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A STUDY ON LEARNING STYLES OF H.S. LEVEL STUDENTS OF DIBRUGARH DISTRICT

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Abstract:
Learning style was considered as the ways or methods by which an individual acquire learning. Effective teaching will not be taking place if it will not match with the learning style of students. So, the researcher tried to study the learning style of students studying at Higher Secondary (H.S.) level. The researcher used ***Felder and*** *Soloman Index of Learning Styles (1991) to study the learning style of students. The findings of the study revealed that the H.S. level students of Dibrugarh district preferred balance learning style in each of four dimensions of learning style (i.e. active/reflective, sensing/intuitive, visual/verbal and sequential/global).*

Key Words: Learning Style, H.S. level & Dibrugarh district.

1.0 Introduction:

From the time of inception psychologists and researchers engaged in the investigation of human learning. They determined various factors (personality, intelligence, motivation, physical environment etc.) as major determinant of human learning. A number of research studies conducted in India and abroad have observed that many variables related to personality and cognitive dimensions influenced on human learning. By interacting with the various stimuli of the environment one acquired various experiences which change or modify the human behaviour. This change and modification of human behaviour can be termed as learning. Again, the approach to the various stimuli of the environment or learning task may differ from individual to individual and hence can be termed as unique. No two persons preference for acquiring particular information or knowledge is the

same. For example one may prefer to acquire information/knowledge by doing and the other may prefer by listening. These differences in acquiring information or knowledge visually, orally and by motor activities or combination of these depend on the child's learning style. Learning styles is the method of educating particular to an individual that is presumed to allow that individual to learn best. It is commonly believed that each people favour some particular method of interacting with, taking in and processing stimuli or information. Based on this concept, the idea of individualized 'learning styles' originated in the nineteen seventy and has gain popularity in recent years **(Panda, S.K. (2012)**.

A learning style is students most preferred way of responding to the stimulus of learning environment. It is a different ways or approach of response. An individual difference exists in terms of learning styles. One may focus on facts, data and information. On the other hand one may comfortable with concepts, theories and mathematical models rather than facts, data etc. In the same way some respond strongly to visual form like picture, diagram; others are more comfortable with verbal form i.e. written and spoken explanations. Many attempts were made to define learning style, some of them are as follows:

Oxford & Ehrman (1988) states that "learning style is a blend of cognitive, affective, and behavioral elements".

Hunt (1979) believes that learning style "describes a student in terms of those educational cognitions under which he is most likely to learn. Learning style describes how a student learns, not what he has learned."

Keefe & Monk (1982) stated as "learning styles as the characteristics cognitive, affective and psychological behaviour that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment."

Schmeck (1987) held that learning style is a student's predisposition to adopt a particular learning strategy across the learning task.

Gregorc (1979) defined learning style as distinctive behaviours which serve as indicators of how a person learns from and adapts to his environment. It also gives clues as to how a person's mind operates.

Debellow (1990) defined learning styles as the way people observes, process and retain information.

Messick (1994) states as "learning styles are consistent orientations towards learning and studying."

Thus on the basis of the above mentioned definition it may be summed up that learning style is a unique way of an individual learner which he adopts or prefers to approach the learning tasks. It covers cognitive, affective and psychomotor dimensions of the behaviour and can be considered as a stable indicator of how pupils learn rather than what pupils learn.

2.0 Significance of the study:

Learning styles of the students play a vital role in the teaching learning process. Effective teaching will not be taking place if it will not match with the learning style of students. The teaching style of teacher should be organized according to the learning style of students. So, teacher should try to find out the most preferred learning style of students and try to organize the learning environment and teaching methods accordingly. In such situation effective teaching and learning will take place. Moreover the curricular activities and experiences should organize according to the learning style of the students.

The study will helpful to know the learning style of students studying at the particular level and also able to find out the most preferred learning styles of students. On the basis of that the teacher can organized his or her classroom activities and experiences. Knowledge of learning styles not only helpful for the teachers but also significant for parents to give assistance and guidance to their children according to their preferred learning style. Moreover, some research works have been carried out in Dibrugarh district in respect of literacy, general conditions but hardly any reference is available which study about learning style of students studying at Higher Secondary level of Dibrugarh district of Assam. It is assumed that this study will be very significant value for teachers, educators, administrators, parents and for students also.

3.0. Objective of the study:

The study was conducted with the following objective in view:

a. To study the learning style of students studying at H.S. level of Dibrugarh district.

4.0. Method:

Considering the nature of research problem and the nature of data required for the study, the researcher uses a 'Descriptive Survey' method for data collection.

4.1. Population:

The population of the present study comprised of all the students studying at H.S. level in the Government and Provincialised Higher Secondary Schools, Junior Colleges, Missionary H.S. Schools and Degree Colleges of Dibrugarh in the year 2013-2014. There were all total 51 AHSEC educational instructions where were 2 govt. H.S. schools, 12 were junior colleges, 6 were private H.S. schools, 20 were provincial H.S. schools 11were degree colleges and 7 CBSE schools including K.V., V.K.V. & J.N.V). All total there were 58 educational institutions which offer higher secondary courses in Dibrugarh district of Assam.

4.2. Sample:

For the present study, the researcher had adopted quota sampling technique for selecting the sample. The sample consisted of 28 educational institutions which offer higher secondary courses. Out of which 4 were CBSE and 24 were AHSEC educational institutions. Moreover the sample of students consisted of 30 students from each institution. There are 15 male and 15 female students.

4.3. Learning Style Inventory:

A number learning style inventories are available to study the learning styles of students. The researcher had gone through learning style inventories developed by **Karuna Shankar Mishra** and **Kolb's** *Learning style Inventory*. Considering the objectives, relevance and sample of the study, the researcher had decided to use **Felder and Soloman** *Index of Learning Styles (1991).*

It was used to measure the four domains of learning style, i.e. (a) process information (active/reflective), (b) perceived information (sensing/intuitive), (c)

receive information (visual/verbal) and (d) understanding information (sequential/global) learning style.

4.3.1. Reliability of the Scale:

To determine the reliability of the test the researcher used test-retest method. The following table shows the reliability of the original test and the reliability of the Assamese version.

Table 1

Reliability of the scale

	Active/ Reflective	**Sensing/ Intuitive**	**Visual/ Verbal**	**Sequential/ Global**
Original Scale	0.804	0.787	0.870	0.725
Assamese version	0.578	0.478	0.641	0.632

4.3.2. Validity of Index of Index of Index of Learning Style:

The construct validity of the Index of Learning Styles was determined by **Litzinger, *et al.* (2005)**. They conducted factor analysis to check the construct validity of the inventory. The strongest evidence is for the Sensing-Intuitive scale, for which all items load on a single factor. For visual-verbal scale the evidence of construct validity is also good as there are two factors. For the Active-Reflective and Sequential-Global scales the identified factors also appear to be appropriate.

5.0. Analysis and Interpretation of data:

5.1. Learning styles of H.S. level students of Dibrugarh district

In the present study the learning styles of H.S. level students of Dibrugarh district was examined. Index of Learning Styles (ILS) created by **Fedler and Soloman (1991)** was used to determine the learning styles of students. The scale is consisted of four domains and each domain consisted of two dimensions; i.e. processing information (active & reflective), perceiving information (sensing & intuitive), receiving information (visual & verbal) and understanding information (sequential & global). Each domain has 11 items and as there are four domains so the total number

of the items is 44. A score of 1-3 on either side of a domain indicates a weak preference for that particular category, suggesting that the individual is responsibly balanced on both dimensions of the scale (**Fedler and Soloman, 1991, 1994**); a score of 5-7 indicates a moderate preference, and a score of 9-11 indicates a strong preference for one dimension of a particular domain (**Willems, 2011**). So there are all total five categories in each domain. For example, in the processing dimension the five categories are strong active, moderate active, balance (scores between 1-3 on both dimension are taken together), moderate reflective and strong reflective. Table 4.6 shows distribution of H.S. level students of Dibrugarh district on their learning styles.

Table: 3.1

Distribution of H.S. level students of Dibrugarh district on their learning style

Dimensions / **Preferences**	**Processing Information**		**Perceiving Information**		**Receiving Information**		**Understanding Information**	
	Active	Reflective	Sensing	Intuitive	Visual	Verbal	Sequential	Global
Strong (9-11)	13	2	20	1	17	6	11	0
Moderate (5-7)	118	42	169	43	139	97	114	65
Balance (1-3)	307	225	266	208	239	209	294	223

In the first domain of the learning style i.e. processing information, it is observed that out of 707, 13 (1.8%) students have strong preference for active learning and only 2 (.28%) students have strong preference for reflective learning style. On the other hand, 118 (16%) students have moderate preference for active learning style and 42 (5%) students have moderate preference for reflective learning style. Here, maximum 532 (75%) numbers of students are balance learners (where 307 are active

and 225 are reflective learners).

In terms of second domain of the learning style i.e. perceiving information; 20 (2.82%) students have strong preference for sensing learning style and only one student has strong preference for intuitive learning style. Again 169 (23%) students have moderate preference for sensing learning style and 43 (6%) students have moderate preference for intuitive learning style. Highest numbers of students 474 (67%) are come under the balance category in processing information domain learners (where 266 are sensing and 208 are intuitive learners).

In the third domain of the learning style i.e. receiving information; 17 (2.4) students have strong preference for visual learning style and only 6 (0.84%) students have strong preference for verbal learning style. On the other hand, 139 (19.6%) students come under moderate preference for visual learning style and 97 (13%) students come under moderate preference for verbal learning style category. Majority of the students 448 (63%) are balance learners in perceiving information domain (where 239 are visual and 209 are verbal learners).

In the fourth domain of learning style i.e. understanding information; 11 (1.5%) students have strong preference for sequential learning style and no student prefer global learning style. Again, out of 707 students 114 (16.12%) students have moderate preference for sequential learning style and 65 (9.2%) students have preference for global learning style. Highest number of students 517 (73%) come under the balance learning style category in understanding information domain (209 are sequential and 294 are global learners. The figure 4 shows more clearly the distributions of H.S. level students of Dibrugarh district in each domain of the learning style.

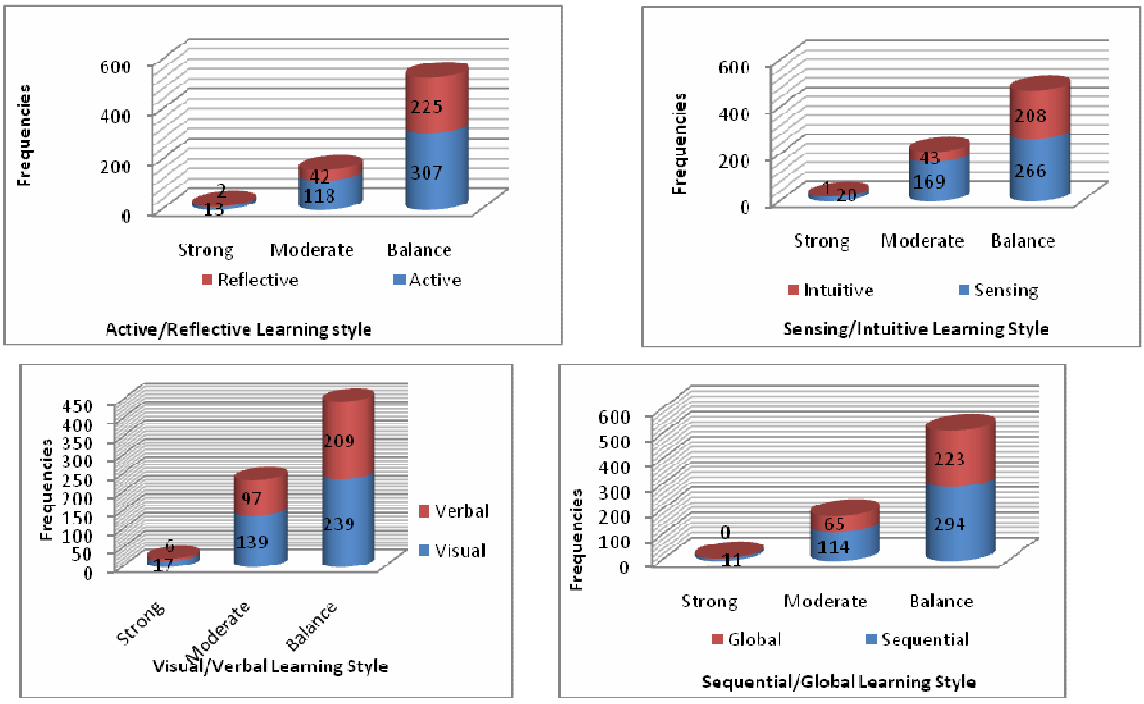

Figure 1: Distribution of the students on four domain of the learning style.

6.0. Findings of the study:

Learning Style of H.S. level Students of Dibrugarh district:

Regarding the learning style, most of the students preferred balance learning style in each four dimensions of learning style (active/reflective, sensing/intuitive, visual/verbal and sequential/global . But by making comparison in between two aspects of a dimension it was revealed that most of the students prefer active (62%), sensing (64%), visual (55%) and sequential (59%) learning style in comparison to reflective, intuitive, verbal and global learning style.

Conclusion:

The H.S. level students of Dibrugarh district preferred balance learning style in each of four dimensions of learning style (i.e. active/reflective, sensing/intuitive, visual/verbal and sequential/global).

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