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# Learners' Learning Style Preferences and Teachers' Awareness in the Context of Higher Secondary Level in Bangladesh

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*Abstract*- This article is conducted to investigate the English language learning style of the higher secondary learners in Bangladesh and how far the teachers are aware about the learners' preferences. For this purpose, 30 students were selected from 3 higher secondary colleges to express their styles through a questionnaire as to how they preferred learning English as a foreign language. Moreover, this study also included 8 teachers' interview on how they perceive learners' preferences while teaching English. The questionnaire containing 13 items, were adopted and adapted from Reid's (1987) original study of perceptual learning style preferences. The findings of the study showed some specific styles preferred by most of the learners. In various cases, the teachers were not aware of the learners' styles and those who were aware showed their problems of implementing these styles in classroom. The article ends with some suggestions in order to aware teachers and learners about the effectiveness of learning styles.

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# I. INTRODUCTION

n the process of learning a second language learning style is an important issue to be considered as the success is associated with it. It is very difficult to capture a foreign language like English and the learners have to face challenges and new experiences while learning. . Language learning success is associated with a range of factors including age, gender, motivation, intelligence, anxiety level, learning strategies and language learning styles (Sharp, 2004). Reid (1987, 1995) viewed that 'all students have their own learning styles and learning strengths and weaknesses,' and that 'a mismatch between teaching and learning styles causes learning failure, frustration, and demotivation'. Different students may have different levels of motivation, different attitudes about teaching and learning, and different responses to specific classroom environments and instructional practices. The more instructors understand the differences, the better chance they have of meeting the diverse learning needs of their students. The learners are expected to be highly motivated in doing things that they prefer. So, the need knowledge about their students' for teachers' preferences and styles is indisputable. In this regard,

Alfonseca et al. (2006) point out that an awareness of students' learning styles will enable teachers to adapt appropriate techniques and methods that suit the students' preferences. In addition, according to Reid (1987:88), "identifying the learning styles preferences of non-native speakers (NNSs) may have wide-ranging implications in the areas of curriculum design, materials development, student orientation, and teacher training".

In Bangladesh, the teachers are not so aware about the learning styles of the learners. But nowadays newly appointed teachers are trying to apply new techniques of communicative Language Teaching. In this case also they do not show their enthusiasm as it is very difficult to arrange class according to learner's preference in the context of Bangladesh. Again, most of the learners are not aware about their preferred styles. The present research tries to find out the extent of preference of the learners on different styles used in the classroom of Bangladesh. Particularly, this study shows the level of learners support towards a specific styles and how they feel better to learn. So the study also contributes to make the learners aware about their preference and how they will be able to achieve their desired success.

# II. LITERATURE REVIEW

Categorization of learning styles

Reid (1995) categorizes learning styles into three major types:

- i. Cognitive learning styles
- ii. Sensory learning styles
- iii. Personality learning styles

### a) Cognitive learning styles

*Field- independent vs. Field – dependent.* Field- independent learners learn more efficiently step by step, from the beginning with analyzing facts and proceeding to ideas. On the contrary, field – dependent learners prefer to learn in context as a whole.

*Analytic vs. Global.* Analytic learners learn individually, and they prefer to achieve the set goals. Global learners, contrarily, learn more effectively through concrete experience, and by interaction with others.

*Reflective vs. Impulsive*: Reflective learners learn more effectively if they get some time to consider options before the response is made. Impulsive

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learners, in contrast, are able to respond immediately, and they take risks.

#### b) Sensory learning styles

Sensory learning styles are further divided into two types: perceptual learning styles and environmental learning styles.

## Perceptual learning styles

*Auditory learner:* An auditory learner learns more effectively through the ears (hearing)

*Visual learner:* A visual learner learns more effectively through the eyes (seeing)

Haptic learner: A haptic learner learns more effectively through touch and body involvement.

#### i. Environmental learning styles

*Physical vs. Sociological:* Physical learners learn more effectively when variables such as temperature, sound, light, food, time, and classroom arrangement are considered.

Sociological learners, in contrast, learn more effectively when variables such as group, individual, pair, and level of teacher authority are regarded.

### c) Personality learning styles:

*Extroversion vs. Introversion:* Extroverted learners are always interested to express their views, try to communicate with others to justify their perception and maintain a good relation with others. On the contrary, introverted learners try to learn something individually and independently.

Sensing vs. Perception: Sensing learners learn best from reports of observable facts and happenings and rely on their senses. But perception learners learn more effectively from their meaningful experiences and relationships with others.

*Thinking vs. Feeling:* thinking learners learn best from impersonal circumstances and logical consequences. On the other hand, feeling learners prefer personalized circumstances and social values.

# III. LEARNERS' LEARNING PREFERENCES

The term "learning style" as used in the literature during the last thirty years or so, has labeled a very broad and relatively diffuse concept (Bedford, 2006). Keeffe (1979:4) defines learning styles as "the composite of characteristic cognitive, affective, and physiological factors that serve as relatively stable indicators of how a learner perceives and interacts with, and responds to the learning environment". However, Oxford and Anderson (1995) add three more aspects to the definition of learning styles: executive aspect; social aspect and behavioral aspect. Hence, they suggest that learning styles have six interrelated aspects:

- 1. Cognitive elements include preferred or habitual patterns of mental functioning.
- 2. The executive aspect deals with the degree, to which the person seeks order, organization and

closure and manages his or her own learning processes.

- 3. The affective aspect reflects clusters of attitude, beliefs and values that influence what an individual will pay most attention to in a learning situation.
- 4. The social aspect concerns the preferred extent of involvement with other people while learning.
- 5. The psychological aspect involves at least partly anatomically-based sensory and perceptual tendencies of the person.
- 6. The behavioral aspect is where the learning style relates to a tendency to actively seeking situations compatible with one's own learning preferences (Oxford and Anderson, 1995: 203).

Reid(1987), based on the findings of a survey, distinguished four perceptual learning modalities. These perceptual learning modalities include:

- 1. Visual learning (for example, reading and studying charts)
- 2. Auditory learning (for example, listening to lectures or audiotapes)
- 3. Kinaesthetic learning (involving physical responses, experiential)
- 4. Tactile learning (hands on learning, as in building models)

# IV. Importance of Learning Style Preferences

Learning styles vary from culture to culture and society to society. There are three major factors for which learning style varies from one learner to another:

- i. Cultural factors
- ii. Cognitive factors
- iii. Personal factors/ psychological factors

Through socialization an individual develops some features of his / her personality. Psychological factors are determined by culture which is shared by the all learners of the society but heterogeneity occurs in the case of cognitive factors. Culture tries to create one kinds of homogeneity among all the members of a society. Thus there are some common styles of learning and teaching among the learners and teachers of a country. Learning styles vary from one learner to another for cognitive factor but to some extent there are some common styles for all learners. CLT shifted the responsibility from teachers to learners and individual learners adopt many styles of learning. The teachers are not that much aware about the learning styles of the learner. So they have to bring out learners likings and disliking in order implementing syllabus, materials and teaching activities. Thus, an awareness of both the teaching and learning styles is necessary to achieve an effective result in the field of learning English as a foreign language in Bangladesh.

# V. OBJECTIVES OF THE STUDY

The present study aims to identify the strategies, styles and learning preferences that the Higher Secondary students followed while learning English as a foreign language. This study presents an estimated picture about the students' likings, disliking and preferences. At the same time this study investigates the teachers' awareness regarding learners' preferences. As the primary sources of data are the subjects' own insights into the learning process, the focus is on the actions that the learners consciously employ to facilitate learning, and, as Oxford (1989) suggests, make it more enjoyable. The study is concerned with some specific areas:

- a) Homogeneous strategies and styles of higher secondary learners' both inside and outside the classroom to advance the learning
- b) Whether these strategies contradict with the teachers' awareness and experience
- c) Whether the learners' strategies and other modes of learning significantly vary from one another in language learning.

# VI. Methodology

Reid's (1987) original study involved the use of a self–reporting questionnaire based on existing learning Data Collection and Analysis style instruments. Before administrating the questionnaire, the students were informed of the objectives and significance of the research. They were also requested to state their real responses. In addition, they were acknowledged for the time they would spend in filling in the guestionnaire. The subjects were also informed to ask for any clarifications they might need. After that, the questionnaire was distributed to the subjects. The present study used the same questionnaire in order to determine the perceptual learning style preferences of Bangladeshi learners. There are 30 students are taken from three different colleges of Mymensingh and Tangail. The respondents are first year students of Higher Secondary level from the mainstream of Bangladesh. The questionnaire consisted of 14 questions written in English and a Likert scale (For example, each student was asked to indicate the extent of their agreement or disagreement with statements: strongly agree, agree, undecided, disagree, strongly disagree).

The study also incorporated 8 English teachers from the similar institutions. The teachers are requested to provide their opinions about how far they are aware about the learning preferences of their students and how is the result if they follow the learning preferences of the learners.

	Questionnaire items = 13	Strongly agree	agree	undecided	disagree	Strongly disagree
1.	I prefer to learn something by doing something in the class	34%	47%	0%	1 3%	6%
2.	I learn more when I work with a group	25%	25%	3%	41%	6%
З.	I prefer to learn by doing pair work	67%	27%	0%	7%	0%
4.	I enjoy speaking at the classroom	27%	34%	10%	19%	10%
5.	I remember things I have heard in the class better than things I have read	50%	30%	0%	10%	10%
6.	When I study alone I understand things better	27%	24%	0%	34%	15%
7.	I learn better in the class when the teacher gives lecture	73%	23%	0%	4%	0%
8.	I learn better by reading than listening to others	10%	30%	0%	41%	19%
9.	I prefer to learn by listening and taking notes	63%	15%	0%	10%	12%
10.	I understand things better in class when I participate in role playing	50%	27%	10%	13%	0%
11.	I learn something quickly when the teacher corrects my error then and there	84%	16%	0%	0%	0%
12.	I prefer to be corrected by my classmates	63%	15%	0%	10%	12%
13.	I learn better when I watch textual videos	27%	24%	23%	13%	13%
14.	I learn better when I have freedom to express my views	56%	30%	0%	10	4%

### Table 1: Questionnaire items and degree of response

Levine (2003) describes three types of analysis – descriptive, analytical and contextual. In this present study, the descriptive method is followed for the analysis of the data, because this method will show the exact level of the learners' preference. The data from this study more or less reflect the EFL students' preferences in Bangladesh. For questions the respondents are asked to tick one out of 5 options. After the student completed their task the findings are counted in order to arrange them according to the percentage of the students. From 30 students how many of them prefer which styles are shown in the score of percentage. The detailed analysis of the data, findings, and interpretation are presented in the following pages.

# VII. Results and Discussion

In case of language learning there are three types of learners are available in Bangladesh i.e. Visual, auditory and Kinesthetic learners. The learners are categorized according to their preferences in the above table and this way the mostly preferred styles of the learners' come into the light.

#### a) Visual Learning

The data shows that visual strategies are followed by the learners but in this case they show mixed attitude. In the Table1 it is seen that 30% student agree to learn by reading than listening to others. Again, 10% of the student strongly agreed with this statement. It shows that 40% student like to learn by reading and seeing something. In case of learning through watching textual videos 24% students agreed and 27% student strongly agreed with this style. But the number of disagreement is also not so small to be ignored there as it is 13% in both level of disagreement. The variation occurs for cognitive and psychological factors. Moreover, 27% students strongly agreed to study alone and 24% also agreed to this view. Thus, it is seen that a wide number student prefer to learn individually, seeing something on the page or on the multimedia. There are also a few students who are not aware about their preference regarding watching textual videos though they are well aware of learning by reading individually.

#### b) Auditory Learning

The findings showed that auditory learning got preference from the learners to a great extent. In the question no 5, the scores of preference in the column of strongly agree and agree are 50% and 30% respectively. The indication is that students prefer to learn by hearing whether from teachers or from classmates. This issue again becomes clearer through their strong preference towards question no. 7 and 9. The higher secondary learners of Bangladesh are greatly devoted to their teachers lecture but it goes against the basic philosophy of communicative language teaching. So auditory learning is also mostly preferred by the learners.

#### c) Kinesthetic Learning

Kinesthetic learning styles include group work, pair work, speaking independently at the class, and also role playing. The findings showed that the learners are aware of their learning styles and their strong preference regarding question no.1 2, 3, 4, 10, and 14. The percentage of their preferences is also remarkable. One thing is clear in the findings that the learners prefer pair work more than group work. In case of question no2 (group work) the percentage of strongly agree and agree is-25%-25%. Again, in case of pair work the number is- 67%-27%. So pair work is more preferable by the learners than the group works. The students want to talk freely in the classroom but in case of enjoyment the preference varies. The learners are showing their interest in communicating in the class but the preference of question no.4 showed that above 50% of the students do not enjoy speaking at the class. It shows that they are not eager to take the responsibility of learning on their shoulder and want the teacher to guide them as a facilitator.

The findings of the question no. 11 and 12 showed that almost all the student prefer to be corrected by their teachers then and there as the percentage strongly agree and agree is 84%-16% (que.11) and 63%-16%(que.12). But there are some learners who feel humiliated to be corrected by their classmates. The strong preference towards error correction shows learners dependence on their teachers. They think that teachers are their guardians and it is their responsibility to follow their guidelines to achieve their goal of learning.

It is to be noted that students feel hesitated to answer the questions while conducting interview though they prefer kinesthetic learning styles. It is questionable whether they are really learning actively like their preference or these styles are only attractive to them.

### d) Teacher's Interviews

In the interview, teachers are asked about the learning preferences of their students. The teachers show mixed attitude towards the learning style preferences of the learners regarding communicative method. The questions cover the area of communicative classroom activities. They have different opinions on the effectiveness of the preferred styles of second language learning.

The opinion of the 6 teachers conflicts with the mostly preferred styles of the learners. They do not agree with the kinesthetic and global styles of learning. For example, one teacher said,

The students prefer group work and pair work only a period of time. As you (the researcher) asked them about these styles they showed their strong preference. I do not find them that much active in the class. Even they are not willing to give an answer of my question. It seems unnatural to me that they prefer learning by participating in the class and hesitate to talk with teacher. It can be enjoyable to them only for a few days but language achievement is not possible. The text book follows the basic philosophy of Communicative English but I think it needs more revise. Most of the students are introvert and they become more benefitted from teachers' lecture. I think they are not able to take responsibility to learn the foreign language by themselves. It is not possible to arrange classes according to their preference because it will bring a hazardous situation both for the students and teachers. (College teacher)

Others felt that it is impossible to arrange class according to the students' preference because the classroom size is large and it is unmanageable to them. The teacher cannot reach all the students and to make them speak during the class. They want to teach the students the correct structures or correct pronunciation in every possible ways. One teacher said,

If I allow them to speak with each other in the classroom very few of them will speak English. There is a little possibility of speaking correct English. If I continue it long run they will learn each others' mistake. Again, when I correct them in every step they feel shy and demotivated to carry on. They are doing well in the exam hearing teachers' lecture and learn correct English. If I switch from my preference to their style the learning will not be effective. If they learn the language first they can express it wherever they need to use English. Without the basic foundation they will not be able to use it rather it will create a haphazard situation in the classroom. (Collage teacher)

However, there are 4 teachers who are trying to follow the students' preference. Actually, they are not following learners' learning style but the communicative text book. These teachers have some training on the communicative text book. The task and activities of the text book require a wide range of learners' participation. As the data of the students' show that majority of the students are global and kinesthetic who prefer to learn by doing and sharing something in the class. These teachers are aware about the learners' preference and arranging classes according to it. In this case one of the teachers said,

'I found the learners' interest in the task and activities of the text book and tried to arrange it. But it is very difficult to make them listen to others speech while one group is performing. Everybody wants to speak and none to listen. One thing I want to mention that the purpose of learning is not served well in this way because the students' take it as a form of entertainment not as learning. So they are reckless of using it and do not heed to others. Everybody is eagerly waiting for their own floor or getting worried about one's own performance. Thus the collaborative activities are a failure. Listening and reading skills do not find importance to them as they do not go for in detail reading texts.' (College teacher)

'I have arranged several times the visual adaptations of some interesting texts in the classroom. In this case they are very much interested to enjoy it and they get involved with the theme. When I showed them some text related situation they failed to pick up the language by seeing or hearing it. Students try to form group only with those who are advanced and those who are extroverted. Thus, majority do not feel interested to communicate in the classroom.' (College teacher)

'I try to follow the task and activities of the text book but it requires more time and the syllabus cannot be completed within time. The students are a bit careless in learning this process because they think it is not helpful for the exam though they know the necessity of it. So, the overall learning process is hampered. Moreover, the students cannot rely on each other and always look for the teacher's active presence in the classroom. They feel hesitate to make argument with teacher though they have full freedom to speak. They feel more comfortable when they listen to the teacher's lecture.' (College teacher)

### e) Cultural influence on learning style

The study shows that there is a gap between learners learning preference and the awareness of the teachers. The problem lies both in learners and teachers. The learners are trying to cope with the changing nature of learning mode of CLT and the teachers consider these strategies ineffective. Those who are aware about this change in learning styles are also not at ease because they do not get desired output from the learners. Culture is one important issue in this regard for which both teachers and learners are failed to cope with the amalgamated classroom situation. The awareness of western culture will facilitate learners' understanding and use of a second language but their native culture has influenced their perceptions of how a second language is learned and taught. There are some cultures of learning in Bangladesh e.g. teachers have absolute authority I the classroom, students show great respect to the teacher and students do not consider challenging teachers in public a good habit. It is often take the form of knowledge transmission from teacher to students.

In other words, the "culture of learning" shapes the way a second language is learned and taught. In this sense, knowledge of the different perceptions, beliefs and values inherent in culture of learning will facilitate mutual understanding and contribute to effective teaching and learning outcome. In Bangladeshi context, teachers are expected to be knowledgeable, considerate, and play parental roles in the learning setting. The teacher-student interaction is not lubricated with the democratic oil of warmth and first names, but with the oil of respect. So it is seen that both the teachers and students are in a transitional period with the adapted teaching learning styles which the method of second language learning deserves. Those who are aware of the changing situation become auditory or kinesthetic learners or even global learners and same is in the case of teachers.

## VIII. SUGGESTIONS

The objective behind conducting this study was to come across the findings that could feed into classroom practice, and provide guidance for teachers and learners as well as material designers and syllabus planners. As the study shows both the learners and teachers are equally important to make the L2 learning successful. Not only that but also a culture sensitive methodology is also needed to be implemented for ESL classroom. The teachers cannot be blamed that they are not aware because those who has already implemented the learners' preference are not wholly satisfied. Apart from the above-mentioned concepts, some bridging strategies are suggested here:

- 1. The teachers can use instruments to identify students' needs, including classroom activity preferences, develop self-aware learners, and encourage changes in students' behavior.
- 2. To alleviate the tension for the students, teachers should help them recognize the merit inherent in the communicative approach, be aware of the need to shift gradually from their previous learning models to communicative methods.
- 3. Teachers also need to diversify their teaching styles to meet the learners' needs and classroom activity preferences, at least in the initial period. Ur (1996) argues that activities in class should be varied, and a varied lesson plan is more likely to cater to a wide range of learning styles and strategies.
- 4. The teacher should reach those students who are not participating in the classroom activities and make them interacting with the teacher. Gradually they will be able to communicate with others confidently. Teachers need to adapt classroom materials to make them user-friendly and to help them to express themselves freely without feeling embarrassed when they make mistakes.
- 5. As there are some practical difficulties in classroom teachers should arrange peer work and group discussion should be avoided in order to manage the upcoming chaos.
- 6. Communicative teaching process requires high proficiency from the part of the teacher. So teachers should be trained about the overall teaching procedures and make them aware of the learners preferences. The students should be given counseling to be aware of their individual learning styles as well as the necessity of the communication in L2.

7. Good rapport also needs to be built between teachers and learners. A good relationship between teachers and students is very important to keep harmony and show respect for teachers from students--a sort of "family relationship" that places emphasis on respect, harmony, and caring. If teachers are concerned about nothing but teaching English in the classroom, students might feel disappointed when they face this style of relationship and will be afraid of interacting with the teacher.

# IX. Conclusion

This empirical evidences of this study shows that students demonstrate diverse learning styles of which teachers are not that much aware. Learners prefer to learn in group and mostly in pairs. They like to participate in the classroom and at the same time expect teacher's presence similarly. Still they wait eagerly to be explained by the teachers while doing something and prefer to be corrected by the teacher then and there. Majority does not hesitate to be corrected by the peers. The auditory learners prefer to hear teacher's lecture or others conversation and they even do not participate in doing something. Though students showed interest towards visual learning teachers opposed this saying that they were not able to pick up the language by seeing it.

The teachers those who are trying to adopt the styles preferred by the students are also facing some problem. The difficulties that the teachers are facing are caused by the cultural behavior of Bangladeshi students. Communicative language teaching demands learner's authority in the class which is conflicting reality. Teachers should consider culture-related style differences as they plan how to teach, and make a conscious effort to include various learning styles in their daily lesson plans.

# References Références Referencias

- 1. Cheng, X. T. (2000b). Culture of learning and ELT in China. *Teaching English in China, 23* (1), 47-48.
- 2. Cohen, A. (1984). Studying second-language learning strategies: How do we get the information? Applied Linguistics, 5, 101-112.
- 3. An, S. D. (2002). Differences in participation between Asian learners and Western learners in ELICOS classrooms. *Teaching English in China*.
- 4. Reid, J. (1987). The Learning Style Preferences of ESL Students. *TESOL Quarterly*, 21: 87-111.
- 5. Reid, J. (1995). *Learning Styles in the ESL/EFL Classroom.* Boston: Heinle & Heinle.
- Keefe, J. (1979). Learning Style: An Overview. In J, Keefe (ed), *Student Learning Styles: Diagnosing and Prescribing Programs,* (pp. 1-17), Reston, Virginia: National Association of Secondary School Principals.

- 7. Brindley, G. (1984). *Needs Analysis and Objective Setting in the Adult Migrant Education Program.* Sydney: NSW Adult Migrant Education Service.
- 8. Kavaliauskiene, G. 2003. "English for specific purposes: Learners' preferences and attitudes". Journal of Language and Learning, 1, (1).
- 9. Levine, D. (2003). Building classroom communities. Indiana: National Education Service.
- Riazi, A & J., Riasati. Learning style preferences: A students case study of Shiraz EFL institutes. Asian EFL Journal, 9, (1).
- 11. International Learning Styles Network. (2008). About learning styles. Retrieved from http://www.learning styles.net/index.php?option=com\_content&task=vi ew&id=20 &Itemid=70&Iang=en
- 12. Islam, Jahirul(2011). Language Learning Style Preferences: Bangladeshi EFL Learners. Harvest: Jahangirnagar Studies in Language and Literature.
- Felder, R. M., & Brent, R. (2005). Understanding student differences. Journal of Engineering Education, 94(1), 57-72. Retrieved from http://www4 ncsu.edu/unity/lockers/users/f/felder/public/Papers/ Understanding\_Differences.pdf