

Chapter - I

INTRODUCTION

Background of the Study

Education is the foundation of human civilization. So, it has become possible to bring up the civilization up to modern era from barbaric stage. Education, in this sense, aims to transfer the ideas, skills, attitude, experience and knowledge of people in the community. Education plays significant role for the overall development of the citizens as well as country. With the education system, so many disciplines have vital role (Sing, 2011)

Mathematics was developed in the society. The history of mathematics education refers the contemporary society has served today's situation in the field of the society. Mathematics directly deals with human life. So, it is believed that mathematics has its root to early human life. In other words, mathematics and human life developed parallelly. That is to say, mathematics has the vital role to develop the civilisation since its inception. Historically mathematics in the initial stage was created to fulfil human needs. It was introduced later in formal education system. It had been developed simultaneously with the development of society of each time has also been practicing it with its own ideas and belief (Pandey, 2014).

But in Nepal, many groups are backward socially, geographically, economically and their active participation is not well in education such group are Dalit group, among all Dalit, Badi caste is the lowest caste even in Dalit. In the present context, there are a lot of challenges for the nation to bring up these groups in the mainstream of school education. In the context, learning of mathematics is the beyond of thought. On the other hand, most of the Badi children don't have the access of school education and even who have access they don't have better learning

achievement in the school. So, this study would be concerned with the study of Badi students.

Dalit are economically exploited, politically excluded, socially oppressed, religiously as well as culturally ostracized and educationally deprived. (Koirala, 1996).

The myth of origin of Badi are supposed Kumau Gadwal of Uttar Pradesh of India. They came to Nepal from India in fourteenth to sixteen century and as reported by descendant of the petty kings of Salyan, initially settled in Salyan district of Nepal and later in Rolpa, Rukum, Surkhet, Jajarkot, Arghakhachi, Dang, Bardiya, Banke, Kanchanpur, Kailali Darchula, Bajhang. Badi are an untouchable Dalit caste group with total population 38,603(0.145%) of National population of Nepal. The male population is approximately 18,298 and female 20,305 with the population of female higher by 2,007 persons than the recorded male population (CBS: 2011). They are migratory people who keeps moving in groups consisting of three or four families from the foothill of Himalayas during the winter season. While picking of the facts about their origins the etymology of the word “Badi” and “Patar”(Badi Prostitutes) need a brief explanation, the term Badi from its root word ‘Bandaka of Nepali language which refers to one who plays on musical instruments. Similarly, the word ‘Patar’ which means character or an artist who makes some stages performance likes singing, dancing or acting. Thus, the two term that is the Badi and Patar untidily refer to the classes of singer, dancer and actor. In fact, traditional identity of the Badi in west Nepal was that of singers, dancer and players, they used to sing the religious songs in relation to Hinduism as the Ramayan, the Mahabharat and the Krishacharitra to the people interested. Besides this, they used to perform dancing and singing program of money. The elite of those days hired the Badi’s feast and festivals in order

to exhibit their pump and show. Therefore, the Badis earned their livelihood by entertaining their patrons.

In the history, the Badi community used to serve at king place and rich people of feudal lord's samanta's house by dancing singing and making plays some survival instrument mainly Nepali drums called "madal" and fishing net and prostitution with women which main occupation is a feature of them, Regional Office, Nepalgunj (2001).

Cox, Thomas (1993) attributes the present situation in which Badi women practice prostitution from early period Rana regmi, in 1950, and subsequent establishment of King Mahendra's Panchayat government. When rulers and landlords in Western Nepal were stripped of much of their previous authority and IPst of the right to tax subject and exact unpaid labour and rent (agriculture land) from them. As a result, they lost much of their economic doubt and were unable to continue their patronage of Badi. As consequence, the Badi women thus began to take prostitution for living. In the later time they expanded with own occupation such as Tulsipur, Ghorahi, Nepaljunj, Birendranagar, chhinchu, Similarly, Khalanga, Shantinagar, Shreenagar, Lantibazar, Luham, Syalapani, Simrut, of Salyan and other popular places. This caste is lacking as economic, social, political, educational and as other conditions than other caste in the society. Moreover, now some Badi have not own house and setting on side of river in huts and they work hard like breaking stone into pebbles, concrete as alternate occupation. And most of the Badi want to be farmer but they don't have their own land. So, they should work for others. It is the main feature of them.

On the other hand, Salyan is central district, where Badi community live. They are settled in different places even though they have their own community. The main

cultural occupations of the Badi community are making and repairing of musical instruments, fishing, laboring in the river side and work for other people for their basic livelihood. They do not involve in prostitution. They feel hate to do such kind of work because the other community try to dominate them. They want to remain independent. Also, they want farming as well, but they don't have their own land. So, they forced to work in field of other Community people. Because they are poor economically, socially, occupationally, etc. That is the direct cause of difficulties in learning mathematics.

Badi is a caste of the Dalit community residing mostly in the mid-western hill of Nepal. They were conceived to be the lowest of hill Dalits under the national civil code (*Muluki Ain*) of 1854. Their status in the code has not changed even today. Badi have been discriminated against by non-Dalit, and hill Dalits as well. Their discrimination occurs on the basis of caste, but they are also excluded in political, economic, educational, social, cultural activities and from employment opportunities in state and non-state sectors.

Statement of the Problem

Badi people fall under privilege group of the society discriminated, humiliated and disadvantaged socially, economically, culturally and politically in the society by the other cast people and the state policy. All students are studied in same class and same curriculum, but their children have low achievement in mathematics in class in comparison to other caste students. The researcher intended to study the difficulties in learning mathematics of Badi children:

-) Why do Badi students have difficulties in learning mathematics at basic level?
-) How does home environment influence learn to Badi students to support their mathematics at basic level?

Objectives of the Study

The following were the objectives of this study:

-) To explore the causes of learning difficulties of Badi students at basic level.
-) To identify the influences of home environment of Badi students to learn mathematics at basic level.

Significance of Study

This research study tried to identify the hindering factors of learning mathematics of Badi students with reference to this context; it would be worthwhile to study the problems of Badi students.

Nepal has accepted the universal motto “Education for all” to tie-up the prevailing different caste, their religion, culture and traditions. The Badi are dominated in terms of level of social hierarchy. The study would have the following significance:

-) The study helps to minimize the difficulties in learning mathematics of Badi students at basic level.
-) Its finding would be helpful Badi students to improve the mathematics achievement.
-) This study would be helpful for good behaviour towards Badi students for: teachers, parents, and curriculum designers and educationist persons.
-) Badi parents can create better learning environment to their children.

Delimitation of Study

This case study was related to the difficulties of Badi students in learning mathematics at basic level. The following were the limitation for the study:

-) This study was delimited in Salyan district.
-) This study had been conducted to only public school.

) This study was limited to only four Badi students of Shree Bhanubhakta Basic School Bagchaur -2 Salyan district only.

) This study has included the Badi students of grade V only.

Definitions of the Related Terms

Some terms especially related to this research are defined as follows:

Achievement

Achievement in this study is defined in terms of mathematics score obtained by the students in the achievement test which constructed by the researcher.

According to the obtained achievement the researcher tried to find out the related factors and remedial ways.

Dalit

According to Nepali dictionary “Caste or group of people who are unable to get equal right, prestige, proud in the society, who are exploited and disadvantaged caste or group of people due to unequal social system. Person or group of people who are socially, economically, culturally, and politically disadvantaged. (i.e.

Panninachalnejaat).is known as dalit.

Badi

Badi refers one of the Dalit groups. They are dominated by upper castes. They have not their own land. So, they did hard work in other’s house and field. Whose cultural occupation is making and playing musical, instrument, fishing, singing and dancing.

Badi Students

Badi students are children of backwardness Dalit groups are discriminated in terms of different social factors like; economic, educational, occupational, social and

cultural. Their parent's cultural occupation is making musical instrument, fishing, singing and dancing.

Learning Difficulties

It is a general term meaning; that a child (or adult) feels difficulties in learning in a typical manner because the brain has trouble processing information. A learning difficulty is not an indication of intelligence level, but it means the child will have trouble learning in the same way other do and may have trouble performing certain types of tasks.

Cause

Cause means those problems, which affect mathematics learning of Badi students.

Marginalized

Often behind by the national education policies denying many people their right to education.

Parents

Father and Mother or as otherwise may be defined by state in school.

Basic level

In this study class I to VIII in the school system of Nepal is consider as Basic level.

Culture

A culture is a particular society or civilization, especially considered in relation to its belief, way of life or arts and philosophy.

Discontinuity

Discontinuity in process is a lack of smooth or continuous development, especially differences in attitudes and value

Chapter - II

REVIEW OF RELATED LITERATURE

Introduction

A collective body of works done by earlier scientists is technically called the literature (Singh, 2006). The research is carried out on the foundation of the previous study. The previous study proves to be guidelines for the later ones. There still many topics or problems which need to be studied. This chapter describes the empirical literature, theoretical literature and conceptual frame work of this study. The related literature review can be presented as below:

Empirical literature

Rijal (2008) conducted a study on “Difficulties in learning mathematics”: A case study of Rana Tharu in Kanchanpur district. The objective of this study were to identify the difficulties in learning mathematics of Rana Tharu students at lower basic level and to identify the causes of difficulties. This study was based on qualitative in nature. The study was conducted with the sample size of Rana Tharu students of Grade- VI. Face, interview with students, parents, Mathematics teacher head teacher and the observation was taken. The collected data were analyzed by using mathematics categorization and interpreted according to the cultural difference and discontinuity at school and home. There is discontinuity in language lack of interpersonal relation, no proper interaction between teachers and students. The home environment and school environment have not conducive for learning mathematics.

Shai (2010) did a research on “Factor Affecting Mathematics Achievement of Dalit Students in Mathematics: A case Study in Doti District”. He took six peer groups as his sample for the study. He used observation and interview schedule as the tools for his research. His Finding show that the participation of the Dalit students is

less than non- Dalit students. He also found that irregularity is one of the causes being Dalit students fail in the mathematics subject.

Neupane (2005) conducted a study on the topic “Effect of socio-economic status on mathematics achievements”. The study focused on to find the correlation between socio-economic status and mathematics achievement. Lamjung district of Nepal was the area of study. The total sample of study was eighty students of grade III. The sample collected from five selected public schools. This study was designed for the comparison of the Dura and Gurung Students. He concludes that mathematics achievement of Gurung students found to be positively correlated with father’s education. But the other variables were negatively correlated with mathematics achievement. Similarly, mathematics achievement of Dura students positively related to father’s education. But the other variable were negatively correlated with mathematics achievement. The mean, standard deviation, correlation and multiple regression tools were used for the analysis of data.

Adhikari (2006) did a study on “Cultural Discontinuity and difficulties in learning mathematics of Dalit Students”. The objectives of this study were to identify the causes of difficulties in learning mathematics at school, influence factors in learning mathematics, impact of home environment. The study was done on four Dalit students. In depth interview, observation form, written documents were main tools and the study concluded that there is discontinuity between home culture and school culture. The home environment is not supportive for mathematics learning.

Sah (2006) conducted a research on the topic “Effective of occupation on mathematics achievement with in Rai community. He found that the achievement of student from three different occupational group parents (Farmer, Indian army, government service) were in average position. While using t- test between two

variables the achievement of children of farmer was in weaker position than Indian army and government service holder students. Similarly, while comparing the private and government schools the achievement of government school students was in low position than private school students because most of the government school students could not manage time for study and regular attendance. The achievement between Indian army and government service holder's students were found similar. The environment at home of both students' groups were in similar manner. Similarly, in regular attendance, doing homework and active participation is the major cause of the equal achievement between the children of Indian army and government Service holder's children.

K.C. (2009) conducted a thesis "A study of problem faced by students in compulsory mathematics at basic level". The nature of this study was quantities as well qualitative. This study followed survey design. He selected six schools from urban area of Lamjung district randomly. Among them three were government schools. From each school, one mathematics teacher and three mathematics students of grade X were selected as a sample for the study. For the data collection, a set of class observation form and interview schedule were used. The obtained data was analysed and interpreted with the of mean weight age. The major findings of this study were illiterate parents, poverty of parents, lack of encouragement for study, the gap of low achievement and high achievement student unavailability of teaching learning materials, lack of mathematics lab, and lack of trained teacher. It concluded that there had been significant problems in learning geometry at basic level.

Bom (2009) did his thesis entitled "Effect on home environment in mathematics learning". With the objectives to identify the learning environment for Badi students in the school, to identify the major factor involved in the home

environment of the Badi children which affect the learning achievement of mathematics. And to assess the existing learning achievement of Badi children in mathematics of lower basic level at Rukum district. Interview, interaction, observation and group discussion were used as the tool of the study. The researcher selected only one school of Rukum district as sample. The researcher design is qualitative, and he concluded that the factor related to home environment of Badi students are parent's education, Family size, house hold work load, parent's occupation, social belief and social attraction.

Joshi (2011) had made a research report on the title "Learning Difficulties in Mathematics, A Case Study of Open School Students". His aim was that to identify the difficulties in learning mathematics of arithmetic for open school students. It is a qualitative study. He was taken four respondents from Kathmandu district. She has analysed the data by interview and observation. His finding was lack of curriculum and instruction and lack of supportive environment, less interaction and quality of instruction and lack of practice and fast forgetting are the learning difficulties in mathematics.

Theoretical Literature

In this chapter, the researcher discuss the theoretical framework for the study that would support the significant of difficulties of Badi student in learning mathematics. Low achievement in mathematics, teaching materials, mathematical content, language, cultural discontinuity, intrapersonal relation, Teacher management in classroom, home and school environment were more causes of difficulties in learning mathematics. As consequence, students learn poorly in class and unlimitedly they have no option except dropping out from their schools. There were many

learning theories which can be used to analysis and interpretation of the data, I use Ogbu's theory.

Cultural Difference and Discontinuity Theory

Ogbu (2000) delineates about the cultural difference and cultural discontinuity theory that deal with the problems in children's learning caused by the difference and discontinuity between the cultural of home and school. Those children, whose home cultures are much similar to the cultures of the school can, cope easily with the system that may result better learning achievement. Similarly, the children with unmatched or dissimilar home cultures with school cultures and they do not have enough attention in their learning and do not get much recognition of their cultures and they have to work achieving learning outcomes compared to the children with good matched.

Ogbu (2001) emphasized emphasizes learning not only as the product of the cultural and language differences but rather the nature of the relation between the culture and language of minority/ disadvantaged and dominant groups. The dominant group controls the school system through implementation of their curriculum and using their language as the only means of instruction. Regarding cultural difference, identity and school learning, he has put the examples on the case of the United States of America (USA).

Ogbu (2000) has emphasized on two types of cultural differences i.e. the primary cultural difference of voluntary minorities and the basic cultural difference of involuntary (caste like) minorities. As his study suggests, involuntary minorities force more difficulties in school learning, participation and performance due to big gap between their cultures and mainstream culture.

However, he developed the theory of cultural difference on the case of US; it might have implication to this study that is related to cultural discontinuity and

learning difficulties in mathematics of Badi who also disadvantages group in terms of culture of discrimination, domination and backward from mainstream. Mainly the Badi children hesitated to interact with the other children in school as well as in the community due to the socio-cultural reasons. Such scenario hinders interaction and participation with other caste people that obstruct their learning. Similarly, the Badi children at home learn by observing and engaging in the works of their father, mother and elders. But they do not get the opportunity in the school excepting listening, which is the dominating activity during the day at school.

In order to help children of Badi community, it should not forget that the children are not only culturally different but also incompatible to the mainstream school system. The factors affecting the process of their schooling/ learning should also be considered in order to according them without assimilation to provide alternative models for their schooling/ learning, to organize classroom where they can also participate along with other children.

Ogbu's Theory in the context of Ethnic Group of Badi Community

Badi children are more or less concerned with school problems and the problems of caste like minority. The children with similar culture with the culture of school may do well on school where as the disadvantage minority children like Badi children may have poor performance in the school because their culture are less congruent and incompatible with the culture of school. Since they are provided education in culturally different environments, they certainly face difficulties in acquiring skills and contents demanded by the curriculum through teaching/ learning activities rather than they are culturally deprived in learning.

Ogbu (2001) furthermore argues that discontinuity is also occurred in the area of language, thought and measurement. It happens mainly due to the difference

between the teaching and learning strategies in home/ community i.e. informal education and the style used in school i.e. formal education. Similarly, since children learn in school environment without natural context in their experience, learning may have no any significance to their everyday life. Ogbu, (1982) further illustrates that primary cultural discontinuity is generated by primary cultural differences resulting cultural developments before members of a given population come in to contact with existing culture of dominating group of population.

Similarly, a society, on which caste like minorities caste like have been incorporated in to the society rather involuntary and permanently with lacking in job and status in the society. Due to collective institutional discrimination and display like school system, they tend to exclude from the mainstream with school and economic problems that leads their lives to miserable condition. In addition, such subordinate groups under caste stratification with discrimination do not get opportunities and access to privilege, rewards or positions considered as prerogatives of dominant group because of already fixed socio-cultural system or legal mechanism which are made by the dominant group. In these circumstances, the children from disadvantaged caste tend to develop coping behaviour and the attitudes that are different to school culture that obstruct their learning (Ogbu 1982).

As the present research question is considered, it helpful in finding the learning difficulties in mathematics and participation of Badi students. Necessary information was collected from the observation of Badi student's behaviour in the class room. On playground, in community, inquiring in the children and the parents about their cultural practices and preferences, carried out in depth study on the children and parents about their cultural aspects that contribute to their schooling. And how do they feel difficulty to learn mathematics at school was investigated.

Conceptual Framework

This is a case study, tries to identify difficulties in learning mathematics of Badi students at basic level. The following framework in difficulties in learning mathematics is purposed for this case study.

Conceptual Framework of Difficulties in learning Mathematics

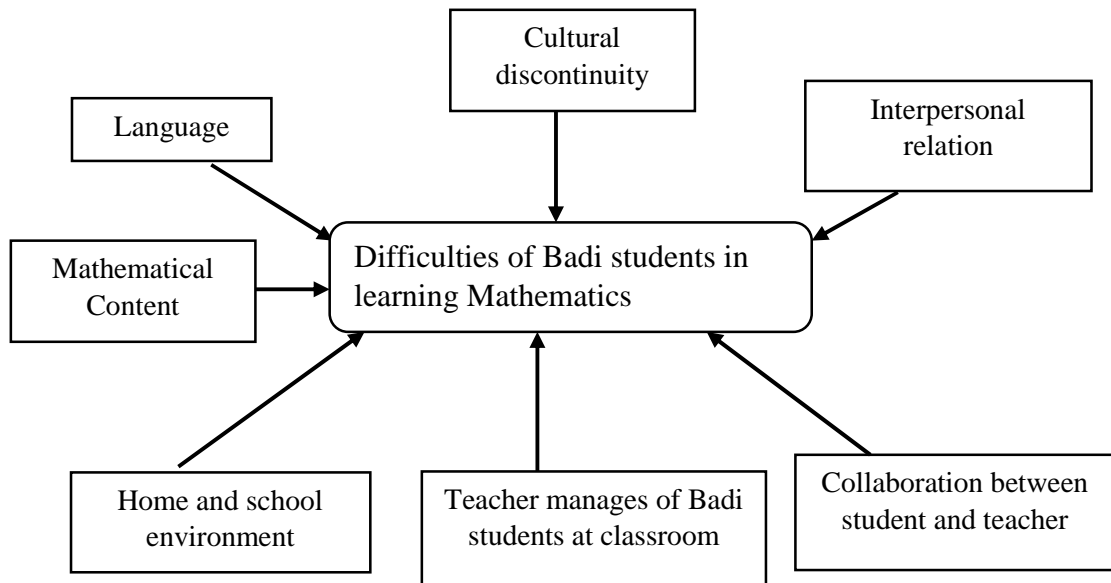


Fig.1.1

(Pant, 2006)

This conceptual framework describes about the Badi children that there was great discontinuity between their everyday life and school activities, as they get practical knowledge in home and theoretical knowledge at school. The language, economic condition, interpretational relation, learning environment at home and school, collaboration between teacher and students, teacher's managements of Badi students at classroom, cultural difference in home and school played vital role in learning mathematics.

Badi culture is related to the music, fishing and dance which was taken as form of entertainment. Badi community has its own norms, culture and customs. Most

of their time pass in unnecessary deeds like drinking alcohol, playing card because they think is our social perfection which dispersed in the society. Badi community thought we have needed to server the upper caste. So, children need not be educated. It is cause of tradition and poverty of Badi community. There was no proper interaction and interpersonal relation between students and teacher. The school police were not sufficient to address low achievement. Communication gap of parents and school administration So, Badi students have disturbed and consequence is low achievement in mathematics.

This study supports the Badi children, who get difficulties in learning mathematics at basic level. The mainstream language and culture is major component for learning, there was misunderstanding between language communications. Interaction refer to the sharing co-operation and adjustment between two or more Persons.

From the above literature reviews show that the achievement in mathematics learning of the student's was poor who belongs to the marginalized community that are backwards in socio-economic conditions. Also they recommended for further study in same context and less study are doing in related to Badi community. The home and school environment of Badi community were different so it is required to research the difficulties of mathematics learning Badi students. Instead of less research related to learning difficulties of Badi students, Researcher decided to study in difficulties of Badi students in learning mathematics.

Chapter - III

METHODS AND PROCEDURES

To carry out the research work, methodology plays the central role because without methodology the researcher cannot fulfil the objectives. The present researcher followed the methodology to fulfil the objectives of the research topic.

Design of the Study

This is a case study with the qualitative research as well as descriptive nature. This study was based on find out the difficulties of Badi students in learning mathematics. Mainly this research has used to observation and interviews tools within related respondents.

Site Selection

This study was related to learning difficulties in mathematics of Badi students located at Bagchaur municipality-2, Salyan because of poor educational condition and backwardness in every aspects of their life. Some of their children did not attend any educational institution yet. Therefore, this research was focused on identifying the cause of difficulties learning mathematics of Badi students.

The researcher selected with purposively, selected only one school of Salyan district. It was Shree Bhanuvakta Basic School. The researcher has a convincing reason for selecting the school that it was located in this area, where the Badi community was living and its catchment are for study site.

Selection of Case Respondents

The respondents of the case study were Badi students. The sample units were selected purposively. There were no rules for sample size in qualitative researcher (Anderson et. al 2001, p. 123). So, the sample size of the inquiry depends up on the researcher. What he/she wants to know, what was the purpose of the inquiry, what

was the credibility of the study and what can be done with available time and resources. Since this study is qualitative researcher. From the school only four Badi students who were weak in mathematics were selected for this study.

Among the 20 students of grade V only four Badi students were selected purposively (two boys and two girls) sampling technique who gave appropriate and actual information. Also, their Badi students, parents, mathematics teacher were selected as respondent to the researcher's convenience.

Tools

Data collection is the most important part of the study. For the study, the researcher has used the following tools to collect the necessary information.

Class Observation Form

The class observation form made by researcher on the basis of requirement/necessity of research was used to observe the difficulties in mathematics learning in classroom practices. The researcher observed the activities of the key respondents in their class, school using the pre-established observation form.

In-depth Interview

On the basis of objectives of the study the researcher developed the interview schedules in unstructured form for students, Mathematics teacher and parents.

Validity of Tools

Triangulation is a method to get an accurate and reliable picture of situation. The idea of assessing learning and attitudes from a range of perspective is called triangulation. The researcher was trying to understand by collecting information from different sources and within different tools. In this study researcher used cross math or data triangulation where the data was obtained from the classroom observation and

interview with the Badi students, mathematics teacher, parents and head teacher. And also, the analysis of the data based on descriptive nature.

Data Collection Procedure

The data collection is the most important part of the study on basis of the data we can study and analyse every aspect from the good techniques. For this study the data and information were collected by using tools as direct observation and interview. The researcher adopted the case study of children with interview and direct observation to get the data for the research study. Personal case study, their experience, feeling works, study time, family background, education condition etc. in the study and held interview with their parents and mathematics teacher for the collection data.

Procedure of Data Analysis

In this study, the analysis was descriptive in nature. The researcher collected data was categorized according to the category of the respondent. The categories were key students, mathematics teacher and parents of the key students. After those different themes such as: cultural discontinuity, interaction, interpersonal relation, home and school environment, languages were given in the text of interview and observation. Then the researcher began with the detail analysis of the data and equally analysis and triangulation form. The data thus analysed were interpreted by using the triangulation method and conceptual understanding of the study developed in literature review and Johan Ogbu's cultural differences and discontinuity theory.

Chapter - IV

ANALYSIS AND INTERPRETATION

This chapter includes the analysis and interpretation of study. This study was related to the qualitative study. The data obtained for the study were presented in terms of following topics: cultural background of Badi students, language, interpersonal relation, collaboration between students and teacher, teacher manage of Badi students at classroom, home and school environment with the help of interview and classroom observation note and explained in their perspectives. The school environment and other detail were obtained by document analysis of the school. The home environment and other details were obtained by taking interview with parents.

Cultural Background of Badi Children

Culture is the most distinctive attribute of human race. Because of this quality, today human being is able to protect, transfer, and improve the cultural traits as per its necessary. Culture is not a pre-constituted object but must be created through human intention and action. The human is the main actor beside the creation, and interpretation of the culture: by virtue of human cognition, today's civilization is possible. Culture is human creation and use of symbol and artefacts. Culture may be taken as constituting the way of life of an entire society, and this was included codes of manners, dress, language, rituals, and norms of behaviours system of belief. Sociologist stresses that human behaviour is primarily the results of nature rather than nature (Dictionary of Anthropology).

The Badi community is a distinct group within Nepal's Dalit or 'untouchable' caste with its own traditions, way of speaking Nepali and forms of social organization. The term of Badi is derived from the Sanskrit word vadyabadak and means one who plays musical instruments referring to the period when they were a

caste of nomadic entertainers in neighbouring Indian state as uttrapardesh. Currently almost forty thousand Badi live in Nepal, the majority in the Tarai districts of the Mid and Far Western Regions. The badi are ranked at the bottom of Nepal's caste system, even with in the Dalit intra-caste hierarchy, which has given them the infamous label of untouchables of the untouchables.

In the Badi community social poverty is too much compared to other community. The sexual exploitation, landless, illiteracy, unemployment, poor political participation, and low level of awareness are the main cause of poverty. Poverty is major constraint for the development of a person. In fact, poverty concerning to Badi community is different from other community. One of the main causes for their poverty and marginalisation reported during this study is lack of knowledge, education and awareness. Another cause of poverty is identified as deprivation of opportunities. This can be particularly traced out as people without access to health service and safe drinking water, landless, homeless and unemployment (Action Aid Nepal, 2001).

Description of the Case Respondents

The respondent children are Badi children. They are Salyan residential. These students are low achiever in mathematics among grade V. the brief description of the key children presented below.

Respondent A

Respondent A was 11 years old girl studying of grade V. She lived in Baguchaur Na. Pa Ward no 2 Simrut Tol Salyan. The distance of school takes ten minutes trip from her house. There are six members in her family. Her family condition is too poor economically. They still believe in religion, superstition, and dogmas. I observed her house and family as well, her mother at riverside for making

concrete, pebbles and her father used to fishing in Sharada River. She did not want to go the school regularly because she had to do all the household works. Her mother said, it is her duty to finish all the work of house. She washes clothes, cleans pots and dishes, Sweep house at home in morning and evening. Due to the regular engagement in her house hold works she had no time to practice mathematics. She usually becomes absent in her school.

Her mother said that Badi was untouchable caste and dominated by higher caste. Her family's main professions are traditional farming, making Madal, Sulpa, fishing net, fishhook, Tariya etc. Her father is also engaged in the work of making musical instrument at shop. Although his income is very low her father is drunkard he drinks alcohol and plays card. His income was not enough to fulfil the need of the family. She said "I understand mathematics at class, but I couldn't remember for a long time. I assume various reasons home environment, economic problem, uneducated family, lack of tuition opportunity, lack of home study."

Respondent-B

Respondent B is a boy of 12 years old. He lived at Bagchaur Na.Pa.2 Salyan. It takes about 20 minutes to go to school to him. He had 7 members family with 2 brothers and 3 sisters. His father is make musical instrument and sometime goes to India. His mother is house wife. Sometime, his mother to goes to forest to bring wood (daura) and making Sulpa. After Selling Sulpa she earns some money. He helps his father making musical instrument.

His family's main source of incomes from the selling musical instrument, Sulpa. He was interested in volley ball. His father and mother were very carless about study. He felt that mathematics was very hard subject. He was not careful in reading and complete his homework. Due to poverty, he was unable to take tuition class.

Researcher asked did you like a mathematics. He said that *“I felt difficulties in learning mathematics. Why I could not understand mathematics”*.

Respondent-C

Respondent C was 13 years old girls studying in grade V. She lived in Baguchaur Na. Pa. ward No. 2 Simruttol Salyan. The distance of school takes fifteen minutes trip from her house. She has eight members in her family. Her economic status is very low. To go to school, she had to all her household works. She even goes to the forest in morning for getting wood (daura) for household work. She did not spend more time in study. Also, she doesn't practice mathematics. Her father made musical instrument, fish net also worked in the field of upper castes. Similarly, her mother is housewife and construction were Hukka and Sulpa also some time works in the field of other person as a worker. Her father and mother want to get out from the poverty in future.

The researcher observed his school activities he found that she no interested in mathematics subject, but she interested in extra activates like dancing, singing cultural programmes. The government of Nepal is giving scholarship to the Badi students, but no any other opportunities have been giving by the school administration for his study. Her father said, “We have basic need fulfilment problem, problem of economically weak”. She does not do homework properly. Above the study they are Badi illiterate, so they could not provide guidelines at home and poor economically as well as these reasons which are the main influencing factor their difficulties in learning mathematics.

Respondent D

He was 12 years old boy student of basic level grade V. He has been studying in the Shree Bhanuvaktha Basic School. He lives with grandfather, father, mother,

two sister and three brothers. His family is medium. There are eight members in his family. His father is also engaged in the profession of driving Autorikshaw on the Rapti highway and his mother is house wife. Also, his mother was working as a road sweeper at Tharmare bazar.

In this case the researcher asked mathematics teacher about his study then he said that “he did not practice as sufficiently, so mathematics may have the difficulty in his study. We saw he sits with also poor students in mathematics class and he failed in mathematics in grade IV and he promoted to grade V. he does not do homework properly”.

From above the statement says that he has very little time for the study. As a result, he is very poor in mathematics and he had no interest in mathematics. So, need of motivation, awareness from his family to school.

Classroom Observation of Respondent Students

The researcher has observed 10 class of the case school in his researcher work to find out the learning environments of class, mathematics teacher’s behaviour toward Badi students. The researcher help appendix I for observation. Among them only three episodes are given here.

Episod-1

It was the first-class observation. Mathematics teacher went in to the class, and then the researcher also entered in to the class. All the students stood up and said good morning. Then the teacher told them to sit down. This showed that the students were well disciplined, and the school has taught them to respect the teacher. There were 20 students in the class. The teacher took the attendance of the students. There were 17 students present on that day. Teacher said that open your homework and check, but sample students did not do homework. And he wrote the topic profit and

loss. He wrote problem on blackboard and solve it. All the students were busy the solution from the black board. The teacher did not review the previous lesson or, related topic for profit and loss and did not give the classwork. After sometimes teacher asked with the students whether they understood the lesson or, not, some student say, "yes sir". Then teacher again repeated problem and different problem from the texts book asking the students. Also, most of the Badi students were present some Badi and other students were responding in the class without any hesitation. In the he gave homework from the exercise book and finished class.

In this episode the researcher find that the most of the Badi students were represent and stayed the whole period some of them were to be interested in mathematic class. They responded the teacher question without hesitation. There was no discrimination between behaving Badi and other students. Teacher was behaving equally but math teacher didn't focus the Badi student especially so that the much Badi student were passive in mathematics class.

Episode-2

It was the second-class observation, mathematics teacher went to the class, and after the researcher also entered in the class, the entire stood up and said good morning sir. The teacher told them to sit down. There were 18 students in the class. Teacher took the attendance of the students. Teacher said open your book please and he wrote the topic Weight. He gave the relevant example to develop the concept on the topic by practically and asked the students about the problems. Somebody replied correctly, and somebody did not. Teacher suggested them to read at home. He gave one more problem to the student to solve in the class. He gave the problem to the students for the practices and observed the mistake of the students. Again, did not

guide them, when they got mistake he came to the board explained to solve. At the last he told them to do the exercise of the text book which too much for the students.

In this episode, the researcher found that the teaching method used by the teacher was lecture and practice the class was well managed and there was no disturbance. Badi students were not well motivated and responded by the teacher. So, saw not interested Badi students. Some Badi students were absent.

Episode-3

It was the third-class observation, mathematics teacher went to the class, and after the researcher also entered in the class, the entire stood up and said good morning sir. Then the teacher told them to sit down. There were 17 students in the class among them 4 students are Badi. Teacher said open your book please and he wrote the topic Volume. He discussed with students giving more examples and noted the formula in black board relating to the lesson with previous lesson, but they did not any teaching material. Then he gave same kind of problem to the students. But Badi students was not completed, they did not try solving the problem. The teacher was trying his best to make the students.

In this episode, the researcher found the teacher were being reviewing the previous chapter and uses related example for clear concept. Badi students were passive in classroom and mathematics teacher did not focus the Badi students specially. Teacher did not use a teaching material in teaching learning period. Also, language was clear.

Cause of Difficulties in Learning Mathematics of Badi Students

There were so many causes of difficulties faced by Badi students in learning mathematics at basic level. These difficulties have been collected with the help of related literature, theory, interview with students, their parents and guardians,

mathematics teacher and related document of school. These are the way to over comes the difficulties of Badi students in learning at basic level.

Learning Environment at Home and School

Parents are keen to send their children in the best school but due to the lack of physical and human resources they are not able to send them. Similarly, the truth is their home environment has a profound impact on their learning. Home is regarded as the first school to all individuals. That is to say, home environment plays a vital role in learning mathematics at basic level. Home environment reflects the occupation, economics condition and learning opportunities of the students at home. School is the second home of any child. School environment reflects believe and tradition of the school community delineating the relation among parents, students and teachers. There are many home and school issues in mathematics learning at basic level in our Badi students in the Nepal of context.

My parents forced us in fish net and musical instrument then only to go to school. So, we are low achievement in mathematics. We are not sufficient time for mathematics learning. We have no separated room for learning mathematics. Many our parents are drinking and noise environment in our home, so we cannot get the environment for study at home.

(Student's view)

From above responses it can be said that most of the Students not sufficient time for mathematics practices. Badi students have sufficient time for mathematics practices. They are an enriching and stimulating home environment fosters healthy growth and brain development by providing a child with love, emotional support, and opportunities for learning and exploration. In families where only one parent is present, there are often fewer economic and emotional resources.

Our economics condition is very low, so our child do not send for regular school. The income is not sufficient for fooding, clothing, shelter, health it is difficult to pay for education. We are not giving sufficient time for practise for mathematics learning so our child does not good achievement in mathematics learning. We know that our students do sufficient time for mathematics learning but we are nothing do that for our child because our economics condition is very low.

(Parent's view)

From above views parents are known their child are very low in mathematics achievement at basic level but they are do not nothing for their child. We are illiterate, so we are not help for child. Ramey and Ramey, (1994) elaborates that a socio-economic status of the family is based on family income source, parental education level, parental occupation and social status in the community (such as contacts within the community, group associations and the community's perception of the family). They have not enough income sources for good education. It can be said that income of the family influences the performance level of the child at basic level.

Every child deserves to attend the safe school where everyone is treated with respect. There is a set of rules and principles, which determine a child-friendly school. Read more about this type of schools and find out what it takes for a school to be called child-friendly. As we know, school is one of the most significant institutions in the life of every person because this is where we take our first steps to the adult world from. A school can make a huge influence on every person, and it can be both positive and negative, depending on the circumstances. Generally, teachers are highly responsible for creating a good atmosphere in class, where no single child will feel left out and all of them will thrive for new knowledge. Being aware of basic child

psychology is important for teachers, because they are the figures that kids look up to, and they should be good role models for them. The researcher that school environment has found as related factors were following:

-) Physical facilities
-) Teacher & peer behaviour
-) Educational environment
-) Expensive education

School environment must be suitable in every excel lection for difficulties in mathematics learning mathematics of Badi students in education system. Along this line I asked to the mathematics teacher what kinds of teaching strategies of Badi students in mathematics learning?

I think they do not discrimination us according to caste. Teacher behave equally in the class but sometimes they are looking angry with us we don't understand mathematics because the teacher got angry when we ask problem. The teacher doesn't emphasize in learning to us he neglected our problems mostly sometimes when we asked the confusion he says you don't understand you study at home.

(Maths teacher's view)

From the above response researcher conclude that mathematics teacher teaches students friendly environment at classroom. Mathematics teacher focused on all student's equal opportunity in mathematics learning. Mathematics teacher teach students friendly environment at classroom.

Influence of Society

People in the society show poor interest in learning. Majority of society does not encourage the girl students to participate fully on education. Although the

government has signed number laws to assist in improving the education of girls throughout Nepal, the implementation of laws would take time. Girls still face number of challenges to gaining social, political and economic equality with boys.

Discrimination against girls starts from the moment they are born. Sons are seen as bringing prestige and honour to the family whereas daughters are often considered only another mouth to feed. Here are several reasons why people allow social influences to affect their thoughts and behaviour. One reason is that we often conform to the norms of a group to gain acceptance of its members. Supporters of a football team voluntarily wear shirts of their teams to feel a part of the group. Friends may also wear similar clothing to their peers to experience a sense of belonging and to emphasize their shared ideas.

The girl is treated inferior to her brother. At a young stage, the girl is expected to perform many works. Girls are so educationally so disadvantage as compared to boys. This study includes social cultural beliefs of society.

In school maximum Badi are from the low-class family of different cultural background so they do not get the suitable time for reading mathematics due to which they select the other subject from options.

(Math Teacher's view)

Girls have to get married very soon so they should know the household skill than the mathematical knowledge. Our society unequally treats another cast and Badi student. Badi students has the inferior place in the society. No prestige is given to the Badi mathematics teacher.

(Student's view)

While analysing the above expressions of Maths teacher and Badi students, it showed that our societies have most illiterate people. The illiterate people thought

higher education was only for boys not for girls because the works of girls were only household. Their parents did not like to make male friends. Female were forced to engage to do household works by their parents. Her society had traditional culture. This culture created discrimination between other cast and Badi cast students. Due to the discrimination behaviour, female forced so many problems. It was also seen Badi had no any prestige in the society.

In Focus Group Discussion, parents said, “If our Badi students go outside and talk with other people, then other people start to talk about our Badi students and it becomes difficult to marry them.” The mathematics teacher said, “Culture of the society affects the participation of Badi in education. People do not want to give higher education for Badi Students. People treat Badi differently and they think Badi are transferable and whatever they are given they take with marriage. Society itself divides Badi and another cast. Badi are placed superior than Badi cast.”

From the above analysis, the researcher found that there was influence of society with negative social cultural beliefs, negative practices and negative attitude. According to sex role theory, the difference between Badi and Other is created by society and cultures. Badi lose confidence of doing well in mathematics and they do not take mathematics in Basic level education.

Parent Education

A parent education program is a course that can be followed to correct and improve a person's parenting skills. Such courses may be general, covering the most common issues parents may encounter, or specific, for infants, toddlers, children and teenagers. These courses may also be geared towards parents who are considering having a child, or adopting one, or are pregnant. Parent Education helps the children to get good education and make them economically sound. It also enables them to live

easily in society and face challenges. This study includes parent's academic qualification, their interest and awareness to educate Badi students.

Badi students must have the knowledge of household works so that they will be able to handle their house after marriage. We have not got any formal education, but we can count money and do transaction. Our child help for earn money most know fishing net and musical instrument works than education.

(Parent's view)

Illiterate parents may be embarrassed about their lack of reading and writing skills; however, many such parents have a strong desire for their children to become literate. My parents are illiterate, and they cannot teach me.

(Student's view)

While analysing the above-mentioned versions of the parents, it was known that, parents had traditional belief and primitive thoughts which was a matter of hindrance in the overall development of the girls. Literacy is built upon a foundation of per-literacy skills, which most kids pick up at home before ever stepping foot in a school. It was due to lack of parent's education that they had not taken formal education. Parents had not better attitude towards Badi students and they are not interested and aware to educate Badi students.

While observing the parents at home, it was not seen teaching or supporting child in study due to lack of education in them.

In Focus Group Discussion, parents expressed their views that they could not give higher education to their daughters because they were worried how to marry them and be aloof from their burden. Parents said, "Badi students are transferable assets so why to invest them a lot being they are not ours". Hence it can be shown that

parents were not aware and interested to motivate for creating learning environment to their child.

From above analysis, it can be concluded that Badi students' parents were illiterate, their interest was to marry daughters at the earlier stage and they were not aware to give higher education to their daughters. According to Walber's theory of productivity, parent's education enhances learning environment at home and they create pressure and support to their children in education hence illiterate parents causes low participation of Badi student's mathematics learning at basic level.

Interpersonal Relation

An interpersonal relationship is a strong, deep, or close association or acquaintance between two or more people that may range in duration from brief to enduring. This association may be based on inference, love, solidarity, support, regular business interactions, or some other type of social connection or commitment. Interpersonal relationships thrive through equitable and reciprocal compromise, they are formed in the context of social, cultural and other influences. The context can vary from family or kinship relations, friendship, marriage, relations with associates, work, clubs, neighbourhoods, and places of worship. They may be regulated by law, custom, or mutual agreement, and are the basis of social groups and society as a whole.

Self-interest generally refers to a focus on the needs or desires (*interests*) of one's self. A number of philosophical, psychological, and economic theories examine the role of self-interest in motivating human action. Every individual has their own interest. Another key factor for students learning is student's interest in mathematics which is shown to be related to achievement goals in mathematics classes and mathematics related career choices. There is no perfect well-structured, planned or

prescribed system that lets students think and act mathematically. This can be done if and only if students play their assigned roles in their learning progress (Strommen& Lincoln, 2019). Interest of girl's students also the vital role in participation. Interest of learner on particular subject has great influence in the improvement of knowledge and be successful on that particular subject, re-factor interest refers to the eagerness of the learners to learn about the particular subject Student's self-interest is related with their achievement and participation in mathematics students having a high level of interest in mathematics can perform well in subject learning too.

Mathematics is hard subject; there are lot of formulas and problem which I don't like.

(Student's view)

Above view of student, they are not interested to learn mathematics. I however was concerned to explore the reason which causes them to feel not good to be students of mathematics. Self-interest generally refers to a focus on the needs or desires of one's self. One's personal interest or advantage, especially when pursued without regard for others. The assumption that individuals are primarily motivated by self-interest. a concern for one's own advantage and well-being acted out of *self-interest* and fear.

A number of philosophical, psychological, and economic theories examine the role of self-interest in motivating human action. One's belief about mathematics can determine how one choose to approach a problem, which techniques will be used or avoided problem, which techniques will be used or how long and how hard one will work on it and so on. (Schonfied, 1985). According to burner "any subject can be taught effectively in some intellectually honest form to any child at any stage of development".

Language

The method of human communication, either spoken or written, consisting of the use of words in a structured and conventional way. Language is a system that consists of the development, acquisition, maintenance and use of complex systems of communication, particularly the human ability to do so; and a language is any specific example of such a system. The scientific study of language is called linguistics. Khas Nepali language is the of Badi and they speak Nepali at home with family members as well as in the community. Badis have developed a special language call khamsi or Palsi, which is spoken among them to cope with various problems encountered when begging from house to house. But the new generation does not language, nor is it spoken inside the house. When a person of another community comes to the house, Badis used to talk among family members in this language so that other would not understand what they were saying. This language is still spoken in large Badi settlements, and Badi elders often use it.

One of the Badi activist says, there can be documented and can be developed into a distinct Badi language. From the information from key informants and form observation, it can be concluded that Badi speak a different variant of Nepali language, and if it is documented and used and transmitted to the coming generations it can develop as a new language. But since the new generation does not speak Khamis or Palsi, the language. But since the new generation does not speak Khamis or Palsi, the language is becoming extinct.

Badis students have language problems they are not good speaker of Nepali language. Which creates difficulty in understanding Nepali language in comparison to other students.

(Math teacher's view)

The above responses it shows that, Badi students used their own language at school and classroom, teacher used Nepali language at class room. So Badi students have language problem understanding the mathematical process and concepts for the Badi students.

The researcher found the mathematics teacher and Badi students show that, Badi student their use informal language in his/her family, not standard vocabulary but in school informal language is not suitable. But in school's standard vocabulary are used. But teacher other students could not understand their language. There is language problem between teacher and Badi students. The main factor for learning mathematics to Badi student. Ogbu, (2001) furthermore argued that the discontinuity occurs in the area of language. This discontinuity carries the difficulty in learning mathematics. it is concluded that language is one of the factors that creates the difficulties in learning mathematics for the Badi students.

Cultural Discontinuity at Home and School

Experience Cultural discontinuity refers to the lack of cohesion between two or more cultures. Upon entry into school, differences in the functional use of language among culturally and linguistically diverse children have been found to account for the discontinuity them. Cultural discontinuity refers to the lack of cohesion between two or more cultures. Upon entry into school, differences in the functional use of language among culturally and linguistically diverse children have been found to account for the discontinuity they experience. Because children come to school socialized to language in culture-specific ways, the discourse structure and communication styles used by many children from culturally and linguistically diverse populations is in congruent with that of the teacher's style of interaction. This discontinuity between home and school language socialization patterns can have a

negative impact on academic achievement. In this paper we delineate some of the issues that illustrate the incongruence between home and school cultures and their implications for teachers.

The learning strategy of the children at home was discontinuity, Ogbu (2000, 2001) argued that due to the cultural discontinuity between home and school, children face problems in leaning mathematics. Environment of home and school affected learning of children. To sum up, the discontinuity between the cultures i.e. environment of school and home discouraged Badi children in the mathematics learning. The culturally based differences in communication styles and language patterns between culturally diverse students and their Euro centrically oriented teachers can often result in misinterpretations of students' ways of interacting, students' intelligence, and students' academic ability (Coleman, 2000; Delpit, 2004; Lovelace & Wheeler, 2006).

These students interact with their teachers and adults in the same way that adults interact with them in their culture, which is not consistent with the interaction expectations that teachers have of them in the classroom. Unfortunately, this often results in teachers misinterpreting students' responses to their questions or misinterpreting their motivations for not sitting in assigned seats, often interpreting the latter as a sign of blatant disrespect for classroom rules (Lovelace & Wheeler, 2006).

The researcher found the learning strategy of Badi students like observing activities and involving in the real activates are discontinued at the school that affects their learning. Most of the students had difficulty in learning mathematics. On the other hand, the students were forced to engage in performing household works by their parents. When they want to school they had to face different bad behaviours

from their friends from other caste. Teacher also did not give special attention to them as they treated all the students equally.

Collaboration between Teacher and Badi Students

Teaching strategies is plays a main role in the achievement of students. Teaching techniques is the part of teaching strategies. It is cause of difficulties learning in mathematics.

Collaboration with students in the design, delivery, and evaluation of instruction and decision-making involves students working in cooperative learning groups, as tutors and partners in partner learning (e.g., reciprocal teaching), and as co-teachers with their teachers. Collaboration with students also means involving students as decision makers and problem solvers, as designers of their own learning and being self-determined in planning for their own futures (e.g., student-led IEP and transition planning meetings). Further, collaboration with students means engaging students as mediators of conflict and controversy and advocates for themselves and others. Collaboration with students means fostering self-discipline and student learning and use of responsible behaviour. This, the participants perception about this view has given

Math teacher taught teacher centred method and he did not care to all students. He did not pre-class. He gave class work, but he only checks the copy the good students. And of the school teachers at the school from Brahimin and Chhetri. They do not response us. So, we were talking about another thing each other. Sometimes we tease the students in the back side of the classroom, when the teacher doesn't care us?

(Student's view)

Badi students have no involvement in group discussion. They have poor interaction with other students also. I cannot understand their language. They use mixed language in classroom. I asked questions, but they cannot response. So, I do not like to ask questions to them.

(Maths teacher's view)

The above views of students and teacher indicated that there was language discontinuity in the mathematics classroom. Due to the mixed language used by students in classroom, it was also seen that respondent did not motive in participation of classroom group discussion, and teacher did not care about it. According to Ogbu, (2001) the dominant language controls the school system through implementation of their curriculum and using their language. Also indicated that the mathematics teacher had been neglecting the question raised by Badi students in mathematics classroom. These classrooms psychological environment was not good. There was not proper interaction between Badi students and other students as well as teacher in the actual classroom practices.

Teacher Managements of Badi Students at Classroom

Classroom management is a term teachers use to describe the process of ensuring that classroom lessons run smoothly without disruptive behaviour from students compromising the delivery of instruction. The term also implies the prevention of disruptive behaviour pre-emptively, as well as effectively responding to it after it happens.

It is a difficult aspect of teaching for many teachers. Problems in this area causes some to leave teaching. In 1981 the US National Educational Association reported that 36% of teachers said they would probably not go into teaching if they had to decide again. A major reason was negative student attitudes

and discipline. Teachers do not focus on learning classroom management, because higher education programs do not put an emphasis on the teacher attaining classroom management; indeed, the focus is on creating a conducive learning atmosphere for the student (Eisenman, Edwards, and Cushman). These tools enable teachers to have the resources available to properly and successfully educate upcoming generations and ensure future successes as a nation. According to Moskowitz & Hayman (1976), once a teacher loses control of their classroom, it becomes increasingly more difficult for them to regain that control.

Students should get opportunity at shows not at home. Do you give extra provision for weak Badi students in classroom teaching?

It is impossible for me because of the large number of students in the class. If I provide long time for class work and extra time for them in the class, it is impossible for complete the course in an academic year.

(Maths teacher's view)

I am poor in mathematics and teacher hardly asks me any questions while teaching. When we help them, teachers beat us by saying don't talk in classroom. I'm sitting in last bench in the classroom.

(Student's view)

Interaction is the social activity and may be with persons and between persons with in persons interaction refers to the mental activates with his/ her mind and soul. It depends upon the personal intellectual capacity.

Research in education and psychology has demonstrated that teacher and students often understand shared experience through learning by doing.

Researchers and educators refer to cultural discontinuity in education varyingly as cultural dissonance, cultural conflict, cultural mismatch, cultural

incongruence, cultural misalignment, or a “lack of cultural synchronization” (Irvine, 2003, p. 7). Cultural discontinuity can be defined as disconnections and inconsistencies between school-based norms and values and those of some students, often from non-dominant cultures. As Obvious Theorem (2001) states that due to the lack of guidance and proper time management for the student they could not get ample opportunity to learn mathematics. Similarly, there can be students having different multiple intelligences and personality in single classroom, among which some need more time and effort to learn the same content than rest of others. So, they have to be provided enough opportunities and guidance in the classroom. If all the things have been well managed then, the better learning can take place.

Cultural discontinuity can be used as an analytical or theoretical tool to explain educational practices that demonstrate such disconnections and inconsistencies. School-based norms and values are socially and culturally constructed by Badi students.

Mathematical Content

Mathematics is abstract subject. It has many facts, theory and other conceptual understanding. The basic knowledge or pre-knowledge of lower grade is the key factor to affect the present grade. Prior knowledge is base also important potential determinant of later performance of students. Pre knowledge is the most important to learning that effect the achievement in mathematics.

I give opportunity to asked question about their confusion while teaching but except some students never ask. Similarly I give class work and homework with check up also. Students are poor in pre-knowledge. Most of the students were irregular in class and low interest in learning geometry. I am not using any fixed teaching method for geometrical teaching but my aim is to how

children receive the knowledge. Teaching period is short, to finish the course on time but that is impossible with child centred teaching

(Maths teacher's view)

From above the response the researcher concluded that most of the teachers are facing various teaching learning problems such as large number of students, different learning capacities of students, different cultural of students, students were not interested for their study etc. Although teacher did hard labour to provide quality education.

There is one way traditional teaching and boring theorems in geometry class.

There is no any sufficient multimedia and books about the geometry and math.

Only geometry box and graph board are use for teaching materials. About the

homework teacher gives use but they won't checked the homework never

given feedback. School took exam but we did not get opportunity to review our exam paper.

(Student's view)

From above the response the researcher concluded that the teacher has not use audio, visual materials as soon as locally available teaching materials. Not well participator approach of both students and teacher in geometry teaching at classroom, lack of diagnostic test, oral test and feedback. Teacher user lecture method in geometry teaching. Not evaluate students copy by giving class work and homework

The cause of difficulties in the learning of concepts in geometry couldn't trainable teacher, unavailable of instructional materials and modern technological material, large syllabus, poor pre-knowledge of students in geometry. According to Ogbu (2001) emphasized emphasizes learning not only as the product of the cultural and language differences but rather the nature of the relation between the culture and

language of minority/ disadvantaged and dominant groups. Since teacher do not relate geometry with daily activities of Badi's students which done in their society. So they are unable to understand geometry.

Impact of Home Environment in Learning

Home is the first school of students, so the home plays the vital role in learning mathematics. A family education and parent's or senior's behaviour effect achievement in learning mathematics. Most of the people of parental generation were uneducated. They were only skilled to traditional pattern such as making musical instruments, Sulpa, fishing net, fishhook, Tariyaetc and other household activities. The dropout rate of Badi children was excessively high in school. The Badi students are not treated as normal students because they are dominated by upper caste. Neither anyone government agency nor any NGO is interested to motivate the students and parents toward the education. They are poor and have work in other field and they are facing hunger. There is not positive learning environment toward education.

The uneducated and illiterate parental generation could not feel the value of education, as it should be which eventually in high rate of failure and dropout. Beside this major factor, lingual problem is the reason of massive dropout rate of Badi children from school and college. Badi students use informal language in his/her family, not standard vocabulary but in school informal language is not suitable. But in school's standard vocabulary are used. In every house hold there is micro cultural which is discontinuous in school culture. Home environment is affected by everyday life of all individuals.

In school, they get theoretical knowledge like they have to use theorem to solve different problem. There was a big discontinuity between home environments, school environment of Badi children. He learnt about different units for measuring

and weighting goods in school, which were not applicable in their community home. But they work in their home making *Gonaire, patiyar, and using hand Ek Bitu Ek Hat, Ek Gaj etc.* also they have to rely on traditional units (*Mana/pathi, paseri, Muthi, Dharni, Bisauli, Bitu etc.*) which is used everywhere in society.

These discontinues between everyday life and school practice make Badi students feel complicated on learning mathematics. so they felt difficulties to learn mathematics simple problems like LCM, HCF of function, word problem, multiply by minus sign, construction of angle, parallel line, parallelogram, triangle are main difficulties. Ogbu, (2001) theory argued that due to the cultural discontinuous between home and school Badi student felt difficulties in learning mathematics. Due to some of the cultural discontinuous between home and school, the thing have not been supportive for the learning mathematics for Badi students.

The researcher found that difference in the home and school culture, many students struggle to learn mathematics. The home and school environment of Badi students was not favourable for learning mathematics. The Badi students' difficulties in learning mathematics.

Chapter - V

SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

This chapter includes the summary of the whole study, it also includes finding and conclusion derived from the analysis and interpretation of previous chapter and finally recommends of how these findings can be used in the academic field.

Summary

There is a religious diversity, caste hierarchy and occupational varieties in Nepalese society. Caste and class-based stratification are still in practice in the society. Badi community is one of the marginalized and disadvantaged caste. Badi are also suffering from social discrimination based on caste and class position. Since the time immemorial, these Badi students are being discriminated, humiliated and disadvantage socially, economically, culturally and politically in the society by other caste people and the state on the name of ethnic group. The main objectives of the study were;

-) To explore the causes learning difficulties of Badi students at basic level.
-) To identify the influence of home environment of Badi students to learn mathematics at basic level.

For the fulfilment of the study, the researcher did the classroom observation and interview guideline to teacher, students and parents were consulted. To explore the causes learning difficulties of Badi students, the population of the study was taken students who were studying at basic level of grade V in Salyan District. The sample of the study was taken from Shree Bhanubhakta basic school Bagchaur 2 Salyan. Badi students (2 boys and 2 girls) were taken for the case study. To the finding of the study, Johan U.Ogbu's theory of cultural discontinuity was used.

This case study was based on qualitative research approach. To investigate the cause of low achievement of Badi students. The design of this study is explanatory case study in which meanings were derived from total research study, logic and reasoning of why and how it was like that, linking with theories. Teacher views, student's views, parent's views.

Most of the Badi students have difficulty in learning mathematics in same area and difficulty is due to their cultural discontinuity. Teacher also doesn't give special attention separately to the Badi Students, influencing factor which have indelicate dare very important because Badi students learn at home and the school. Along with these influencing factors. Home is the main area of learning for children's so home environment, school environment, parent's behaviour etc. play and important role. Similarly, behaviour of society and teachers also play the vital role for Badi students in learning mathematics.

As an observer, the researcher found that there are many factors affecting the learning Badi students at school. These factors are language, interpersonal relation, teacher student's home environment etc.

Findings

The research found that following are the causes of difficulties in learning mathematics:

-) There is cultural difference and discontinuity at home and school as they get practical knowledge in their home and theoretical knowledge in their home and theoretical knowledge at school.
-) Badi student's weak financial status, students also did work to earn money for their family and this is major reason of low attendance in classroom.

Irregularity of the students is cause of lack of pre knowledge and it us also cause of low achievement in mathematics.

-) Badi students have used their mother tongue at home and Nepali language as the second language which is never used in his/ her home. There is language discontinuity at home and in school.
-) Badi Students have not enough time for home study and to do exercise practise of mathematics at home because of domestic problem, parent's culture of the home is also not good for study. This is major causes of low achievement of Badi students in mathematics.
-) Teaching style was traditional. Lack of student-oriented teaching learning environment and lack of classroom management are causing to making the Badi students poor.
-) There is no proper collaborative between Badi students and mathematics teacher.
-) There is lack of interpersonal relation between Badi students and other students at classroom.
-) Badi students are always receive dominating behaviour by other students and teacher.
-) Different dimensions had played the role to occur the problems in teaching learning process such as not using the locally available teaching material, difficult to convert geometry question in mathematical language.

Conclusion

According to the sample school records and views of case respondents most of Badi students are weak in mathematics achievements. They didn't initiate in learning as well as in the classroom participation. They didn't attend school regularly and not

complete the assignment at home. To improve problems related to language, culture enrol a teacher. To upgrade economic condition, government should employ their parents by organizing some programs and to provide the extra classes in school specially focused Badi students.

The language, culture, economic status played by important role of Badi students, also the experience and everyday lives are seemed to be ignored by school practices. The learning environment, instructional materials are the main key which affected the study of Badi students. Personal factors such as motivation, interest, prior knowledge, attendance, gender, study hour, are the major factors that effect on mathematics achievement.

Recommendation

There are many factors which effects on mathematics achievement of Badi students. After analyzing, conclusion and implication of the study the research that present the following recommendations:

-) To increase their economics status, Badi should be occupational trained by government for the good livelihoodand good education.
-) School administration should gather students, teachers and guardians for open interaction so that, difficulties could be identified easily.
-) The people who discrimination to Badi should be punished and those who do not discriminate should be from government.
-) There should be at least one Badi teacher who understands the problem of Badi students in each school.
-) All the necessary educational material should be given from the school to the Badi students as special attention.

-) As this study has been conducted on learning difficulties in mathematics faced by Dalit students, it can be helpful to explore learning difficulties in other caste group such as Tamang, Rai, limbu, and other Dalit Students.
-) It may be help me further study of Badi students.

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Appendix-A

Individual student Records

School's Name:

Student's Name Class

Roll No. Sex

Age

Nationality Religion

Address

Distance to school from home.

Approximate

On footBus Other means

Father's Name

Occupation

Mother's Name

Occupation

Number of Family members

Appendix - C

Interview Guideline with the case students

Name of student Date

Class: Gender

Roll No Position class:

Age: Caste:

Birth Place:

The interview with the Badi students will take on the basis of following things:

-) Family background
-) Personal history
-) Opportunity to the study at home
-) View about the learning environment at home and school
-) Teacher's behavior towards Badi students.
-) Difficulties area in mathematics.
-) Relation between teacher, Badi students and other students.
-) Encouragement provided to Badi students by parents and teacher.
-) Participation of Badi students in mathematics class.
-) Relation between Badi students and their mathematics teacher.
-) View about their culture and language
-) View about school environment.

Appendix-D

Interview Guidelines with the Parents

Name:

Address: Permanent: Temporary:

Age: Date:

Qualification:

Occupation:

The following interview with the parents will take on the basis of following main topics:

-) Economic condition and income sources about family
-) Parents view about Badi children's education
-) Environment at home for learning
-) Relation with other caste
-) Parents view about economic help from NGO, INGO and governments
-) Influencing factors of education
-) Thought about the education of their children

Appendix-E

Interview guideline with the Mathematics Teacher

School Name Date

Teacher's Name: Class:

Qualification: Subject:

Experiences: Period

The following interview with the Mathematics teacher will take on the basis of following main topics:

-) Teaching strategies of the Badi students
-) Problem of teaching Badi students
-) Encouragement of the student learning
-) Participation on individual/group
-) Relation between teacher and Badi students
-) About class work and homework
-) Impact of cultural difference in learning mathematics
-) Factors that influence the learning of mathematics for Badi children.

The observation of Badi students will be taken on the basis of following main topics and notes will be made every day detail.

-) Teacher's behaviour towards the Badi students.
-) Main problem of teaching and learning mathematics.
-) Friend's behavior toward the children.
-) Daily life practices.
-) Children's involvement in household work.
-) Learning environment in classroom.
-) Difficulties area in learning mathematics.