

**ANALYSIS OF DASHANAMI STUDENTS PARTICIPATION IN
MATHEMATICS LEARNING**

**A
THESIS
BY
GANESH CHANDRA BHARATI**

**IN THE PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE
DEGREE OF MASTER OF EDUCATION**

**SUBMITTED
TO
DEPARTMENT OF MATHEMATICS EDUCATION
CENTRAL DEPARTMENT OF EDUCATION
UNIVERSITY CAMPUS, KIRTIPUR
TRIBHUVAN UNIVERSITY
KATHMANDU, NEPAL**

2023



त्रिभुवन विश्वविद्यालय
शिक्षा शास्त्र केन्द्रीय विभाग

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Letter of Certificate

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Letter of Approval

This thesis entitled "**Analysis of Dashanami Students Participation in Mathematics Learning**" submitted by **Mr. Ganesh Chandra Bharati** to partial fulfillment of the requirement for the degree of master of Education has been approved.

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Recommendation for Acceptance

This is to certify that **Mr. Ganesh Chandra Bharati** has completed his M.Ed. thesis entitled "**Analysis of Dashanami Students Participation in Mathematics Learning**" under my supervision during the period prescribed by the rules and regulations of Tribhuvan University Kirtipur, Kathmandu, Nepal. I recommend and forward his thesis to the Department of Mathematics Education to organize the final viva-voce.

Date:

.....

Mr. Krishna Prashad Bhatt

(Supervisor)

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Dedication

Honestly dedicated

To

My parents

Declaration

This thesis contains no material that has been submitted for the award of another degree in any institution. To the best of my knowledge and belief, this thesis contains no previously published materials by any authors, unless due acknowledgment has been made.

.....

Ganesh Chandra Bharati

Acknowledgements

I am very pleased to submit my dissertation title "Analysis of Dashanami Students Participation in Mathematics Learning" for a master's degree in Mathematics Education. I would like to take this opportunity to express my sincere gratitude to all those who have given me the necessary support advice, and inspiration to complete this work.

First and foremost, I extend my heartfelt thanks to my thesis supervisor, Mr. Krishna Prashad Bhatt, of the Mathematics Education Department at Tribhuvan University. He provides me with valuable guidance, constructive feedback, cooperation, and encouragement throughout the study. His unwavering support and interest in my research work were truly inspiring.

Additionally, I would like to express my sincere appreciation to Mr. Abatar Subedi, the Head of the Mathematics Education Department at Tribhuvan University, for his valuable suggestions and official cooperation. I am also grateful to all my esteemed professor, lectures, and staff members at the Central Department of Education and all members of the education department at Kirtipur for imparting their extensive knowledge and guidance.

Furthermore, I am grateful to the wonderful students of the CED for help this research. I would like to thank my family members, friends, and all my well wishers for their kind cooperation and support, both directly and indirectly, in this work. Finally, I would like to express my sincere gratitude to all those who have contribute to this research in any way. It is their encouragement and support that has helped me to complete this dissertation.

Ganesh Chandra Bharati

Abstract

The present study entitled "**Analysis of Dashanami Students Participation in Mathematics Learning**" has main objectives to find out the participations of Dashanami students in mathematics educations in master level and to identify and analyze the causing factors of participation of Dashanami students. The design of this study was qualitative with a narrative inquiry. The data were collected by using purposive sampling method. The total samples were three where two are Dashanami students of Central Department of Education, Kirtipur and one is Dashanami teacher of Kapilvastu district, Shivraj municipality. I analyzed and interpreted the collected data from descriptive point of view.

This research is related to the narrative inquiry of qualitative research. In this, the experiences made by the students during their mathematics studies through indirect interviews with two Dashanami students studying in Tribhuvan University and one Dashanami teacher from Kapilvastu have been compiled. The teacher's experience about Dashanami students during his thirty two years of teaching has been included in this research.

After the analysis and interpretations of data, during the study of four batches of the Central Department of Education at Kirtipur, not even one student in each batch was found to have Dashanami. Only one participant was found in the fourth batch, zero in fifth and one in the sixth batch. It has been found that different causes. It was found that causing factors of participation of Dashanami students and they are: low populations, caste trend, economic situation, education situation of the family and geographical situation.

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Chapter I

Introduction

This chapter consists of background of the study, statement of problem, objectives of the study, research questions, significance of the study, delimitations of the study and operational definitions of the key terms.

Background of the Study

Dashanami Sanyasi is one of the Hindu religious cultural groups. One portion of Sanyasi people lives in Nepal too. Literally, Dash mean in ten in the Nepali language. Dashami includes people having 10 surnames.

It is a Hindu monastic tradition of Ekadandi Sanyasi generally associated with the 'Advaita Vedanta' tradition. They are distinct in their practices from the Saiva Sanyasi (Tridandi) and from Vaisnav Sanyasi. The Tridandi Sanyasi continuous to wear Janai after renunciation, while Ekadandi Sanyasi does not. Any Hindu, irrespective of class, caste, age, or gender can seek Sanyas as an Ekadandi monk under the Dashanami Tradition.

Sri Adi Shankaracharya (788-820 AD) organized a part of the Ekadandi monks under an umbrella grouping of ten names to provide an organized base for the growth of Hinduism. Later on, these 10 groups became 10 surnames. But today many of these branches are different and not in control of Shankara Math. Some of the branches started their own tradition and beliefs during centuries.

10 Surnames of Dashanami in are: Giri, Puri, Bharati, Ban or Van, Titha, Pravat, Sagar, Saraswati, Aashram, Aranya.

Like other castes who have been living in Nepal since time immemorial, Dashanami is also one. The main occupations of the Dashanami caste are agriculture, industry, trade and public service. According to the A.D 2011 census, the total

population of this caste is 227822. It is 0.88% of 100% of the population and is spread over 74 districts of Nepal. It is 33922 (14.88%) in urban areas and 193900 (85.22%) in rural areas. Mustang has the lowest population at 14, followed by Dang at 12924 (5.67%), Kathmandu at 12647 (5.55%), Lalitpur at 1718 (0.75%), Bhaktapur at 2939 (1.25%) and Sindhupalchowk at 10422 (4.57%) and 10540 (4.23%) in Jhapa. (CBS 2011)

Education play a vital role of development of people society and nation and also called backbone of the department .The individual's capacities skills and behavior could be formation through the better education without education people cannot be develop their good behavior and specially education cannot be perfect in itself without mathematics . Mathematics needs must time to practice but every don't get enough time to practice.

Mathematics is related to every human activity. Everyone needs to know the basics concept of mathematics. There is variety of students in each class. Students from different castes also come to the same class. Among which Dashanami is also one but the number of students from Dashanami community is less than other castes. In my experience, when I was studying for a bachelor's degree, I was not only studying mathematics, but I was also the only student of the entire education faculty from the Dashanami community. And now even at the master level, I am the only one from the Dashanami community in the mathematics department. That is why I have studied this subject to get information about the educational status of Dashanami students.

Statement of the Problem

This study is in born from my experience from secondary level to master degree in mathematics classroom. There is a negligible of Dashanami students in

mathematics classroom. This study focus on the participation of Dashanami student at master level .While teaching mathematics in classroom Dashanami student are less interest to learn mathematics. The political, economical, religious and culture condition of the society can effect in the study of mathematics education for Dashanami people. Therefore there are different questions related to the difficulty in mathematics learning for Dashanami student.

Research Questions

The research questions of this study were as follows.

1. What is the level of participation of Dashanami students in mathematics classroom?
2. Which factors are affecting the Dashanami students for learning mathematics?

Objective of the Study

The objective for this study is to find out the participation mathematics education of Dashanami in master level at central department of education of Tribhuvan University in Kirtipur.

1. To explore the participations of Dashanami students in mathematics education in master level.
2. To identity and analyze the causing factors of participation of Dashanami students.

Justification of the Study

Literacy rate of Nepal is very low in comparison to other develop country. The social status of Dashanami community is conked. This study is concern with the participation of Dashanami student in learning mathematics. This research tried to find out factor of low participation of Dashanami student in mathematics at master level. This study also helps to find out the solution existing problems of Dashanami

student participation in master level. This study is important for the following significance.

- This study is helpful to increase Dashanami participation in master level in mathematics.
- It suggests the further research study regarding problem of learning mathematics for different community for Nepal.
- It helps to develop effective mathematical instruction planning and right decision to improve mathematics education of Dashanami student.

Delimitation of the Study

This study is not perfect and free from limitation all of the study have some short of limitation and the problem of every field. So that this study has also some limitation which is pointed as below.

- This study was concentrated on only Dashanami student's participation in master level mathematics in Central Department of Education in Kirtipur.
- This study related to 4th to 6th batch of the semester.

Operational Definitions of the Key Terms

Achievement. Achievement of this study is defined in terms of the source obtained by the students on the achievement test administered by the research.

Dashanami. Dashanami sannyasin, Hindu Shaivite ascetic who belongs to one of the 10 orders established by the philosopher Shankare in the 8th century CE and still flourishing in India today. The 10 orders are Giri, Puri, Bharati, Ban or Van, Sagar, Pravat, Tirtha, Aranya, Saraswati and Aashram.

Ethnic group. It refers to a specific group of people having common culture, tradition and language. So Dashanami lies in Ethnic group.

Mathematics learning. Gain is powerful skills of mathematics learning relatively persistent change in an individual potential behavior due to experience. The experience a student gets when he/she is exposed to mathematics activity or any other activity aimed at causing a change in an individual's behavior.

Participation. Participation in this study defines in term of class attendance, class room interaction (with teachers and other students) and extra activities (like homework, class work, class test etc.) of Dashanami students in master level. In this study participations is defined as an involvement of Dashanami students of master level of Central Department of Education's who are academically regular in mathematics classes and participations in every classroom activities, class work and shares mathematics problems with teachers.

Students. In this study student refers who studying in Central Department of Education, Kirtipur. Dashanami students' lays ten caste groups in Nepal community. Ten caste means like this Giri, Puri, Bharati, Ban or Van, Sagar, Pravat, Tirtha, Aranya, Saraswati and Aashram.

Chapter II

Review of Related Literatures

This study is concerned with the participations of Dashanami students in learning mathematics at master level in Tribhuvan University Kirtipur. Review of related literature is an essential part of research for the research because related literature helps and guides researcher for the further study. This chapter describes the development of Dashanami education. The previous studies cannot be ignored because they present study. This chapter also describe empirical and theoretical framework on this study.

Review of Related Empirical Literature

Adhikari (2006) carried out the study entitled "Cultural discontinuity and Learning difficulties in Mathematics: A case study of primary dalit children." The researcher was determined the objectives to identify the cause of difficulties in learning mathematics of dalit children and to identify the impact of home environment of the dalit children in learning mathematics. The researcher used case study under qualitative research design. The researcher limited his study on two public school in Kaski district by using purposive sampling. He was selected participation observation and in-depth interview for data collection. He was concluded that caste system in Nepal appeared to be a focal point that has affected the everyday lives of people. Caste system influencing factor for thinking towards other people. In every field like as in school or community, they have to be dominated, humiliated and oppressed due to their culture and poor language. So the culture discontinuity is one of the main cause of difficulties in learning mathematics. He concluded that due to the negative home environment, low income of the family, uneducated family environment and

excessive household chores are the main factors of difficulty in learning mathematics for dalit children.

Chaudhary (2014) did a research on topic “cause of low achievement of musahar student in mathematics”. The prime there of the study is to find the causes low achievement of musahar students in mathematics and identify the strategies adopted by school administration to improve mathematics achievement in mathematics. This study was done in shree higher secondary, Simra Bhawanipur VDC - 1 Rautahat. The study was conducted by taking of sample 2 boy and 3 girls with the tools observation in depth interview and school documents. The researcher found that, there is culture discontinuity at school and home.

Shrestha (2016) carried out his study entitled "Cultural Diversity and Difficulty in Learning Mathematics." The main aim of this study was to identify the difficulties in learning mathematics of culturally diverse classroom at school and explore the relation between learning mathematics and culture. In this research the researchers raised questionnaire for teachers and students both. Selection of the research design was qualitative and ethnography approach. He conclude that culture and learning mathematics has mutual relationship. Lack of culture friendly curricular materials, student's anxiety in mathematics, traditional teaching learning activities, family environment and their socio-economic status and discrimination in classroom were the difficulties in learning mathematics in culturally diverse classroom. The researcher has also found that mathematics teaching and learning ways from the school was not good. Existing school mathematics teaching learning practice season to have been failing to address social and culture needs of the students.

Dahal (2011) had studies on the topic “caused of low achievement in mathematics of magar students. A case study” with the objectives to explore the

causes the bring low achievement of magar students at home and school. This was case study research having qualitative and descriptive nature with 2 boy and 2 girls of primary level of kaski district was selected purposively a here magar students studies. The tool for data collection were interview , observation and written documents. He concluded that parent's education and occupations, learning opportunities at home, culture and contemns, teaching methods, relation between teacher and students.

Ghimire (2013) did a research entitled on "Difficulties of Bote students in learning mathematics" for the partial fulfillment of the requirements for the degree of master of education, under the department of education mathematics education. The objective of this study were to identify the difficulties of Bote students in learning mathematics at lower secondary school level and to analyze major causes of difficulties in learning mathematics. This study based on in depth interviews with children classroom observation and observation of home environment and necessary to gain the teacher and parent's perspective. This research found that Bote students are socio-culturally bounded, they falls under the deprived group and are suffering from partially in the society so, they bear inferiority complex in psyche. Also researcher got that there is a drastic gap between their home and school culture at the end which create barriers in learning mathematics. For learning mathematics. They have lack of physical facilities time consumed by various household tasks, lack of learning materials due to poor economic conditions and another major lack is that there is a vast communication gap between teacher, parents and administration on students learning. The researcher concluded that for the improvement of learning mathematics procedure of Bote students teacher and parents should equally responsible for this there should be eliminated that gap between parents and administration and motivated the Bote students on learning mathematics.

Aale (2012) did a study entitled on “mathematics learning different of magar children at primary level. (A case study in sindhuli district)”. For the partial fulfillment of the requirement for the degree of master of education under the department of mathematics education. The objectives of this study were to analyze the role of culture continuity of school and home culture in facilitating mathematics learning and to explain the individual learner and school strategies to address the learning difficulties in mathematics of magar students due to their cultural position with respect to school culture. The research adopted a purposive sampling to collect data. The tools of the research were interview schedule, observation form. Researcher used the theory of John Oghu to interpret the information and to get the conclusion from this study, the researcher found that the culture discontinuity, language culture practices interpersonal relation, low economic condition unfavorable school environment for the different cultural group. Students, teacher, learning opportunity at home, lack of separate room to study support of necessary learning Materials were the main reasons for the difficulties of learning mathematics to the magar students. Researcher concluded that on relating culture practice of the students an learning management in the school to promote learning in mathematics.

Rijal (2008) did a study entitled on “Difficulties in learning mathematics; A case study of Rana - Tharu students” in kanchanpur district for the partial fulfillment of the requirement for the degree of master of education, under the department of mathematics education. The objectives of this study were to find the difficulties and cause of difficulties in learning mathematics of Rana - Tharu students. The research adopted the qualitative research design in which case study approach used. The research tools of this study shows that there is a cultural difference and discontinuity at school and home. There is discontinuity because of language, lack of interpersonal

relation, no proper interaction between teacher and students. The home environment and school environment are not conducive for mathematics learning.

Tamang (1990) Studied entitled on “Elementary process of learning mathematical concept and process of Rasuwa Tamang”. The purpose of this study were to identify the basic mathematical concepts used by Tamang adult with no formal mathematics education, to identify traditional Tamangs method of mathematical operation and to find out the implication of tamang process and tone up to the present learning situation . That project work has shown that the tamang have their own mathematical processes and geometrical concept. The study had also showed that the situation of children in to the formal system. But it did not study the effect of ethno-mathematics practices in the classroom practices.

Thapa (2001) conducted a study entitled "Learning strategy for out of school children of Dalit community." The objectives of research was to find out the learning skills and ways of learning in daily life of untouchable children, to examine the skill which are helping them for the better life in the future and suggest the ways of establishing linkage between everyday life and out of the school curriculum. An interview and participants observation was the main tools of data collection. There were contents which were not contextualized and there was the marked different between society a classroom learning. In out of school classes more emphasis was placed on theoretical aspects and less stress on practical matter. Even in the training material, biological approaches were not included.

The study drew some implication for the improvement of teaching and learning methods of the out of school programmer curriculum. It also comes off with the implication that out of school program materials must be related to everyday life of the children and their ways of learning.

Poudel (2004) conducted a research on learning strategies of mathematical concept of out of school children, a case study of Dalit community. The main objective of this study was to investigate mathematical skills acquired by the out of school children in Dalit community and ways of learning. The nature of study was descriptive qualitative type, he conclude different mathematical concept were constructed in different situation as they were engaged in household works, form works, avert works and the interaction between the numbers of family and society. The result also showed that they acquire mathematical concepts through experience, practice and scaffolding. It was also found that they learned by observation other work by hearing from the others out of school children they learned counting adding, subtraction and multiplication. But the concept of division was not quit clear to them.

Sigdel (2004) conducted a research on learning mathematics of out of school children a case study of Kumal community. The main objectives of that study were to investigate how non school in Kumal children learns mathematical skills. The nature of the study was descriptive type. The different tools such as case study, observation and interview were applied to investigate their learning of mathematical skills and Vygotsky's social constructivism theory was applied to analyze the data. In his research he concludes that the out of school Kumal children learnt most of the mathematical skills at home because they have to help to their parents work to solve their hand to mouth problems. They are not provided formal training for their everyday work they were instructed to do different mathematical calculation from childhood. They were given new works and gradually learnt the acquired mathematical skills from practice. Thus by participating in various works related to mathematical skills, they gradually become able. Many household skills related to

mathematical were learnt in the social context. Their knowledge about mathematical skills was practice based rather than theoretical understanding.

Khanal (2015) completed the Ph. D entitled "Learning Strategies of Mathematics Students". His aim was to explore students learning strategies in mathematics, to analyse the differences in students, learning strategies by gender, ability group, location and school types, to identify the most effective learning strategies for better achievement in mathematics, to examine classroom practices as learning strategy promotion activities, and to determine the factor contributing to the formation of learning strategies. He raised the research questions: What are the learning strategies of students in mathematics? What learning strategies do secondary level students adopt the most to solve the mathematical problem? What is the problem between boys and girls students in their preferred learning strategies? How are the classroom practices promoting learning strategies? He used mixed method research design to deal above research questions. The research tools was questionnaire, observation and open ended interview. He found that the students created and used different learning strategies while learning mathematics like: peer learning, rehearsal, elaboration, help seeking, effort management, time and study management, organization and critical thinking. The mismatches existed between teachers teaching strategies and students learning strategies. The quality teacher was an extremely good classroom manager. If the classroom is poorly managed then effective teaching and learning can't take place. He also concluded that student attempt to memorize material by repeating over and over. Similarly, they even elaborate by summarizing and putting the materials in their own words. They are also involved in deeper processing through the use of various tactics such as drawing, note taking, diagrams, listening, developing concept map or organizing materials in some manner. Student even use

critical thinking strategies to learn mathematics. Students do certain planning, summing and setting up goals as promoted by metacognition strategies. In the addition they performed to seek assistance from their peers, teachers and elders. Asking for help is good strategy as it allows students to learn from others when they cannot deal with the problem alone. They learn in different ways like: by doing, hearing, acting and reflecting, reasoning logically and intuitively, analysing and visualizing steadily. The action of various students produce various strategies in learning. However, peer learning, elaboration, help seeking and effort management are the learning strategies mostly used by mathematics students. Teachers teaching strategies have a significant role in promoting learning strategies. Classroom practice play significant role in promoting learning strategies.

Moreno (2015) Carried out the study entitle " Discourse and Knowledge in two community college developing mathematics classroom". He raised the research questions: What are the patterns of participation on a development mathematics classroom? What are the norms for classroom discourse reflected by these patterns? How does these norms relate to discursive focus on conceptual vs. procedural knowledge? To address these research questions the researcher selected a qualitative research design with ethnography approach. He used classroom observation and interview guideline with teachers and students were the main tools to collect the information.

The examined regularities in the classroom activity to defined pattern of participation that formed the social and socio-mathematical norms fostered in each classroom. Classroom norms depended the understanding of how teacher invited students to participate in classroom discourse and the roles teachers and student played. Supported by the teacher known answer questions, monologue discourse in

one of the classroom was focused on rote memorization of mathematical procedure, whereas a less monologue discourse in other understanding these procedures. Then he concluded that classroom discourse and normative interaction pattern guide and influence students learning in the ways that can improve mathematical goals.

Pangeni(2006) Conducted a research on concept of geometry used by Chitwan Tharu. The study was related to the geometrical concept used by Tharu community. The nature of the study was descriptive qualitative type. The objective of that study was to explore the geometrical concepts used by Chitwan Tharu. The researcher used observation, interview to collect the data from the related field. It was found that before constructing any objects at first they make a shape and size of that object in their mind and construct an object using traditional method of measuring using hand according to their thoughts designed before. It was also found that they mostly prefer to construct geometrical objects which are circular in shape and they could not distinguish between geometrical objects having different shapes such as sphere, circle, two dimensions and three dimensions and they did not know about new creation. They used only traditional concepts.

Pant (2007) Conducted a study entitled " Basic mathematical concept that the numeration system of Darai." They have their own script for numerals. They have their own mathematical process for mathematical operations. Also they have their own traditional system of measurement for length they measured with hand. Similarly the area is measured which plugging time, volume is measured with mana, pathi, muri, and weight is measured with tulo.

Chhetry (2007) conducted a study entitled "Mathematical group of sawyers; a case study of sawyers." This was qualitative type of study. The objectives of the study were to identify the mathematical skills used by sawyer. The research area of

this study was Baglung district. He found that sawyers used to mathematical skills in their works heavily. They used the concept of number, measuring scale, some geometrical idea in their work; they gained mathematical idea through learning experience and from adult.

Lamichhane (2008) conducted a research on mathematical concept of out of school children, a case study of Tharu community. The main objectives of this study were to find out mathematical concept used by out of school children from the Tharu community. The nature of the study was descriptive type. He concluded that different mathematical concepts were constructed in different situation as they were engage in household works, farm works, abort works and the interaction between the number of family and society.

Review of Related Theoretical Literature

For the study, the researcher introduces the theoretical discussion in this chapter. Ezra Park's marginal man theory, Ogbu's theory in the context of ethnic group of community and Vygotskian theory of social constructivism have been used for the interpretation of the finding of the study. They are described as follow:

Ezra Park's marginal man theory. The concept of the marginal man was first introduced by sociologist Robert E. Park in 1928. It refers to an individual who exists at the intersection of two or more cultures, often feeling neither fully a part of one nor the other. This can result in a feeling of dislocation, uncertainty, and anxiety.

As the passage notes, the marginal man may experience a desire to align with the group that occupies a higher status. However, this desire may not always be possible or feasible, as the individual may face rejection by both groups. In some cases, accommodation between the groups may lead to the emergence of a middle class.

The experience of double consciousness, as analyzed by W.E.B. Du Bois, refers to the way in which the marginal individual may see themselves through the lens of two different cultures, each with its own set of values and expectations. This can create a sense of internal conflict and confusion.

The life cycle of the marginal man involves an initial phase in which a small group of individuals may be ahead of the rest of the minority in terms of education or social standing. This group may then grow and form a movement aimed at achieving greater equality and independence. The final outcome of this process may be the creation of a new social framework or the incorporation of the minority into the dominant group.

Overall, the concept of the marginal man highlights the challenges faced by individuals who exist at the intersection of different culture, and underscores the importance of understanding and accommodating these individuals within society.

Ogbu's theory in the context of difference and culture discontinuity theory. In these sections, the researcher discussed the theoretical framework for the study that has support the significance of difficulties on learning mathematics of the student. Discontinuity, difference between the culture of home and school, there were more difficulty in learning mathematics and participation of students, simply because of conflicting nature of curriculum, education setting, socio-cultural background, teaching practices of the children. Consequently, children from student learn poorly in class and ultimately they have no potion except drooping out from their school. Students were from poor economic environment. Illiterate family backgrounds they faced many can be used for the analysis an interpretation of data such as social learning theory, culture language theory everyday life theory and cultural

difference/discontinuity theory and so on. So for the analysis and interpretation data the researcher had used a cultural discontinuity theory of John Ogbu (2000, 2001).

Ogbu (2000) delineates about the cultural differences and cultural discontinuity that deals with the problem in children learning caused by the differences and discontinuities between culture of home and school. Those children whose home cultures are much similar to cultures of home and school. Those children whose home cultures are much similar to cultures of schools can cope easily with the system that may result better learning achievement. Similarly, the children with unmatched or dissimilar home cultures with school culture and they don't have enough attention in their learning and don't get much recognition of their culture and they have to work hard achieving learning outcomes compare to the children with well matched.

As his study suggests, involuntary minorities face more difficulties in school learning participation and performance due to big gap between their cultures and mainstream culture. For them, it is too difficult to cross cultural boundaries in school compared to the voluntary minorities with the primary cultural difference. He further elaborate that primary cultural differenced may create problem in the inter personal and inter group relations as real as difficulties in academic work for several reasons. Among them, most important reasons for children with different cultural backgrounds start get a vast difference reality in school. In addition, lack of necessary concept and skills in their own cultures may be an obstacle for their learning.

Ogbu (2001) furthermore argues that discontinuity also occurs 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 use in school i.e formal education. Similarly, since children

learn in school environment without to their natural context in their experience, learning may have no any significance to their everyday life. Ogbu (1982), argue that the primary secondary culture discontinuity also causes the difficulties in learning and he argues that the children from disadvantaged caste tend to develop coping behavior and attitudes that are different to school culture that obstructs their learning. The theory of cultural discontinuity describes social structure but there are micro cultures in every household that influence children's learning. In his consideration, everyday life theory is to consider finding out the children's home and their interpretation of it Dashanami children are more or less concerned with school problems and the problem of caste like minority. The children with similar culture as that of school may do well in school whereas the disadvantaged minority children like Dashanami 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 of learning.

Social constructivism. The social constructivism is the trend within the modern field of sociology of knowledge. Sociological knowledge is an epistemological discussion of knowledge is created and acquired. Social constructivism focuses on actual production of scientific knowledge. Therefore it is not merely a study of how social factor and practical theory and Vygotskion theory of social construction has been used for the interpretation of the finding of the study. They are described as follows:

Lev Vygotsky. Lev Synvitch Vigotsky was Russian psychologist. He was born on November 5, 1896 in the town of Orsha, Northeast of Miinkin Byelorussia. He

completed gymnasium in Gomel with the gold medal in 1913. After graduating from Masco University with specialization in literature in 1917, he began his literacy research. Vygotsky was famous scholar who emphasis on the social construction. Social constructivism is a theory among the several theories on construction. The researcher has been used Vygotsky's theory for this study that knowledge is socially constructed and children learn when they get contact with outer environment either verbally or observantly. Vygotskian is one of them; that regarded social interaction between peers and adults as important aspect in creating meaning making sense and conveying culture within the shared context.

According to Vygotsky, infants are endowed with basis perceptual and memory capacities that they shared with order animal. These develop during the first year through direct contact with environment. The rapid growth of language leads to a profound change in thinking. It broadens, preschool's participation in social dialogues with more knowledgeable individual, who encourage them to master culturally important task. Soon, young children start to communicate with themselves. As a result basic mental capacities are transformed uniquely into human's higher cognitive process.

Vygotsky focus that a child learns something first on the social level, then he later on at the individual level. It means children develop their skill through playing or increasing with peers and other adults. This means that social level takes first for intension of the learning. Vygotsky though such inner psychological process at the individual level eg: emotional and cognitive structure. Therefore internalization is process at the by which inter psychological becomes the intra psychological is not a simple transform from external activities to perform cognitive structure. The learning is thus facilitated through speech, interaction and co-operative activities.

Knowledge is being constructed in social situation of negotiation rather than being the relation of the real object reality, which is termed as social construction believes on the multiple construction of the world. In social constructivism theory each human being makes sense of the world in a unique way (Mc Combs and Mc neely, 1919 cited in JRME, 1992)

According to social constructivism Vygotsky, knowledge is constructed in two ways in the social context. Firstly, social interaction influence on the nature of knowledge that is constructed and process of individual use to construct that knowledge. Thus the constructions are socially centered and in value process of understanding, constructing, meaning and making senses (Brunner et, al. 1987). The children's construction of knowledge is not only from individual but also from the contents, the context and the interaction with more knowledgeable others. Here the knowledge is constructed by child needs some mediator such as parents, teacher and adults or peers to uplift his knowledge from the knowledge they was. Although, the researcher have reviewed many aspects. I have used only selected theoretical concept related to my objective which is relevant to the concept of Vygotsky social constructivism.

Implications of the Review for the Study

Above reviewed literature (theoretical and empirical) is similar and helpful for the study. I have taken ideas and information about my researches which have been more useful and helpful for my study based on procedure, methodology, sources of data, tools and so on. This review of the study obtained information from the varieties of book, theses, and journal articles and so on. These entire sources helped me to build the ideas related to research problems, challenges, and new methodology and contextualize the finding and provide an opportunity for critical analysis.

Ogbu's theory in the context of ethnic group of community and Vygotsky's social constructivism theory provide me an insight for building theoretical knowledge.

Conceptual Framework

This study focuses to classroom participation of Dashanami students in Mathematics learning activities and their achievement in mathematics. To guide this study a conceptual framework is organized in the following diagram.

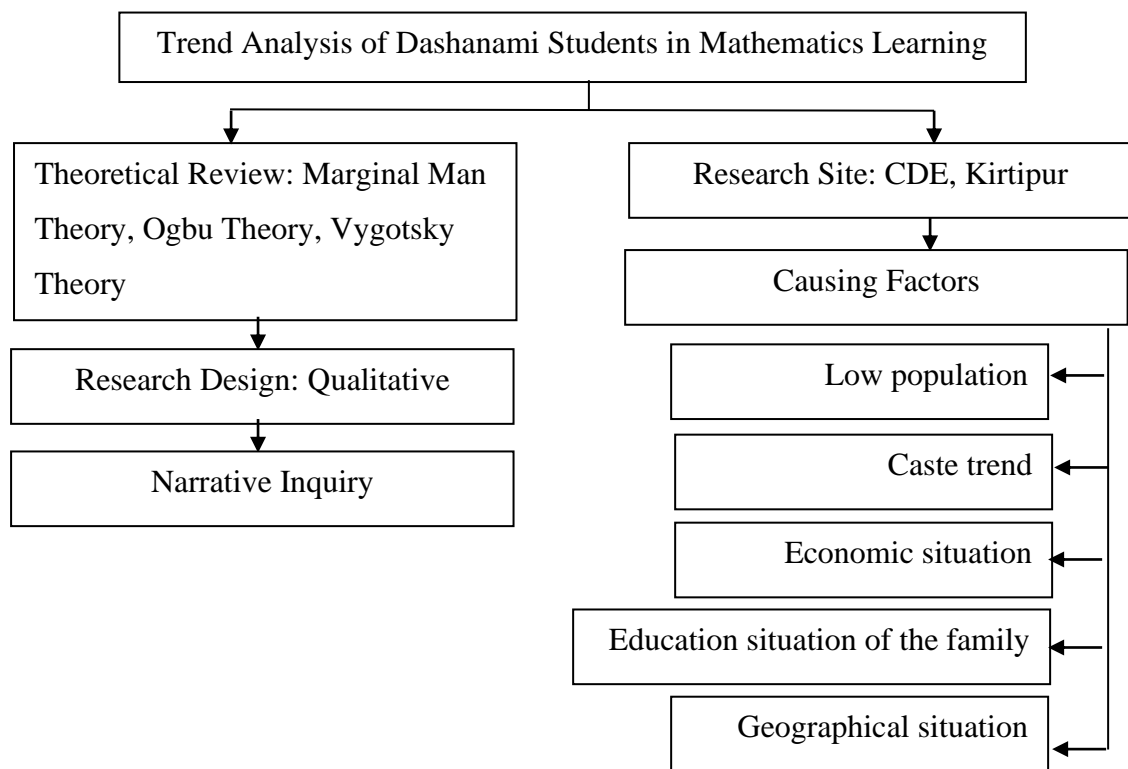


Figure 1: Conceptual Framework

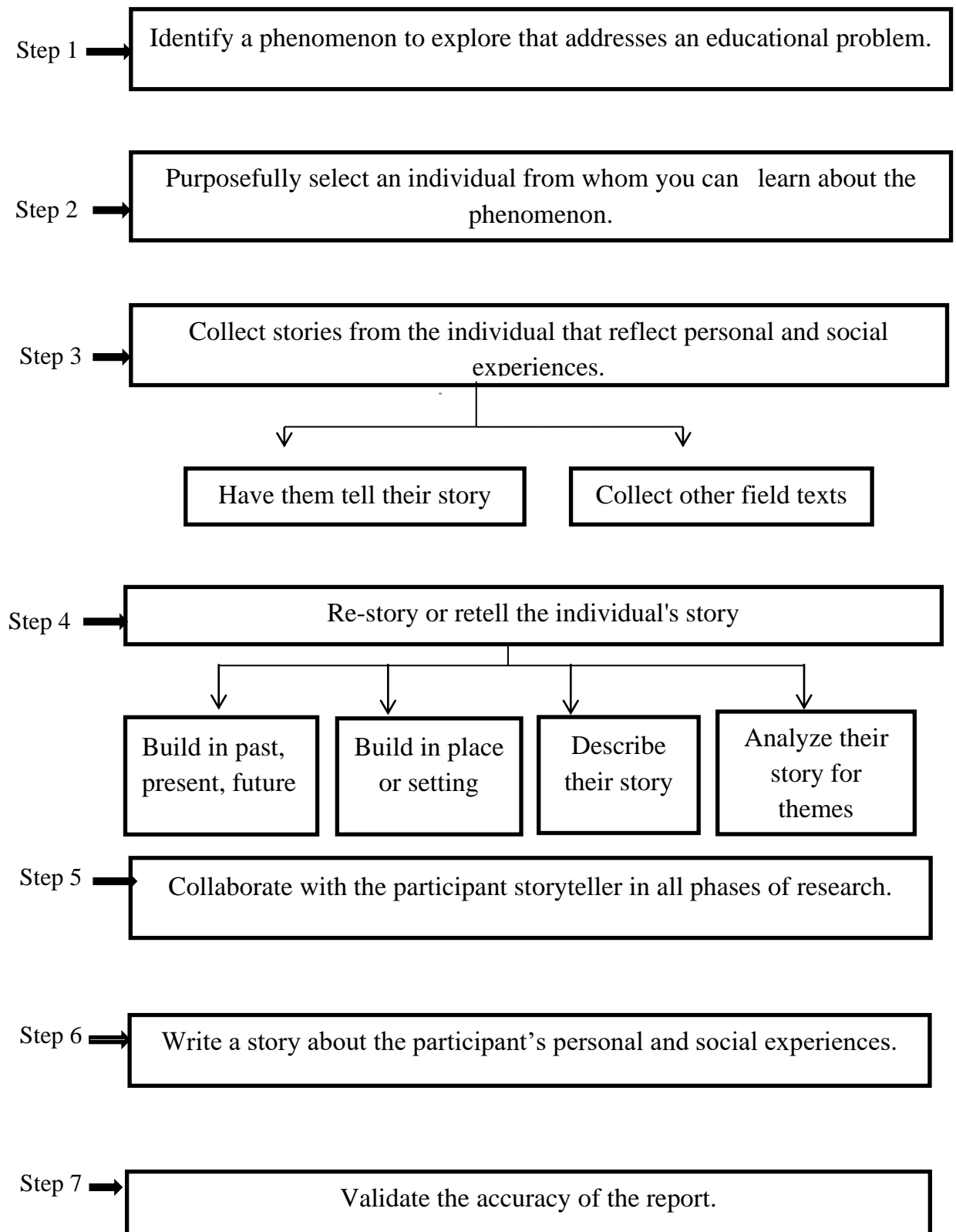
Chapter III

Methodology and Procedures

This section includes methods and designs of the study, population, sample and sampling procedures, data collection tools and techniques, data collection procedures, data analysis and interpretation procedures and ethical considerations. To achieve the objectives of the study, the following methodologies were selected in the research process.

Design and Method of the Study

The design of the study was based on narrative inquiry. It is a qualitative research design, which refers to the process of gathering information for the purpose of research through story telling. In narrative inquiry research, live stories and people's biography are the main subject matter of the research. Khanal (2016) states that in narrative inquiry research design researchers describe the lives of individuals, collects and tells stories about people's lives and writes narratives of individual experiences. So, it is a kind of investigation of people's experience or the story. To conduct narrative studies researchers establish an intimate relationship with the participants. Additionally, for participants in a narrative study sharing their stories make them feel that their stories are important and they are heard. Creswell (2012, p.507) presents the following characteristics of narrative inquiry; which includes; Individual experiences, Chronology of the experiences, Collection of the individual story, Restoring, Coding for themes, Context or setting, Collaborating with participants.

Figure 1: Steps for Conducting Narrative Research

Source: Creswell (2012, p. 514)

In this way, narrative research captures an everyday normal form of data that is familiar to individual. In narrative research story is a sequence of real event or an account of such a sequence which can motivate to change others life. Thus it is an in-depth study about the respondents' live experiences/ story through narrative interview.

Moreover, I was interested to explore the factors which affect participations Dashanami students. What are the realities have not yet been addressed by the researchers. Narrative research approach was the best design for me to explore their real stories of Dashanami students.

Research Site/Respondents

In this study, I took Dashanami students who were studying mathematics in the fourth, fifth and sixth batch of Central Department of Education in Kirtipur. The sample number of the study was one person from fourth batch and I was also from sixth batch. I used simple purposive sampling procedure for the study.

Data Collection Tools and Techniques

Data collections tools and techniques where used to find detailed and relevant information about the event. For the data collections process, I selected Dashanami students from the fourth batch, fifth batch and sixth batch and I selected one Dashanami teacher. I used interview as the main tool of my study.

Source of Data

Primary data. The primary source of data is called first data which is considered to be the most authentic. For the primary data, I took interview with Dashanami students who where studying mathematics in the fourth, fifth and sixth batch of Central Department of Education, Kirtipur.

Secondary data. Secondary information collected from books, article, reports, newspapers and so on. After collecting the data, I have done interpret and analyze the data then the finding and conclusion be drawn.

Data Collection Procedures

Data collection is an important part of the study on the basis of the data; we can study and analyze every aspect of the study. For this study, the data and information have been collected by using tools as participant observation, in-depth interview. The data from interviews consists of indirect questions to people about their experiences, opinions, feeling and knowledge. In my research, I have collected the information through taking their in-depth interview with teachers and students.

Before conducting the interview I had taken the consent from the participants by clarifying the objectives of this study. I had used semi-structured interviews of students and teachers. In this study, indirect interview was used as a research tool as it is useful for obtaining first-hand data which are more reliable and authentic. Then the interview was conducted based on some guiding questions for the related with my research. I used primary sources and secondary sources for data collection process. The primary information collected from mathematics teacher, mathematics students and as well as from educated people of the society. The participants expressed their views, ideas, thoughts, and experience regarding is based on my questions. While taking an interview with them I recorded their interview and noted important points given by them.

I used two methods to collect data that which was Observation and Interview. I collected data through direct and indirect interview.

Data Analysis and Interpretation Procedures

The data analysis and interpretations process involved transcribe the narratives and typing the story, I used the collected data to get a general sense of the information. I transcribed the oral narratives into writing after listening to the data taken over the phone repeatedly.

Quality Standards

After completing the construction of the research tools, it is necessary to maintain the quality standards of the research. To maintain the quality standards we have the following criteria. So I have followed those criteria to maintain the quality standard in my research.

Credibility. This concept replaces the idea of internal validity, by which researchers seek to establish confidence in the 'truth' of their findings. Lincoln and Gubba (1988) recommended several techniques inquirers may use to enhance the credibility of their research: prolonged engagement, persistent observation, and triangulation, peer debriefing, negative case analysis, progressive subjectivity checks and member checking, and Peer review in the field.

Triangulation of data means the collection of data through the multiple sources to include interview, and document analysis (Cresswell, 2009). In this study, I was use multiple of data to confirm emerging findings. Also, I used multiple stand point to analyze the collected data using reviewed literature,

The member checking ensures the truth value of data (Cresswell, 2009). In this study, I performed the member check by sending participants a copy of their views. The next method that I used to increase the truth worthiness is the prolonged engagement in the field. To maintain credibility of the research, I tried to spend as much as time for observation and engaging with participants with their work. After

getting information, I wrote notes, asked similar types of question to others people and tried to find real practices, challenges of semester system in mathematics education from that information Contexts or settings (where the interpretations might be transferred). To maintain transferability, I explained practices in the particular community briefly. I included photos related with practices, challenges of semester system in Mathematics Education in my research. I tried to capture most of scenario by using thick description of observations, interviews and then making meaning in the research (Acharya, 2017).

Transferability. Transferability replaces the concept of external validity. In order to maintain transferability I drew on most of the scenarios using observation, interviews and thick descriptions of my interpretations.

Dependability. This concept replaces the idea of reliability i.e. the issue of dependability refers to the idea of another researcher being able to repeat same work, in the same context, with the same methods and participants, and get similar results. This is the third standard for judging qualitative studies and refers to the stability or consistency of the inquiry processes used over time. To maintain it, I collected document all processes in detail, and then I shared with advisors to get in evaluation to help the process to conform dependability (Acharya, 2017).

Conformability. Conformability is the fourth criterion that refers to the quality of the results produced by the inquiry in terms of how well they are supported by the members involved in the study and events independent of the inquiry. I am also a part of Dashanami student so to maintain compatibility, before finalizing the information myself review many times and I share information with my other students.

Ethical Considerations

Ethical consideration is one of the most important parts of the research. Without ethical consideration, research can't be fruitful. The major ethical consideration in the study is the permission of school administration, information to the students while taking an observation of the classroom, interview. There won't be any discrimination due to gender, casts, and cultural diversities while collecting the data. For maintaining the ethical issues of my research. I was be informed consent to my participant, secrete the privacy of my participant, cited the authors whoseideas were taken in my research, and are aware of the plagiarism.

Chapter IV

Analysis and Interpretation of Data

This story includes the analysis and interpretation of the data collection from the life stories of the relevant respondents, observations of mathematics classroom, and interviews with Dashanami teacher. This was a qualitative research (narrative inquiry). The main focus of this research was to find the level of participation of Dashanami student in mathematics. For meeting the objectives of the study, data was collected from three batches (4th, 5th, and 6th) of Central Department of Mathematics Education in Kirtipur. The researcher minutely studied attendances as well as the other activities of Dashanami students.

Observation Appendix-A my life story, Appendix-B and Appendix-C emphasized interview taken from the key respondents, Appendix-C interview of Dashanami teacher. The descriptive method is mainly used in this research. The researcher attempted to calculate the study by describing and analyzing the information acquired in the research process. The chapter includes the analysis and interpretation of the collected information. Data were categorized according to the framework category of the sample and different themes were given in the text note.

Thus the obtained data and information were analyzed and interpreted in their perspectives under the following headlines: Narrative inquiry of the students, the participation of Dashanami students in Central Department of Mathematics Education, learning environment of Dashanami students at home, learning environment of Dashanami students at college.

This chapter divided into two sections: the first section I described the level of participation of Dashanami students, the second section was described factors are effecting the Dashanami students for learning mathematics.

Level of Participation of Dashanami Students

The respondent was Dashanami students from Central Department of Mathematics Education in Kirtipur. The brief descriptions of the key students were presented below:

Appendix-A

The first university of Nepal is Tribhuvan University. In order to complete my study, I started to study the number of students enrolled in mathematics subject in 6th batch in Tribhuvan University. The number of students enrolled in the 6th batch in students were enrolled in this school from 77 districts of Nepal. Dashanami Community also participated in 83 students who come to enroll from different communities. Among the 83 students, there was one person from the Dashanami community. That was me. I have mentioned my experience below:

My name is Ganesh Chandra Bharati. I am from Dashanami community. My permanent addresses are Shivraj Municipality-1, Kapilvastu. My village name is Nayabasti where forty houses are there. All of these twelve houses belong to Dashanami.

I was studying in government school at Kapilvastu. When I was studying in lower level, I didn't even know about what is Dashanami? I thought, it is same as Bramin. When someone asked with me I replied Bramin. As I grew older I realize Dashanami is different from Bramin, Chhetri. It was the time to class seven a new teacher had entered our class and start the introducing program. I also involved and I introducing myself. My name is Ganesh Chandra Bharati, He got surprised you are Bharati. I never steamed such kind of surname. When he said then I couldn't reply anything. There are about seventy students but I was only one student "Bharati".

When I have completed grade seven then started to read in class eight. There were some new students who were from another school to read there. The teacher had introduced us while introducing there were two students also Dashanami. I felt very happy to find them at same class. The time was passed, and then the time was to for class nine. In this class, the school provides the opportunity to choose optional subject. I choose optional math in class nine. Sometime, I thought what are the benefits for better future? My friends also shared what can we do in future, There were twenty five to thirty students who were involving optional mathematics from different community. While completing class nine we entered class ten. After some months we gave SLC exam in 2011. After some months the result had published. I was only one student who was passed from Dashanami community.

Then I joined intermediate level in mathematics. I was found seven students Dashanami group but I was only one student who studied mathematics from Dashanami group.

After passing intermediate level I was admitted bachelor level in a new college. There were about five hundred students in that college but I was the only one student from Dashanami community. The reason is that the low population of Dashanami group in our country.

When I passed/completed bachelor level I came to Kathamandu to do master degree I wanted to join education faculty on mathematics. First, we have to give entrance exam in order to there were about hundred students participated. After that exam eighty three students were getting success and they were admitted to study mathematics in first semester of 6th batch. There were lots of students from different community but there were only one student from Dashanami community before years, I did not feel bad being alone in government school of the village, but when I saw

alone in the Central Department of Education, it become a matter of interest that why the participation of Dashanami was less? And I wanted to study the situation of Dashanami in other batches.

Appendix-B

In order to complete my study, I collected the data of the students who come for admission in mathematics in Tribhuvan University in the 4th batch.

As I have started of study the fifth batch of Central Department of Education. Here I was involving the field study. I have collected data of the student enrolled in the fifth batch. When I was collecting the data, there are seventy students involving in the fifth batch. But there were not anyone from Dashanami community.

There are some problems like low population, weak economic states, emigration outside the country in education department but they haven't interest to choose mathematic from Dashanami students.

Appendix-C

In order to complete the study, I collected the data of students who made the maths subject at the Tribhuvan University. Among the 159 students, one Nirmala Puri from Dashanami community participated. With the help of the department, I spoke to Nirmal puri over the phone about my experience with her which is mentioned below:

My name is Nirmala Puri I was born in India when I was 7 years I migrated to Nepal. We live in Byas Municipality ward no. 5 Tanahu. There are 150 houses some of them 9 houses belong to Dashanami. We are 6 members in our family. My father and mother are academically weak but four members are strong in academic. Elder sister none studied till class 8 and younger sister have completed intermediate level. Brother got graduate in bachelor. I have complete master degree. Other Dashanami members have complete bachelor and master degree from our community.

I had attended a government school in India from class one to four. After that I come to Nepal then joined at Shree Janjukta Secondary School Tanahu class four to ten. At that time I did not know anything about Dashanami Perhaps. I was the only one member of our community who had Puri surname in this school.

When I was studying in class nine there were sixty students in the class. Out of sixty, there were eight students studying additional mathematics. Dashanami was the only one among two who studies optional mathematics. We were sixty students to participant in S.L.C. from our school. Out of sixty we were two participate from Dashanami community.

After completed S.L.C. level. I come to Parasar Collage Tanahu to study intermediate level. We were thirty students enrolled in class eleven mathematics but I was the only one present from the Dashanami community.

After completed intermediate level. I come to Bhanu Bhakta Multiple Campus, Tanahu to study bachelor degree sixty to sixty five students enrolled in the first years. There were twenty four students studying mathematics. I was only one from Dashanami out of twenty four students.

When I passed/completed bachelor level I came to Kathamandu to do master degree. I wanted to join education faculty on mathematics. First, we have to give entrance exam in order to there were about two hundred students participated. After that exam one hundred eighty three students were getting success and one hundred fifty nine were admitted to study mathematics in first semester of 4th batch but I was the only one present from the Dashanami community.

I have changed five school/collage from class one to masters degree. I was found that Dashanami participation was low in every school. I was the only one from Dashanami who studies mathematics from class nine to master degree.

I think, the reasons for the low participation of Dashanami are as follow:

- Low population
- Caste trend
- Economic situation
- Education situation of the family
- Geographical situation

Appendix-D

Narayan Giri; a teacher from the Dashanami community, spent 32 years in the teaching profession while completing his studies. In his 32 years of experiences, he was indirectly interviewed by taking in the interest of tenth grade students in mathematics. From the 30 minute interview with him, I have mentioned below the things that help the study.

My name is Narayan Giri. I am from Shivraj-1 Kapilvastu. I was appointed as a permanent teacher at Shree Nepal Adarsha Higher Secondary School. Since 2046-9-26. I spent 32 years of my life in the teaching profession and retired in 2075-9-10. In that period I learnt many thing and I have lots of experience from teaching profession.

When I was appointment there were 1 to 10 classes. There were about 400 students at that time in the beginning time school infrastructure were very weak. Gradually school's environment has strong lace building, teacher and other things. Later, number of students was increasing. Every academic year, there were 100 to 150 students had admitted there. In order to, there were 2-3 students' studies from Dashanami community.

During those years, there were some participation of Dashanami students in different programmed and I was only one teacher who had taught there.

After years, the four teachers were arrived at this school. Some of them lucky I met Dashanami female teacher.

During the profession time, I met three Dashanami colleagues. But student's numbers were zero.

Now, teaching learning systems have changed, Both English and Nepali medium. Technical classes also teaching from class 9. Mainly there are about 50 staff in that school among them four teachers were from Dashanami community. Some academic years, students were highly admitted 3500 to 4000 but Dashanami students were very low.

In public school, normal families children are enroll there. Highly economic facilities children are enroll in boarding school. In this way, the number of Dashanami students is decreasing years by years.

In my experience, the main reason of the low participation of Dashanami students because of low populations. Other problems are also uneducated family, geographical structure, weak economic situation etc.

The Level of Participation of Dashanami Students in Mathematics

Participation of students in learning mathematics at Tribhuvan

University. In this research participation means regularity, the interaction between teacher and students, doing homework/assignments and classwork of the Dashanami students. Regularity in the classwork is one aspect of participations. The following table shows the rate of participation of first semester of Dashanami students.

Table 4.1*Attendance of Dashanami Students of First Semester*

Batch	Attendance of Dashanami students
Fourth	92%
Fifth	0%
Sixth	93%

(Source: Faculty of Education, Tribhuvan University)

In these beaches, there were 159 students in fourth beach, 79 students in fifth beach and 83 students in sixth beach. There were different caste group (Gurung, Sunar, Chetri, Brahaman and Dashanami) students and among them, less of the students were Dashanami. According to the Tribhuvan University total number of students of Dashanami was 2 in 4th, 5th and 6th batch. Table 4.1 show that the average attendance of Dashanami students is only 92.5%. It indicates that the regularity of Dashanami students in the Tribhuvan University.

Table 4.2*Attendance of Dashanami Students of Second Semester*

Batch	Attendance of Dashanami students
Fourth	91%
Fifth	0%
Sixth	95%

(Source: Faculty of Education, Tribhuvan University)

In these beaches, there were 159 students in fourth beach, 79 students in fifth beach and 83 students in sixth beach. There were different caste group (Gurung, Sunar, Chetri, Brahaman and Dashanami) students and among them, less of the

students were Dashanami. According to the Tribhuvan University total number of students of Dashanami was 2 in 4th, 5th and 6th batch. Table 4.2 show that the average attendance of Dashanami students is only 93%. It indicate that the regularity of Dashanami students in the Tribhuvan University.

Table 4.3

Attendance of Dashanami Students of Third Semester

Batch	Attendance of Dashanami students
Fourth	83%
Fifth	0%
Sixth	82%

(Source: Faculty of Education, Tribhuvan University)

In these beaches, there were 159 students in fourth beach, 79 students in fifth beach and 83 students in sixth beach. There were different caste group (Gurung, Sunar, Chetri, Brahaman and Dashanami) students and among them, less of the students were Dashanami. According to the Tribhuvan University total number of students of Dashanami was 2 in 4th, 5th and 6th batch. Table 4.3 show that the average attendance of Dashanami students is only 82.5%. It indicate that the regularity of Dashanami students in the Tribhuvan University.

Table 4.4

Attendance of Dashanami Students of Fourth Semester

Batch	Attendance of Dashanami students
Fourth	89%
Fifth	0%
Sixth	93%

(Source: Faculty of Education, Tribhuvan University)

In these beaches, there were 159 students in fourth beach, 79 students in fifth batch and 83 students in sixth batch. There were different caste group (Gurung, Sunar, Chetri, Brahaman and Dashanami) students and among them, less of the students were Dashanami. According to the Tribhuvan University total number of students of Dashanami was 2 in 4th, 5th and 6th batch. Table 4.4 show that the average attendance of Dashanami students is only 91%. It indicate that the regularity of Dashanami students in the Tribhuvan University.

Causes of low participation in learning mathematics of Dashanami students. While studying the participation of Dashanami students, looking at the interviews taken from Dashanami teaches and students, the participation was not only low in Tribhuvan University but also in other public schools. According to the interview with Niramala Puri, the public school where she studied upto the class 10 and the school where she studied upto 11, 12 and bachelor. Dashanami participation was also low.

Similarly, the interview conducted with Narayan Giri sir also made it clear that in the Nepal Adarsha Secondary School of Kapilvastu, where he taught for 32 years, he said that the participation of Dashanami students in any classes the participation of Dashanami community is zero. He explained that the reason for the low participation was the low population.

In my experience, when I was studying from class 1 to 12, the participation of Dashanami community was low. The number of students from other communities was normal but I myself was the participant from Dashanami community.

On the whole, what can be said from the whole conversation is that the reasons for the low participation of Dashanami students are as follows:

- Low population

- Caste trend
- Economic situation
- Education situation of the family
- Geographical situation

Low population. People from different communities live in Nepal.

Dashanami is one of them, but since the population of Dashanami community is less compared to other communities, the participation of Dashanami students in the school is also low.

Caste trend. Nepal is a development oriented country, usually in different communities of Nepal, there is a trend of the second generation embracing the same profession as their father, so that even through the new generation studies higher education, they join themselves in the old profession, some of them are not interested in education.

Economic situation. Even if everything is supported, some students cannot get higher education due to their family's financial situation, so this is also the main reason that hinders the low participation of students.

Education situation of the family. If the educational qualifications of the family members are good, then the children of that family get good opportunities. They believe that they should progress through education.

Geographical situation. Nepal is geographically difficult, not every place has the same service facilities. As a result, the same kind of student participation is not found in every place. Student's participation in school is low due to the fact that they have to walk for 1-2 hours to go to school.

Other factors also affect student participation which is mentioned below:

Learning environment of Dashanami students at home. The environment of the totality of the educational atmosphere at home and school . Home is regarded as the first school for every child. They learn how to behave, how to respect elders, how to cooperate. In this research, the home environment reflects the occupation, economic condition, educational background of the family and learning opportunity of the students at home. The home environment plays a vital role in learning. School is the second home of any child. The teachers, students, head teacher, friends, and parents are the component of the school.

Occupation of parents. Occupation of the parents is one of the aspects of the learning environment at home. Occupation means that which occupies or engages the time and attention. The following table shows the occupational details of parents of Dashanami students.

Table 4.5

Occupations Details of Parents

Occupation	Involvement
Agriculture	70%
Labor	15%
Business	3%
Others	12%

(Source: Faculty of Education, Tribhuvan University)

Table 4.5 show that the most of the Dashanami students were from the low economic family background. Only a few students were from medium class. Approximately 30% of Dashanami students completed their homework at home. None of the students took the tuition class of mathematics for improving their results.

We do not have basic things in our house. Nobody is in the family earn money. We are in a difficult situation to survive. How can we send the children to school?(According to Parents).

Our parents income depends upon agriculture and labor which is not sufficient for us it is difficult to manage the daily expenditure of home. We do not have a tuition class to improve mathematics.(According to Students).

Educational background of the family of Dashanami students. Educational background of another aspect of the learning environment at home. The following table shows the educational background of the parents of Dashanami students.

Table 4.6

Educational Background of the Family

Education	Percentage
Bachelor or Above	5%
+2	5%
S.L.C.	15%
Literate	20%
Lliterate	55%

(Source: Faculty of Education, Tribhuvan University)

The data indicate that most of the Dashanami students were from uneducated families and low economical background, and they have not given sufficient time at home for mathematics learning and doing homework and other practices. Dashanami students were not expected to achieve in Mathematics. The parents do not guide them in house and always avoid taking responsibility to provide an educational environment at the home. The above data also show Dashanami students did do homework regularly in mathematics, due to lack of sufficient time at home for

parents, so they become weak in mathematics. Indeed mathematics needs more practice to achieve good marks but they did not give enough time for practice and they did not take the tuition classes because they have no enough money.

Learning environment of Dashanami students at school. School is the second home of every child. The teachers, students, and parents are the component of the school. The school environment reflects the belief and tradition of the school community delineating the relationships among parents, students, and teachers. Scholarship to the students, the extra class provided, appropriate teaching method and equal chance for all students in all activities are the major aspects of the school environment, (KC, 2009)

All the activities which are conducted in the school came within the school environment. It is one of the components of total educational atmosphere. However, school is considered the second home of all children where the teachers, students, and other staff play a role of like the family members. Teacher's guide control and provide information about the books and the current time. The schools have to maintain the rule and regulations of the school period. No matter how the school environment, it has a deep relation with society. The social environment becomes adverse to the school environment. If the social environment maintains the educational environment is society, the school environment becomes good for students to learn about the current knowledge

Teachers rarely use students centre learning strategies for mathematics teaching and use the mathematical materials for teaching mathematics. Lacks of pre knowledge, low attendance in school, do not study at home, do not do their homework and class work regularly are the main problem of teaching Dashanami students.

Students Related Factors

Motivation. Motivations are the foundations of learning which encourage, make and excited the person to learn from inner self. It activates the person to learn positive things. Motivation is a factor of school and home learning environment. However, it inspires the students to learn something which are out of interest of the students. The students get less encouragement by the parents to go to school. However, the weak students in mathematics have no extra to create interest to learn mathematics. On other hand they get no encouraged environment to learn mathematics in the house. The school offers a little bit encouragement in the class which is not sufficient for mathematics learning as well as other subjects. If the teacher and parents do not anything for encouraging the students to learning then the students did not make positive though towards learning. So, the motivation plays the vital role towards student's learning. Motivation becomes one of the prominent factors to learn mathematics which brings high achievement in mathematics.

Interest of learner. Interest is the quality that attracts the person's attention and make person wants to learn more about something or to be involved in something. Interest is everything to do anything. Nobody can do anything without interest. Though, man born without his interest but he gets success in his interested area.

Interest always depends upon an individual. So interest area determined by the activities of the society. Along with the development process, the area of interests is beings increasing in the people. To be succeeding in every aspects of human life, education is base. In 21th century basic educations have been needed for all peoples either they interested or not. Different students have different desire. so, the desire of some students at the school are in sport like football, volleyball, cricket etc. Where some students interested on dance and music, studying, learning something and so on.

Therefore, how much achievement of students will achieve in mathematics is determined by their attraction, desire and labor towards mathematics, among them student's interest plays the vital role to gain achievement in mathematics. If the students are interested in learning mathematics then they ultimately obtained high score in the mathematics. Those who are not interested in mathematics and they also pay less time to learning mathematics or problems solving they obvious get low achievement in mathematics.

Chapter V

Finding, Conclusion and Implications

This chapter describes the major finding drawn from the analysis and interpretation and discussion result from the collected data. Conclusion is described from the result of interpretation of data. The chapter closed with implication of research. An implication of study is given for the area when this study can be applied.

Findings of the Study

From the analysis and interpretation of the collected data, the following results were considered as the major finding of the study.

Due to the decrease in the population of Dashanami, the number of Dashanami among the students studying mathematics has decreased. The school had sufficient rooms, benches and play ground with sound environment, School's library is proper managed but the study materials is not proper managed for mathematics. Students have no interest in mathematics.

Due to the geographical situation, additional mathematics is not taught in all place, So it was found that students do not study mathematics and study other subjects.

Due to the financial condition of the family, Students who studied mathematics at the lower level obtained higher education and dropped out.

The work done by family members also affects children's education. If there are well educated members in the family, there is mentality that the children should also study, if there are foreign members, If there are army, they think army.

Conclusion

The data analysis of the 4th, 5th, and 6th batches of students enrolled in mathematics at Tribhuvan University has revealed a concerning trend of low

participation among Dashanami students. Several factors contribute to this issue, including the relatively small population of the Dashanami community and a lack of interest in mathematics among lower classes. Specifically, on the fourth interest day, out of 159 students, only one student identified as Dashanami. Similarly, among the 79 students from five batches, no Dashanami students were observed. In the sixth batch, which consisted of 83 enrolled students, only one student hailed from the Dashanami community. These statistics indicate that the low participation of Dashanami students is not limited to Tribhuvan University alone but potentially extends to other educational institutions as well.

Insights from an interview with Narayan Giri Sir, a seasoned teacher with 32 years of experience, further support the notion that Dashanami student participation may be lacking in both Tribhuvan University and other schools. Several underlying reasons can be identified for the low participation of Dashanami students in mathematics education. Firstly, the Dashanami community's low population inherently translates to a smaller number of students available to enroll in mathematics programs. Additionally, certain caste trends within the community might discourage students from pursuing mathematics due to traditional occupations or cultural biases associated with specific caste groups.

Economic circumstances also play a significant role in hindering Dashanami students' access to mathematics education. Financial constraints faced by these students and their families can limit their ability to afford the costs associated with mathematics programs, including tuition fees, textbooks, and additional resources required for the subject. Moreover, the educational background of Dashanami families may influence their aspirations and perspectives regarding mathematics. If families lack a strong educational foundation, it can impact the value placed on mathematics

education and subsequently diminish student interest in the subject.

Geographical factors also come into play, as Dashanami communities residing in remote or underdeveloped areas might face limited access to educational opportunities. Insufficient infrastructure, transportation facilities, and educational support can create significant barriers for Dashanami students aspiring to pursue mathematics. The lack of nearby institutions offering mathematics programs can restrict their enrollment options and hinder their educational progress.

Furthermore, the occupation of parents can have a significant influence on the educational choices made by Dashanami students. If parents are engaged in traditional occupations that do not require advanced mathematical skills, there may be less motivation for their children to pursue mathematics education. Limited exposure to the potential career prospects and benefits associated with mathematics can further diminish their interest in the subject.

The motivation and interest levels of Dashanami students also contribute to their low participation in mathematics. Stereotypes, a lack of role models, and a limited understanding of the practical applications of mathematics can affect their motivation and engagement with the subject. Overcoming these barriers requires initiatives that promote awareness about the benefits of mathematics, provide role models from the Dashanami community, and cultivate an environment that fosters curiosity and enthusiasm for the subject.

In conclusion, the low participation of Dashanami students in mathematics education at Tribhuvan University and other schools stems from a combination of factors. These include the community's small population, caste trends, economic constraints, the educational backgrounds of families, geographical limitations, parental occupations, and student motivation and interest. To address this issue, it is

crucial to implement targeted interventions. These should aim to increase access to quality education, provide financial support to marginalized communities, raise awareness about the benefits and practical applications of mathematics, and foster student motivation and interest through inclusive educational practices. By addressing these underlying factors, we can work towards creating a more equitable educational system that ensures equal opportunities for students from all backgrounds.

Educational Implications

Observing the above study, the researcher has presented implication and recommendation which might be beneficial to the concerned authority for further improvement in the mathematics teaching and learning. The problems stimulated teaching learning activities, instructional materials and evaluation system. So, the following points reveal the implications of this study:

- This study can be used to promote the achievement level of Dashanami students in mathematics education.
- The teacher should motivate weak and praise them to participant in teaching learning activities.
- School's administration should conduct a program to enhance the achievement of different ethnic group on the basis of information provided by this study.
- It should also be studied in other level such as primary, Lower secondary in the same or different aspect.
- This study is done within particular area. The broad and general study may be done for the overall Dashanami's students.
- The school administration should interact to the students, teachers, guardians and other stakeholders to discuss the possibilities way of promoting learning achievement of weak students in mathematics.

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