority of the students were placed in Third Division. For students taking the HSSLC Examination under MBSE, the problem lies in matching up to their peers from other central education boards, such as the Central Board of



Secondary Education (CBSE) and Indian School Certificate (ISC). Findings of the present study do not have any support nor disagreement as no study is found to have reported any findings in this regard.

#### **5.11.9 Problems faced by Teachers of Higher Secondary Schools in Mizoram**

Analysis of the findings relating to problems faced by the teachers revealed that the most problem that the teachers faced in school was classroom disturbances caused by the students while taking classes perhaps because the teacher is not competent enough to attract the students' attention and interest. Therefore, it is important for teachers to adopt different teaching methods to make their class interesting and enjoyable by the students as they get bored very easily. This may also be because students misbehaves in class such as disruptive talking, interfering with teaching activities or rudeness to teachers. This again fills the research gaps as no study regarding this aspect has been found

#### **5.11.10 Problems faced by Students of Higher Secondary Schools in Mizoram**

The findings of the study revealed that majority of the students were faced had problems with classroom disturbances caused by other students hence the need to tackle this problem by properly disciplining these students so that they may form good habits and good character. The students also mentioned that they had problems with school timing perhaps because school timing continuously changes with the changing ministry in the State which probably results in adjustment problems among the students. Review of related studies reveals that the problems faced by students of higher secondary schools in other states of the country have not been dealt with by

researchers. This also implies that the coverage of this aspect in the present study meets the requirement of conducting a study to explore the problems of higher secondary school students so that improvements could be suggested in a meaningful way.

The present study gives a real picture of the development, status and problems of higher secondary education in Mizoram. It highlights how much development takes place since its existence. It also portrays the enrolment pattern of the students as well as how teachers were recruited. The study also examines the different teaching and evaluation methods employed by the teachers. It also reveals the physical infrastructure and facilities of the schools, the different kinds of academic and non-academic activities organized for the students and the outcome of education in terms of HSSLC Examination results. It also identifies the problems faced by the teachers as well as the students which will help the concerned authorities to take necessary measures for the improvement of higher secondary education in Mizoram.

These findings will offer a significant new contribution to knowledge in the area of higher secondary education. It will serve as a pilot study for those who would like to venture more deeply into the area.

## 5.12 Educational Implications of the Study

The present study has certain implications. They are listed as under :-

- a) The largest enrolment of higher secondary schools in Mizoram was dominated by arts stream which implies that science and commerce streams were not as popular as arts stream among the students.
- b) There were only a few numbers of schools which offer commerce stream. This implies the need to open more schools for students aspiring to study commerce.
- c) Almost all private school teachers do not have the required professional qualifications which imply the need to adopt a uniform policy for recruiting teachers irrespective of government, deficit or private schools.
- d) The present study found that many of the teachers were trained years back when looking at their age which implies the need to conduct more training for teachers.
- e) The findings of the present study also imply that majority of private higher secondary schools do not have their own building thus resulting in congestion of the classrooms.
- f) Science laboratory facilities need to be supplied sufficiently to schools offering science stream.

- g) Unavailability of library in most schools highlights that the importance of library is neglected.
- h) Organization of non-academic activities was very few which indicates that most schools neglect the importance of co-curricular activities for the students.

### **5.13 Recommendations for the Improvement of Higher Secondary Education in Mizoram**

From the findings of the study, the following recommendations are made for the improvement of higher secondary education in Mizoram :

- a) In terms of students' enrolment, it was found that till the last academic session covered by the study, the majority of enrolment was dominated by arts stream. Since the most prestigious stream is science stream seconded by commerce and then followed by arts, it is recommended that schools which offer science and commerce should make necessary arrangements so as to attract more students under such streams.
- b) Since almost all higher secondary schools especially deficit and private schools admitted only students who have performed relatively well in their High School Leaving Certificate (HSLC) Examination, it is recommended that the schools should open more seats so that there will be equality of educational opportunities for all students.

- c) Mizoram Board of School Education should also take necessary steps in opening more schools which offer commerce stream as there are only a few numbers of schools which offer commerce at present.
- d) In terms of professional qualifications, only all teachers from government schools have the required qualifications whereas there were few deficit school teachers who have this qualification and private schools also have poorer number of teachers who were professionally trained. Therefore, it is recommended that deficit and private schools should also follow and adhere to the same recruitment rules as followed by the government schools and a uniform policy should be adopted for recruitment of teachers irrespective of government, deficit and private schools.
- e) Since the maximum number of teachers were between 40 to 49 years of age, it is clear that they will be teaching for at least 10 years or so considering the retirement age of teachers. Thus, regular in-service training should be conducted so as to update themselves with the advancing topics in the field of education.
- f) Since many of the teachers were trained years back and their knowledge and technique had become obsolete, refreshers' courses and in-service training for such teachers should be organized regularly.
- g) When looking at the age the teachers and the experience they had, it is clear that the state had not been recruiting teachers on a large scale basis for quite some time. Since the enrolment of students had been growing

tremendously and there could be an imbalance in teacher-pupil ratio, there is an urgent need to recruit more teachers to avoid these problems.

- h) When recruiting teachers for higher secondary schools, aptitude and interests of the candidates for teaching should also be well-taken care of as they affect the morale of the students as well as the standard of higher secondary education in Mizoram.
- i) Since most deficit schools were run by the different churches in Mizoram, the church needs to work harder to recruit more teachers so that there will be a balance in the teacher-pupil ratio.
- j) It is also considered important that those who managed private schools should work harder so that there will be no imbalances in the teacher-pupil ratio. Since private school teachers need to be the most hardworking because so many responsibilities were laid upon their shoulders, such schools should recruit more teachers so as to maintain a balance between these three types of schools.
- k) Majority of private schools do not have their own building and were functioning in rented houses resulting in poor landscaping of the schools and were also very congested, steps should be taken by the Mizoram Board of School Education so that permission for opening new schools should only be given to those schools which were found fit according to the conditions of affiliation as laid down by the Mizoram Board of School Education.

- l) In today's world where children are given importance, it is also recommended that schools be designed in a child-friendly manner so that children will feel safe and enjoy going to school.
- m) It is also recommended that concerned authorities should take immediate steps in providing sufficient number of science or laboratory equipments to schools having science stream since schools which offer science stream do not have sufficient number of laboratory equipments.
- n) Majority of the schools do not have a library. Efforts should be made so that library is available in all schools which should be constantly restocked with the latest edition of books. This will not only help the teachers but also the students as well.
- o) Only few schools have internet connectivity. Since so many learning materials are available in the internet which are both beneficial for the teachers and the students, schools should book internet connections that may be easily accessible by both the teachers and the students.
- p) Since the method of teaching adopted in schools was mostly the traditional lecture method, it is suggested that teachers should have the courage to experiment with various other teaching methods so as to make their teaching more interesting and enjoyable by the students as they get bored very easily.
- q) Even though majority of the schools have organized non-academic (co-curricular) activities, it is essential that such activities be organized more

frequently keeping in mind the importance of co-curricular activities for students.

- r) Government schools need a lot of improvement so that their students may be able to match up with their peers from private and deficit schools since their students performed poorer than students from such schools in the Higher Secondary School Leaving Certificate (HSSLC) Examinations.
- s) Private schools should take necessary measures in proper construction of their schools since most of the condition of the private school buildings were in bad condition as observed by the investigator.
- t) There should be sufficient number of well-ventilated and well-lighted toilets for the students.
- u) Salary of the teachers should be revised and linked to the cost of living. Fixed pay given to private school teachers should be stopped as their salaries were much less as compared to government and deficit school teachers. All teachers should be treated at par with the payment of salaries.
- v) Schools should take major steps in disciplining their students, forming in them right habits and developing good character in them since many of the teachers faced problem with the disturbances they caused while teaching in the classrooms.



- w) Teachers should be friendly towards the students and be approachable.  
They should not favour a particular student.
- x) School timing should be properly adjusted keeping in mind the lifestyle of the Mizo Society.

#### **5.14 Suggestions for Further Research**

In the course of the study, it is considered necessary to conduct further research on the following areas of higher secondary education. They are:-

- a) A comparative study of the organizational climate of government and privately managed higher secondary schools in Mizoram may be conducted.
- b) A comparative study of higher secondary education in different states of the North Eastern Region of India may be undertaken.
- c) An in-depth study of the curriculum of higher secondary schools in Mizoram in relation to NCF 2005 may be taken up.
- d) A study of the problems of educational administration in higher secondary schools in Mizoram may also be conducted.

## **APPENDICES**

## **Appendix I**

### **List of Sample Higher Secondary Schools**

#### **I. Government:**

1. Government Higher Secondary School, Mamit
2. Government Higher Secondary School, Kawrthah
3. Government Chaltlang Higher Secondary School, Aizawl
4. Government J. L. Higher Secondary School, Aizawl
5. Government K. M. Higher Secondary School, Aizawl
6. Government Mizo Higher Secondary School, Aizawl
7. Government G. M. Higher Secondary School, Champhai
8. Government Higher Secondary School, Serchhip
9. Government Higher Secondary School, Lunglei
10. Government Leitlangpui Higher Secondary School, Lunglei
11. Government Region Higher Secondary School, Lawngtlai
12. Government Higher Secondary School, Saiha

#### **II. Deficit:**

1. St. John's Higher Secondary School, Kolasib

2. St. Paul's Higher Secondary School, Aizawl
3. Helen Lowry Higher Secondary School, Aizawl
4. Higher Secondary School, Aizawl
5. St. Peter's Higher Secondary School, Chhingchhip
6. Baptist Higher Secondary School, Lunglei

**III. Private:**

1. Lungdai Higher Secondary School, Lungdai
2. Vairengte Higher Secondary School, Vairengte
3. Boston Higher Secondary School, Aizawl
4. Calvin Higher Secondary School, Aizawl
5. Home Missions School, Aizawl
6. New Horizon School of Education, Aizawl
7. St. Joseph's Higher Secondary School, Aizawl
8. St. Salvios Higher Secondary School, Aizawl
9. Staines' Memorial Higher Secondary School, Aizawl
10. Champhai Higher Secondary School, Champhai
11. Zokhawpui Higher Secondary School, Champhai
12. Queensland Higher Secondary School, Champhai

13. Lalthanhawla Memorial Higher Secondary School, Serchhip
14. Haulawng Higher Secondary School, Haulawng
15. SamDaBen Higher Secondary School, Lunglei
16. New Life Academy, Vawngzawl
17. K. T. Higher Secondary School, Lunglei
18. D&D Higher Secondary School, Lunglei
19. Presbyterian English School, Lunglei
20. Silver Mount School, Lunglei
21. Bethesda Higher Secondary School, Lunglei
22. South Heath Academy, Lawngtlai
23. Jehovah Jireh Higher Secondary School, Lawngtlai
24. Foxall Higher Secondary School, Saiha
25. Don Bosco Higher Secondary School, Saiha

## Appendix II

### Observation-cum-Interview Schedule for Collecting Institutional Data, Physical Infrastructure and Facilities Available and Activities (Academic and Non- Academic) Organized in Higher Secondary Schools in Mizoram

#### Institutional Data

1. Name of the School : \_\_\_\_\_
2. Address of the School : \_\_\_\_\_
3. Date of Establishment : \_\_\_\_\_
4. Type of School : (a) Government
- (b) Deficit
- (c) Private
5. Streams Offered : (a) Arts
- (b) Science
- (c) Commerce

#### Physical Infrastructure and Facilities

- Nature of school building** : (a) Owned
- (b) Rented

### **Physical Condition of the School Building**

1. The school building is in good condition : Yes  No
2. The size of the classroom is satisfactory : Yes  No
3. The school is surrounded by walls : Yes  No
4. The design of the school is child-friendly : Yes  No
5. The site and building of the school is well-landscaped : Yes  No

### **Provision of Hostel Facilities**

1. Hostel is provided : Yes  No
2. There are separate hostel for boys and girls : Yes  No

### **Provision of Separate Rooms in the School**

1. Principal's Room : Yes  No
2. Teachers' Common Room : Yes  No
3. Office Room : Yes  No
4. Students' Common Room : Yes  No
5. Science Laboratory : Yes  No
6. Computer Laboratory : Yes  No
7. Hall for physical education : Yes  No

8. Recreational Centre : Yes  No

9. Conference Hall : Yes  No

### **Provision of Classroom Facilities**

1. Teachers' Chair and Table : Good  Bad

2. Students' Desks and Benches : Good  Bad

3. Black/White/Green Boards : Good  Bad

4. Classroom is well-lighted and well-ventilated: Good  Bad

### **Provision of Science Laboratory Facilities**

1. Separate Science Laboratory is available : Yes  No

2. No. of laboratory equipments is sufficient : Yes  No

### **Provision of Library Facilities**

1. Library is available : Yes  No

2. Separate reading rooms are available : Yes  No

3. Library facilities are adequate, well-equipped and easily accessible:  
Yes  No

4. Students have access to latest books/journals: Yes  No



### **Provision of Safe Drinking Water**

1. Safe drinking water is available : Yes  No
2. The source of drinking water is PHE Connection: Yes  No
3. Water is available all year round from this source: Yes  No

### **Provision of Sanitation Facilities**

1. Proper sanitation facilities are available : Yes  No
2. Toilets are well-lighted and well-ventilated : Yes  No
3. There are enough working toilets for students: Yes  No
4. There are separate toilets for teachers : Yes  No
5. There are separate toilets for boys and girls : Yes  No

### **Condition of Power Supply**

1. Power supply is available in the schools : Yes  No
2. Sufficient electrical outlets are available in classrooms:  
Yes  No
3. The school experiences some kind of power shortage:  
Yes  No

### **Other Facilities Provided in the Schools**

- |                                      |   |     |                          |    |                          |
|--------------------------------------|---|-----|--------------------------|----|--------------------------|
| 1. Computers                         | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Telephones                        | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. Internet Connection               | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. Fans in the Principal's Room      | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. Fans in the Teachers' Common Room | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 6. Fans in the office                | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 7. Fans in the classrooms            | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |

### **Academic and Non-Academic Facilities**

#### **Academic Activities**

- |                              |   |     |                          |    |                          |
|------------------------------|---|-----|--------------------------|----|--------------------------|
| 1. Science exhibition        | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Essay writing competition | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. Class test                | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. Assignment                | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. Seminar                   | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |

### **Non-Academic Activities**

- |                                  |   |     |                          |    |                          |
|----------------------------------|---|-----|--------------------------|----|--------------------------|
| 1. Excursion                     | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 2. Debate                        | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 3. Quiz                          | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 4. Elocution                     | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 5. National Cadet Corps (NCC)    | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 6. National Service Scheme (NSS) | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 7. Scouts and Guides             | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |
| 8. Adventure Club                | : | Yes | <input type="checkbox"/> | No | <input type="checkbox"/> |

**Appendix III**

**Personal Data Sheet for Teachers of Higher Secondary Schools in Mizoram**

1. Name of the School : \_\_\_\_\_
2. Address of the School : \_\_\_\_\_
3. Type of School :  
(a) Government   
(b) Deficit   
(c) Private
4. Streams :  
(a) Arts   
(b) Science   
(c) Commerce
5. Educational Qualifications :  
(a) M.A   
(b) M.Sc   
(c) M.Com   
(d) MBA   
(e) MCA
6. Professional Qualifications :  
(a) B.Ed   
(b) M.Ed
7. Age : \_\_\_\_\_
8. Teaching Experience (in years): \_\_\_\_\_
9. Gender : (a) Male  (b) Female

**Appendix IV**

**Questionnaire for Teachers of Higher Secondary Schools in Mizoram for  
Studying Teaching-Learning Processes, Methods of Evaluation and Problems  
Faced by the Teachers**

**Part-A: Teaching-Learning Processes and Methods of Evaluation**

1. What are the methods of teaching that you follow in class?

a) Lecture

b) Discussion

c) Demonstration

d) Dictating Notes

e) Question and Answer Method

f) Seminar

g) Project/Field Work

h) Any other: \_\_\_\_\_

2. What efforts do you make to improve teaching- learning processes?

a) Adopting innovative practices

b) Motivating students to learn

- c) Monitoring students' progresses
- d) Using power point presentation
- e) Any other: \_\_\_\_\_

3. What are the methods of evaluation used by you?

- a) Class Test
- b) Assignment
- c) Terminal Examination
- d) Promotion Examination
- e) Practical Works
- f) Field Works
- g) Any other: \_\_\_\_\_

**Part-B: Problems Faced by the Teachers**

1. What problems do you face relating to condition of school buildings and classrooms?

- a) Deplorable condition of the school building
- b) Undersized classroom
- c) Poor quality of teachers' tables and chairs

- d) Bad black/white/green boards
- e) Insufficient number of desks and benches
- f) Poor lighting of the classroom
- g) Poor ventilation
- h) Improper fencing and railing
- i) Any other: \_\_\_\_\_

2. What are the problems faced by you relating to facilities?

- a) Inadequate storage for the teachers' materials
- b) Computers that are not easily accessible
- c) No internet connection
- d) Unavailability of halls/areas for things such as teachers' meetings, parents' conferences or faculty planning sessions
- e) Unavailability of restaurant/cafeteria within the school premises
- f) Unavailability of cooling fans in the teachers' common room
- g) Insufficient parking area to accommodate the vehicles of teachers
- h) Any other: \_\_\_\_\_

3. What are the problems faced by you relating to science laboratory?

a) Unavailability of separate science laboratory

b) Insufficient number of science equipments

c) Any other: \_\_\_\_\_

4. What are the problems faced by you relating to safe drinking water and sanitation?

a) Unavailability of safe drinking water

b) Insufficient number of toilets

c) Unavailability of separate toilet for female teachers

d) Unavailability of well-ventilated toilets

e) Any other: \_\_\_\_\_

5. What are the problems faced by you relating to school administration?

a) Bad relationship between principal and staff

b) Bad relationship between colleagues

c) Bad relationship between teachers and students

d) Lack of instructional facilities

e) Insufficient number of teachers

f) Inadequate non-teaching staff



g) Heavy workload of staff

h) High enrolment and over-crowded classes

i) Any other: \_\_\_\_\_

6. What are the problems faced by you relating to service conditions?

a) Unsatisfactory service conditions

b) Lack of facilities for in-service education of teachers

c) Poor salary

d) Lack of recognition by the society and government

e) Lack of competency

f) Lack of incentive

g) Lack of teaching aids

h) Lack of promotional facilities for teachers

i) Lack of funds for higher secondary education

j) Unavailability of programmes like refreshers' courses and training

k) No opportunities for teachers' professional development

l) Any other: \_\_\_\_\_

7. What are the problems faced by you relating to students?

- a) Late arrival of the students
- b) Frequent unjustified absences of the students
- c) Students skipping classes
- d) Classroom disturbances caused by the students
- e) Continuous cheating of the students
- f) Vandalism
- g) Theft
- h) Intimidation or verbal abuse of students
- i) Any other: \_\_\_\_\_

## Appendix V

### Questionnaire for Students of Higher Secondary Schools in Mizoram for

#### Studying their Problems

##### Basic Information

1. Name of the School : \_\_\_\_\_

2. Address of the School : \_\_\_\_\_

3. Type of School : (a) Government

(b) Deficit

(c) Private

4. Streams : (a) Arts

(b) Science

(c) Commerce

##### Problems

1. What problems do you face relating to condition of school buildings and classrooms?

a) Deplorable condition of the school building

b) Undersized classroom

c) Bad black/white/green boards

d) Insufficient number of desks and benches

- e) Poor lighting of the classroom
- f) Poor ventilation
- g) Improper fencing and railing

2. What are the problems faced by you relating to facilities?

- a) Lack of hostel facilities
- b) Inadequate storage for the students' materials
- c) Computers that are not easily accessible
- d) No internet connection
- e) Unavailability of recreation centre for games and sports
- f) Unavailability of restaurant/cafeteria within the school premises
- g) Unavailability of cooling fans in the classrooms
- h) Insufficient parking area to accommodate the vehicles of students
- i) Any other: \_\_\_\_\_

3. What are the problems faced by you relating to science laboratory?

- a) Unavailability of separate science laboratory
- b) Insufficient number of science equipments
- c) Any other: \_\_\_\_\_

4. What are the problems faced by you relating to safe drinking water and sanitation?

- a) Unavailability of safe drinking water
- b) Insufficient number of toilets
- c) Unavailability of separate toilet for boys and girls
- d) Unavailability of well-ventilated toilets
- e) Any other: \_\_\_\_\_

5. What problems do you face relating to teachers?

- a) Poor relationship between teachers and students
- b) Unfriendly attitude of the teachers
- c) Insufficient number of teachers
- d) Teachers having poor teaching skills
- e) Incompetency of teachers
- f) Late arrival of the teachers
- g) Frequent unjustified absences of the teachers
- h) Intimidation or verbal abuse by the teachers
- i) Physical injury by teachers

j) Occurrence of mental or emotional abuse

k) Favouritism of a particular student by the teacher

l) Any other: \_\_\_\_\_

6. Do you face problems relating to high enrolment and over-crowded class and school timing? Yes  No

7. What are the problems faced by you relating to other students?

a) Poor relationship between peers

b) Classroom disturbances caused by other students

c) Vandalism

d) Theft

e) Bullying

f) Intimidation or verbal abuse by other students

g) Physical injury by other students

h) Any other: \_\_\_\_\_

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### **BRIEF BIO-DATA OF THE CANDIDATE**

NAME : Lalrempuii

FATHER'S NAME : Lalchawimawia

DATE OF BIRTH : 22.08.1984

ADDRESS : H.No. B-38, Salem Veng  
Lunglei - 796701

GENDER : Female

RELIGION : Christianity

OCCUPATION : Superintendent at Lunglei Child  
Care Centre, Child Protection  
Service (CPS), Women and Child  
Development, Social Welfare  
Department

MARITAL STATUS : Married

EDUCATIONAL QUALIFICATION : M.A., NET.

PH.D REGISTRATION NO. & DATE : MZU/Ph.D/421 of 15.05.2012

DEPARTMENT : Education, Mizoram  
University

TITLE OF THE THESIS : Higher Secondary  
Education in Mizoram :  
An Analytical Study



**DEPARTMENT OF EDUCATION  
MIZORAM UNIVERSITY  
AIZAWL-796004**

**PARTICULARS OF THE CANDIDATE**

Name of the Candidate : Lalrempui

Degree : Doctor of Philosophy

Department : Education

Title of Thesis : Higher Secondary Education in  
Mizoram: An Analytical Study

Date of Admission : 29.07.2011

Approval of Research Proposal

1. BOS in Education : 21.04.2012

2. School Board : 15.05.2012

Registration No. & Date : MZU/Ph.D/421 of 15.05.2012

Due Date of Submission : 14.05.2017

Extension (if any) : Extended for two (2) years Vide No. 16-  
2/Adm. - I (Acad.)/15/55 Dated 17th  
February, 2017 up to 14.05.2019

(Prof. B.B. MISHRA)  
Head  
Department of Education  
Mizoram University

**HIGHER SECONDARY EDUCATION IN MIZORAM:**

**AN ANALYTICAL STUDY**

**LALREMPUII**

**DEPARTMENT OF EDUCATION**

**MIZORAM UNIVERSITY**

HIGHER SECONDARY EDUCATION IN MIZORAM:

AN ANALYTICAL STUDY

ABSTRACT

BY

LALREMPUII

EDUCATION DEPARTMENT

Submitted in partial fulfillment for the requirement of the Degree of Doctor of

Philosophy in Education of Mizoram University, Aizawl

## **Introduction**

Higher Secondary Education is a crucial stage in the educational hierarchy as it prepares the students for higher education and also for the world of work. With the liberalization and globalization of the Indian economy, the rapid changes witnessed in the scientific and technological world, and the general need to improve the quality of life and to reduce poverty, it is essential that school leavers acquire a higher level of knowledge and skills than is provided in the 8 years of elementary education particularly when the average earning of a secondary school certificate holder is significantly higher than that of a person who has studied only up to class VIII.

The Higher Secondary Education (10+2) in Mizoram has been functioning since 1996 and yet no analytical study has been conducted. To identify the status, development, its students and teachers, problems and to suggest measures for improvement of higher secondary education in Mizoram, an intensive research needs to be undertaken.

How much development has taken place in higher secondary education in Mizoram? What is the enrolment pattern? are the questions that come into the mind of the investigator.

As the quality of education depends to a great extent on the quality of the teachers, the following questions has also been raised:

- a) Who are the teachers of higher secondary schools in Mizoram?

b) What are their recruitment procedures?

Regarding the conditions of higher secondary schools in the state, the investigator is curious to know answers to the following questions:

a) What types of physical infrastructure and facilities are available in higher secondary schools in Mizoram?

b) What courses are being offered?

c) What are the teaching-learning processes and methods of evaluation?

d) What activities are organized? In what types of activities do they participate?

e) What is the outcome of the education in terms of Board Examination Results?

It is anticipated that teachers and students are confronted with some problems. To know what those problems are is also the concern of the investigator. The answers to all the questions that have been raised can be found only through an intensive research.

### **Statement of the Problem**

In order to obtain satisfactory answers to all the questions stated above and also to fill the research gap, an analytical study on higher secondary in Mizoram is conducted. Thus, the problem of the present study has been stated as: **Higher Secondary Education in Mizoram: An Analytical Study.**

### **Objectives of the Study**

The following are the objectives of the study:-

1. To study the development of higher secondary education in Mizoram in a historical perspective.
2. To analyze students' enrolment in terms of gender, types of institutions and academic streams.
3. To prepare and analyze profile of teachers in terms of types of institutions, educational and professional qualifications, age, teaching experience, gender and academic streams.
4. To examine the recruitment procedures of higher secondary school teachers in Mizoram.

5. To examine the physical infrastructure and facilities available in higher secondary schools in Mizoram.
6. To analyze the teaching-learning processes and methods of evaluation.
7. To examine the activities (academic and non-academic) organized for higher secondary classes in Mizoram.
8. To analyze the HSSLC Examination results of eight consecutive years i.e., 2011-2018
9. To examine the problems faced by teachers of higher secondary schools in Mizoram.
10. To examine the problems faced by students of higher secondary schools in Mizoram.
11. To suggest measures for improvement of higher secondary education in Mizoram.

## **Methodology**

A descriptive survey approach was used to collect data for the present study.

**Population of the Study:** The present study was comprised of the following categories of population:

1. All the higher secondary schools in Mizoram constituted the first category of population.
2. All the teachers of higher secondary schools in Mizoram formed the population of teachers.
3. The entire students enrolled in higher secondary schools in Mizoram constituted the third category of population.

**Table 1**

**Population of Higher Secondary Schools, Teachers and Students**

**(2013-14)**

Management	No. of Schools	No. of Teachers			No. of Students		
		Male	Female	Total	Boys	Girls	Total
<b>Government</b>	20	195	238	<b>433</b>	3979	4022	<b>8001</b>
<b>Deficit</b>	7	98	68	<b>166</b>	1580	1549	<b>3129</b>
<b>Private</b>	71	378	248	<b>626</b>	4303	4076	<b>8379</b>
<b>Total</b>	<b>98</b>	<b>671</b>	<b>554</b>	<b>1225</b>	<b>9862</b>	<b>9647</b>	<b>19509</b>

*Source: Statistical Cell, Directorate of School Education*



**Sample of the Study:** The following samples were taken by following purposive and random sampling techniques:

1. Out of the existing 98 higher secondary schools in Mizoram, a sample of 44 per cent (43 schools) was purposively selected so as to include higher secondary schools offering arts, science and commerce subjects.
2. 55 per cent of the teachers in the sample schools constituted the sample of teachers.
3. 24 per cent of students from each stream of studies, i.e., arts, science and commerce offered by sample schools was randomly taken as sample students

**Table 2**

**Distribution of Sample of Higher Secondary Schools, Teachers and Students  
(2013-14)**

<b>SAMPLE</b>											
<b>No. &amp; % of Schools</b>				<b>No. &amp; % of Teachers</b>				<b>No. &amp; % of Students</b>			
<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>	<b>Government</b>	<b>Deficit</b>	<b>Private</b>	<b>Total</b>
12 (60)	6 (86)	25 (35)	43 (44)	289 (67)	154 (93)	228 (36)	671 (55)	1904 (24)	882 (28)	1983 (24)	4769 (24)

## **Tools Used**

For the collection of data, the investigator used the following tools constructed by her:

1. Observation – cum – Interview Schedule to collect certain information from the principals of higher secondary schools in Mizoram regarding institutional data, physical infrastructure and facilities, and the academic and non – academic activities organized for higher secondary classes.
2. Personal Data Sheet for preparing profile of teachers which includes information regarding their educational qualifications, professional qualifications, age, teaching experience, gender, types of institutions and academic streams.
3. Questionnaire for teachers of higher secondary schools in Mizoram for analyzing the teaching-learning processes, methods of evaluation and to study their problems.
4. Questionnaire for students of higher secondary schools in Mizoram for studying their problems.

## **Collection of Data**

Data collected for the present study can broadly be divided into two parts, i.e. secondary data and primary data.

Secondary data were used for studying the development of higher secondary education in Mizoram. They were collected from relevant documents such as letters of correspondences, meeting minutes, documents and records from the offices of the Mizoram Board of School Education. Besides this, the investigator also made use of unstructured interview with the Secretary of MBSE to have a more in-depth understanding of the status of higher secondary education in Mizoram.

Primary data were collected by the investigator by visiting the sample schools and administer the tools to the principals, teachers and students of sample higher secondary schools. For studying the physical infrastructure and facilities and the academic activities and non-academic activities organized for higher secondary schools in Mizoram, the investigator observed the schools and interviewed 43 principals by using Observation-cum-Interview Schedule. She also administered Personal Data Sheet and Questionnaire to 671 teachers for preparing their profile, for analyzing the teaching-learning processes, methods of evaluation and for studying their problems. Problems faced by the students were collected from 4769 students who responded to the Questionnaire prepared for this.

## **Statistical Treatment of Data**

Descriptive statistics such as frequencies and percentages were applied for the treatment of data.

## **Findings of the Study**

### **1. Development of Higher Secondary Education in Mizoram in a Historical Perspective**

- a) As North-Eastern Hill University (NEHU) which managed pre-university education in colleges decided to hand over the management of +2 education to Mizoram Government as per the recommendations of the Education Commission 1964-66 and in pursuance of the decisions taken by the Council of Ministers in their meeting held on 25th July, 1995, the state government decided to take over the management of +2 education in schools with effect from 1995 academic session.
  
- b) Regarding the syllabus, the Council of Ministers in their meeting held on 25<sup>th</sup> July, 1995 decided that schools should adapt/adopt the existing NEHU Syllabus until a new syllabus was worked out by the Mizoram Board of School Education. It also advised the board to work out the new syllabus keeping in view the standard and requirement of higher secondary education. When the new syllabus had been finalized, planning

was made to introduce the new syllabus with effect from 1997 academic session.

- c) The responsibility of preparing the Higher Secondary School Text Books was entrusted to State Council for Educational Research and Training (SCERT) which was then examined and approved by the Mizoram Board of School Education.
- d) During 1995-96, 13 High Schools were converted into Higher Secondary Schools
- e) During 1996-97, 7 High Schools were converted into Higher Secondary Schools
- f) During 1997-98, 6 High Schools were converted into Higher Secondary Schools
- g) The Education and Human Resources Development Department under the State Government took necessary action in creating teaching and non-teaching posts and built up the entire required infrastructure in respect of all the High Schools which had been converted into Higher Secondary Schools.
- h) With the gradual conversion and up-gradation of the existing High Schools into Higher Secondary Schools and the introduction of +2 stage

of education, Pre-University classes being taught in Colleges were abolished correspondingly.

- i) In 1996, the Mizoram Board of School Education (First Amendment) Act was enacted. This amendment was necessitated by the handing over of the responsibility for Classes XI and XII stage by North-Eastern Hill University (NEHU) to the State Board. Under these circumstances, Mizoram introduced the 10+2+3 structure in 1996 and thus transferring +2 classes to the school system which was at that time attached to the degree colleges. A number of high schools were thus converted into higher secondary schools.
- j) The Higher Secondary Schools came into existence only in the year 1996 when the Pre-University class equivalent to Class XI & XII was shifted from Colleges to Schools. From this year onward, Class XI and Class XII were under the purview of School Education from Higher Education accordingly.
- k) On the 7<sup>th</sup> of April 1997, the Competent Authority of the Central Board of School Education (CBSE) approved the adoption of the Senior School Curriculum (Classes XI & XII) of the Central Board of School Education (CBSE) by the Mizoram Board of School Education (MBSE).

- l) In 2003, the Mizoram Education Act, 2003 was enacted by the State Legislative Assembly with a view to promoting the standard of education and by the progressive measures to improve the entire school system of Mizoram.
  
- m) Higher Secondary School Leaving Certificate (HSSLC) was computerized from 2005. The software for such was carefully planned and made by EXXON Automation Team of Bombay. Since computerization requires careful handling, trainings were conducted by MBSE for all the school authorities throughout the state on 29<sup>th</sup> September, 2004 at Aizawl and 1<sup>st</sup> October, 2004 at Lunglei.
  
- n) Integrated Evaluation Scheme (IES) for Higher Secondary Stage was implemented on 14<sup>th</sup> August, 2017 by the Mizoram Board of School Education. Thus, all higher secondary schools in Mizoram started using IES from 2017-18 academic session.
  
- o) The number of higher secondary schools has been expanding over the years. In 1996 when higher secondary schools came into existence, there were only 16 schools which kept on increasing almost every year and according to the Annual Publication 2016-17 (List of Schools with Number of Teachers and Enrolment of Students) published by the Statistical Cell, Directorate of School Education, Government of

Mizoram, the most recent data available, there were 163 higher secondary schools in which there were 1661 teachers and 22540 students.

- p) According to 2016-17 statistics, out of 163 higher secondary schools, there were 25 schools run by the government (5 Schools by the Central Government and 20 by the State Government), 20 private schools aided by the State Government or Local Body (7 Deficit Schools and 13 Adhoc Aided Schools) and 118 Private Unaided Schools (11 Lump-sum Aided Schools and 107 Purely Private Schools). Out of 1661 teachers, there were 36 teachers from Central Government Schools, 473 from State Government Schools, 179 from Deficit Schools, 177 from Adhoc Aided Schools, 70 from Lump-sum Aided Schools and 726 from Purely Private Schools). Out of 22540 students, there were 448 students from Central Government Schools, 7869 from State Government Schools, 3325 from Deficit Schools, 1542 from Adhoc Aided Schools, 924 from Lump-sum Aided Schools and 8432 from Purely Private Schools).
- q) It can thus be concluded that higher secondary education in Mizoram is still quite young and has completed 24 years of its existence. From just only 13 higher secondary schools converted from high schools in 1995-96, the number of higher secondary schools have now come up to 163.



## **2. Students' Enrolment in Terms of Gender, Types of Institutions and Academic Streams**

### **Students' Enrolment in Terms of Gender**

- a) There was an increase in the enrolment of students each year.
- b) During the years 2011 and 2015, the enrolment of male students was higher as compared with the female students. The percentages of male students enrolled in 2011, 2012, 2013, 2014 and 2015 were 50.30, 50.34, 50.54, 50.49, and 50.31 respectively.
- c) In 2016, enrolment of female students was higher than that of male students in which the percentage was 51.11.
- d) During 2011-16, male students constitute 50.13 per cent and female students 49.87 per cent of enrolment. Thus, there was no gender disparity in terms of students' enrolment in higher secondary schools in Mizoram.

### **Students' Enrolment in Terms of Types of Institutions**

- a) During the period 2011 to 2016, the percentages of students enrolled in state government, private, deficit, adhoc aided, lumpsum aided and central government schools were 38.93, 34.48, 14.50, 6.75, 4.08 and 1.26 per cents respectively.

- b) In 2011, 2012, 2013, 2015 and 2016, schools run by the state government had the highest percentage of students' enrolment while schools run by the central government had the lowest.
- c) In 2014, private schools had the highest percentage of students' enrolment whereas central government schools had the lowest.
- d) Government schools had the largest number of students followed by private schools and deficit schools.

#### **Students' Enrolment in Terms of Academic Streams**

- a) The highest percentage of students' enrolment during 2011 to 2016 belonged to arts stream followed by science and commerce streams.
- b) The percentages of arts students enrolled in 2011, 2012, 2013, 2014, 2015 and 2016 were 67.98, 67.92, 68.73, 70.96, 69.31 and 69.28 respectively.
- c) The percentages of science students enrolled in 2011, 2012, 2013, 2014, 2015 and 2016 were 19.48, 21.63, 21.83, 20.19, 18.1 and 18.25 respectively.
- d) The percentages of commerce students enrolled in 2011, 2012, 2013, 2014, 2015 and 2016 were 7.73, 5.83, 5.67, 5.47, 4.84 and 4.85 respectively.
- e) Majority of the students belonged to arts stream as most of the schools offered arts as compared to science and commerce.

f) There were only a few schools which offered commerce stream.

### **3. Profile of Teachers in Terms of Types of Institutions, Educational and Professional Qualifications, Age, Teaching Experience, Gender, and Academic Streams**

#### **Profile of Teachers in Terms of Types of Institutions**

43.07 per cent of the teachers were government school teachers, 22.95 per cent were deficit school teachers and 33.98 per cent were private school teachers

#### **Profile of Teachers in Terms of Educational and Professional Qualifications**

- a) In terms of educational qualifications, all the teachers of higher secondary schools had the required educational qualifications as laid down in the Mizoram School Education Department (Group 'A' posts) Recruitment Rules.
- b) In terms of professional qualifications, only government school teachers had the required qualifications. Deficit schools have 59.09 per cent of professionally trained teachers whereas private schools have only 7.02 per cent of professionally trained teachers. Private schools were the worst among them as they had only a few per cent of teachers who have the required professional qualifications.

### **Profile of Teachers in Terms of Age**

- a) The age of teachers as shown by the records revealed that the largest percentages (39.93) of teachers were between 40 to 49 years of age followed by 36.66 per cent of teachers who were between 30 to 39 years of age. 18.93 per cent of them were below 29 years whereas 4.47 per cent were above 50 years.
- b) Among the teachers, the highest percentages in the age groups 29 years & below, 30 to 39, 40 to 49, and 50 years & above were formed by private school teachers (44.30), deficit school teachers (41.56), government school teachers (56.75) and deficit school teachers (7.14) respectively.
- c) Looking at the age of the teachers, it is evident that the state government had not been recruiting teachers on a large scale basis for quite some time.

### **Profile of Teachers in Terms of Teaching Experience**

- a) In terms of teaching experience, 12.67 per cent had less than 5 years teaching experience, 18.33 per cent of the teachers had 5 to 9 years experience, 23.99 per cent had 10 to 14 years, 27.27 per cent had 15 to 19 years and 17.73 per cent had 20 and more years of teaching experience.

- b) Deficit schools had the highest percentage of teachers who had teaching experience of 20 years and above which was 25.97 per cent whereas there were 35.09 per cent from private schools who had an experience of less than 5 years.

### **Profile of Teachers in Terms of Gender**

- a) Against 56.63 per cent male teachers, there were 43.37 per cent of female teachers.
- b) Private schools had the largest percentage of male teachers constituting 60.09 per cent followed by deficit schools and government schools with percentages of 55.19 and 54.67 respectively.
- c) Regarding female teachers, government schools had the largest percentage of female teachers constituting 45.33 per cent followed by deficit schools and private schools with percentages of 44.81 and 39.91 respectively.

### **Profile of Teachers in Terms of Academic Streams**

- a) 68.85 per cent were arts teachers, 22.65 per cent were science teachers and 8.49 per cent were commerce teachers. Arts teachers constitute the

highest percentage of higher secondary school teachers followed by science and commerce teachers.

- b) Regarding arts stream, private schools had the largest number of teachers with 77.19 per cent followed by government schools with 74.74 per cent and 45.45 per cent were from deficit schools.
- c) With regards to science stream, 39.61 per cent were from deficit schools, 21.80 per cent from government schools and 12.28 per cent were from private schools.
- d) Looking at commerce stream, 14.94 per cent were from deficit schools, 10.53 per cent were from private schools and government schools had only 3.46 per cent of commerce teachers.

#### **4. Recruitment Procedures of Higher Secondary School Teachers in Mizoram.**

- a) The recruitment rules of higher secondary school teachers under the Government of Mizoram were called the Mizoram School Education Department (Group 'A' posts) Recruitment Rules, 2012.
- b) Regarding the recruitment of deficit and private school teachers, they were recruited by the managing committee of the schools in accordance

with the rules and regulations prescribed from time to time by the state government.

- c) The post of Lecturer for higher secondary schools in Mizoram was categorized into three grades namely Junior Grade, Senior Grade and Selection Grade. Each of these post were classified under General State Service (Group 'A' Gazetted) (Non-Ministerial).
- d) Lecturers (Junior Grade) were 100 per cent directly recruited. When these junior grade lecturers were in a regular continuous service for eight years, they were eligible for promotion to Lecturer (Senior Grade). Again, when they were in regular continuous service for sixteen years which is calculated from the date of entry in the junior grade, they were eligible for promotion to Lecturer (Selection Grade).
- e) According to the Seventh Central Revision of Pay (as modified and extended to the employees under the Government of Mizoram) Rules, 2018, junior grade lecturers were in Level 10 of the pay matrix with basic pay of Rs. 56,100/-, senior grade lecturers in Level 10A with basic pay of Rs. 64,700/- and selection grade lectures in Level 11 with basic pay of Rs. 67,700/- with all other allowances as admissible from time to time.
- f) The age limit for direct recruits of higher secondary school teachers of Mizoram was between 18 years and 35 years. However, upper age limit

was relaxable by five years for candidates from Scheduled Caste/ Scheduled Tribes.

- g) Regarding the educational qualification and other qualifications required for direct recruits, the criteria were: (i) At least 2<sup>nd</sup> Class Master Degree from recognized university in the relevant subject with Bachelor of Education or its equivalent from institutions recognized by National Council for Teacher Education (NCTE) 'OR' Two years integrated M.Sc.Ed course or equivalent course recognized by NCTE and (ii) Working knowledge of Mizo language at least Middle School Standard.
- h) The period of probation for junior grade lecturers was for 2 years. In the case of senior and selection grade lecturers, probation was not necessary as they were selected and promoted according to their period of regular continuous service.

## **5. Physical Infrastructure and Facilities Available in Higher Secondary Schools in Mizoram**

### **Nature of school building**

- a) 58.14 per cent of higher secondary schools had their own buildings while the other 41.86 per cent were running their schools in rented buildings.



- b) Government schools and deficit schools had their own buildings while most private schools rented buildings for running their schools.

### **Physical condition of the school building**

- a) Of all the schools, deficit schools had the best percentage in terms of good condition of the school building, satisfactory classroom size, schools surrounded by wall or fence, child-friendly design of the school and a well-landscaped building, government schools came second and then followed by private schools.
- b) The physical conditions of private schools were worst among them.

### **Provision of hostel facilities**

65.12 per cent provided hostel facilities for their students in which there were separate hostel for boys and girls

### **Provision of separate rooms in the school**

- a) While all schools had teachers' common room, 93.02 per cent had separate principal's room and 72.09 had separate office room due to congested space.
- b) Schools which offered science stream had separate science laboratory which was 46.51 per cent.
- c) Only few schools had separate computer laboratory (11.63 per cent), recreational centre (23.26 per cent) and conference hall (13.95 per cent)

- d) None of the schools had students' common room
- e) Deficit schools had the best space in terms of different separate rooms followed by government schools and private schools.

#### **Provision of classroom facilities**

- a) All schools had the required classroom facilities such as chairs, tables, desks, benches, and blackboards/whiteboards/green boards.
- b) 79.07 per cent of the classrooms were well – lighted and well – ventilated.

#### **Provision of science laboratory facilities**

While 86.36 per cent of the schools had separate science laboratory, only 50 per cent of the schools had sufficient number of laboratory equipments. 80 per cent of deficit schools had sufficient number of equipments whereas 50 per cent of government schools and only 36.36 per cent of private schools had a limited number of science equipments.

#### **Provision of library facilities**

- a) Majority of the schools did not have a library in their schools.
- b) Even though 11.63 per cent of the schools mentioned that they had a library, there were no proper libraries in any of the schools.

**Provision of safe drinking water**

- a) Safe drinking water was available in all schools.
- b) The source of drinking water was PHE water which was available all year round for all these schools.

**Provision of sanitation facilities**

- a) All schools had proper sanitation facilities
- b) Of the 62.79 per cent toilets for the students, only 41.86 per cent of them were well-lighted and well-ventilated.
- c) Majority of the schools had separate toilet for the teachers as well as for the female students.

**Condition of power supply**

- a) Power supply was available in all schools and sufficient electrical outlets were available in 95.35 per cent schools.
- b) Some kind of power shortage was experienced by all the schools.

### **Other facilities provided in the schools**

- a) All schools had computers and telephones but only 37.21 per cent of the schools had an internet connection.
- b) All schools had cooling fans in the teachers' common room whereas 93.02 per cent and 72.09 per cent had cooling fans in the principal's room and office room respectively.
- c) No fans and air conditioners were available in the classrooms.

## **6. Teaching-Learning Processes and Methods of Evaluation**

### **Methods of Teaching Followed in Class**

- a) In terms of methods of teaching, all teachers were following the traditional lecture method accompanied by 47.69 per cent of discussion method, 76.15 per cent of notes dictation, 21.16 per cent of question-answer method and 6.41 per cent of project/field works.
- b) In addition to lecturing, the highest percentages of teachers who used discussion method, dictating notes, question-answer method and project/field work were deficit school teachers (56.49), government school teachers (84.78), private school teachers (22.81) and again private school teachers (10.09) respectively.

- c) None of the higher secondary school teachers used demonstration and seminar as method of teaching.

### **Efforts Made by Teachers to Improve Teaching-Learning Processes**

- a) 62.30 per cent of the teachers adopted innovative practices out of which the majority was constituted by government school teachers with 68.86 per cent followed by 65.58 per cent of deficit school teachers and 51.75 per cent of private school teachers.
- b) Out of the 81.97 per cent of the teachers who motivated their students to learn, there were 87.20 per cent of government school teachers, 83.33 per cent of private school teachers and 70.13 per cent of deficit school teachers.
- c) There were 84.20 per cent of higher secondary school teachers who monitored the progresses of their students. Teachers from government schools constituted the majority by 92.04 per cent followed by private school teachers with 82.89 per cent and deficit school teachers with 71.43 per cent.
- d) Out of 671 higher secondary school teachers, only 14.01 per cent were using power point presentation in the classroom. 18.83 per cent of deficit

school teachers, 14.19 per cent of government school teachers and 8.77 per cent of private school teachers were using this method.

### **Methods of Evaluation**

- a) In terms of evaluating students, all teachers used terminal and promotion examination to evaluate the progress of their students.
- b) Apart from using examinations for evaluating students, the highest percentages of teachers who employed class test, assignment and practical works were private school teachers (78.07). This is followed by deficit school teachers (46.75) and private school teachers (26.75).

## **7. Activities (Academic and Non-Academic) Organized for Higher Secondary Classes in Mizoram**

### **Academic Activities**

- a) All schools organized class test for their students whereas 95.35, 55.81, 51.16 and 25.58 per cents of the schools organized other activities such as assignment, seminar, essay writing competition and science exhibition respectively.
- b) Majority of the schools considered class test and assignments to be the most important academic activities organized for higher secondary classes in Mizoram.

- c) Among all the schools, deficit schools were the best in organizing different academic activities while private schools were the worst.

### **Non-Academic Activities**

- a) Non-Academic activities such as excursion, debate, quiz and elocution were organized by 69.77 per cent, 67.44 per cent, 83.72 per cent and 18.60 per cent of the schools.
- b) 39.53 per cent of schools had National Service Scheme (NSS), 23.26 per cent had National Cadet Corps (NCC), 11.63 had Scouts & Guides and only 6.98 per cent of the schools had adventure club in their schools.
- c) Among all the schools, deficit schools are the best in organizing different non-academic activities while private schools are the worst.

## **8. HSSLC Examination Results of Eight Consecutive Years i.e., 2011-2018**

### **Overall Results of Students in the Higher Secondary School Leaving Certificate (HSSLC) Examinations for Eight Consecutive Years i.e. 2011 to 2018**

- a) During the years 2011-2018, 59489 students passed the examinations out of which 1357 were placed in Distinction, 11371 in First Division, 20306 in Second Division and 26455 in Third Division and the overall pass percentage was 70.03. Meanwhile, 2287 students were given compartmental chance and 23168 students failed the examinations.

- b) With regards to the category of divisions particularly the Distinction Division, only 1 per cent of the students attained the Distinction division in 2011, 2012 and 2013 but the percentages increased to 2 since 2014 till 2016. It keeps on increasing to 4 and 5 in 2017 and 2018 respectively. Therefore, there was a slight improvement over these last two years in terms of achievement of students in Distinction Division.
- c) In 2011, 14 per cent of the students achieved First Division but there were slight downturns in 2012 and 2013 when the percentages went down to 12 and 10 respectively. However, gradual improvements were seen in 2014, 2015, 2016, 2017 and 2018 when the percentages went up to 17, 18, 19, 22 and 33 respectively. Therefore, a major leap can be seen in the achievement of students in First Division in the HSSLC Examinations during the last two years.

**Results of Students in the HSSLC Examinations 2011-2018 in terms of Academic Streams i.e.Arts, Science and Commerce**

- a) In 2011, commerce stream had the highest pass percentage of 68 seconded by science stream with 62 per cent followed by arts stream with 59 per cent.
- b) No improvement in the pass percentage was seen from all streams in 2012. The pass percentage of arts stream remained the same as it was again 59 per cent, science stream went down to 59 per cent and commerce stream also went down to 61 per cent.



- c) In 2013, commerce stream ranked the top having a pass percentage of 70 seconded by science stream with 60 pass percentage followed by arts stream whose pass percentage went down again to 57.
- d) The years 2011, 2012 and 2013 had the same trend in the results in that commerce stream performed the best followed by science stream and arts stream. A new trend was found when science stream superseded commerce stream by having the highest pass percentages of 76 and 82 in 2014 and 2015 respectively. Second position was bagged by commerce stream with pass percentages of 75 and 80 in 2014 and 2015 respectively and third position by arts stream with pass percentages of 71 and 72 in 2014 and 2015 respectively.
- e) During the last three years, commerce stream again had the highest percentages. In 2016 and 2017, commerce stream had the highest pass percentages of 85 each followed by science stream with pass percentages of 77 and 82 respectively. Arts stream had the lowest pass percentages of 77 and 73 in 2016 and 2017 respectively.
- f) In 2018, commerce stream again stood first with a pass percentage of 92 seconded by science stream with 87 per cent followed by arts stream with a pass percentage of 79.
- g) The pass percentages of students from the three academic streams were highest in the year 2018. During these eight years i.e. 2011 to 2018, students from arts stream performed poorer than students from science

and commerce streams. Therefore, it can be concluded that students from arts stream need a lot of improvements so that they may be able to match up with their peers from science and commerce streams.

- h) Students from arts stream had 3 per cent of students who obtained distinction in 2018, 2 per cent in 2017, 1 per cent in 2016, 0.76 per cent in 2014, 0.49 per cent in 2015, 0.31 per cent in 2012, 0.16 per cent in 2011 and 0.2 per cent in 2013. Science stream had 6 per cent of students obtaining distinction in 2017, 5 per cent in 2018, 4 per cent both in 2015 and 2016, 3 per cent in 2014 and 1 per cent each in 2011, 2012 and 2013 respectively. Commerce stream had 13 per cent of students obtaining distinction in 2018 which was the highest among them, 4 per cent both in 2015 and 2017, 2 per cent both in 2014 and 2016 and 1 per cent each in 2011, 2012 and 2013 respectively.
- i) There was slight improvements in the percentages of students who obtained distinction in the HSSLC examinations held during 2011 to 2018.
- j) In the HSSLC Examinations held during 2011 to 2018, students from science stream always had the highest pass percentage in first division every year, commerce stream came second and arts stream always stayed at the bottom. Science stream had 49 per cent of students obtaining first division in 2018 which was highest during these years, 35 per cent in 2017, 32 per cent in 2015, 31 per cent in 2016, 26 per cent in 2014, 15 per cent in 2012, 14 per cent in 2011 and 12 per cent in 2013

whereas commerce stream had 38 per cent in 2018, 21 per cent in 2016, 20 per cent in 2015, 18 per cent in 2017, 10 per cent in 2011, 9 per cent thrice in 2012, 2013 and 2014. The percentages in the case of arts streams were 22 in 2018, 12 in 2017, 10 in 2016, 8 both in 2014 and 2015, 5 in 2012 and 4 both in 2011 and 2013.

- k) Progressive improvements can be seen in the percentages of students obtaining first division in the HSSLC Examination over these eight years.
- l) The results of the HSSLC Examinations in Mizoram during the years 2011 to 2018 indicate that majority of the students still struggle to get higher marks and percentages making it hard for them to get on merit lists across the colleges for higher studies. They also indicate that only a meager number of students were in Distinction Division and majority of the students were placed in Third Division. For students taking the HSSLC Examination under MBSE, the problem lies in matching up to their peers from other central education boards, such as the Central Board of Secondary Education (CBSE) and Indian School Certificate (ISC).

**Results of Students in the HSSLC Examinations 2011-2018 in terms of Management of Schools Management of Schools**

- a) In 2011, deficit schools had the highest pass percentage of 82 and both government and private schools had 73 per cent each.

- b) No improvement from government schools was seen in 2012 when the pass percentage went down to 71 whereas the pass percentages of the deficit schools and private schools improved with 86 and 77 respectively.
- c) In 2013, deficit schools again ranked the top having a pass percentage of 82 seconded by private schools with 75 pass percentage followed by government schools whose pass percentage went down to 69.
- d) The years 2012 and 2013 had the same trend in the results in that deficit schools performed the best followed by private schools and government schools performed the poorest. A new trend was found when private schools superseded deficit schools by having the highest pass percentages of 88, 90 and 83 in 2014, 2015 and 2016 respectively. Second position was bagged by deficit schools with pass percentages of 86, 89 and 82 in 2014, 2015 and 2016 respectively and third position by government schools with pass percentages of 80, 82 and 69 in 2014, 2015 and 2016 respectively.
- e) In 2017 and 2018, deficit schools again have the highest percentages of 89 and 94 respectively. Private schools came second with percentages of 76 and 80 followed by government schools with percentages of 70 and 76 in 2017 and 2018 respectively
- f) Pass percentages of students from the three types of schools were highest in the year 2015. There was a sharp decline in the pass

percentage of students in 2016 from 2015 in the case of government schools. During the last seven years, government school students performed poorer than students from deficit and private schools. Hence, it can be concluded that government schools need a lot of improvement so that their students may be able to match up with their peers from private and deficit schools.

- g) Deficit schools always had the highest pass percentage in Distinction every year, private schools came second and government schools always stayed at the bottom. Deficit schools had 8 per cent of students obtaining Distinction both in 2017 and 2018, 6 per cent in 2015, 5 per cent in 2014, 4 per cent in 2013 and 2016 and 2 per cent in 2012 whereas private schools had 5 per cent in 2018, 3 per cent in 2017, 2 per cent in 2014, 2015 and 2016; 1 per cent in 2012 and 0.003 per cent in 2013. The percentages in the case of government schools are 1 per cent in 2014, 2015, 2016, 2017 and 2018; 0.003 in 2012 and 0.001 in 2013.
- h) In terms of students' achievement of First Division in HSSLC Examinations held during 2012 to 2018, deficit schools performed the best followed by private schools and government schools performed the poorest. Deficit schools had 44 per cent of students getting First Division in 2018, 27 per cent in 2017, 26 per cent in 2015, 24 per cent both in 2012 and 2014, 22 in 2016 and 20 in 2013 whereas private schools had 31, 24, 23, 20 and 18 per cents in 2018, 2015, 2014, 2017 and 2016 respectively and 13 and 10 per cents in 2012 and 2013

respectively. The percentages for government schools were 18 in 2018, 11 in 2017, 10 both in 2014 and 2016, 9 in 2015, 6 in 2012 and 4 in 2013.

- i) The biggest gap between the percentages of deficit school students and government school students securing First Division was found in 2018 when the percentage was 44 for deficit schools and 18 for government schools. The smallest gap was seen in 2014 when the percentages were 24 in the case of deficit schools and 23 in the case of private schools.

## **9. Problems Faced by Teachers of Higher Secondary Schools in Mizoram**

### **Problems of Teachers Related to Condition of School Buildings and Classrooms**

- a) Poor lighting and poor ventilation were the main problems that the teachers faced in regards to condition of school buildings and classrooms and this was not even huge, only 15.65 per cent of the teachers and 14.01 per cent faced this problem respectively.
- b) Private school teachers were the ones who faced this problem the most.
- c) As the percentages of teachers who stated that they had problems with the condition of school buildings and classrooms were low, it can be inferred that there exists no serious problem since majority of the teachers do not mention them.

### **Problems of Teachers Related to Facilities**

- a) Unavailability of halls/areas for things such as teachers' meetings, parents' conferences or faculty planning sessions was a problem for 18.48 per cent, unavailability of internet connection for 17.44 per cent and computers that were not easily accessible for 11.03 per cent
- b) Since the percentages of the teachers who are faced with the problems related to facilities are quite small ranging from 4.17 per cent to 15.65 per cent only, these problems are not considered as significant.

### **Problems of Teachers Related to Science Laboratory**

Insufficiency of science equipments was a problem for 4.17 per cent of the teachers.

### **Problems of Teachers Related to Safe Drinking Water and Sanitation**

With regards to sanitation, unavailability of well - ventilated toilets was a problem for 26.53 per cent. The highest percentage who stated this problem was from private schools with a percentage of 28.07. Unavailability of separate toilet for female teachers was also a problem for 5.07 per cent whereas none of the teachers had problems with the insufficient number of toilets

### **Problems of Teachers Related to School Administration**

Lack of instructional facilities was a problem for 10.73 per cent of the teachers, heavy workload of staff for 6.86 per cent, high enrolment and over-crowded classes for 3.28 per cent and only 0.30 per cent faced problems due to inadequate non - teaching staff. Therefore, the teachers did not face a big problem regarding school administration as majority of the teachers are free from this.

### **Problems of Teachers Related to Service Conditions**

- a) Regarding problems of teachers related to service conditions, 14.90 per cent of them were having problem due to poor salary in which private school teachers constituted the highest percentage.
- b) Other small problems include lack of teaching aids, unsatisfactory service conditions, unavailability of programmes like refreshers' course and training, lack of incentive, no opportunities for teachers' professional development, lack of facilities for in – service education of teachers, lack of recognition by the society and government, lack of funds for higher secondary education and lack of promotional facilities for teachers.

### **Problems of Teachers Related to Students**

- a) The main problem faced by teachers with the students was disturbances caused by the students in the classroom. 32.94 per cent of teachers faced



this problem and among them, deficit school teachers formed the highest percentage (46.75)

- b) Majority of the teachers did not have problems with regards to their students.

## **10. Problems Faced by Students of Higher Secondary Schools in Mizoram**

### **Problems of Students Related to Condition of School Buildings and Classrooms**

Poor ventilation and poor lighting of the classroom were the main problems faced by 12.54 per cent and 11.55 per cent of students respectively in terms of condition of school buildings and classrooms. The highest percentage of students stating these problems were government school students.

### **Problems of Students Related to Facilities**

- a) With regards to problems related to facilities, 14.43 per cent of the students expressed that they had problems with the unavailability of internet connection and 13.84 per cent also stated that computers that were not easily accessible caused problems.
- b) Unavailability of recreation centre for games and sports was a problem for 14.11 per cent and 11.60 per cent for inadequate storage for the students' materials

- c) Government school students were the ones who faced these problems the most as compared to deficit and private school students.

### **Problems of Students Related to Science Laboratory**

Insufficiency of science equipments was a problem for only 3.92 per cent of the students.

### **Problems of Students Related to Safe Drinking Water and Sanitation**

- a) With regards to sanitation, unavailability of well - ventilated toilets was a problem for 25.35 per cent. The highest percentage who states this problem was from government schools with a percentage of 43.12 whereas this caused problems for only 3.23 per cent of private school students.
- b) Insufficient number of toilets was also a problem for 21.33 per cent students and only 0.69 per cent stated that they had a problem with the unavailability of separate toilet for girls.

### **Problems of Students Related to Teachers**

- a) The highest problem that the students faced with regards to their relationship with the teachers was the unfriendly attitude of the teachers. Among the 12.41 per cent of students facing this problem, government school students constituted the highest percentage.

- b) Other problems include favouritism of a particular student by the teacher poor relationship between teachers and students and teachers having poor teaching skills.

### **Problems of Students Related to High Enrolment and School Timing**

- a) With regards to problems related to high enrolment and over - crowded classes, 11.01 per cent stated that they were facing a problem with this. Out of all the students, government school students constitute the highest percentage followed by deficit and private school students.
- b) 31.39 per cent of the students faced problem with regards to school timing. Out of the students claiming to have problems with school timing, students from government schools constituted the highest percentage (41.54 per cent) followed by private and deficit school students with percentages of 35.49 per cent and 19.82 per cent respectively.

### **Problems of Students Related to Other Students**

In terms of students' problems related to other students, 31.39 per cent were having problem with classroom disturbances caused by other students. This was faced by 42.65 per cent of students belonging to government schools followed by 37.07 per cent from deficit schools and 18.05 per cent from private schools.

## **11. Recommendations for the Improvement of Higher Secondary Education in Mizoram**

From the findings of the study, the following recommendations are made for the improvement of higher secondary education in Mizoram:

- a) In terms of students' enrolment, it was found that till the last academic session covered by the study, the majority of enrolment was dominated by arts stream. Since the most prestigious stream is science stream seconded by commerce and then followed by arts, it is recommended that schools which offer science and commerce should make necessary arrangements so as to attract more students under such streams.
- b) Since almost all higher secondary schools especially deficit and private schools admitted only students who have performed relatively well in their High School Leaving Certificate (HSLC) Examination, it is recommended that the schools should open more seats so that there will be equality of educational opportunities for all students.
- c) Mizoram Board of School Education should also take necessary steps in opening more schools which offer commerce stream as there are only a few numbers of schools which offer commerce at present.
- d) In terms of professional qualifications, only all teachers from government schools have the required qualifications whereas there were few deficit school teachers who have this qualification and private schools also have poorer number of teachers who were professionally trained. Therefore, it

is recommended that deficit and private schools should also follow and adhere to the same recruitment rules as followed by the government schools and a uniform policy should be adopted for recruitment of teachers irrespective of government, deficit and private schools.

- e) Since the maximum number of teachers were between 40 to 49 years of age, it is clear that they will be teaching for at least 10 years or so considering the retirement age of teachers. Thus, regular in-service training should be conducted so as to update themselves with the advancing topics in the field of education.
- f) Since many of the teachers were trained years back and their knowledge and technique had become obsolete, refreshers' courses and in-service training for such teachers should be organized regularly.
- g) When looking at the age the teachers and the experience they had, it is clear that the state had not been recruiting teachers on a large scale basis for quite some time. Since the enrolment of students had been growing tremendously and there could be an imbalance in teacher-pupil ratio, there is an urgent need to recruit more teachers to avoid these problems
- h) When recruiting teachers for higher secondary schools, aptitude and interests of the candidates for teaching should also be well-taken care of as they affect the morale of the students as well as the standard of higher secondary education in Mizoram.

- i) Since most deficit schools were run by the different churches in Mizoram, the church needs to work harder to recruit more teachers so that there will be a balance in the teacher-pupil ratio.
- j) It is also considered important that those who managed private schools should work harder so that there will be no imbalances in the teacher-pupil ratio. Since private school teachers need to be the most hardworking because so many responsibilities were laid upon their shoulders, such schools should recruit more teachers so as to maintain a balance between these three types of schools.
- k) Majority of private schools do not have their own building and were functioning in rented houses resulting in poor landscaping of the schools and were also very congested, steps should be taken by the Mizoram Board of School Education so that permission for opening new schools should only be given to those schools which were found fit according to the conditions of affiliation as laid down by the Mizoram Board of School Education
- l) In today's world where children are given importance, it is also recommended that schools be designed in a child-friendly manner so that children will feel safe and enjoy going to school.
- m) It is also recommended that concerned authorities should take immediate steps in providing sufficient number of science or laboratory equipments

to schools having science stream since schools which offer science stream do not have sufficient number of laboratory equipments.

- n) Majority of the schools do not have a library. Efforts should be made so that library is available in all schools which should be constantly restocked with the latest edition of books. This will not only help the teachers but also the students as well.
- o) Only few schools have internet connectivity. Since so many learning materials are available in the internet which are both beneficial for the teachers and the students, schools should book internet connections that may be easily accessible by both the teachers and the students.
- p) Since the method of teaching adopted in schools was mostly the traditional lecture method, it is suggested that teachers should have the courage to experiment with various other teaching methods so as to make their teaching more interesting and enjoyable by the students as they get bored very easily.
- q) Even though majority of the schools have organized non-academic (co-curricular) activities, it is essential that such activities be organized more frequently keeping in mind the importance of co-curricular activities for students.
- r) Government schools need a lot of improvement so that their students may be able to match up with their peers from private and deficit schools since their students performed poorer than students from such schools in

the Higher Secondary School Leaving Certificate (HSSLC) Examinations.

- s) Private schools should take necessary measures in proper construction of their schools since most of the condition of the private school buildings were in bad condition as observed by the investigator.
- t) There should be sufficient number of well-ventilated and well-lighted toilets for the students.
- u) Salary of the teachers should be revised and linked to the cost of living. Fixed pay given to private school teachers should be stopped as their salaries were much less as compared to government and deficit school teachers. All teachers should be treated at par with the payment of salaries.
- v) Schools should take major steps in disciplining their students, forming in them right habits and developing good character in them since many of the teachers faced problem with the disturbances they caused while teaching in the classrooms.
- w) Teachers should be friendly towards the students and be approachable. They should not favour a particular student.
- x) School timing should be properly adjusted keeping in mind the lifestyle of the Mizo Society.