A Study on the Similarities and Differences in Learning Styles between English Medium and Bengali Medium Learners

Tahmina Tuli

Student ID: 12103051

Department of English and Humanities

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Submitted by

Tahmina Tuli

Student ID: 12103051

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BRAC University, Dhaka

December 2015

	Dedication	
I want to dedicate this pa	aper to my parents who encouraged me and gave me unco	ndit
support and love.	are to the grant of the same and the same an	

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I certify that the dissertation I submitted is my original work. I am also conscious about the fact that there is no such resources used for which my work can be found to be plagiarized. If I used any resources, I gave references for those.

Signature

Acknowledgement

Firstly, I want to thank my Almighty who gave me patience and strength to complete my thesis paper. Secondly, I want to convey my sincere gratitude to my supervisor Dr. Asifa Sultana, as she gave me the proper guidance. She supported and motivated me with her immense patience all the time during my thesis writing and made possible to complete my thesis paper. Besides my supervisor, I also want to express my heartily thanks to some of my close friends, who encouraged me a lot in my thesis. Last but not the least, my sincere thanks also go to my parents, other family members, friends, fellow mates and other teachers of my department with whose collaboration, motivation, inspiration it has become possible to complete my thesis.

Abstract

The purpose of this study was to find out the similarities and differences in learning styles between English medium and Bengali medium learners. This study attempted to find whether the learning styles of Bengali medium and English medium students' are same or different. To find the similarities and differences the researcher did surveys in English medium and Bengali medium schools. It has analyzed the surveys or the answers or responds of questionnaires by using bar charts and following quantitative method. This research also provided the recommendation which can help teachers in terms of trying different learning styles in their teaching, so that students can discover and be introduced with different learning styles. There is no research which is free from limitations; similarly this research also faced limitations. By overcoming obstacles and limitations, this study finally became capable to find out the answers of research question.

Key words: Learning Styles, Visual Learning Style, Auditory Learning Style, Kinesthetic Learning Style, Bengali Medium Learners, English Medium Learners.

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Chapter 1

Introduction

1.1 Introduction

Language is an important media to communicate or interact with others. At present time, language learning is not only limited to our mother tongue. Our thirst of knowing has flourished day by day and we are starting to learn more than one language for our own sake of interest. We know that second language learning is not as easy as our first language. It requires more times, concentration and supporting environment. There are two mediums of educational institutions remain or appear in our country- Bengali medium and English medium. If we observe carefully, we find that there are many differences between these two mediums in terms of environment, using teaching materials, learning and teaching environment, communication in English, tuition fees, learning costs or expenses etc. However, the most noticeable difference is- the students of English medium educational institutions have more exposure to English language, whereas the Bengali medium students have comparatively less exposure to English. Every learner has their own way or style to learn a language which is called learning style. Different scholars' defined learning style in different ways but among them a definition can be focused which has given by Romanelli, Frank, Bird, Eleanora et al (2009). They said that learning style refers to an individual's cognitive, effective and psychological behavior that help one's to perceive, interact with and respond to the learning environment. Learning style is very important for students to acquire or learn new knowledge or information, but it is also true that in the present days most of the students are not aware of their own learning style though they are following certain styles of learning unconsciously. Similarly, the students of English medium and Bengali medium schools are following some particular learning styles while learning something. The learning

Comparative study of Learning Styles between English and Bengali Medium Learners environment has a influence on learning styles. Teaching environment is likely to be important for learning language. Environment of these mediums may make them habituated to a certain style of learning from their early age. As a result, they may grow up with certain learning styles and follow it for any kind of learning. Therefore, the purpose of this paper is to find out similarities and differences in learning styles between English medium and Bengali medium learners and if any differences remain why they occur.

This research or study examines the following research question-

Are there similarities or differences in learning styles between English medium and Bengali medium learners? If yes, what are they?

This research can be proved useful to others to know about the learning style. Teachers and students can also know about similarities and dissimilarities of learning styles of Bengali medium and English medium learners. It can help students to learn about those learning styles which they never tried or followed before and also teachers can assimilate other learning styles in teaching students which they never tried before in teaching a particular medium learner.

Chapter 2

Literature Review

2.1 What is Second language Acquisition

In general, Second language acquisition refers to the acquisition which occurs after an individual's first language learning. According to Ellis (1994) second language basically play institutional and social role in society or community. He also added that the function of communication of second language acquisition generally comes after the communication of mother tongue. He further added that second language acquisition and foreign language acquisition are not the same; second language acquisition plays a social role after mother tongue in community.

According to Lightbown and Spada (2006), though second language acquisition is different from a learner's first language acquisition, learners' characteristics and learning environment play equally important roles in both types of language acquisition. They further claimed that first language acquisition occurs without the presence of "cognitive maturity and metalinguistic awareness", whereas, these are present in acquisition or learning process of a second language. The following factors have been identified to be significant for learning a second language (Lightbown and Spada, 2006; National Science Resource Center, 2002; O'Malley and Chamot, 1990)-

2.1.1 Context

O'Malley and Chamot (1990) said that language is a complex cognitive skill that can be described within the context or cognitive theory. Lightbown and Spada (2006) further added that the second language learning is different from a learner's first language acquisition. A learner

Comparative study of Learning Styles between English and Bengali Medium Learners acquires his/her first language at a very early period of time when the cognitive maturity does not occur. A learner acquires his/her first language subconsciously, whereas; a second language is usually learnt in a conscious mind. Moreover, the context or the situation is different from one another in language acquisition/learning and metalinguistic awareness only exists in second language learning.

2.1.2 Learner characteristics

Lightbown and Spada (2006) claimed that it is obvious that every Second language learner has already learnt a language before which refers to his/her first language or mother tongue. In terms of second language learning a learner go through the metalinguistic awareness and cognitive maturity and thus this "prior knowledge" considers as advantage of learning second language because they know how a language really works (p. 30). According to their view "Mental abilities" are different in first language acquisition compared to second language learning because in second language learning mental abilities become specific due to "critical period for language acquisition" (p. 31). Moreover, attitude towards language and cultural differences are also prominent issues in language learning. They suggested that children are more willing to try a new language than adults because adults are afraid of making errors whereas children hardly hesitate to attempt new language and make errors. In California Journal of Science Education the National science resource center (2002) also mentioned that children learn or construct theories or ideas through their experience. Children always try to link new learning with their experience or existing knowledge. They are naturally more enthusiastic to know a new thing especially language. So, they go through less inhibition to learn and communicate in a language.

2.1.3 Learning conditions

According to Lightbown and Spada's (2006) view younger children learn second language in different learning condition compare to elder learners. The learning environment remains more silent and informal for young children until they are ready to speak in that language. Dewey (1897) believed that a learning institution should have an informal setting for children so that the condition remains friendly and close to real life to them. Thus a child can learn easily and connect their learning with their real life scenario. On the other hand, Lightbown and Spada (2006) further said that the elder language learner learns their second language in formal settings as they more practice in different social settings (such as- interview, shopping, dialogue between two candidates about a subject, medical visits etc). In classroom situations, the elder learners are bound or forced to use their second language for a short period of time.

2.2 What is Individual Differences

Umar Farooq (2011) said that according to dictionary of education Individual differences are those differences which exist among humans and make a single person different from another person. He also added that these differences generally occurs based on interest, attitude, values, habits, psychomotor skill, self concept. There is a connection between individual differences and learning environment. Lightown and Spada (2006) suggested that if a person has good proficiency in his or her second language he or she must be largely influenced by the environment where "the language was heard and used, the kind of instruction (if any) they received, how long they used the language, and the age at which they began learning" (p. 53). Wang and Lindvall (1984) also proposed that a learner responded to the environment according to his individual learning style and in a learning environment teacher's instruction is an

Comparative study of Learning Styles between English and Bengali Medium Learners important media to facilitate appropriate responds from a student. Wang and Lindvall (1984) defined the instruction as "intentional manipulation" which means deliberate exploitation. The main purpose of an instruction is to teach or is to enable students to learn or receive the outcomes which sometimes become difficult because of students' own differences of learning styles.

According to Wang and Lindvall (1984) it is challenging for an educator or a teacher to know each and every student's individual differences and according to provide them instructions accordingly so that they can attain the learning goal. Individual differences have a great role to contribute in learning performances. It is not possible for an instructor to give instructions to every student separately to ensure their learning. So, Wang and Lindvall (1984) suggested the instructors to provide "adaptive instruction", which, according to them, is effective for all kinds of learner with individual differences to receive the knowledge and skills.

2.2.1 Lightbown's (2006) view on other Individual Factors

According to Lightbown and Spada (2006) individual differences is inherent which help ones to succeed or failure in second language learning. They (2006) also added that many teachers believe from their own experiences that an extrovert learner is a better and quick language learner because of their sociable or friendly personality and other characteristics such as- intelligence, aptitude, learning style, personality, motivation and attitudes, age etc. These characteristics are known as individual factors which play role to large extent in second language learning. Lightbown and Spada (2006) described different Individual factors which are-Intelligence, Aptitude, Learning Styles, Personality, Motivation, Attitude, and Age. They said that intelligence refers to performance on any kind of test. According to Lightbown and Spada (2006) we all have intelligence in certain subjects. Intelligence means whether we have the capacity to think beyond the limited knowledge. Intelligence can apply in many kinds of topics.

Comparative study of Learning Styles between English and Bengali Medium Learners Somebody can be intellectual in mathematics where in other side, someone else can be intellectual in other subject. They also said that, Aptitude is one's ability to learn or how quickly one can learn. It only focuses on learning. Aptitude is related to learning and more specific to language. Aptitude can be inherent or it can be acquired. They further added that, different personality characteristics, such as- extroversion, introversion, inhibition, anxiety or nervousness, self esteem, empathy, talkativeness, dominance, responsiveness etc affect second language learning. According to Lightbown and Spada (2006) motivation is very important in terms of language learning especially in second language learning but it is a complex phenomena. If learner is bound to speak in the second or foreign language in a new environment to survive he/she will be automatically highly motivated to learn language. Another factor is also important in term of defining motivation and that is learner's attitude toward the language. If a learner get positive attitude from the people with whom he communicates, then he will be motivated to learn the language, but if he get negative impression from those people then his motivation rate can be fall. They said that Age is a valuable factor in language learning. People of young age or younger people can learn a language more effectively than elder learners. They do not feel any inhibition to communicate with other on language which he/she is learning. They are not scared of making errors. As a result they can learn a language very well that is not possible for a learner of elder age to learn. Once a learner crosses the age of critical period hypothesis he /she no longer can learn the second language like a young child.

2.3 Learning styles

According to Lightbown and Spada (2006) learning style is one of the Individual factors that contribute. In general, learning style refers to an individual's natural, habitual and preferred way of learning. Lightbown and Spada (2006) also suggested that different people may have

Comparative study of Learning Styles between English and Bengali Medium Learners different learning styles, and therefore, they can be referred as different learners; such as-visual learner, aural learner, and kinesthetic learner. O'Malley and Chamot (1990) claimed that according to cognitive theory an individual is mainly involved in a mental process to learn a language and the learning strategies are learner's special way to process that information which "enhance comprehension, learning or retention of the information" (p. 1). In general learning style is learners' own way to learn a language in which he/she feels comfortable to learn. Pashler, Daniel, Rohrer and Bjork proposed that, "the term learning style refers to the view that different people learn information in different ways" (2008, p. 106). They advised that, "learning style needs to document a specific type of interaction between instructional method and assessments of an individual's learning style" (p. 108). They have also said that learner's learning is basically enhanced or improved by instruction which also play role to tailor the learner's learning style. They further suggested through instruction teachers can determine students existing or prior knowledge which is important to establish a knowledge that in which level students are existing and what kind of instruction is optimal for them. Romaneele, Bird and Ryan (2009) proposed that many authors' considered learning style as the factor of getting success in higher education. They also added that the knowledge of learning style is useful for both teachers and students because they (teachers) can use learning style theory to articulate the most preferred learning style majority of students which can help them to teach. According to Spada (2006), learning style is an individual's natural or preferred way of learning in which he/she absorbs processes and keeps new information and skills. Spada (2006) also described different types of learning styles; such as- visual learner, aural learner, kinesthetic learner which are considered as "perceptually-based learning styles" (p. 59). Different people gave their different opinion about these perceptually-based learning styles. Many authors and researchers had done their survey on

Comparative study of Learning Styles between English and Bengali Medium Learners visual, auditory, kinesthetic or tactile learners' groups and came up with different findings or results. In the following sections a description of a range of learning styles are presented.

2.3.1 Visual learning

Learners have their own way to learn. According to Mayer and Massa (2003) some people learn by processing words and some people learn by processing pictures. Mayer and Massa (2003) regard these educational practices as visualizer and verbalizer hypothesis.

Therefore, the people or learners who learn better by processing images, pictures, graphs, videos etc, they are known as visual learners. As proposed by Mayer and Massa (2003) Visual learners are different from the verbal learners in terms of cognitive style. Similarly, Lightbown and Spada (2006) defined visual learner as the learners who learn something by having seen it, who learns visually, unless they cannot learn that thing. Reid (1987) added some examples of visual learning's; which are - reading, studying charts etc. In "The Learning Style Preferences of ESL Students" Reid (1987) had found from survey that Korean students were more visual compare to other language background students, but on the other hand, the native speakers of English language prefer visual learning style as a minor style not as a major style.

2.3.2 Auditory learning

Lightbown and Spada (2006) said that the aural or auditory learners learn by listening by ear which means learning something by listening lectures, audio clips, recorders etc they are considered as aural or auditory learners. Reid (1987) has found from the survey he has talked about in "The Learning Style Preferences of ESL Students" that, "Japanese speakers were the least auditory of all learners and were significantly less auditory than Arabic and Chinese speakers, who expressed a strong preference for auditory learning" (p. 97). Reid (1987) also

Comparative study of Learning Styles between English and Bengali Medium Learners added that Chinese speakers preferred auditory learning style as a major one. Like the Chinese speakers Korean, Indonesian and English speakers gave strong preferences for auditory learning style.

2.3.3 Kinesthetic/Tactile learning

Spada (2006) said that kinesthetic learners are those who perceive learning by physical actions. Reid (1987) also defined kinesthetic learning as "total physical involvement with a learning situation" (p. 89). They are able to learn very easily by noticing different bodily movement which is considered their strength. Kinesthetic learners generally remain busy in different bodily movements or actions while learning something new in classroom or somewhere else. However, Reid (1987) has said that kinesthetic learning style is the most preferred learning style of ESL students, whereas, English native speakers give less importance to tactile learning style. From the Reid's view it can be said that the demonstration of language learning for the second language learners works more through tactile or kinesthetic style compare to the native speakers of English.

Learning style is very important in language learning field; but according to Spada (2006) it is quiet difficult to determine "whether they reflect immutable differences or whether they develop through experiences" (p. 59). He also included that if students want to use their own way to learn or perceive anything which can help them to learn quickly, teachers should not stop them, either they should encourage or help the students in their preference way of learning.

Csapo and Hayen (2006) defined learning style as "individual differences in learning" (p. 129). They also included that an individual perceive, communicate and respond to the environment in an individual way or differently because of his/her different learning styles which

Comparative study of Learning Styles between English and Bengali Medium Learners means their approaches to communicate with the learning environment are different from each other. So, they (2006) think that understanding learning style is very important in teaching/learning process and so they considered the learning style as the key component in this process which can be helpful to meet the teaching and learning goal for teachers and students at the same time. According to Caspo and Hayen (2006) if the learning style theory can be utilized in classroom situation, it can be advantageous for different academic level.

Csapo and Hayen (2006) said that according to Kolb learners' learning style are largely influenced by different factors; such as- early educational specialization, professional career or occupation, personality type, present job role and adaptive competencies (p. 130). Kolb also elaborated that these factors affect our learning style throughout our whole lives and reshape our learning style in different levels of our lives.

2.4 Studies on learning styles

Dunn, Beaudry and Klavas (2002) mentioned about different survey or experimental research on learning styles based on different instructional environment, perceptual preferences, sociological preferences and time-of-day preferences. A large group of researchers experimented to identify the effects of learners learning styles on their "achievement, attitude and behavior" (e. g. DeGregoris, 1986; Della Valle, 1984; Hodges, 1985; Krimsky, 1982; MacMurren, 1985; Murrain 1983; Pizzo, Shea, 1983; Stiles 1985). The researchers' findings show that different elements of classroom or instructional environment influence an individual's learning style. The researchers mentioned about four elements of instructional environment which influence learning styles in large scale which are-"quiet versus sound, bright or soft lighting, warm or cool temperatures and formal versus informal seating designs" (p. 80). These elements influence

Comparative study of Learning Styles between English and Bengali Medium Learners learning of students in different ages or levels. Such as- in one point researchers found that in early education younger children need less light or soft lighting environment whereas the elder students need comparatively more/ bright lights in their learning environments. Similarly in primary level of education it needs more sounds to teach the students of elementary school years whereas it becomes less important to apply sounds more loudly in secondary or higher level of students.

Reid (1987) mentioned about a survey, where a questionnaire was designed and developed to identify candidates' chosen learning styles. Most of the participants in this survey were non native speakers, who were in high intermediate or advanced level and 154 participants were English native Speakers. Through this survey six learning styles were measured which arevisual, auditory, kinesthetic, tactile, group learning and individual learning. In this survey nine language backgrounds were analyzed and the findings showed that Korean students were more visual than other language background students. On the other hand, native speakers of English take the choice of visual learning as a minor preference. In the case of auditory learning, Arabic and Chinese speakers were considered as the strong auditory learner, whereas, Japanese speakers were considered as the least auditory of all learners. English speakers choose auditory learning as a major learning style. Most ESL students considered kinesthetic learning as a major learning style though, on the other hand, Local speakers of English had the second most minimal inclinations mean around there. Local speakers of English preferred more on individual learning style, besides they did not support more on group studies. On the other hand, Non Native speakers of English or other language groups such as- Arabic, Chinese, Korean and Spanish speakers prefer less on individual learning styles and supported more on group studies.

From the perspective of authors and researchers, learning style is an individual's preferred way of learning or perceiving knowledge. The way knowing of learning style is important for teachers and students, the learning environment are also important for them. Depending on environment sometimes learning styles can be differed. Therefore, learning style of English medium students and Bangla medium students or native speakers and non native speakers can be different depending on learning circumstances or environment. A Study on the Similarities and Differences in Motivation and Skills between English medium and Bengali medium learners (Biswas, 2013) found that there remain some differences between English medium and Bengali medium students in terms of motivation and skills. The students of both medium find different circumstances for learning, such as- in English medium students get enough opportunities compare to Bengali medium students to develop their learning, thus they receive more exposure to the second language English. In this point, the researcher can relate it to the study where accessible equipment and environment can create the main difference between these two mediums. Whereas, a Bengali medium student try to build up his/her speaking skill to cope up with the modern world, an English medium student try to develop his/her writing skill because he/she already have the speaking skill because of the more exposure environment. Thus, in Bengali medium students motivation is somewhat different from the English medium students. In Bengali medium schools, English has taken as a subject of learning where in English medium schools English has taken not only as a subject of learning but also a medium of learning. So, they get more positive environment compare to Bengali medium students. Because of the different environment, their motivation and skills are different from each other.

Chapter 3

Methodology

3.0 Introduction

Through this chapter the researcher presents the research methodology that was followed to accomplish the result. The researcher focused on learning styles of both Bengali medium and English medium students to find out if there were any differences between these two groups with regard to their learning style.

3.1 Research Design

The researcher followed the quantitative method. An online questionnaire was used to collect data.

3.2 Participants

The researcher chose 35 students of Bengali medium and 30 students of English medium schools as participants. One group of students was from Adorsho Biddya Niketon School which is a Bengali medium school and another group was from East West International School which is an English medium school. The group which contained the Bengali medium students consisted with 35 participants and another group (the English medium students) contained 30 participants. Most of them were aged between the ranges of 12 to 15 years. All of them were from preintermediate level.

3.3 Instrumentation

The researcher borrowed a questionnaire titled "Learning Style Survey" (2004) designed by University of Oregon (see Appendix). There were 24 questions in the questionnaire for the

Comparative study of Learning Styles between English and Bengali Medium Learners students of both Bengali and English medium group of students. Most of the survey items were designed as statements and there were three options; such as- A. Often, B. Sometimes and C. Seldom, were given for students to respond. Students needed to put a tick mark on the correct option according to their view for each question. The sample of the selected questionnaire was similar to the pattern of multiple choice questionnaires.

3.4 Setting

The researcher did the survey in both medium of schools, English medium and Bengali medium, in a formal setting. It can be claimed as formal setting because the survey took place in classroom situations. The researcher observed the classes first, and then at the end of those classes she gave the instruction about the questionnaire and requested the students to participate into the survey. Most of the students participated with enthusiasm.

3.5 Data Collection Procedure

The researcher contacted two schools; among them one was Bengali medium and another one was English medium. The researcher found the scope to work with or run the survey in both types; such as- governmental and non-governmental educational institution; as the selected Bengali medium school was a governmental institution and English medium school was a non-governmental institution. At first the researcher took permission from the principals of both schools to take the survey. However, some teachers and the principals were interested to know about the survey that what it will deal with and on which topic the researcher was going to focus. So the researcher gave them an overview about the research work and survey. Secondly, researcher was taken to the classes by teachers and they introduce her to students who participated in the survey. After that, the researcher observed the classes first and then at the end

Comparative study of Learning Styles between English and Bengali Medium Learners of classes she made the students introduce with the survey questionnaire and encouraged them to participate in it. The students were allowed to ask any questions about the survey.

3.6 Method of Analysis

In general, the questionnaire followed the quantitative method. The researcher used this questionnaire to measure the learning styles; especially focused on three aspects which were-Visual, Auditory and Kinesthetic learning style; of both medium students'. The students responded by putting tick mark on options according to their opinion. After completing the survey the responses were measured by giving points/marks/scores for each question-answer. Next, through measuring the points the researcher found the possible numbers of each learning styles from the sample.

3.7 Measuring findings through scoring procedure

According to the questionnaire (University of Oregon, 2004), questions were categorized into three types of learning styles, which were - Visual Learning Style, Auditory Learning Style and Kinesthetic Learning Style. In this questionnaire question 2, 3, 7, 10, 14, 16, 19, 22 fell into visual categorized questions. Besides, question 1, 5, 8, 11, 13, 18, 21, 24 are Auditory type question and question 4, 6, 9, 12, 15, 17, 20, 23 were based on Kinesthetic learning style. There were eight questions for each category and for each questions students got marks for choosing answers. There was a scoring scale specified for each answers, which was, Often = 5 points, Sometimes = 3 points, Seldom = 1 points

3.8 Obstacles

Though there were no major obstacles but minor obstacles were faced by the researcher during the survey work. It was difficult to take permission from the Principal of the English medium school. The researcher had to wait for a long time to take the permission. Another obstacle was found during survey that the location of the Bengali medium school. The location of that school was somewhat inconvenient.

Chapter 4

Finding of the Study

4.1 Findings of questionnaire

The researcher provided the questionnaire to two groups- one group was of Bangla medium learners' and another group was of English medium learners. A total of 65 students participated properly in this survey and among them 35 students were from Bangla medium and 30 students were from English medium. Discussions on findings of the selected questionnaire is given bellow-

Question 1: Can remember more about a subject through the lecture method with information, explanations, and discussion.

This question was designed in a way to find out if a student is auditory learner or not.

About 86.6% of Bengali medium learners responded or choose often and each of them got 5 marks for this question. Similarly, about 86.6% students of English medium school respond often where, it has cleared according to this question 1 that both Bengali medium and English medium learners are auditory learners. Responses of question 1 has given in below as a figure of pie chart-

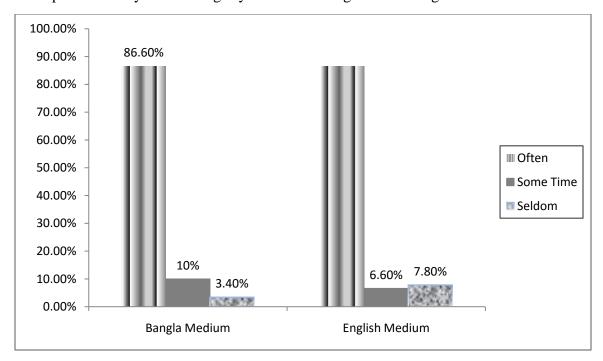


Figure 1. Can remember more about a subject through the lecture method with information, explanations, and discussion.

Question 2: Prefer information to be written on the chalk-board, with the visual aids and assigned readings.

This question has designed to find out if a learner is visual learner or not. About 86.6% students of English medium choose often where, in Bengali medium about 46.6% students respond often. Therefore, it can be predicted that according to this question English medium learners are more visual than Bengali medium learners because most of the English medium learner got 5 marks whereas, Bengali medium learners very hardly got 5 and most of them got 1 or 3 marks. Responses of question 2 has given in below as a figure of pie chart-

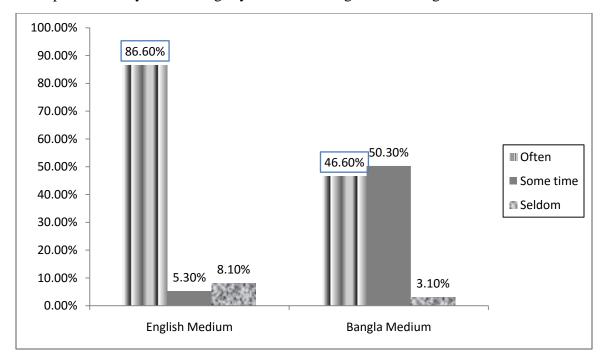


Figure 2. Prefer information to be written on the chalk-board, with the visual aids and assigned readings.

Question 3: Like to write things down or take notes for visual review.

Again this question is to find out visual learner. About 100% students of English medium choose often and got 5 marks and about 46.6% of Bengali medium learners choose often. As a result, it has again assumed from the findings of this question that Bengali medium learners are less visual than English medium learners. The responses are shown in below as bar chart-

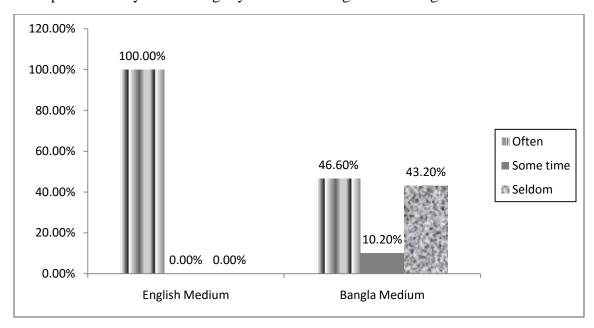


Figure 3. Like to write things down or take notes for visual review.

Question 4: Prefer to use posters, models, or actual practice and some activities in class.

This question is designed to find out tactile or kinesthetic learners. 86.6% Bengali medium learners choose often whereas, only 46.6% English medium learners choose often. Thus apparently most of the Bengali medium learners got more marks than English medium in this question which examine that Bengali medium learners are more kinesthetic than English medium learners. Responses are shown in below as bar chart-

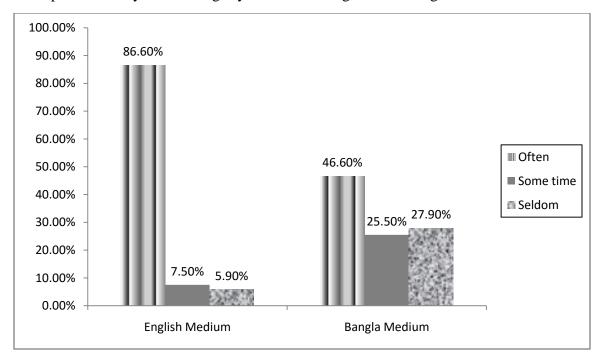


Figure 4. Prefer to use posters, models, or actual practice and some activities in class.

Question 5: Require explanations of diagram, graphs, or visual directions.

Question 5 is based on finding out auditory or aural learning style. From responds of this question it seems that both the learners of English medium and Bengali medium requires explanation of diagram, graphs, or visual directions, as 86.6% of Bengali medium and 73.2% of English medium learners choose often as their answer. Their response is showing in below as bar chart.

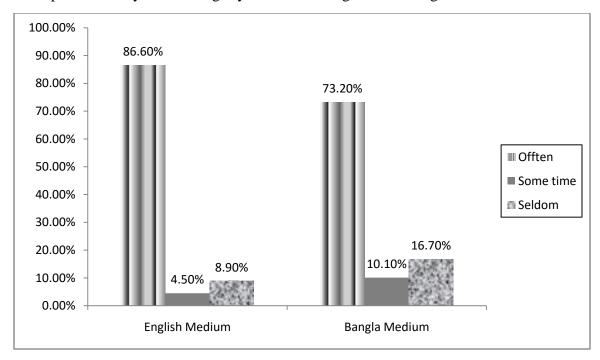


Figure 5: Require explanations of diagram, graphs, or visual directions.

Question 6: Enjoy working with my hands and making things.

Question 6 is based on finding out tactile learners. Most of the Bengali medium learners came up with 5 marks, 86.6% of them choose often as their answer, but on the other hand, 20% of English medium learners choose often. So, it can be said that Bengali medium learners enjoy more working with hands and making things than English medium learners. In below the responses are showing in bar chart -

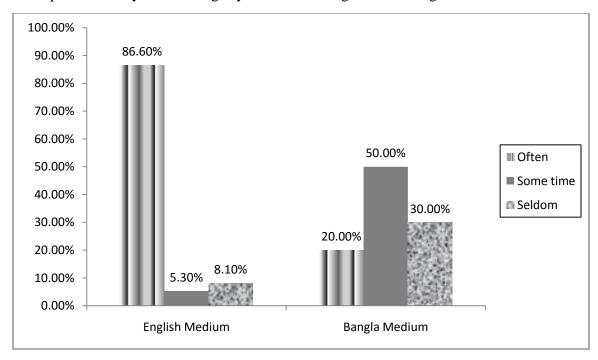


Figure 6. Enjoy working with my hands and making things.

Question 7: I am skillful with and enjoy developing and making.

This question is to find out visual learners. About 86.6% English medium students respond often to this question where, 20% Bengali medium learners responded positively. So, it has cleared according to this question that English medium learners are more visual learners. Their response is showing in below as bar chart.

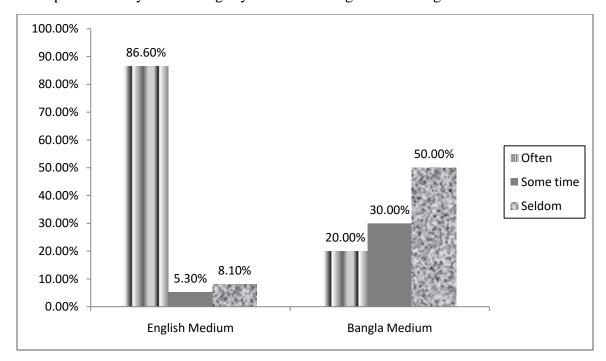


Figure 7. I am skillful with and enjoy developing and making.

Question 8: Can tell if sounds match when presented in pairs of sounds.

This question is based on Auditory learning style and in this question most of the responds came as often from English medium learners. A well number of Bengali medium learners also choose often as their answer. So, 86.6% English medium learners and 73.2% Bengali medium learners choose often and proved themselves as auditory learner. Their response is showing in below as bar chart.

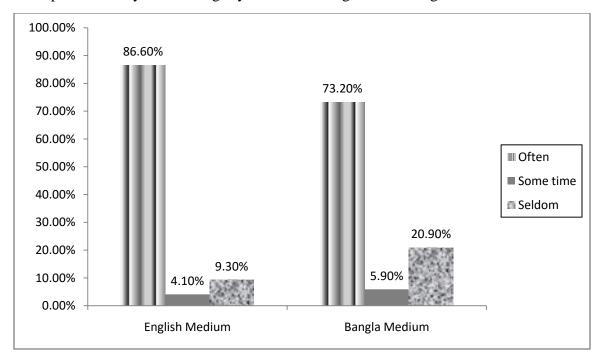


Figure 8. Can tell if sounds match when presented in pairs of sounds.

Question 9: Remember best by writing things down several times.

This question is a tactile strategic type as it is based on to find out tactile learners. About 73.2% students of Bengali medium responded often as their opinion where, only 20% English medium learners choose often and most of them choose seldom. Responses are showing in below as bar chart-

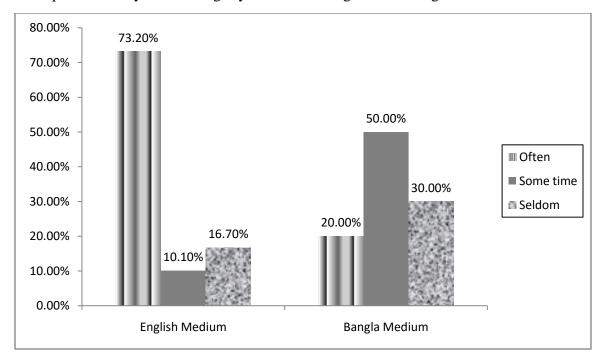


Figure 9. Remember best by writing things down several times.

Question 10: Can understand and follow directions on maps.

It is a visual learning style based question. About 73.2% English medium learners and only 20% learners of Bengali medium choose often to respond. So again, it has proved according to this question that English medium learners are more visual learners than Bengali medium learners. The responses are showing as bar chart in below-

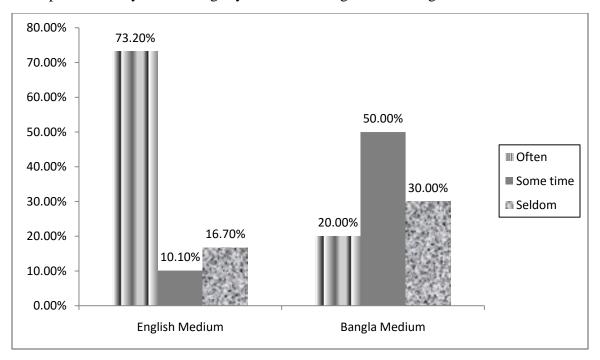


Figure 10. Can understand and follow directions on maps.

Question 11: Do better at academic subjects by listening to lectures and tapes.

It is an auditory learning based question. About 73.2% learner of English medium got 5 responding this question but only 86.6% Bengali medium learners got 5. So, it can be said that both English medium and Bengali medium learners do better at academic subjects by listening to lectures and tapes. Results are showing in bar chart-

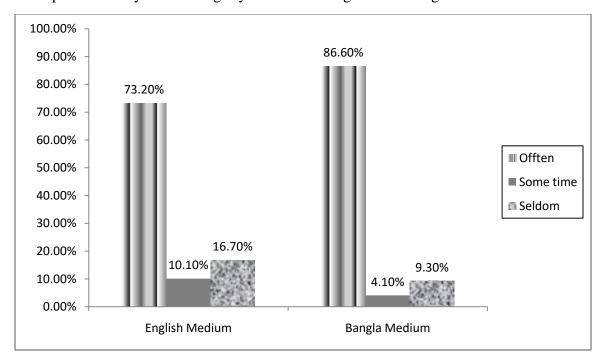


Figure 11. Do better at academic subjects by listening to lectures and tapes.

Question 12: Play with coins or keys in pockets.

Through this question researcher found the learners of kinesthetic leaning style because this question is basically focused on whether a learner is involved in bodily movement while learning anything or not. In responding this question among 86.6% Bengali medium learners and 20% English medium learners choose the option 'often'. These responds shows that English medium learners are less kinesthetic kind of learners than Bengali medium learners. Results are showing as bar chart in below-

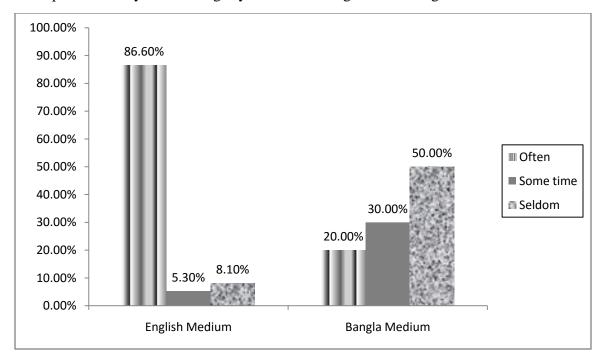


Figure 12. Play with coins or keys in pockets.

Question 13: Learn to spell better by repeating the words out loud than by writing the word on papers.

This question helped to find out auditory learners. The learners who responded strongly agreed with the statement are found as auditory learners and answering this question both mediums' learners (86.6% of Bengali medium learners and 73.2% of English medium learners) responded almost equally. Most of them choose often as their answer. So, both medium can be considered as auditory learner. Responds are showing in bar chart-

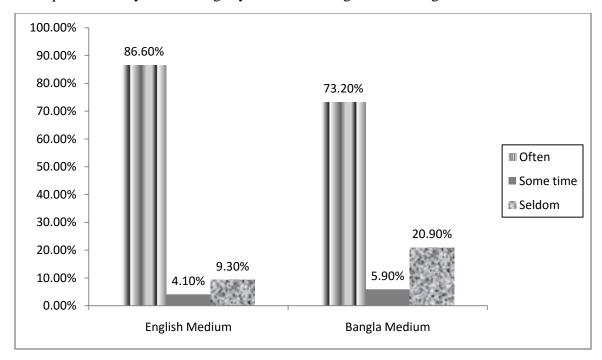


Figure 13. Learn to spell better by repeating the words out loud than by writing the word on papers.

Question 14: Can better understand a news article by reading about it in the paper than by listening to the radio.

This question is a visual learning style based question. In responses of this question a large number of English medium learners (about 86.6%) choose the option 'often' where very minorities of Bengali medium learners (about 20%) choose often. Thus, it seems that English medium learners are more visual learner comparing to Bengali medium learners.

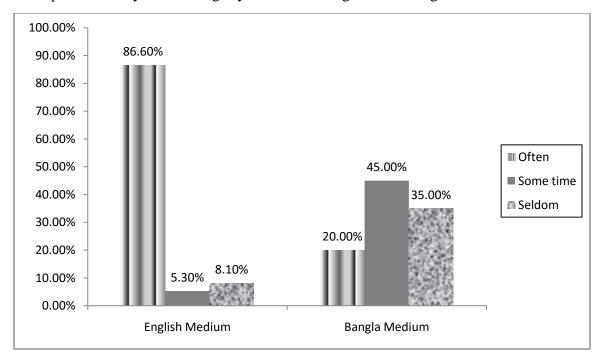


Figure 14. Can better understand a news article by reading about it in the paper than by listening to the radio.

Question 15: Chew gum or snack during studies.

Chewing gum or having snacks during study time is a kind of kinesthetic learners' sign. They always try to involve in bodily movement while learning. Though it is not allowed in Bengali medium schools to have snacks and chew gum during studies, but the learners responded often as their answer by proving themselves as kinesthetic learner. About 73.2% of Bengali medium learners choose often whereas, only 46.6% English medium learners agreed with this statement.

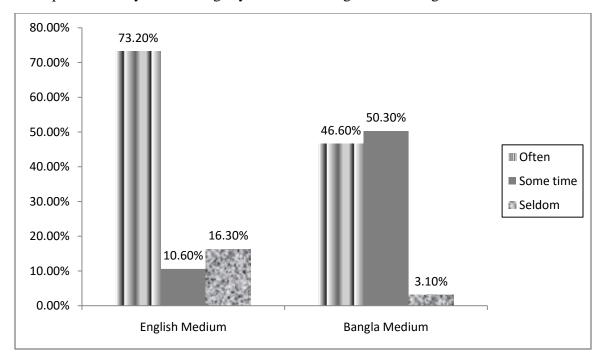


Figure 15. Chew gum or snack during studies.

Question 16: Feel the best way to remember is to picture in your head.

In response of this question about 86.6% English medium learners respond positively and prove themselves as visual learner. On the contrary, only 46.6% Bengali medium learners choose often as they more depended on lectures or vocal sounds than visual pictures while remembering something.

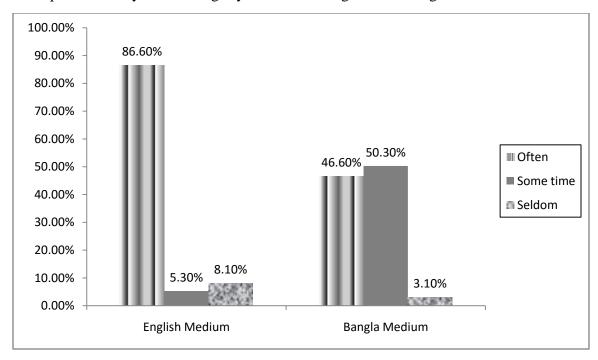


Figure 16. Feel the best way to remember is to picture in your head.

Question 17: Learn spelling by "finger spelling" words.

This question is to find out tactile learners who use hands while spell a word. Many Bengali medium (about 73.2%) learners responded positively in answering this question comparing to English medium learners (about 20%).

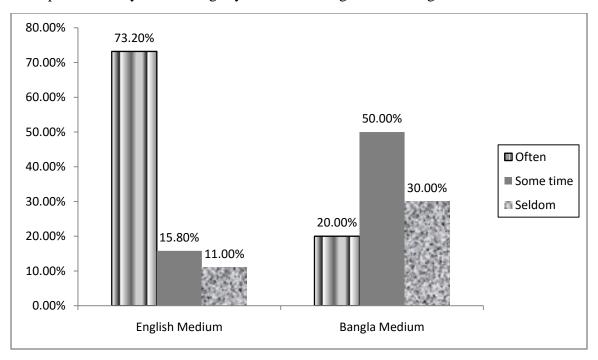


Figure 17. Learn spelling by "finger spelling" words.

Question 18: Would rather listen to a good lecture or speech than read about the same material in a text-book.

Both Bengali medium and English medium learners like to listen to a lecture or speech than read about the same material in a text book, as about 100% and 86.6% learners of English medium and Bengali medium learners choose often as their response.

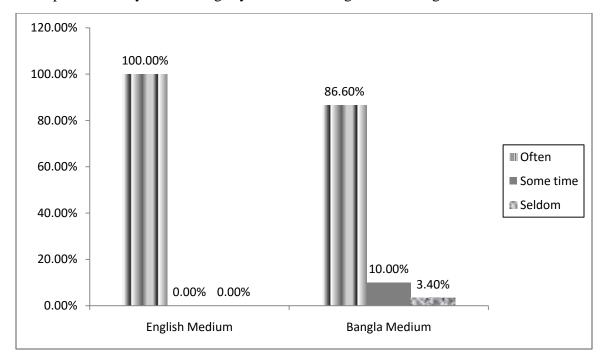


Figure 18. Would rather listen to a good lecture or speech than read about the same material in a text-book.

Question 19: I am good at working and solving jigsaw puzzles and mazes.

About 73.2% English medium learners choose often answering this question. Through their response it seems to the researcher that English medium learners are much creative and visual learner. On the other hand, Bengali medium learners are not that much interested like English medium learners at working and solving jigsaw puzzles and mazes, as only 20% of them choose often. This question was designed to find out visual learners. Throughout the answers researcher found English medium learners as more visual learner than Bengali medium learners.

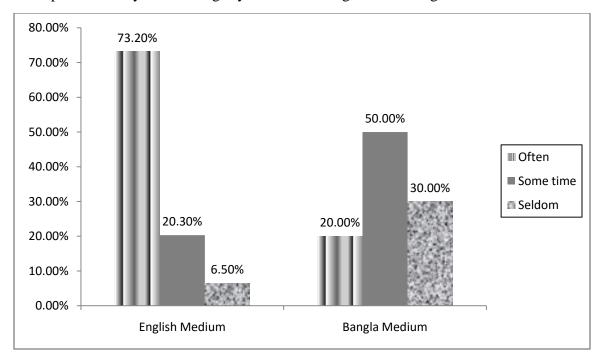


Figure 19. I am good at working and solving jigsaw puzzles and mazes.

Question 20: Grip objects in hands during learning period.

By this question researcher tried to figure out which learners are kinesthetic. In answering this question about 86.6% Bengali medium learners choose often as their respond where, only 20% of English learners are agreed with this statement and choose often. The responses are showing through the given chart in below-

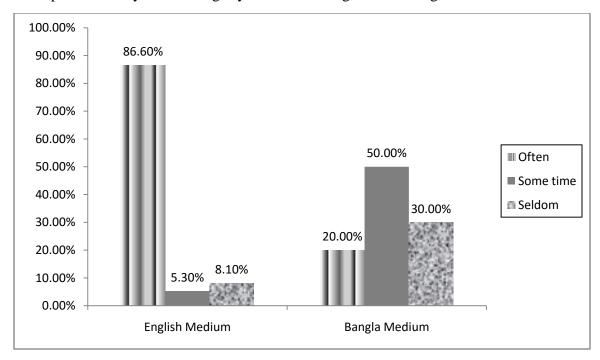


Figure 20. Grip objects in hands during learning period.

Question 21: Prefer listening to the news on the radio rather than reading about it in the newspaper.

Both Bengali medium and English medium learners like to listen to the news on the radio rather than reading about it in the newspaper because the percentage of two groups was close to each other. About 73.2% of Bengali medium learners and 86.6% of English medium learners got 5. So, according to this question both group of learners can be considered as auditory learner.

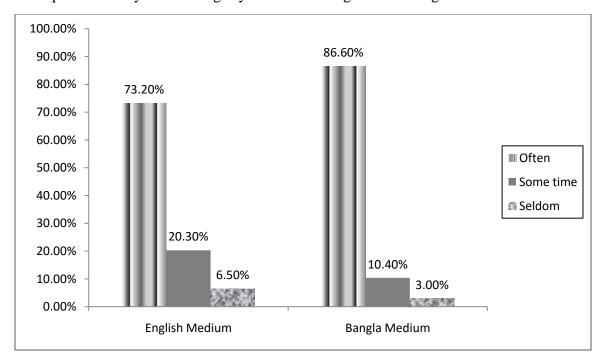


Figure 21. Prefer listening to the news on the radio rather than reading about it in the newspaper.

Question 22: Obtain information on an interesting subject by reading relevant materials.

This question is based on to find out visual learners. The learners, who can obtain information by reading materials, are visual learners. Through the responses of learners researcher found that about 73.2% of English medium learners and 20% of Bengali medium learners can obtain information on an interesting subject by reading relevant materials. Thus, it seems to the researcher that according to this question English medium learners are more visual than Bengali medium learners.

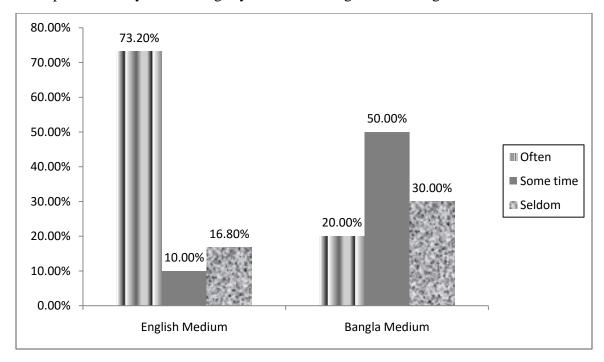


Figure 22. Obtain information on an interesting subject by reading relevant materials.

Question 23: Feel very comfortable touching others, hugging, handshaking etc.

This question specified to find out kinesthetic or tactile learners. Responds of this question did not come appreciably, as most of the students felt hesitate answering this question. So, a very minority responds came from both groups. But in this minority results the majority responds came as often from Bengali medium learners as 46.6% students choose often whereas, only 20% responds came as often from English medium learners' group.

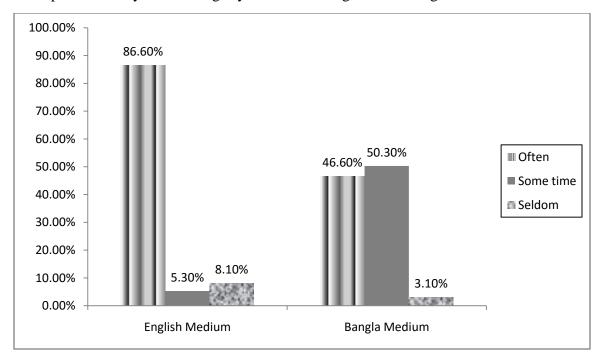


Figure 23. Feel very comfortable touching others, hugging, handshaking etc.

Question 24: Follow oral directions better than written ones.

Both English medium learners and Bengali medium learners like to follow oral directions better than written ones, as the equal percentage of English medium learners and Bengali medium learners (about 86.6%) chose often. So, it seems that according to this question both group of learners are auditory learners.

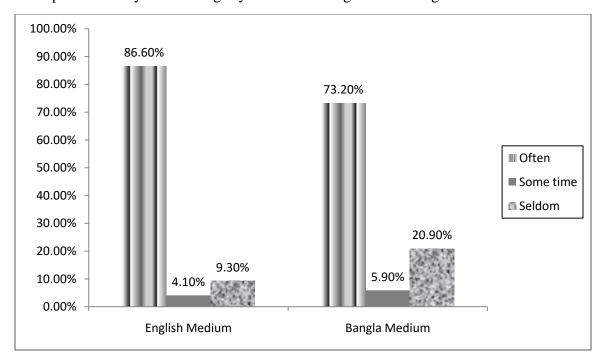


Figure 24. Follow oral directions better than written ones.

The researcher counted the average of the given scores for each question to get the proper measurement and then calculated the total averages of each category of learning style-

Table 1: Measurement of English Medium Learners' Learning Style

(Scoring Procedure)

Visual		Auditory		Kinesthetic	
Learning	(AVG of	Learning	(AVG of	Learning	(AVG of
Style	Scoring)	Style	Scoring)	Style	Scoring)
English	Bengali	English	Bengali	English	Bengali
Medium	Medium	Medium	Medium	Medium	Medium
Q- 2: 4.33	Q-2: 2.33	Q-1: 4.33	Q-1: 4.33	Q-4: 2.33	Q-4: 4.33

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Q-3: 5	Q-3: 1.66	Q-5: 3.66	Q-5: 3.66	Q-6: 1	Q-6: 4.33
Q-7: 4.33	Q-7: 1	Q-8: 4.33	Q-8: 4.33	Q-9: 1	Q-9: 3.66
Q-10: 3.66	Q-10: 1	Q-11: 3.66	Q-11: 3.66	Q-12: 1	Q-12: 4.33
Q-14: 4.33	Q-14: 1	Q-13: 3.66	Q-13: 3.66	Q-15: 2.33	Q-15: 3.66
Q-16: 4.33	Q-16: 2.33	Q-18: 5	Q-18: 5	Q-17: 1	Q-17: 3.66
Q-19: 3.66	Q-19: 1.66	Q-21: 4.33	Q-21: 4.33	Q-20: 1	Q-20: 4.33
Q-22: 3.66	Q-22: 1	Q-24: 4.33	Q-24: 4.33	Q-23: 1	Q-23: 2.33
Total AVG=	Total AVG=	Total AVG=	Total AVG=	Total AVG=	Total AVG=
33.3 (out of	11.98 (out of	33.3 (out of	33.3 (out of	10.66 (out of	30.63 9out of
40)	40)	40)	40)	40)	40)

From this measurement it seems that, English medium learners are more visual and auditory and less kinesthetic learners, where, on the other hand, Bengali medium learners are more auditory and kinesthetic and less visual learners.

Chapter 5

5.1 Discussion

Learning style has an important role to play in learners' educational or academic life. Pashler, Daniel, Rohrer and Bjork (2008) suggested that different people have different style to perceive new information or new learning. Similarly, learners of Bengali medium and English medium schools have their own learning styles. However, it is not always important that learning style is inherent; it may sometimes be developed by the environment or surroundings. The researcher found from the observation of classes that the learning and teaching environment of the Bengali medium and English medium schools are not same, there remain some differences for which learners' learning styles can be built up differently. For example, the teachers of English medium schools use metaphors to build an imaginary visual description towards students. On the other hand, teachers of Bengali medium schools do not use metaphors, elaborate examples. They do not use realistic examples and hardly help students to visualize things, scenario and objects etc. As a result, there are created some similarities and dissimilarities among learning styles of Bengali medium and English medium group of students. Where Bengali medium learners prefer more a particular learning style, at the same time, the other group (English medium students) prefer less the same learning style. The learning environment is somehow responsible for it.

However, in this study, the researcher's main motive is to find out the similarities and differences of learning styles of Bengali medium and English medium learners. A previous study (Reid 1987) conducted with two groups of native and non native English speakers found that Non Native speakers' preferred learning style was visual, whereas the Native Speakers chose visual learning style as a minor one. Similarly, most Non Native Speakers gave major

Comparative study of Learning Styles between English and Bengali Medium Learners preferences on kinesthetic learning style, where most of the Native speakers gave very low preferences on this learning style. On the other hand, in the case of auditory learning style, some of the Non Native speakers such as- Arabic and Chinese speakers gave major preferences but the exception is Japanese learners. Native speakers also gave major preferences on auditory learning style. Correspondingly, in this study the researcher took Bengali medium learners (who are less exposure to English language and can be compared to the Non Native speakers) and English medium learners (who are more exposure to English language and can be compared to the Native speakers) as sample. From the study researcher found that Bengali medium learners were more auditory and kinesthetic learners as they preferred more on these both learning styles but, at the same time, they preferred less visual learning style. On the other hand, it has also found by the researcher that English medium learners preferred more on visual and auditory learning styles and less on kinesthetic learning styles. So, according to Reid's (1987) survey Non Native speakers are more visual and kinesthetic learners, whereas, Native speakers are only auditory learners. Conversely, from the findings of this study the researcher found that Bengali medium learners are auditory and tactile learners, whereas, English medium learners are auditory and visual learners.

Learning style is not always inherent; it can be built up depending on environment or the surroundings. In the article named "Survey of Research on Learning Styles" the authors Dunn, Beaudry and Klavas (2002) has mentioned about a chart where different researchers in different times did the same research. As an example, the researcher talked about a survey or the experiment which was done by DeGregoris (1986), Della Valle (1984), Hodges (1985), Krimsky (1982), MacMurren (1985), Miller (1985), Murrain (1983), Pizzo, Shea (1983), Stiles (1985), that Dunn, Beaudry and Klavas (2002) mentioned in their article named "Survey of Research on

Comparative study of Learning Styles between English and Bengali Medium Learners Learning Styles" which has mostly focused on instructional environment. As a result of experiment they found that different elements of environment influence on learners' learning. They discovered that learning environment can be changed depending on learners need according to their age. However, it is true that environment carry a strong effect on learning process. Through the survey the researcher found that English medium learners are more visual than Bengali medium learners. In this case, it can be said that environment or the context of the students really matters. Bengali medium learners are basically Bengali contextualized learner. They are familiar with Bengali culture, nature, environment, heritage etc. Whatever they learn in their schools is mostly cover the Bengali context. For example, in their Bengali subject a poem of Rabindranath Tagore basically focus on Bengali nature, context, life of a Bengali farmer, culture etc; which a Bengali medium learner is already familiar with. So, there is nothing like to use visual materials to make students familiar with the subject learning. The teachers of Bengali medium schools use kinesthetic way or bodily movement and use their voice to make students understand. Similarly, in other subjects such as-General Science, Social Studies, Home Economics etc it is using Bengali contextual objects, nature etc in their examples. On the other hand, in English medium schools the books or the literatures are using to teach students are mainly focused on foreign context. They are not present in Bengali context. For example, snow, desert etc are not present in Bangladeshi context. Naturally, a poem of William Shakespeare covers the foreign context, not a Bangladeshi context. So, the English medium students with Bengali background need to see or need to discover their learning objects through visual way. Therefore, in those educational institutions it is using video clips, documentary, movies, songs etc to make them familiar with. So, naturally they develop their visual way of learning which may not built in Bengali medium learners. However, in both medium teachers need to deliver

Comparative study of Learning Styles between English and Bengali Medium Learners lectures to students. As a result, students in both medium are habituated in auditory learning. Therefore, it can be said that environment play a greater role on students' learning styles.

In a study on the level of motivation and skills between English medium and Bengali medium learners- (Biswas, 2013), it was found that there are differences between the English medium and Bengali medium students in terms of motivational factors and skills, since there are many differences are found on the basis of environmental opportunities. According to this study, it is also noticeable that environment has an effect even on the students motivational factors and skills for which one group give more focus on accuracy and another one give focus on developing their communication skill. However, this study dealt with a very different issue but the main point researcher want to relate with her study is to environmental effect on learning. The environment of English medium institutions is not same as Bengali medium institutions. As a result, students of English medium are habituated in different learning style compare to Bengali medium students. In Bengali medium schools there are not enough accessible resources to develop learning whereas, on the other hand in English medium schools the accessible recourses are available to support and develop learning. Thus, visual learning resources, such as-video clips, documentary, short film etc are not generally found in Bengali medium schools which are easily found in English medium schools. As a result, Bengali medium students are more kinesthetic and auditory learners since teachers of those educational institutions are bound to use more kinesthetic and auditory way of teaching. Most of the time they deliver their lecture by their bodily movement to express the meaning of a poem, object, speech or anything else, where in English medium teachers can utilize the visual accessories to support their lecture and make their lecture very easily understood for students. Another point can be noted that in English medium schools the costs or expenses are higher than Bengali medium schools. Thus, it is

Comparative study of Learning Styles between English and Bengali Medium Learners possible for them (English medium schools) to adapt modern technology or visual way of teaching through the support of modern technology whereas, it may not possible in Bengali medium schools for maintaining the lower costs or expenses. As a result, there remain differences in learning styles among English medium students and Bengali medium students.

5.2 Conclusion

Through this study the researcher examined the similarities and differences in learning styles between English medium and Bengali medium learners. The result that researcher found through the study is, there are similarities as well as differences in learning styles of these groups. The survey showed that the English medium learners are more visual learners compared to Bengali medium learners. On the other hand, it also showed that Bengali medium learners are more kinesthetic learners compare to English medium learners but both of them are auditory learners. Through the discussion and analysis it can also be assumed that there may some environmental role or aspect works for these similarities and differences in both medium learners' learning styles. However, environmental roles were not the key issue of this study, and future studies may closely examine the role of environmental properties on the learning styles. The present study can give an idea about the differences and similarities in learning styles between both mediums and this idea will make it easier for teachers to change their teaching view or styles and teaching materials according to the learning styles of students so that, they can learn more rapidly.

5.3 Recommendation

Teachers can use different learning styles in both medium, so that the learners can discover other styles or ways of learning. They can try those learning styles that they never tried

Comparative study of Learning Styles between English and Bengali Medium Learners before. It will help them to nurture learners' knowledge and to train them for different ways of learning. Since in Bengali medium it is often not possible to maintain high expenses like English medium schools, the teachers should try visual aids which can be purchased in limited expenses. Similarly, teachers of English medium schools also should try kinesthetic way of learning, so that students can be introduced with this learning style.

This study is not free from limitations. Based on limitations of this study other researchers can do other research work to know something more about learning styles or to give spotlight other areas based on learning styles of both medium learners.

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Appendix 1

Questionnaire for students

ease	try to	answer of these questions and put the tick mark into the correct option.
1.	Can re	member more about a subject through the lecture method with information,
	explan	ations, and discussion.
	A.	Often
	B.	Sometimes
	C.	Seldom
2.	Prefer	information to be written on the chalk-board, with the use of visual aids and
	assigno	ed readings.
	A.	Often
	В.	Sometimes
	C.	Seldom
3.	Like to	write things down or take notes for visual review.
	A.	Often
	В.	Sometimes
	C.	Seldom
4.	Prefer	to use posters, models, or actual practice and some activities in class.
	A.	Often
	В.	Sometimes
	C.	Seldom
5.	Requi	re explanations of diagrams, graphs, or visual directions.

A. Often

B. Sometimes

6. Enjoy working with my hands or making things.

C. Seldom

A.	Often
В.	Sometimes
C.	Seldom
7. I am s	skillful with and enjoy developing and making.
A.	Often
В.	Sometimes
C.	Seldom
8. Can te	ll if sounds match when presented in pairs of sounds.
A.	Often
В.	Sometimes
C.	Seldom
9. Reme	mber best by writing things down several times.
A.	Often
В.	Sometimes
C.	Seldom
10. Can ui	nderstand and follow directions on maps.
A	. Often
В	. Sometimes
C	. Seldom

11. Do better at academic subjects by listening to lectures and tapes.
A. Often
B. Sometimes
C. Seldom
12. Play with coins or keys in pockets.
A. Often
B. Sometimes
C. Seldom
13. Learn to spell better by repeating the words out loud than by writing the word on papers
A. Often
B. Sometimes
C. Seldom
14. Can better understand a news article by reading about it in the paper than by listening to
the radio.
A. Often
B. Sometimes
C. Seldom
15. Chew gum or snack during studies.
A. Often
B. Sometimes
C. Seldom
16. Feel the best way to remember is to picture it in your head.
A. Often

Comparative study of Learning Styles between English and Bengali Medium Learners
B. Sometimes
C. Seldom
17. Learn spelling by "finger spelling" words.
A. Often
B. Sometimes
C. Seldom
18. Would rather listen to a good lecture or speech than read about the same material in a
text- book.
A. Often
B. Sometimes
C. Seldom
19. I am good at working and solving jigsaw puzzles and mazes.
A. Often
B. Sometimes
C. Seldom
20. Grip objects in hands during learning period.
A. Often
B. Sometimes
C. Seldom
21. Prefer listening to the news on the radio rather than reading about it in the newspaper.
A. Often
B. Sometimes
C. Seldom

22. Obtain information on an interesting subject by reading relevant materials.	
A. Often	

- C. Seldom
- 23. Feel very comfortable touching others, hugging, handshaking etc.
 - A. Often
 - B. Sometimes

B. Sometimes

- C. Seldom
- 24. Follow oral directions better than written ones.
 - A. Often
 - B. Sometimes
 - C. Seldom

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