

## Chapter I

### INTRODUCTION

#### Background of the Study

Nepal is a multicultural, multiethnic, multilingual, multireligious nation. The CBS (central Bureau of Statistics of Nepal) provided data on 100 ethnic groups in the 2001 AD where it is provided data on 125 ethnic or caste group in 2011 AD census. There are many religions that are Hindu, Buddhist, Muslim and Christianity. Among them a Muslim is someone who follows or practices Islam, monotheistic Abrahamic religion. Muslims consider the Quran their holy book, to be the verbatim word of God as revealed to the Islamic people and messenger Muhammad.

According to Nepal National population census 2068 B.S. the total population of Muslims are 1164225. About 97% of the Muslim community live in the Terai region while the other three percent are found in the city of Kathmandu and the western hill area. Among the 49131 (18.98%) Muslims are live in Banke district. Some Muslims are involved in business but most of the Muslims are involved in agriculture. In Nepal 4.38% of Muslims are literate. It shows that Muslim literacy rate is very low.

This study about the "causes of low achievement of Muslim student in mathematics". Here achievement in mathematics is defined as basis of mathematics score obtained by the Muslim students in test taken by school. Another objective of this study is to know or find the mathematics learning environment of Muslim students at home. Mathematics is a universal part of human culture. Parents desire that their children climb the ladder of performance to as high a level as possible. For poor performance of students in school, many factors such as lack of facilities in the school, lack of teacher, indiscipline, unfavourable home environment. Home environment is found to be an important factor in determining academic performance of students. From the

beginning, parents have been the major person involved in raising children in every society. So family is recognized as important agent of the socialization. The home is the first place of learning for the child. So home has the important influence on the child's mathematics achievement. What the child learn at the home and how his family motivates him towards mathematics education contributes to the child's success in school. The home as an educational environment is considered as the social psychological determinants of learning.

Home environment of Muslim students also influence to the participation rate of learners, learners interest, teaching and learning environment at school, teacher and students relation. There are a lot of factor affecting student success in mathematics. According to Guithu and Mwangi, 2003; self-concept, motivation to learner are major factor that affect to the success in mathematics learning. Hert(2009) noted that social –personal motivation also influence the student's success in learning mathematics.

The important of mathematics is every day of life .Mathematics is a methodical application of matter. The skill of learning today are more important than knowledge, which is so readily available on internet .Studying mathematics not only will develop more and scientist but also produce more citizen who can learn and think creatively and critically. The illiterates of the 21 St century will not be those are literates who are literate on mathematics .This study is mainly concern with to know the cause of achievement of Muslim students in mathematics .After the study it helps to improve the literacy rate of Muslim community and improve the achievement of Muslim student in mathematics learning .

Mathematics education 's aims to enable people to develop positive attitude towards mathematics including confidence enjoyment and preference (Ministry of Education 200p.g ) effecting teaching of mathematics is one of the priority of government of the main issues of the

Nepal through quality math teacher . The main issues of Nepal in the field of education are increasing the result of mathematics in school level. The literacy rate of Muslim is very low in Nepal comparatively other community. Only the 61.8% male Muslim people and 26.8 %Muslim female are literate. The percentage of Muslim students obtaining school leaving certificate is 25.5 %of male and 12 % female (Statistic of Human Development). Various problem of Muslim society in Banke District are concerning poverty,education, health education, industrial growth and technology etc. In all these field mathematics has an important role. Without mathematics we cannot prepared young Muslim people to think creatively on new problem so the research tries to find out the causes of low achievement of Muslim students in learning mathematics and it should recognized to support national educational and mathematics education planner. After all it may helps to increase the literacy of Muslim students for studying and give more information about Muslim students for further study.

### **Statements of the Problem**

This research concerned with the causes of low achievements of Muslim students in mathematics learning at Basic level. It is also focused on to find mathematics learning environment of Muslim students at home.

Most of the research show that achievement of Muslim students in mathematics is low (Bhariti, 2003 and Acherry, 2001). During the teaching period I also found that most of the Muslim student's achievement in mathematics was low than other community's students.

In the result of 2074 B.S. of Nepal Rastriya Secondary school 54% students are passed in mathematics. But only16 students Muslim students were passed in the written exam out of 51 students that means only 31.4% students were passed in mathematics in basic level.Muslim students are educationally backward they have faced different problems in mathematics learning

then other ethnic students (Ansari,2011). The school annual result also show that the achievement of Muslim students in mathematics is very low then other students at basic level. As a researcher in my internal observation in the different school of Banke district, it showed that Muslim students are week in mathematic so I want to study on the causes of low achievements of Muslim students in mathematics learning in Banke District .This study also intended to address the following research questions:

- ) What are the main factors of low achievements in mathematics learning of Muslim students?
- ) How these factors abstract in mathematic learning?

### **Objectives of the Study**

The objectives of the study were as follows:

- ) To explore the causes of low achievements of Muslim students in mathematics learning.
- ) To find mathematics learning environment of Muslim students at home.

### **Significance of the Study**

Signification menace meaningful and important .it is also refers to meaning of something's. Muslim is the one of the important community. Without their development we cannot think about the development of Nepal. There are number of question which needs to be answered at this stage. Why Muslim students are weak in mathematics? What are the factors that affect to the achievement in mathematics? Significant of the study as follows:

- ) This study would find the cause of low achievements of Muslim students in mathematics which would be valuable things for teacher researcher,curriculum designer and other stake holder related to education.

- ) The finding of the present study would be significant to make new plan to improve the achievements of Muslim students.
- ) It may helps to increase the literacy rate of Muslim students.
- ) It may help parents to make plan for their children study.
- ) This study would help the school administrator and member of school management committee to run and manage their whole school system smoothly.

### **Delimitations of the Study**

The main propose of this study is to find the causes of low achievement of Muslim students towards mathematics. A research can not cover all the fields of the research so it has some delimitation. The study would have following delimitation:

- ) This study was limited only on basic level's students of grade VI,VII and VIII.
- ) This study was limited on only school of Banke District.
- ) This study was only limited in Baijanath GaunPalika of Banke.
- ) This study was based on Muslim students of public school.
- ) Six Muslim students had taken for this study by purposive method.

### **Definition of the Key Terms**

Defining important terms is essential to ensure a common understanding of key concepts. It enhances readers' understanding of important terms.

**Low achievements:** It refers to the score less than 50 percent in basic level examination.

**Basic level.** It refers to grade I to VIII

**Causes.** It refers to reason for and events or action that which produces or effect results

**Students.** Low mathematics achievements Muslim students of community school (Nepal Rastriya Secondary School) of grade I to VIII

**Literate.** A person who can learn and write

**Illiterate.** A person who cannot read and learn

**Community School.** Those school, which receive regular financial support from the government of Nepal

**Muslim.** Muslim is someone who follows or practices Islam, monotheistic abrahamic religion.

**School factors.** The factor which are associating with school environment are called school related factor. These factor such as; physical facility, classroom management, availability of teaching materials, teaching learning process, teacher performance etc are called school factors.

**Home factor.** The factor associated with home called home factor. In this study home factor indicated that the factor that affect the students achievements in mathematics at home such as; parents education or qualification, economic condition, gender discrimination etc. are called home factors.

**Social factor.** The factor that affected to the students achievements are called social factor. This factor are social culture, social discrimination, social tradition, social environments etc are the social factors.

## **Chapter II**

### **REVIEW OF RELATED LITERATURE**

Literature review is very essential factor for any type of research. According to Marriam (1998), describes "the literature review as an interpretation and synthesis of published work ". Literature review gives deep knowledge to study on any title of research and support to make a reliable research. The review should describe, summarize, evaluate and clarify the literature .In general the literature review should provide a context for the research, and justify the research, ensure the research hasn't been done before. The major purpose of the present study is exploring the cause of low achievement of Muslim students in mathematics. There are two types or literature review one is empirical literature and another is theoretical literature review.

#### **Empirical Review**

The empirical study of literature is an interdisciplinary field of research which includes the psychology, sociology and philosophy, the contextual study of literature and history of reading literacy text(Google). It is based on observation and measured phenomena and derives knowledge from actual experience rather than from theory or belief.

Pandey(2008), did studies on the topic "Causes of low achievements in mathematics". A case study with the objectives to find out the causes of low achievement in mathematics , to find out the ways of promoting mathematics achievements and to identify the strategies taken by school improving mathematics achievement. The researcher used case study design with qualitative approach. The researcher selected six students including 3/3 boys and girls according as different family background and performance of the examination in mathematics. He analyzed the interview schedules taken by Head teacher, Math teacher, selected students as well as their parents and class observation note in the basis of theoretical framework. From the analysis,

researcher found that discontinuity between home culture, school culture and home environment were the causes of low achievement.

K.C (2016), did studies on the topic "Analysis on the cause of low achievement in Mathematics at Secondary Schools" with the objectives to analyze the cause of low achievement in mathematics in secondary level students and to suggest remedial ways for high achievement in mathematics. The researcher used case study design with qualitative approach .Class room observation,semi structural interview and focus group discussion the main tools for data collection. The researcher selected four students from purposively selected school. From the data analysis researcher found that classroom fearful environment,low socio-economic status of children ,lack of foundation of teacher ,lake of responsibility, accountability ,lack of supervision of DEO,school supervisor and SMC were main causes of low achievement in mathematics .

Bhattari(2016) did study on "Causes of low achievement of Tharu students in mathematics". Objectives of this study are to explore the personal factor that bring low achievement in mathematics and to analyze the role of home and school related factor for low achievement in mathematics of Tharu students. In order to fulfil the objectives of the study, researcher was selected four Tharu students through purposive random sampling method. His study was based on the qualitative research approach. The design of the study was descriptive in nature. From the study the researcher found that Tharu parents were illiterate, language is one of the obstacles for Tharu students, use of teaching materials in mathematics was very less, Tharu students do not get encouragement and motivation at home and school. Most of the Ttharu community passed their time in unnecessary deeds like drinking alcohol playing cards which is the main cause of low achievements of tharu students in mathematics.



Ansari, (2011) did study on "A study on comparison of mathematics achievement of Madarsa and public primary school students in Nawalparasi district had been done by using quantitative research method. Objective of this study are to find the mathematics of primary madarasa and public school students and compare the mathematic achievement of madrasa and public school. The researcher selected only madrasa and public school purposively. The sample was choosing purposively 200 students from madrasa and public school of grade three from Nawalparasi district. The researcher used teacher questionnaire, guardians from and three instruments achievement test paper. The time given for achievements test was only forty five minutes. The researcher also compared the achievement of urban and rural Madrasa students and also the achievement of girls and boy of Madarsa students. The finding of this study is there is no difference between mathematics mean achievement of Madarsa girls and public school girls was higher than the score of Madarsa's girls.

Dahal(2011), did research on "A study on cause of low achievements in mathematics of Magar students ". The design of his researcher was qualitative on which he used design of the conceptual structure strategy of the logical systematic plan and direction of research. The main purpose of the study was explore the cause that brings low achievements in mathematics of Magar students .The researcher had selected purposively one secondary school from Kaski district And he selected 4 magar students from selected school to study. The researcher selected student on the basis of mathematics score of pervious exam, gender, socio-economic background. The parents of case study , Head teacher, Mathematics teacher were selected as the respondents of the parent's education, education, occupation, learning opportunity, at home, culture custom, teaching method, langue and main cause of low achievement of mage students in mathematics.

Shafiq, M. Naeep, (2013) study on "Gender Gaps in Mathematics achievements in Muslim Countries. Using quartile regression analysis, this study examine gender gaps in mathematics, science, and reading in Ajarbijan, Indonesia, Jordan, Quater and Tunisia among 15 years students. The analysis shows that the achievement of boys is better than girls. The main factor that affected to mathematics achievements are social characteristic and economic condition of the family.

Ker, H. W., (2016) did an exploratory Comparative investigation of Singapore and the USA students on "The Impact of Students, Teacher and School-Level Factor on Mathematics achievements". Report from the trends in international mathematics and Science Study (TIMSS) consistently show that there is a substantial gap in average mathematics achievement between Singapore and the USA. This study conducts an exploratory comparative investigation on the multilevel factor influencing the mathematics achievement of students from these two countries. A conceptual framework together with an integrated model is purposed for the analysis. The TIMSS 2011 eight grade mathematics data were chosen for the study. Result reveal that the common features influence mathematics achievement for the students of both countries are student self-confidence, school composition by the students, school composition by students background and teacher confidence in teaching mathematics. The cause of the different effects of American students mathematics achievements is more associated with resource, whereas the effect of Singaporean student's mathematics achievement are more attitudes, expectation and motivation. The major elements that effected to Singapore students are the teacher level.

Lamichhane, T. (2015) did his research entitled "Participation of Tharu student in mathematic learning" with the objectives to explore the cause of low participation of the Tharu students in learning mathematics and analyze the factor that effect on participation of the Tharu

students in learning mathematics at secondary level. And he used qualitative research method in which he choose case study method. The respondents of the study were Tharu students, their parents and mathematics teacher who were selected purposively .The total number of case respondents was five according to gender and cast ethnicity .After the research researcher find out that the participation of the students in mathematics is lower than other students because Tharu students are not free to get education rather than other students .There is low participation of Tharu students at secondary level education due to social environment poor economic condition, illiterate parents and social custom.

Bhattarai, (2011) studied" mathematics Achievement and its causal factors of secondary level Sharpa students in Sankhumasava district" The purposes of the study are to compare the achievement of Sherpa and non Sherpa students in mathematics and explore the affecting factors that determines the achievements of Sherpa students in mathematics. The research used mixed method of research. Sixty Sherpa students of five secondary public school their head teacher and math teacher, low achiever Sherpa students and their parents were choose for study. Achievement test, questionnaire and interview schedule were main tools for the data collection. Process and social constructivism theory was applied as the theoretical framework. The study concluded that the achievement of Sherpa students in mathematics was lower than that of non Sharpa students .Similarly there were many causal factors for their low achievement which included home related low achievement which included home related school related and students related factors.

Regmi, (2004) conducted research on the topic" A study of achievement in mathematics of Gurung and Kumal student at primary level" conducted in public schools of Tanahu district. The searcher used survey design. The main purpose of researcher was "Study and compare the

achievement of Gurung and Kumal students in mathematics". The researcher used survey design .The researcher selected 128 students from class eight in which sixty four students were Gurung.The mean score of the Gurung students was compare with the main score of Kumal students .The mean score was compared with Gurung students between speaking mother tongue and non –mother tongue and also the mean score of Kumal students between speaking mother langue and non –mother langue was compared. At least the researcher find that the mean achievement of Kuma lstudents spiking non mother tongue is low then the mean achievement of gurung students non mother tongue is significantly different then the speaking mother language.

Darlami(2016),did research on "Determinant factor of low achievements in compulsory Mathematics ".The purpose of this research was to identify and understand the determinant factor of low achievements in compulsory mathematics. This research design was mix method in qualitative and quantitative nature. The researcher used stratified sampling method to select the school and students in where sample school were 6 and students were 110. Qualitative data were taken from mathematics achievement test and questionnaire .To identify the determinants factor arise 58 students in questionnaire. Qualitative data were described by triangulation analysis through interview. Mean score, standard deviation, variance, t-test, and chi-square test were used to analyze data. 5% level of significant. After analysis and interpretation of obtained data ,finding indicated that students factor ,teacher factor, practice of students, pre-knowledge, and skill of students ,home environment factor play a vital role in low achievement .Which factor were reduce from the government's police then maybe increase the mathematics achievement.

Since from above review, there are many research on study of different ethnic group, causes of low achievement in mathematics , factor that affecting to learning mathematics, attitude of ethic group students towards the mathematics and studies on achievement of public

and Madarsa's students. From which the researcher has found that there is many factor that affecting the achievement of mathematics learning .Such as school environment, home environment, teacher qualification, culture and custom, physical facility, motivation . Most of the research on Muslim students, I found that the participation of Muslim students is very low and achievement of Muslim students is low in mathematics. But no research has been done to find causes of low achievement in mathematics. It is very important to know the cause of low participation of Muslim students and causes of low achievement in mathematics learning of Muslim students. During a literature review, I found less numbers of literatures which are related to Muslim students and Muslim community. So I reviewed other literatures which are related to causes of low achievement of students in mathematics learning.

### **Theoretical Review**

There are so many theories which can be used to understand the learning process and development .Theories are formulated to explain, predict and understand phenomena. "A theoretical definition is an abstract concept that define a term in an academic discipline without a falsifiable operational definition, conceptual definition assume both knowledge and acceptance of the theories (Google)". There are so many learning theories about learning and development of children such as cognitive, behaviourist, humanist and social constructivism. In which constructivism is one of the theories to analyze and interpret the data of mathematics or resolve the problems. Constructivism believes that learning and development are collaborative active and children are cognitively developed in the context of socialization and education.

### **Constructivism**

Constructivism is a new approach that claims that human are better able to understand and the information they have constructed by themselves. According to constructivist theories

learning is a social advancement that involves language, real word situations and interaction and considered to be central in the learning process.

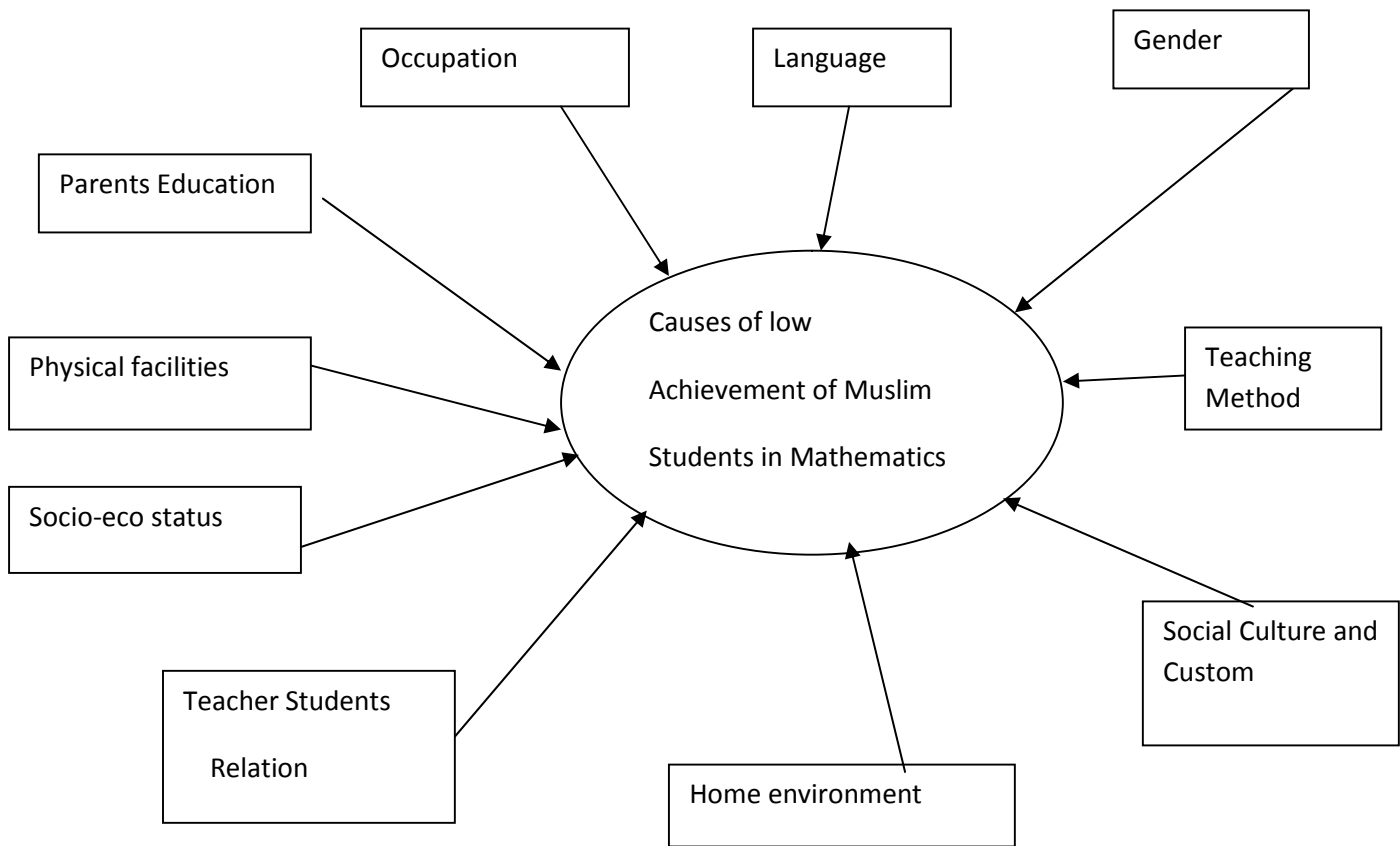
This study mainly related with the vygotskey theory of constructivism approach to remaining mathematics. Vegotskey(1978) states every function in the child cultural developments appear twice first on the social level later on the individual level. The main idea of Veygotsky's theory is that human learning process a specific social nature and is part of a process by which children grow in to the intellectual life of those around them. Learning environment promote the learner to gather, filter and analyze and reflect on the information provided and to comment on this knowledge. So it is assumed that learner have to construct their own knowledge individually. Each learner has a tool kit of concepts and skill with which her or she must construct knowledge to solve problems present by the environment. The role of community, other learners and teacher are to provide the settings, pose the challenges and offer the support that will encourage mathematical construction .The central principal of this approach are that learner can only make sense of new situation in terms of their existing understanding. Boethel and Dimock (2000) outline that constructivist learning theory emphasizes six assumption of constructivism:

- ) Learning is an adaptive active activity
- ) Learning is an situated
- ) Knowledge is constructed by the learner
- ) Experience and prior understanding play a role in learning
- ) There is resistance to change
- ) Social interaction play role in learning

From the above empirical and theoretical literature review we construct conceptual framework which is given below to explain with the objectives of the research.

### **Conceptual Framework**

Conceptual framework is a 'rudder' of that will guide us towards realizing the objectives of our study. A conceptual framework represents the researcher's synthesis of literature on how to explain a phenomenon (Darlami,2010). It maps out the action required in the course of the study given his previous knowledge of other researcher point of view and his observation on the subject of researcher. " The conceptual frame work sets the stage for the presentation of the particular research question drives the investigation being reported based on the problem statement of thesis present the context and the issues that causes the researcher to the study"(McGaghieeta, 2001). It has already described theoretical literature that following theoretical models was constructed for the cause of Muslim students in mathematics learning which a frame work for this study. So some factor affecting achievements of Muslim are given below:



Source. Bhattarai, A. (2011)

Fig. Framework for cause of low achievement in mathematics of Muslim students

There are some causes that bring low achievements in mathematics of Muslim students. House related factor play the vital role in learning mathematics. Parent's education, learning environment at home, culture and customs effect to get the result. Another factor that effect to learning mathematics is students related factor. Students prior knowledge, Gender, students interest are the major factor that effect to learning mathematics. Among them interest of learner another big factor that effect to learning mathematics.

I take four major variable (factor) related to numbers of students, teaching method, language, teacher student's relation and physical facility which are shown in the above framework.



## **Chapter III**

### **METHODS AND PROCEDURES**

The process used to collect information and data for the purpose of making business decision is called method. This chapter describe how the present study was conduct in course of answering the research question and achieved the objectives. It described the design of the study, population of the study, selection of school, methods of data collection, data analysis and interpretation of the result.

#### **Design of the Study**

The design of my study was case study(D.Adms,2000). A case study is an in depth study of a particular situation. It is a method used to narrow down a very broad field of research in to one easily research (Martyn shuttleworth).Research design is the conceptual structure strategy of the logical systematic plan and direction of research (Dhal; 2011). It is important to collect the data and analyze it to researcher. This research was based on case study being of qualitative approach. The case of this research was low achievement Muslim students in mathematics at school level in Banke District.

#### **Research Area of the Study**

The research area of the study was consist all students of basic level of community school of Baijanath Gauwn Palica of Banke District during the academic year 2075 B.S.

#### **Respondent of the Study**

Respondent means a portion of the population which represents all the population of the study. The researcher had selected purposively Sheri Nepal Rastiya Secondary School Baijanath, Banke. I had also selected five students purposively for interview who had got low achievement in mathematics in the previous year in final examination 2074. Other respondent of this study was selected student's parents, mathematics teacher and Head teacher of school. A purposive

sampling means a non-probability sample that is selected based on characteristics of the population and the objectives of the study.

### **Tools for Data Collection**

There are many tools for the qualitative research to get the information (data) from the people. On the basis of data collection technique we can study and analyzed every aspect of the study. To get the information from the people about their experience, ideas and believes. The tools for the data collection of my study were observation form, interviews schedule, school document

**Observation form** Observation form was one of the tools of my research. I observed classroom activities, home and school environments for learning mathematics and recorded document of the Muslim students who are selected on my study. The researcher developed observation form with the advice of the supervisor and researcher observed teacher attitude, student's attitude towards learning mathematics, behaviour and motivation of the parents, location of the school, classroom environments and facilities was provided by school on the basis of observation form and note it on note book (Creswell,J.2009).I observed the class room and home environment regularly two weeks to get the information of the students.

**Interview schedule.** Interview schedule was used to collect the data from teacher, guardians, and students about the experience. On the basis of the objectives of the study the researcher developed the interview schedule under the various guidelines in unstructured form. The interview schedule was developed on the basis of conceptual framework. This schedule was developed for the students, math teacher, parents and head teacher(Creswell,J.2009).

**School document.** The researcher had collect data through the observation, interview and focus group discussion. Also the researcher studied school documents mark ledger of previous grade that had got low achievement Muslim students in mathematics, attendance register of students and teacher and relevant records of students.

## **Data Collection Procedure**

Data collection procedure is a technique to collect data to fulfil the research's objectives. For this purpose the researcher took permission letter from Department of Education TU Kirtipur. After selecting the sample school with purposive method, the researcher went to selected school for collect the data. The researcher had asked for consent (permission) to the Head teacher when he /she agreed to allow the study to be carrying out then I was started the research.

To collect the data class observation was done regularly for 15 days teaching activities. I observed, listen their interaction with their friends and with their teacher on the basis of observation form. Class room behaviour and their interest was carefully observed and notes every day. With the help of semi-structured interview was taken with teacher and focus Muslim students and parents. I had carefully listened and notes properly.

## **Data Analysis and Interpretation Procedure**

This study is concerned with causes of low achievement of Muslim students in learning mathematics. In this study, analysis of data was gained and analysed by descriptive and interpretive method. Primary data was organized according to individual responded on interview, observation and documents analysis,

In qualitative research information is also synthesized through different forms of theories and literature. The collected data was categorized according to the conceptual understanding and the theme of my study was developed. The similar terms of respondents were collected together and explained in their perspective. To maintain the validity of the result of the study cross match and triangulation method was adopted(Cresswell,2012). At last the researcher had analysed and interpreted the data by using the conceptual framework which is developed in the literature review.

## **Chapter IV**

### **ANALYSIS AND INTERPRETATION**

This chapter deals with the analysis and interpretation of the collected information derived from the case study. This was a qualitative study. The focus of this study was to explore the causes of low achievement of Muslim students in mathematics and to find the mathematics learning environment of Muslim students at home. The researcher used tools for this study such as interview schedule of students(Appendix-I), parents (Appendix-II), head teacher (Appendix-III),math teacher(Appendix-IV) and observation form of participation in class(Appendix-V).Also the researcher had observed mathematics class, case students behaviour, activities and interaction with mathematics teacher in research. Each activities and behaviour of the students and teacher were carefully observed and noted.The direct interview was taken to the focused students, their parents, math teacher and head teacher. The responses of the respondents during face to face interview were carefully noted. The student's home environment and behaviour was evaluated by the researcher with the help of interview schedule. The researcher had also noted the case student's pre-class documents, their regularity, from school document.

The descriptive method is mainly used in this research .the researcher has attempted to calculate the study by describing and analyzing the information acquired in the research process. The collective information was analysed and described in their perspective under the following headings:

- Introduction of sample school
- Introduction of case students
- Learning environments of Muslim students at home and at school

## **Introduction of Sample School**

Shree Nepal Rastriya Secondary School is located at BaijanathGaunpalika -5, Banke district. It was established in 2064 B.S. The school stands within the narrow area and situated 6b kilometres west- south from Kohalpur city. The graduates of this school had entered into different professions. Most of the graduates are involve in agriculture.

According to the head teacher, It was established with the great effort of local people specially Muslim and Tharu people with little fund of government. At present there are 14 teachers including head teacher and 420 students in this school. Among them 51 students are Muslim.

## **School Community**

Shree Nepal Rastriya Secondary school is situated in BaijanathGauanpalika -5,Banke . All of the communities around school were mix communities. The students of Muslim community were less numbers than that of other community .More than 50% students are belongs to Tharu communities. People of different cast live around the school area they are Brahman, Chhetri, Kami and Magar. Braman are in minority and Tharu are in majority.

The school community was diverse in nature, language, cast, ethnicity, culture and different value and custom as well as multi class in economic composition. Most of the Muslim parents send their children to the school very late because they were educationally as well as economically back ward. Most of the parents of the school are involved in agriculture especially Muslim parents. Only list numbers of parents are involve in business. There are many private schools which are better than this school. Rich and educated parents sent their children to the private school. The students from economically week were many in number then the students of rich and educated background.

The following responses were obtained when asked what is your view towards this school.

*"We can admit our children in this school because it is a government school so we did not need to pay any fee. The private school are beyond our access because they are very expensive for us we did not afford the fee."*

-Parents' view

### **Case Respondent A**

Sajidhusansalmani was thirteen years boy studying at grade VII. He lives in Gruwagaun - 5, Banke. It takes 5 minutes to reach in school from his home. There were eight family members in his house and they all believed in Muslim religion. They only speak Urdu language with his family member as well as he sometimes speak Tharu and Nepali language in school. His interest subject was science. He was known as disciplined and very calm boy. He did all his work himself .Even in his village he has left the mark as a good boy.

His parents were uneducated. Economically, it is not hard to maintain the family .but his mother was not able to do any physical work. Now his father also did little business. Most of the time his father was spends in field. His one sister is studying in grade three in the same school.

While observing the mathematics class, the researcher saw him with regular homework but he is not active in the class works. According to his mathematics teacher some time he comes without homework. He had hardly asked the question in mathematics class and also less participated in teaching activities. When the researcher asked why you did not come with your homework. He replied "I feel mathematics is very hard so i did not complete the homework ". From that we can assume that he was interested in other physical activity rather than in academic activities.

When, I asked about his educational status. The mathematics teacher gives his views as:

*"He is disciplined students but his position has not satisfactory. He has no good environment to study in the house and there is no guardian in home who helps him in his study.*

- Math Teacher

### **Case Respondent B**

AltabNau was thirteen years old boy studying at grade VI. He lives in Gruwagun-5 Banke. He has nine family members in his family. The distance between school and his house is 2 km. he goes to school by foot. His economic condition is very poor. He said his father has not managed the required teaching materials for his study. His family are farmer and he help to his family on their work. Study is important for all in his opinion. But he said *"I did not liked to go school because when we are unable to solve any problem and did not completed the homework, our teacher punished us "*. They followed the Muslim religion and speak Urdu language at home. In the school only Nepali language was spoken. He said that due to the language he did not understand teacher and unable to asked any questions to their teacher.

While observing the mathematics class, the researcher saw him irregular in class and also irregular in homework. He had not asked any question in mathematics class. According to the mathematics teacher casually he comes without homework. He did not asked any question in mathematics class.

## Respondent C

Hasinaidrishi was 13 years girl studying at grade VII. She lives in Baijanath Gaunpalika-5 Gruawan,Banke. It takes eight to ten minutes to reach in school from her home. There are seven family members in her house and they all spoke Urdu language with her family, relatives and friends. Her interest subject was science in school. Hasina's educational standard was decreased in comparison with her previous class. Her father was educated but he did not give any time for their study. He did not give priority to complete their children's homework. Her parents are farmer so they are busy in the field. Her one brother was also studying in the same school.

While the researcher observing the mathematics class, the researcher saw her with regular homework. According to her mathematics teacher she is discipline and good students but sometimes she comes without home work. She did not participated in group discussion .When the researcher asked why you did not interact with teacher and other friends. She replied "*She careless about interaction with their teacher and friends because she fell shyness in mathematics and there is no Muslim teacher in school so I hesitate to interact with my teacher, friends also discriminate to us on the religion. Other religion friends did not sited with us and they did not included muslim students on their group*".

*"We are farmer so we work out of the home. We are unable to provided sufficient time for their education. We are economically week but I will teach her less until complete SEE."*

- Father

Hasin has to do the house work rather than the study because in her religion girls are bounded by culture and custom. Her parents can't afford tuition fee and all required materials for the study.



## **Respondent D**

Buggenjaga was thirteen years girl study in grade VII. In her family there were seven members. Her parents are farmer. Their parents are worked in the field. Buggen helped her parents in field as well as household work. She wants to be a nurse. To learn with her friends was her main hobby and her interested subject was science. She did not have good family environments to study. Her father was also busy in social work. He did not give sufficient time to their children for their study. She fell mathematics is boring subject because she did not understand the mathematical problem. When the researcher asked the question, Why you fell mathematics is boring subject? She replied " I fell mathematics is boring subject because our teacher did not give attention to us. When I asked any question to math teacher he did not give answer clearly and blamed us it is you weakness. When I request him help to solve the mathematical question he ignored to me".

*"We have not sufficient education qualification to help our children for their study. School environment is also not good. There are not sufficient teaching materials. Teachers are also not qualified in school".*

-Father

*"Most of the Muslim students comes school without home worked. They did not bring the required minimum teaching materials .When we inform about this they did not response."*

- Head teacher

While the researcher observed the mathematics class, researcher showed she had never completed her homework. When teacher asked the question related to that day topic she was enabled to reply the answer. She hardly asked the question to mathematics class but she interacted with their Muslim friends.

## **Respondent E**

Apsana Salami was twelve years girl of grade six. She had been studying in Nepal Rastiya secondary School. Her house situated in Baijanath gaunpalika-5 gruwagaun ,Banke. It takes teen minutes to reach in school from her home. All member of her house followed Muslim religion also spoke Urdu language. There were seven members in her family. Her father was barber. Her mother was house wife she worked in home. She is very discipline student in school. Her class roll number was four and her interested subject was Science.

While observing the mathematics class, the researcher saw her with regular homework. According to the math teacher she is good and discipline student. She did not participate in the class discussion. When the researcher asked the question why you did not interact with your teacher and did not ask any question to your math teacher. She replied "Our teacher gives less priority to Muslim students. When I asked any question to math teacher he replied the answer in Nepali language I did not understand properly and I fell boring to ask any question to teacher".

*"There are so many students from different cast and language. I did not understand all language so I taught them in Nepali language. By the cause of language it was so difficult to teach them."*

- Math teacher

From the introduction of all the respondent I found that most of the muslim students parents are farmer. Muslim students did not have enough time to study because they are forced to help their parents works. Language was also one of the common factor that influence in their achievements. Most of the muslim students did not complete their home works because they are unable to solve all mathematics problems and nobody can help them to complete the home work.

## **Learning Environment of Muslim Students at School**

Environment is the major component of mathematics learning. It is foundation of learning .It includes both school and home environment which plays the vital role to provide atmosphere to progress in study.

**Home environment.** Home is regarded as the first school to each child. Learning is the process of absorbing new information in a meaningful way and putting it to use home environment. Student's learning success is enhanced when both parents and teachers state their goals for student's performance.

The students learn how to behave other how cooperate to each other etc in the home. It is assumed that the success was positively impacted by home learning opportunities such as parents reading to their children,resources, encouraging play with letters and numbers parent'seducation,Socio-economic condition of family and so on.

*When I observed the students home I show most of the students were busy to help their parent in their house work. There were not enough educational materials in their home. Most of the students did not have separate room for learning. Students parents also did not pay much attention to their studies.*

When asked the question to students do you get sufficient time and learning materials to learn mathematic? Most of the students replied that:

*"Our parents forced us to help them when we learn and also they did not brought teaching materials properly and suggested us to left the class when working at home".*

-Students View

But respondent D answered that *"I am free from the house work. My parents' does not force to do work".*

The above view indicates that most of the Muslim students do not get opportunity to learn mathematics also they did not have learning materials to learn mathematics. Most of the parents said that

*"We are poor so we did not able to brought learning materials in a time. It is our compulsion to get help from our children on house work because we are poor .We did not able to pay money for worker".*

The above view of students, parents and my observation indicates that due to poor economics condition they did not have any more physical facilities at home. Most of the Muslims are farmer so they are forced to help their parents in their work. So they did not have sufficient time to learn mathematics at home. But most of the researcher emphasized mathematics need more time to get good achievement cause of low achievement of Muslim students in mathematics are:

- ) They cannot attain the class regular
- ) They did not have enough learning materials
- ) They attain the class without homework
- ) They does not afford extra class to improve in mathematics
- ) The children of Muslim students became shy to as any question about the problem.

From all the parents, students view and my observation it is clear that the Muslim student have low achievement in mathematics due to lack of time to learn mathematics. They have not enough facilities to learn at home. Bhattari(2016) showed that home is the factor that effect to the achievements of Tharu students. The constructivism theory also elaborated that the opportunity to learn mathematics at home play vital role in mathematics achievement. So

insufficient learning opportunity at home was the main factor that creating proper learning environment at home.

**Parent's Educations.** The students pass their most of the time in the home with their parents .the children learn many thing from their parents the parents education have an important influence on the personality of child .educate parents can better understand the educational needs and their children's aptitude .They can help their early education which affects their proficiency in their achievement there is not only the role teacher in learning process parents educations and socio economic factor are also play the vital role in students achievement most of the Muslim people of parental generation are uneducated and their economic condition is low .they could not fulfil the need of the family.Due to the lack of knowledge they are engaged in farming and household works so due to thepoverty they could not fulfil the need of the family as well as needed of their children.

When I asked about their parents' education the following response was obtained.

*"Our parents are illiterate they could not read and write so our parents cannot provide guidance at home for mathematics learning".*

- Students

Also most of the parents said that;

*"We are illiterate so we can't help them to learn. We did not know how to teach our children".*

- Parents

*"Most of the Muslim parents are illiterate so they did not able to give the guidance to them for learning mathematics their children do not complete the home work regularly. They did not know the important of education so they did not give priorities to education"*

- Teacher

But respondent D said that

*"My Uncle helps me to learn the mathematics. When I fell difficulties in learning mathematics I asked to my uncle"*

- Students

From the above view the researcher found that most of the Muslim students' achievement was low due to illiterate's parents. The parents are not guiding them in house and did not able to guide give guidance to solve the mathematics problem at home.

The above view also show Muslim students did not do homework regularly in mathematics due to lack of sufficient time at home for mathematics practice and lack of guidance of parents, their pre-prior studies on the same topic become weak in mathematics. The constructivism theory elaborates that the students had high achievement in mathematics if there is good education guidance. Dahal(2011) also show that Parent's education is one of the important factor that effect to the students achievements in mathematics. Finally we can conclude that the relationship between parent's education and mathematics achievement of students was positive.

**Socio-economic status.** According to the 14<sup>th</sup> plan of Nepal 21.6% of Nepalese people are living below the line of poverty.

Most of the Janajati are below the line of poverty and among them Muslim is of the caste who live under the poverty whose literacy rate is also very low in the context of there is no fee to pay for education in the government school out due to the poverty Muslim parents are not able to manage the necessary thing for their children like copy pen books bag dress others required teaching materials which are very necessary things to students the Muslim poor parents cannot

managed all these necessary things to their children and this factor affects in the mathematics learning process about this matter teacher.

In my observation *"Most of the Muslim parents are farmer. Their economic status is not good. Muslim community was dominated by other community so their social status is also not good. Most of the Muslim family suffering from the poverty they have not enough money to invest to their children's studies. They struggle to fulfil their basic needs. Due to the lack of money they are far from the access of library"*

When ask about socio-economic status most of the parents gave their view in this ways.

*"We are economically backward so we are unable to manage learning materials which are very necessary. We are fitting to fulfil our basic need like food, cloth, basic health service then how w mange the money for our children stud"*

When I ask question about socio-economic status and facilities that provided by government to Muslim students. Head teacher replied that:

*"The government has provided facilities to the Muslim student in the school these facilities are not sufficient for the Muslim. It seems that the social awareness program should be conducted to increase the education achievement of Muslim students".*

-Head Teacher

The views of head teacher and Muslim parents it is show that Muslim are poor they did not able to manage the money for their children education. Facility that provide by government was not sufficient for the Muslim children education.

From above view of Muslim parents, head teacher and my observation we can conclude that the cause of low education achievement of Muslim student was low socio economic status as well as lack of awareness. Most of the Muslim students' parents are farmer so their income was not sufficient to invest in the education. On the basis of wealth other cast's people dominate to

them. Due to the domination, Muslim students did not interact to other society's students.

According to the constructivism, high socio-economic condition parents' children are get more opportunity to learn the mathematic which was directly affected to the student's achievement. So Socio-economic status was the important factors that influence the achievement of Muslim students.

**Occupation.** Parents are the primary person involved in the raising children every society children are socialized and become a productive citizen whenever parent's posses the resources and skills apply them efficiently and joyfully for the upbringing of their children.

*In the observation it is show that most of the Muslim parents are farmer they forced their children to help them in their work in field as well as housework also culturally they cannot give the priority to the education .They think education is far from their status and they cannot afford for it and income from the agriculture sector it is not enough to invest in education.*

When I asked about occupation of the parents and their involvement, most of the students sad that:

*"Our parents forced us to help them in their field work. Due to the presser of the work we did not able to focus on our education. I think if we are free from work we would be improve our learning/ education"*

-Student

*"Due to the lack of money we cannot able to buy necessary teaching material for their children. We are farmer so we have no sufficient money to bring the worker to work in the field so we are constraint"*

-Parents views



From the above views of parents and students we can say that due to the poor economic condition and pressure of field work, students did not able to concentrate on their learning and occupation of parents directly affect to their parents Darlami(2011).

From the above all view indicates that due to the low economic condition of parents they force to work with them we can easily say that Muslim parents give more priority to their occupation rather than mathematic learning it is their compels not a interest. According to the constructivism theory the backward cultural occupation is the one of the cause of low achievement in mathematic. So we conclude that occupation is one of the most important factor that affect to the students achievements.

**Culture and Customs.** Traditional cultural practices reflect the value and beliefs held by members of community for periods spanning generation .every social growing in the world has specific traditional culture practices and beliefs and culture is the bas of the human civilization which shape the psyche of the individual and the society. Muslim is a strict religion then others religion which is not related to other religion .their own faith values culture and norms and tradition are available in their own society. In the Muslim society girls hesitating to with other students and teacher because of their culture custom social belief and value most of the Muslim family cannot give the Muslim family cannot give the permission to interact with male person so due to the culture and customs they cannot tell their mathematics problem to the math teacher.

The people of these community had not enough land to work but they adopt the agriculture in the context of Nepal farmer are not able to earn money from agriculture to survive their daily life. It is very hard to sustain the life by adopting the agriculture due to the poverty they are dominated by other community.

*The researcher found that the culture of Muslim at home and school were unmatched. So they speaks Urdu language at home and Nepali language is necessary at school, Muslim students felt difficulty to asking question to their teacher because their culture bounded them most of the non-Muslim student did not like to made a Muslim friends and they did not like to interact with Muslim students .Muslim student dominated by their friends and also teacher in the Muslim culture girls are not allowed to speak with others person this culture discourage to learn in school.*

The following response were obtained when asked how does culture affect the children's learning

*"Our culture thinking is that we have no permission to interact other male persons girls are bounded by culture and custom"*

- Students

*"We are poor and we have not more money to teach our children for further study so that it is better to drop out the school education"*

- Parents

*"Due to the Language our teacher ignore to interact with us"*

- Students

*"Muslim parents are admitted their son on private school but not girls they do not treat equality their son and daughter"*

- Head Teacher

From the above views of students, parents and teacher views most of the Muslim girls fell hesitation to interact to their non Muslim and their teacher due to the language and their culture.

Muslim culture did not allow interacting to other person to the girl. So Muslim culture did not give freedom to discussion it make passive to students in teaching learning activities

Finally, from the above view it indicated that Muslim students less interact with their teacher and their friends due to hesitation that was but by society traditional values cultures customs social belief due to freedoms due to language strictness of the religion farness of their parents and many other reason.

**Physical facilities provided by School.** Shree Nepal Rastriya secondary school is situated in baijanath gaunpalika -5, Banke. From the academic perspective it is one of the medium government schools of Baijnath.

Students come from the different place and belongs to different cast like Bramins,Chhetri,Dalit,Tharu and Muslim.

In the observation I found that,

*The area of the school was bounded by wire. The school has sufficient classroom to teach the students form grade one to ten but there is no library room, particle lab, store room, staff room in this school. There are sufficient desk bench but the size of bench was not suitable to the all students, white board was also very small which not comfort to teach the mathematics. There was playground in front of school; the facility of toilet was available to all students and also the clean drinking water managed by the school management committeeto students.*

The following view was obtained about the learning material available on school

*"The school has not enough teaching materials for mathematics specially our furniture are not student friendly"*

-Head teacher

*"We are not satisfied because our math teacher did not teach used teaching materials.*

*There is no any teaching and playing material"*

- Students

From the views of students and head teacher it clear that there was not enough physical facility. Most of the research shows that good physical facilities improve the achievement of the student. Good physical facilities of the school make good learning environment to learning.

Finally, from allthe above views and my observation indicated that due to the lack of physical facility teaching was not going properly and students are also not satisfied by the facility that provided by the school which is also lack of low achievement in mathematic constructivism theory encompasses lack of physical facility is also causes of low achievement. Physical facility of the school directly effect to the students achievement Bhattari(2016).

**Teacher Students Relation.**As a teacher it is necessary to motivate students and help them recognize their strength for students and have a big impact on helpingshape create support and establish students strengths goals and knowledge .the teacher plays a vital role to create environment that support effective teaching in the classroom the organization of the learning space learner involvement and discipline in the class room are important factor influencing academic achievement teacher support refers to students beliefs that their teacher care about them value them and establish personal relationship with them. The positive associations between perception of teacher supports students adoptive motivational beliefs.

The teacher and students relation is one of the relation which happens in school teacher students' relation should be respectful and cooperative to each other. The students should be faithful and keen interested to learn from things from the teacher which keeps relations strength

forever teacher should be communicate more effectively with students as well as with overall perception of their students strengths and weaknesses.

Also student learning can be positively impacted by the encouragement of teacher to their students if teacher believe in their students their students begin to believe in themselves.

The respondents have following opinion to the question why Muslim students are weak in mathematics.

*"Muslim students presences without homework and they do not keep interest in mathematics"*

- Teacher

*"The teacher does not use teaching materials only solve the question on the white board"*

- Student

According to the constructivism theory the teacher and students' relation should be good to progress in mathematics but above view show that the relation between students and teacher is not so good students are not satisfied with the teacher and decreasing the progress.

**Language.**Language is a means of communication it is the most essential affected factor of the low achievement of Muslim students in learning mathematics .Nepal is a multilingual country one hundred twenty three languages are spoken in all over the country. in the content of government school of Nepal, Nepali language is the medium of instruction which is barriers on academic achievement to Muslim students Urdu is the first language of Muslim student but they are imposed to speak Nepali language in the class room and while interacting with teacher and their friends because of this cause the relation between teacher and Muslim students and their friends is not good.

In class observation I show that

*The teacher entered in the classroom and all the students were stood up and said good morning sir. The teacher told them sit down .when the teacher started to teach mathematics, he reviewed the previous lesson of statics. After that he wrote that days problem on the board in Nepali language and solve it . Teacher explained by using Nepali langue. Muslim students asked some question in Urdu language but teacher replied by using Nepali. But Muslim students did look not satisfy.*

When I interview with teacher he said about language, he said that:

*"Most of the Muslim students speak mixed language which is very difficult to understand they fell hesitating to asking question so due to the less interaction their achievement in mathematics is low"*

- Teacher

From the above view of teacher, most of the Muslim students are not understand the Nepali language. Due to the language teacher fell to difficulties to teach Muslim.

When I ask to Muslim students why do you not interact with your teacher in class they replied "*I did not understand clearly when teacher teach us in Nepali because I can't understand Nepali language properly .When we ask any question to teacher in our mother language the teacher did not understand our language so we don't understand simple idea about mathematics"*

Also most of the students said that, "We speak Urdu language at home frequently but we do not use Nepali. So we have no opportunity and environment to learn Nepali language at home but in school teacher always teach us in Nepali or Tharu language. If teacher thought us in Urdu language it would be easier for us to understand the mathematics problems"

*"I understand the Nepali language but I feel very difficult to understand the mathematical problem. We understand clearly if the teacher teaches us in our mother language"*

-Students

The above view shows that most of the Muslim students do not understand second language adequately while teacher teaches in Nepali due to the Nepali Language or hesitating Muslim students fell shyness in asking questions to math teacher. Muslim is culturally backward ethnic group uses Urdu language to communicate with their relatives and friends but they are imposed to speak Nepali language to learn mathematics this show that the dominance of mother language is reason for low achievement. Constructivism theory also said language is one of the most important factors that effect to learning. According to constructivism students can easily understand the mathematical problem if we teach students in their mother language. Students fell very easy to learn in their first language and it is also effective to teaching and learning. So we can easily say that language is the one of the most important factor that affected to the mathematics learning.

**TeachingMethod.**Teaching method plays a main role the in achievement of students' .the fundamental importance of teaching strategies is to make easier to implement a variety of teaching methods and techniques. It is direct affect in achievement of students in learning mathematics a trained teacher can use rightly and appropriately the teaching materials and makes the teaching learning easy and interesting. In order to teach mathematics, different mathematicians have developed different methods. To teach mathematics is not an easy task to but indeed a difficult one. To make this complex task easier, several methods have been developed such as problem solving method, discussion method, student centred method and teacher centred method.

A teacher plays a vital role within a few hours in the classroom by delivering the daily specific planned content which is part of curriculum for the specific grade .teacher must have passion for learning and teaching as well as to understand need and interest of the student world is changing day by day so teacher need to be technically perfect.

When I observed the classroom, *the teacher just entered in the class with daily using teaching material. All the students stood and said good morning sir. The teacher said them sit down. Then teacher had started to teach he wrote a problem from the textbook and solve students did not ask any question to their teacher. That time the classroom environment was seen disturbing with noise. In that day teacher did not used any teaching materials and teacher used lecture practice method to teach mathematics.*

The teaching learning process can not be effective in mathematic classroom if there is not appropriate method go focus should on the learning environment that must address the students' personals needs.

*"I always used student centred teaching method. I also want to used teaching materials but we have not sufficient teaching materials"*

-Mathematics Teacher

*"Our teachers don't use any teaching material only solve the problem on the board and he did not use student centred method"*

- Students

From the above views and class observation it can be concluded that the teacher used only lecture method.The students' participation was very poor. The classroom environment was not learning friendly it was authoritative. The constructivist theory also said that student friendly environment and student centred teaching method improved the student's achievement. But this kinds of environment was not seen in the classroom so Muslim students felt difficulty in



mathematics learning thus we can conclude that bad teaching strategies was one of the cause of low achievement.

**Gender.**Nepal is a multicultural, multilingual country more than one hundred twenty language is spoken in Nepal. One hundred twenty five casts are live in Nepal their own culture and custom among them Muslim is a culture who followed the Muslim religion and speaks Urdu language. In the Muslim culture here is belief that son looks after parents in their old age and that daughter for the maintenance of household work. Due to this belief son are given education and daughter are kept in the house. Especially Muslim keep this discrimination in Muslim religion there is no permission to interact with other male students for the girls but male are free to interact to other. Most of the Muslim parents do not wants to send their daughter in school education because there are not Islamic culture norms and values like kuran and hadith which is are necessary to learn all Muslim in the world but they send their son on boarding school.

When I observed the class, *I saw that the math teacher asked more question to the boys and asked less question to the girls. Most of the time teacher listen to the non Muslim students' voice (question) and replied the answer. The Muslim students said that their teacher did not care to their question and also not co-operate with them to complete the class work*

When the researcher asked the question to parents why do you not send your daughter in school they replied?

*"School education is not necessary for the daughter because they have to do the household works after marriage"*

- Parents

*"Due to the our culture and custom we are unable to send our daughter in school"*

- Parents

*"Teacher did not take care when we ask question but the care when boys ask the question"*

- Students

*"We have own tradition and culture we can not abandon our tradition there is no need any culture to send daughter in school , Also I think his education is not for daughter it is for only son"*

- Parents

*"We did not discriminate to the student on basis of their culture, customs, gender and religion"*

-Head Teacher

From the above response it is clear that there is domination that Muslim girls facing in their daily life also Muslim boys. The Muslim social practices did not encourage sending their daughter at school. They think there is no meaning to thought the daughter reading writing is the works of son not of daughter this think prevent girls from building up their confidence which ultimately affects their performance level in mathematics. Constructivism theory encompasses gender discrimination is one of the cause of low achievement of children in mathematics learning.

## Chapter –V

### **SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATION**

Summary may refer to abstract shortening a passage or a write up without changing its meaning but by using different words and sentences .it tells us the main the me of your work finding is conclusion reached after investigation a new crafted conclusion can provide the final word on the value of your analysis or researchers recommendation is a suggestion or proposal as to best course of action especially one put forward by an authoritative body.

This chapter is basically concerned in deriving same finding and conclusion from the discussion of the previous chapter besides finding and conclusion it has some recommendation which will be useful for further studies and education implication.

#### **Summary**

This study was based on case study design used qualitative research approaching the main purpose of the study was to explore the causes of low achievement in mathematics learning of Muslim students and to find mathematic learning environment of Muslim students at home. The respondent of the study consisted of all students of basic level in the academic year 2075 of Banke district. For the case study purpose the researcher employed purposive sampling techniques to select the sample school and select the school Nepal Rastriya secondary school for the case study five Muslim students were taken as the respondent from basic level Also the researcher had done the different activities to complete the objectives like classroom observation school document analysis the researcher has maintained the reliability and validity of these tools with the discussion with the subject experts supervisor and educational researchers to analyze and interpret the data at first the collected information was categorized according to the category and different themes were considered as a code the similar code version of the respondent were

collected together and explained in the perspective. Cross match and triangulation was adopted to maintain the validity of the information.

### **Findings of the Study**

The main objectives of this study were to explore the causes of low achievement in mathematics learning of Muslim students and to find mathematics learning environment of Muslim students at home this study had depended on the objective and pointed the finding as follows:

- ) Most of Muslim parents were illiterate and they use their children as house worker.
- ) Most of the Muslim parents are illiterate so they are not able to support their children to solve the mathematical problem.
- ) In home and school environment language is one of the obstacles for Muslim students in mathematics learning.
- ) Muslim students are weak in mathematics learning but teacher had not motivated to learn mathematics in class.
- ) The Muslim students who were encouraged by parents did better in mathematics were as those who were discouraged by parents did not do well in mathematic so parents view on the mathematic also affected on achievement of Muslim students in mathematics.
- ) Most of the Muslim students were not attained the class regular. The teacher are not careful about students regularity and they are not trained in supportive to Muslim culture there are no any subject in the curriculum which is related to Muslim culture so Muslim students do not take interest in learning mathematics .so pedagogical aspect in which teacher expectation and their views beliefs directly influence on achievement of Muslim students in mathematics.
- ) The use of teaching materials in mathematics classroom is very low by the teacher.

- ) Household work becomes one of the burning problems for the Muslim students to study.
- ) School has a continuous communication gap with guardians
- ) As a home aspect gender bias at home parents education and practice time of students directly affected on achievement of Muslim students in mathematics.
- ) The school aspect like physical facilities religion bias at school and teachers and peer's behaviour towards Muslim students affected the Muslim students' achievement in mathematics.
- ) Muslim students do not get motivation and encouragement at home and school.
- ) The school has no vision of cooperative relationship with guardians and the guardians were also not active to cooperate.

### **Conclusion**

The study showed the low achievement of Muslim students from the sample of school analyzing with the themes and related document. The main causes behind this are teacher and Muslim parents lower expectation on Muslim students, gender biasness at school and home, poverty, lack of parents awareness, parents education, practice time at home, religion strictness at home, effect of culture and custom, language, unsupported behaviour of teacher to Muslim students, lack of school environment, lack of student confidence level in mathematics, lack of school vision to improve the achievement in mathematic of Muslim students, careless of students, on child friendly environment at school and home and teacher students relation. So these are the cause of low achievement of Muslim students in mathematics learning.

The achievement of Muslim students may be improve if the curriculum included Urdu language manage the extra class in the morning or evening manage Muslim teacher in the in school, improve the participation of Muslim students in extra curriculum activities, provide math education by their mother tongue, reduce their cultural effect for gaining school, education make

Muslim students friendly school environment. So it may improve the achievement of Muslim students in mathematic learning.

### **Recommendation for the further Study**

On the basis of finding of the study the following suggestions prep rearing for the further research:

- ) The conclusion of the study would be valid for the Muslim students at basic level of Banke district so it is suggested to carry out national wise research on it similarly the study should be conducted for the other grade as well as levels.
- ) Further study can be done on the topic comparison of achievement of Muslim students and non Muslim students in mathematics learning.
- ) It would be advisable to study the options and attitude of Muslim students towards mathematics or towards the instructional materials.
- ) A study can be done on effect of teaching materials in their mathematic achievement.
- ) Further study can be done on the topic participation of Muslim girls in learning mathematics.
- ) A study can be done on the cause of school dropout problem of Muslim students.

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## Individual Student Record

Name:

Class:

Roll No:

Age:

Address:

Date:

.....District.....MP..... Ward

No.....Village

Name of School:

Religion:

Position in previous Class:

Number of family member:

Father Name:

Occupation:

Education:

Mother's Name:

Occupation:

Education:

Interested Subject:

### **Interview format for Students**

Name: \_\_\_\_\_ Class: \_\_\_\_\_  
Roll No: \_\_\_\_\_ Age: \_\_\_\_\_  
Address: \_\_\_\_\_ Sex: \_\_\_\_\_

### **Interview guideline**

- Personal history
- Working time at home
- Family background
- Family support to learn
- Opportunity to learn at home
- Difficulties in learning mathematics
- Teacher's response with them/ Feed back
- view towards mathematics teacher
- View about school environment
- Teaching Method and Language
- View towards cause of low achievement
- Homework and class work
- Relation with mathematics teacher
- About gender/religion discrimination
- Income source
- Regularity in school

## **Interview Guideline for Mathematics Teacher**

Name of teacher:

Age:

Sex:

Qualification:

Experience in teaching:

Religion:

Interview date:

This interview with mathematics teacher had been taken on the basis of following topics:

- Teaching strategies for Muslim students
- Problem on teaching Muslim students
- Participation of Muslim students in discussion
- Teaching learning environment
- Teacher view about Muslim students
- Students learning habit
- Encouragement and motivation to the Muslim students to participation on discussion about any topic of mathematics
- Teaching method
- Difficulties things to teach the Muslim students
- Behaviour of Muslim students at mathematics class
- Causes of low achievements of Muslim students
- View about improvement of Muslim student's achievements
- Interest of Muslim students in mathematics learning
- Use of lesson plan
- Use of teaching material
- Use of ICT

## **Interview Guidelines for Parents**

Name:

Age:

Address:

Occupation:

Sex:

Family member:

Education:

Annual income:

The interview with the parents had been taken on the basis of following topic:

- View towards socio economics status
- Expenditure of the family and their income
- View about school and teacher
- View about their children achievement in mathematics
- View about facility provided by school
- View about mathematics teacher and school
- Obstacles of Muslim Students in school
- View about mathematical instruments provided by parents
- Occupation of parents and their income
- Expectation from the school
- Culture followed by parents
- Time provided by parents to their children
- Causes of low achievements of their children in mathematics
- Learning opportunity at home
- View about cost of education

### **Interview Guidelines for Head teacher**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Qualification: \_\_\_\_\_ Sex: \_\_\_\_\_

Experience of head teacher: \_\_\_\_\_ Age: \_\_\_\_\_

Religion: \_\_\_\_\_

The interview with the head teacher had been taken on the basis of following topics:

- Classroom management
- Problem in teaching Muslim students
- Relation between staff and students
- Relation with guardians
- Teaching learning environments
- Students learning habit
- Facilities provided by school
- Extra class for low achievements students
- Coordination between teacher and parents
- Teacher training
- Opportunity provided for Muslim students
- School facilities
- Causes of low achievements of Muslim students in mathematics

### **Main Topic of Observation Area**

- Regularity of Muslim students
- Learning environment at home
- Learning behaviour of Muslim students
- Learning environment of classroom
- Children's involvement in house work
- Participation of Muslim students in teaching learning process
- Teacher behaviour towards Muslim students
- Teaching materials used in mathematics learning process
- Review and related new learning to previous lesson
- Regularity of math teacher
- Check the individual understanding
- Regularity of Muslim students
- Behaviour of teacher towards Muslim students
- questioning system of mathematics class