

**Problems Faced By The Secondary School Students In Science Subject
Of Biswanath Chariali District Of Assam**

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ABSTRACT

Science subject occupies a significant position in the school curriculum. Science is included as a compulsory subject in school's curriculum because teaching everyday science is for everyone has become an unavoidable part of general education. Therefore the teacher should know the value of the science subjects and the teacher should try to give the best knowledge of science subject to the students. They should try to solve all the problems faced by secondary school students in science subject in their school so that the students should learn the science subject thoroughly.

In this paper, the emphasis has been on the problems faced by the secondary school students in the science subject of Biswanath Chariali district of Assam. The main purpose of this paper is to see both the internal problems and external problems faced by secondary school students in the science subject of Biswanath Chariali district of Assam.

Keywords: *Curriculum, Science and Secondary School*

Introduction:

Science is a continuous process of observation, investigation and acquisition through empirical and conceptual means. It involves describing, predicting and explaining nature and its changes in the simplest way possible. It is dynamic. It is

knowledge as well as the process of its continuous development and refinement. Science is both a product as well as a process. Teaching science subject occupies an essential place in the school curriculum. Science is a compulsory subject in the school curriculum up to class X. Teaching of everyday science for everybody has become an unavoidable part of general education. The science curriculum inculcates the minds of the students to see the value of science subject in their daily lives. So all the science teachers should actively be involved with the students in teaching science in their schools and they should try to solve all the problems related to the science subject in the secondary schools. Efforts are made by the science teachers to solve the problem related to science subject which is faced by the secondary school students both internally and externally in Biswanath Chariali district of Assam.

The rationale of the study:

Science has great importance in our everyday life. The Kothari commission recommended that science and mathematics should be taught on a compulsory basis to all pupils as a part of general education during the first ten years of schooling. In addition, there should be the provision of a special course in these subjects at the secondary stage, for students of more than average ability. So the teacher should give importance to the science subject at the secondary stage in their school and try to solve the problem related to the science subject which is faced by secondary school students in school.

There have been quite a number of studies conducted in different areas of science education in India. Assam is one of the biggest states of northeast India. Biswanath Chariali is a small district of Assam. Here science is taught as General Science at the secondary stage of school education. It is a compulsory subject of study and the learners learn it as a composite subject and not as a separate discipline like Physics, Chemistry and Biology. The booklet on curriculum and syllabi for Class IX – X prepared by the Board of Secondary Education, Assam (SEBA) claims that the science curriculum has been developed with the objective of translating the basic recommendation of the NCF (2005). In spite of these initiatives, evidence show that the standard of teaching science subject and their problems in the schools of Assam is not up to the mark. Some of the

research studies have been carried on science subject and problems of the science curriculum in the secondary school of Assam. But less attention has been given to the science subject at the secondary level of Assam in which the secondary school students face various problems in science subject in their school and this leads the researcher to raise some research questions:

Research questions:

- (i) What are the internal problems faced by the secondary school students of Assam?
- (ii) What are the external problems faced by the secondary school students of Assam?

Title of the study:

“Problems faced by the secondary school student in science subject of Biswanath Chariali district of Assam”.

Objectives of the study:

1. To study the internal problems faced by the secondary school students of Assam.
2. To study the external problems faced by the secondary school students of Assam.

Delimitation of the study:

The study is delimited to teaching science subject at the secondary level (class IX & X) which is developed by the Board of Secondary Education (SEBA) Assam. The study is also delimited to the provincialized schools of Biswanath Chariali district of Assam. Out of 96 secondary schools, 24 (25%) number of secondary schools and 228 (10%) no. of students from both the urban and rural areas are selected from Biswanath Chariali district of Assam.

Methodology:

The present study is descriptive in nature using a survey method to describe the problems faced by the secondary school student in the science subject of Biswanath Chariali district of Assam.

Population:

The students of secondary schools of both the urban and rural area of Biswanath Chariali district of Assam is taken as the population of the study.

Sample:

The technique of selecting a sample is of fundamental importance as it helps to find the exact face of the survey. There are total of 96 numbers of provincialized secondary schools in Biswanath Chariali district of Assam. The investigator selected 24(25%) schools randomly considering both the rural and urban areas of Biswanath Chariali district of Assam as the sample of the study and 228 (10%) numbers of secondary school students are selected randomly both from the urban and the rural schools.

Tools:

The selection of suitable tool is the vital importance for any research study as it enables the investigator to collect the required data necessary for the study. The tool used for the present study is a questionnaire for the secondary school students.

Data Analysis and interpretation:**Analysis of data with regard to study the internal problems faced by the secondary school students of Assam:**

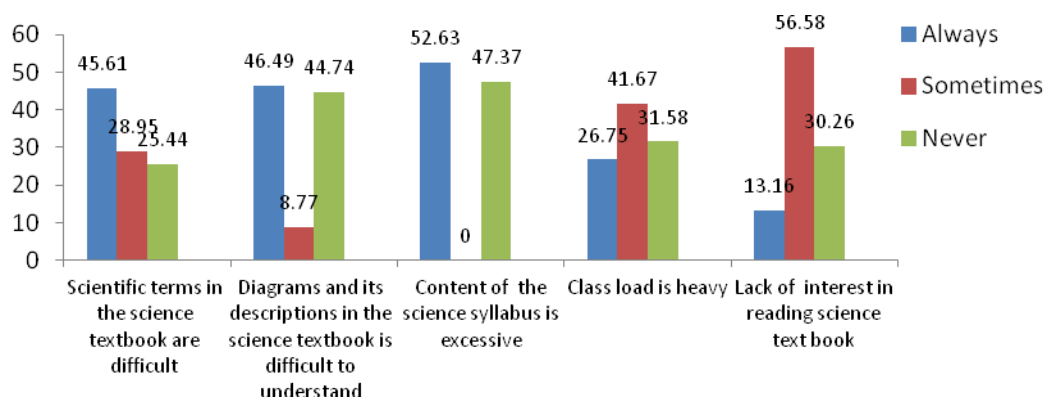
The internal problems faced by the secondary school students of Assam are discussed in the following table:

Table No. 1

Internal Problems faced by the students of Biswanath Chariali district of Assam

Sl. No.	Internal problems (statements)	Always	Sometimes	Never
1.	Scientific terms in the science textbook are difficult	104(45.61%)	66(28.95%)	58(25.44%)
2.	Diagrams and its descriptions in the science textbook is difficult to understand	106(46.49%)	20(8.77%)	102(44.74%)
3.	Content of the science syllabus is excessive	120(52.63%)	00(00%)	108(47.37%)
4.	Class load is heavy	61(26.75%)	95(41.67%)	72(31.58%)
5.	Lack of interest in reading science text book	30(13.16%)	129(56.58%)	69(30.26%)
6.	Problems in completing project work assigned by your science teacher	72(31.58%)	85(37.28%)	71(31.14%)
7.	Not interested to do homework given by your science teacher	63(27.63%)	69(30.26%)	96(42.11%)
8.	Demonstration of scientific experiments by your science teacher are not understandable	56(24.56%)	84(36.84%)	88(38.60%)
9.	Not interested in the science classes	69(30.26%)	70(30.70%)	89(39.04%)
10.	Distracted from the science lesson while getting disinterested in the topic discussed	72(31.58%)	71(31.14%)	85(37.28%)

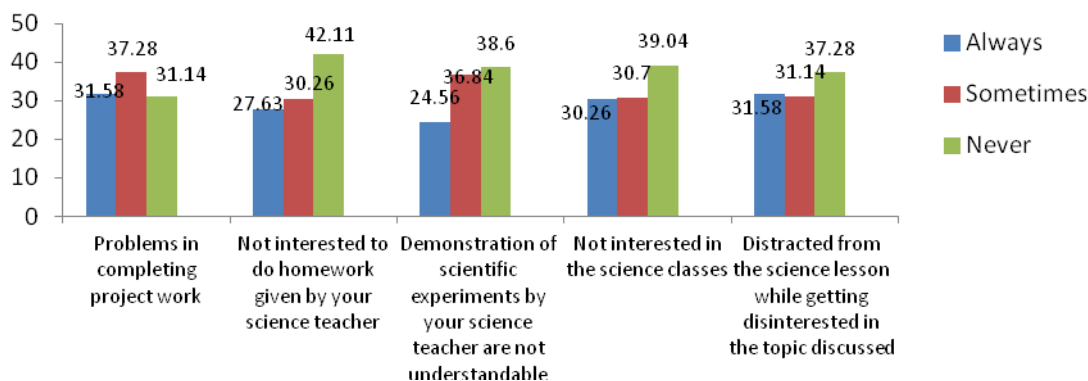
Fig No. 1**Internal Problems faced by the students of Biswanath Chariali district of Assam**



From the above table, it is clear that the secondary students have viewed that they have faced various internal problems in their school. 45.61% no. of students always, 28.95% no. of students sometimes and 25.44% no. of students never feel that the scientific terms in the science textbook are difficult. 46.49% no. of students always, 8.77% no. of students sometimes and 44.74% no. of students never feel difficult to understand the diagrams and its descriptions in the science textbook. 52.63% no. of students always and 44.74% no. of students never feel excessive the content of their science syllabus. 26.75% no. students always, 41.67% no. students sometimes and 31.58% no. of students never feel that their class load is heavy. 13.16% no. of students always, 56.58% no. of students sometimes and 30.26% no. of students never interested to read their science textbook.

Fig No. 2

Internal Problems faced by the students of Biswanath Chariali district of Assam



From the above table, it is clear that the students have faced various internal problems in school. 31.58% no. of students always, 37.28% no. of students sometimes, 31.14% no. of students never feel problem in completing the project work assigned by the science teacher. Though 42.11% no. of students are interested to do homework given by the science teacher but 27.56% no. of students always, 30.28% no. of students sometimes not interested to do homework given by the science teacher. 24.56% no. of students always, 36.84% no. of students sometimes and 38.60% no. of students never feel that the demonstration of scientific experiments by the science teachers are not understandable. Though 39.04% no. of students never feel that they are not interested in the science classes but 30.26% no. of students always, 30.70% no. of students sometimes feel that they are not interested in the science classes. 31.58% no. of students always, 31.14% no. of students sometimes, 37.28% no. of students never distracted from the science lesson while getting disinterested in the topic discussed.

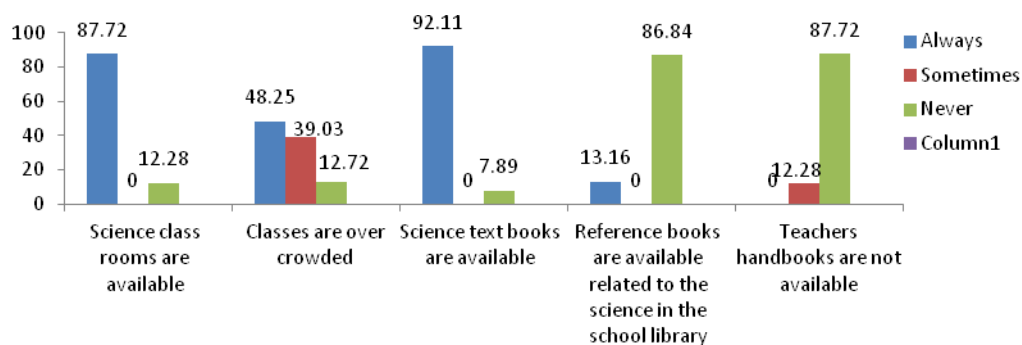
Table No. 2**External problems faced by the students of Biswanath Chariali district of Assam**

Sl. No.	External problems (statements)	Always	Sometimes	Never
1.	Science class rooms are available	200(87.72%)	00(00%)	28(12.28%)
2.	Classes are over crowded	110(48.25%)	89(39.03%)	29(12.72%)
3.	Science text books are available	210(92.11%)	00(00%)	18(7.89%)
4.	Reference books are available related to the science in the school library	30(13.16%)	00(00%)	198(86.84%)
5.	Teachers handbooks are not available	00(00%)	28(12.28%)	200(87.72%)
6.	Insufficient knowledge of the science teachers on the content of the syllabus	88(38.60%)	00(00%)	140(61.40%)
7.	Science syllabus is not completed by your science teacher	30(13.16%)	94(41.23%)	104(45.61%)
8.	Science teacher arrange some extra class for science subject in school	48(21.05%)	43(18.86%)	137(60.09%)

9.	Scarcity of laboratory instruments , equipments and materials	93(40.79%)	00(%)	135(59.21%)
10.	Blackboard used by your science teacher during the science class	180(78.95%)	48(21.05%)	00(00%)
11.	Science teacher remove the doubts in science subject	96(42.11%)	89(39.03%)	43(18.86%)
12.	Teachers are not operate the laboratory	97(42.54%)	67(29.39%)	64(28.07%)
13.	Lack of study materials on science subject	187(82.02%)	00(00%)	41(17.98%)
14.	Usage of computer for teaching science subject	52(22.81%)	98(42.98%)	78(34.21%)
15.	Arrangement of field trip / science excursion by your science teacher	79(34.65%)	94(41.23%)	55(24.12%)
16.	Getting opportunities to attend seminars and workshops on science topic	20(8.77%)	53(23.25%)	155(67.98%)
17.	Scarcity of science teachers	198(86.84%)	00(00%)	30(13.16%)
18.	Problem of understanding in the medium of instruction	38(16.67%)	00(00%)	190(83.33%)
19.	Score in the examination of science subject is not as expected	87(38.16%)	93(40.79%)	48(21.05%)
20.	Lack of parents support	67(29.39%)	60(26.31%)	101(44.30%)

Fig No. 3

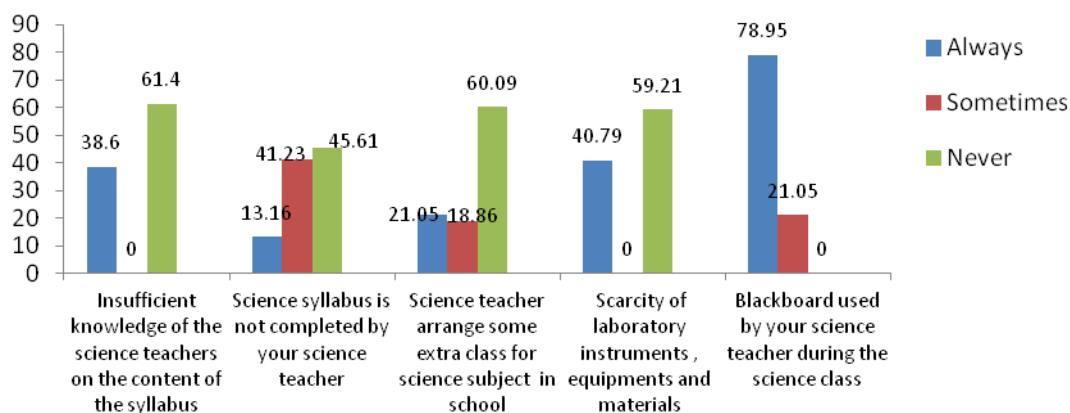
External problems faced by the students of Biswanath Chariali district of Assam



From the above table, it is clear that the students have faced various external problems in their school. Though 87.72% no. of students viewed that the science classrooms are available in their school but 12.28% no. of students viewed that the science classrooms are not available in their school. In some schools 48.25% no. of students viewed that the classrooms are always and 39.03% no. of students viewed that sometimes their classrooms are overcrowded. Science textbooks are almost available but it is not available in all school. 92.11% no. of students viewed that they have available science textbooks but 7.89% no. of students viewed that they have no available science textbook. In most of the school, reference books related to the science subject are not available in the school library. Only 13.16% no. of students viewed that they have reference books related to science subject in their school library but 86.84% no. of students viewed that they have no reference book related to science subject in their school library. Though teacher handbooks are almost available in all the schools. But 187.72% no. of students viewed that the science teachers' handbooks are available but 12.28% no. of students viewed that the science teachers' handbooks are not available.

Fig No. 4

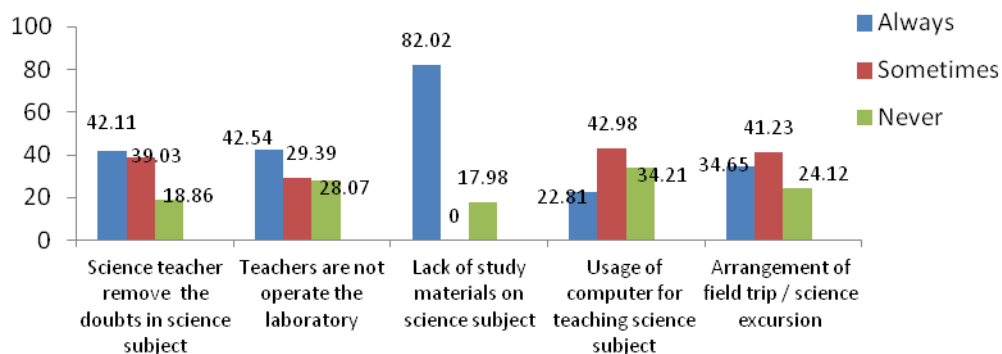
External problems faced by the students of Biswanath Chariali district of Assam



From the above table, it is clear that the students have faced various external problems like in some schools. 38.60% no. of students viewed that the science teachers have always insufficient knowledge of the content of the syllabus. 13.16% no. of students viewed that the science teachers are always not completed the science syllabus and 41.23% no. of students viewed that sometimes their science teachers not completed the science syllabus. Though 21.05% no. of students viewed that the science teachers arrange always and 18.86% no. of students viewed that their science teachers sometimes arrange extra classes for science subject in school but 60.09% no. of students viewed that their science teachers never arrange any extra class for science in school. Though 59.21% no. of students viewed that they have never faced the problem of scarcity of laboratory instruments, equipments and materials in their school but 40.79% no. of students viewed that they have always faced the problem of scarcity of laboratory instruments equipments and materials in their school. During the science class blackboard is used by the science teacher in almost all the schools. But 21.05% no. of students viewed that sometimes their science teachers have used the blackboard.

Fig No. 5

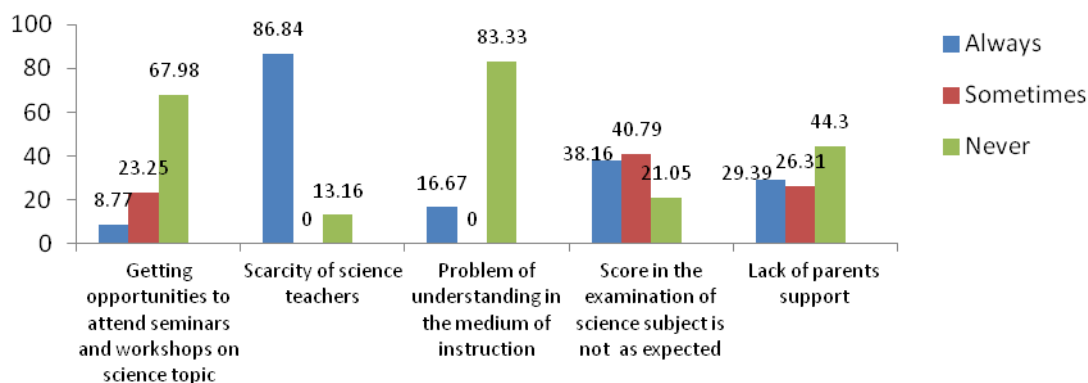
External problems faced by the students of Biswanath Chariali district of Assam



From the above table, it is clear that the students have faced various external problems in some school. In some school, 42.11% no. of students viewed that their science teacher always and 29.39% no. of students viewed that their science teacher sometimes not removed the doubts in science subject. 42.54% no. of students viewed that their science teacher always not operated the laboratory and 29.39% no. of students viewed that their science teacher sometimes not operated the laboratory. The majority of the school has no study material in science subject in their school. 82.02% of students viewed that the school has no study material in science subject in their school. In most of the school, the science teacher has not used the computer for teaching science subject. though, 22.81% no. of students view that the science teacher have always and 42.98% no. of students viewed that sometimes the science teachers have use computer for teaching science subject. But 34.21% no. of students viewed that the science teacher have never use the computer for teaching science subject. In some school, the teacher has not arranged any field trip or science excursion for the students. 34.65% no. students viewed that their science teachers always and 41.23% no. of students viewed that the science teachers sometimes arrange the field trip or science excursion for them. But 24.12% no. of students viewed that the science teachers never arrange any field trip or science excursion for the students.

Fig No. 6

External problems faced by the students of Biswanath Chariali district of Assam



From the above table, it is clear that the students have faced various problems. In almost all the schools, the students have not got any opportunities to attend seminars and workshops on science topic. 8.77% no. of students viewed that they have always, 23.25% no. students have sometimes but 67.98% no. of students viewed that they have never got any opportunities to attend seminars and workshops on science topics. Nowadays the students have suffered a big problem i.e. scarcity of science teachers in their school. Only 13.16% no. of students viewed that they have never faced the problem of scarcity of science teachers but 86.84% no. of students viewed that they have always faced the problem of scarcity of science teachers in their school. Some students faced a problem in understanding the medium of instruction in learning science subject in their respective schools at the secondary level. 83.33% no. students viewed that they have not faced a problem in understanding the medium of instruction in learning science subject, but 16.67% no. students viewed that they have faced the problem in understanding the medium of instruction in learning science subject. A number of students have faced a problem in their school in science subject i.e. their score in the examination of science subject is not as expected. 21.65% no. of students viewed that their score in the examination of science subject is as expected but 38.16% no. of students viewed that always their score in the examination of science subject is not as expected and 40.79% no. of students viewed that sometimes their score in the examination of science subject is not as expected. 44.30% no. of students viewed that they have never deprived of parent support. 29.39% no. of students viewed that they have always, 26.31% no. of students viewed that they have sometimes deprive of parent support.

Findings of the study:

1. From the above table, in Biswanath Chariali district, it is clear that the secondary school students have viewed that they have faced various internal problems in their school like some students feels that the scientific terms in the science textbook are difficult, diagrams and its descriptions in the science textbook is difficult to understand, content of the science syllabus is excessive, class load is heavy and some students are not interested to read their science textbook. They have faced the problem in completing the project work assigned by the science teacher, they have not interested to do homework given by the science teacher, demonstration of scientific experiments by the science teacher are not understandable by some students in school, some students are not interested in the science classes and some of them distracted from the science lesson while getting disinterested in the topic discussed.
2. The students of both urban and rural secondary students of Biswanath Chariali district faces lots of external problems such as science classes are not available in all the school. In some school classrooms are overcrowded so the students have faced the problem of learning science subject properly in their school. Science textbooks are almost available only a few schools, it is not available in all schools. In most of the school, reference books related to the science subject are not available in their school library. Though teacher handbooks are almost available in all the schools, but in some schools it is not available. Some science teacher has insufficient knowledge on the content of the syllabus, some teachers are not completed the science syllabus. In some school, for the slow learners teacher arrange some extra class for learning science subject in school but in some schools the teacher has not arrange any extra class for science subject in school. The students have also faced another problem i.e. the scarcity of laboratory instruments, equipments and materials in their school. During the science class, the blackboard is used by almost all the science teacher but in some schools, the science teacher has not used the blackboard always, sometimes they have used the blackboard in their science class. The science teachers have not removed the

doubts in science subject, not operated the laboratory for teaching science subject in their school. Majority of the school has no study material in science subject in their school. In most of the school, the science teacher has not use the computer for teaching science subject. The teacher has not arranged any field trip or science excursion for the students which are very essential in learning the science subject. The students have not got any opportunities to attend seminars and workshops on the science topic. Now a days the students have suffered a big problem i.e. scarcity of science teacher in their school. Some students have faced a problem in understanding the medium of instruction in their respective school at the secondary level. A number of students has faced a problem in their school in science subject i.e. their score in the examination of science subject is not as expected. Some students have not got any support from their parent.

Conclusion:

From the present study, it is clear that secondary school students have faced lots of problem in learning the science subject in the school. The teachers should try to solve all the problems of the students in learning science subject in school. The investigator had also face a lot of problems from the school administration. Some of the schools found to be not at all interested in science subject. There is also very minimum provision of organization of any program related to science that has been organized by the school administrations. Form the above discussion it is clear that In the field of education, though science subject occupies an important position in school curriculum, so the science teachers should give the importance to the science subject at secondary school and they should try to solve all the problems related to science subject which is faced by the secondary school students both internally and externally in their respective school. The science teachers, educators, school administration should give importance to solve all the problems of science curriculum at the secondary level of the students so that the learners can learn the science subject without any difficulties.

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