RESEARCH ARTICLE

AN INVESTIGATION ON THE LEARNING STYLES OF B.Ed. TRAINEES

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Abstract

The present study is an attempt to find the preferred Learning Styles of B.Ed. Trainees and its effect on a set of independent variables based on Gender, Educational Qualifications, Type of Institutions and their Medium of Study. To achieve this aim, the researcher has adopted survey method. The tool used for the data collection was Learning Styles Inventory developed by Dr. Karuna Shankar Misra (2012). Tool was administered to 230 B.Ed. Trainees drawn randomly from three B.Ed. colleges of Patna. The findings indicated that Verbal Constructive Learning Style was found to be more prevalent Learning Style among B.Ed. Trainees. Furthermore, the results show that there is no significant difference between Learning Styles and its dimensions i.e. Enactive Reproducing, Enactive Constructive, Figural Reproducing, Figural Constructive, Verbal Reproducing and Verbal Constructive Learning Styles on the basis of their Gender, Type of Institutions and Medium of Study. Another major finding is that, there is a significant difference between Graduate and Post-Graduate B.Ed. Trainees in their Learning Styles and its dimensions i.e. Figural Reproducing and Figural Constructive Learning Styles. This information is quite useful to the teachers as by understanding the preference of the students for different Learning Styles would aid them in aligning the course delivery in conjunction with students’ preferred Learning Styles.

Introduction:

Human beings are rational animals. He has got the power of reasoning. This power enables him to learn things quickly. Learning is said to be equivalent to change, modification, development, improvement and adjustment. Its process varies from person to person due to differences in cognitive processing. Every individual has its own natural or habitual pattern of acquiring and processing information in Learning situations. The common ways or pattern by which people learn are known as their Learning Styles. Every individual has different strength and preference in the way how they take in and process information which is to say, they have Learning Styles. They possess different Styles of Learning and those ways are neither superior nor inferior to another. It is not concerned with “what” learners learn, but rather “how” they prefer to learn. It is individual inclinations toward specific Learning approaches.

Keefe (1987) defined Learning Style as “the composite of cognitive, affective and physiological characteristics that serve as relatively stable indicators of how a learner perceives, interacts and responds to Learning environment”.

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According to Stewart and Felicetti (1992) Learning Styles are “those educational conditions under which a student is most likely to learn”. Brown (2000) defines Learning Styles as “the manner in which individual perceive and process information in Learning situation”. He argues that Learning Style preference is one aspect of Learning Styles, and refers to the choice of one Learning situation or condition over another. Karuna Shankar Misra (2005) defines Learning Styles as “the way one internally represents experiences and recalls or processes information”. Although slightly different, these definitions share the common underlying attempt to tap into how students prefer to learn rather than what they learn.

Learning Styles has an important place in the lives of students. When students understand how they learn and their preferred ways to learn, they will be able to integrate it in the process of Learning and this will enable them to learn more easily and quickly.

Teachers’ knowledge about the students Learning Style is extremely important. When teachers are able to analyze the differences and need of their students, the educational process is likely to become optimized for both students and teachers. Understanding Learning Styles is a key component in effective teaching. Teaching cannot be successful without having the knowledge of Learning Styles of students and a commitment to matching them with teaching Styles and strategies. An awareness of student Learning Styles can be used as a basis for educators to optimize teaching methods for diverse students’ populations.

Classification of Learning Styles
There are various classifications of Learning Styles propagated by different researchers over the decades. Learning Styles instruments/inventories have been developed to classify students as per the preference for different Learning Styles. In the present study, the researcher used a model for Learning Styles offered by Stewart and Felicetti (1992). They classified the Learning Styles in six different types which have been taken for the present study are Enactive reproducing, Enactive constructive, Figural reproducing, Figural constructive, Verbal reproducing and Verbal constructive.

Their operational definitions are as follows:

i Enactive Reproducing:  
It indicates one’s preference for action based concrete experiences. The emphasis is on imitation and practice. It is reproduction oriented.

ii Enactive Constructive  
It indicates preference for conceptualizing one’s experiences based on the processing of enactive information.

iii Figural Reproducing  
It refers to one’s preference for visual experiences related to make diagrams, charts, pictures, maps and photographs. The emphasis is on imitation and practice. It is reproduction oriented.

iv Figural Constructive  
It refers to the preference for processing of figural experience which will lead to conceptualizations.

v Verbal Reproducing  
It refers to the written or spoken information related to subject matter communicated through words.

vi Verbal Constructive  
It refers to the preference for reflective, accommodative and abstract thinking about subject matter so as to develop conceptualizations.

Significance of the Study  
During the past three decades, some researches have been done on school children but only a few researchers have investigated the preferred Learning Styles of B.Ed. Trainees.

Teaching cannot be successful without having a knowledge of Learning Styles of students and a commitment to matching them with teaching Styles and strategies. It becomes necessary to examine the individual to identify exactly, how he or she is likely to learn more effectively. Therefore, determining Learning Styles is quite valuable in order to achieve more effective Learning.

Significance of the study lies that when teacher educators accommodate Learning Styles by systematic varying teaching and assessment methods to teach B.Ed. Trainees, they will observe immediate and powerful increase in the Achievement of B.Ed. Trainees. It has been seen by the researchers that there are gaps between the teaching Styles of the teachers and the Learning Styles of the learners. Because of this mismatch the learners may become
ineffective and get discouraged. Unless the teaching strategies match with B.Ed. Trainees Learning Styles, they will not be instrumental in revolutionizing the decaying national economy. Therefore, the findings of the present study will be helpful in bridging these gaps.

Statement of the Problem
An Investigation on the Learning Styles of B.Ed. Trainees.

Operational Definitions
i Learning Styles: An individual’s Learning Style is the way he or she concentrates on, processes, internalizes, and remembers new and difficult academic information or skills. It is ability of learners to perceive and process information in learning situations.

ii B.Ed. Trainees: B.Ed. Trainees are those who pursue B.Ed. courses in the various colleges of Teacher Education.

Objectives of the Study:

i To find the significant difference in Learning Styles of B.Ed. Trainees on the basis of their Gender.

ii To find the significant difference in Learning Styles of B.Ed. Trainees on the basis of their Educational Qualification.

iii To find the significant difference in Learning Styles of B.Ed. Trainees on the basis of their Type of Institution.

iv To find the significant difference in Learning Styles of B.Ed. Trainees on the basis of their Medium of Study.

Tool Used
Learning Style Inventory (2012) developed by Dr. Karuna Shankar Misra, Professor, Department of Education, Banaras Hindu University, Varanasi.

Method Used
The investigator has used survey method for the present study.

Population of the Study
The population of the study comprise of all B.Ed. trainees of Patna.

Sample
The sample consists of 230 B.Ed. trainees by using simple random sampling technique.

Statistical Techniques Used
i Mean

ii Standard Deviation

iii ‘t’ test

Delimitations
i The study is restricted to Patna only.

ii The study is restricted to B.Ed. trainees.

iii The study is restricted to one variable.

iv The study is restricted to 230 students.

Hypotheses of the Study
i There is no significant difference between Learning Styles of B.Ed. Trainees on the basis of their Gender.

ii There is no significant difference between Learning Styles of B.Ed. Trainees on the basis of their Educational Qualification.

iii There is no significant difference between Learning Styles of B.Ed. Trainees on the basis of their Type of Institution.

iv There is no significant difference between Learning Styles of B.Ed. Trainees on the basis of their Medium of Study.
Ho 1: There is no significant difference between Learning Styles of B.Ed. Trainees on the basis of Gender.

Table No. 1: Learning Styles of B.Ed. Trainees on the basis of Gender.

| Dimensions         | FEMALE (N = 170) | MALE (N = 60) | t-value | REMARKS |
|--------------------|------------------|---------------|---------|---------|
|                    | Mean | SD    | Mean | SD    |        |         |
| Enactive Reproducing | 25.264 | 3.831 | 25.533 | 3.698 | 0.479 | NS      |
| Enactive Constructive | 27.411 | 3.886 | 26.653 | 3.843 | 1.315 | NS      |
| Figural Reproducing | 21.823 | 3.776 | 21.667 | 4.375 | 0.247 | NS      |
| Figural Constructive | 24.8  | 4.562 | 24.483 | 4.893 | 0.438 | NS      |
| Verbal Reproducing | 26.935 | 4.266 | 26.9  | 4.233 | 0.055 | NS      |
| Verbal Constructive | 28.452 | 4.578 | 28.367 | 4.697 | 0.123 | NS      |
| Learning Styles    | 154.688 | 18.535 | 153.6 | 20.296 | 0.365 | NS      |

(At 5% level of significance, the table value of ‘t’ is 1.97)

It is inferred from the table that the calculated value of ‘t’ is less than the table value of ‘t’ (1.97) at 5% level of significance. Therefore, the null hypothesis is accepted. Hence, there is no significant difference between Female and Male B.Ed. Trainees in their Learning Styles and its dimensions i.e. Enactive Reproducing Learning Styles, Enactive Constructive Learning Styles, Figural Reproducing Learning Styles, Figural Constructive Learning Styles, Verbal Reproducing Learning Styles and Verbal Constructive Learning Styles.

Ho 2: There is no significant difference between Learning Styles of B.Ed. Trainees on the basis of Educational Qualifications.

Table No. 2: Learning Styles of B.Ed. Trainees on the basis of Qualifications.

| Dimensions         | GRADUATE (N = 137) | POST GRADUATE (N = 93) | t-value | REMARKS |
|--------------------|------------------|-------------------------|---------|---------|
|                    | Mean | SD    | Mean | SD    |        |         |
| Enactive Reproducing | 24.948 | 3.593 | 25.903 | 4.016 | 1.844 | NS      |
| Enactive Constructive | 27.036 | 3.862 | 27.473 | 3.916 | 0.834 | NS      |
| Figural Reproducing | 21.350 | 3.738 | 22.419 | 4.139 | 1.997 | S       |
| Figural Constructive | 24.124 | 4.640 | 25.591 | 4.528 | 2.387 | S       |
| Verbal Reproducing | 26.832 | 4.181 | 27.064 | 4.365 | 0.403 | NS      |
| Verbal Constructive | 28.007 | 4.650 | 29.053 | 4.475 | 1.713 | NS      |
| Learning Styles    | 152.299 | 18.981 | 157.505 | 18.627 | 2.064 | S       |

(At 5% level of significance, the table value of ‘t’ is 1.97)

It is inferred from the table that the calculated value of ‘t’ is less than the table value of ‘t’ (1.97) at 5% level of significance in their Enactive Reproducing Learning Styles, Enactive Constructive Learning Styles, Verbal Reproducing Learning Styles and Verbal Constructive Learning Styles whereas the calculated value of ‘t’ is greater
than the table value of ‘t’ (1.97) at 5% level of significance in their Learning Styles and its dimensions i.e. Figural Reproducing Learning Styles, Figural Constructive Learning Styles. Hence there is a significant difference between Graduate and Post-Graduate B.Ed. Trainees in their Learning Styles and its dimensions i.e. Figural Reproducing Learning Styles and Figural Constructive Learning Styles. However, there is no significant difference between Graduate and Post-Graduate B.Ed. Trainees in their Enactive Reproducing Learning Styles, Enactive Constructive Learning Styles, Verbal Reproducing Learning Styles and Verbal Constructive Learning Styles.

**Ho 3:** There is no significant difference between Learning Styles of B.Ed. Trainees on the basis of Type of Institution.

**Table No. 3:** Learning Styles of B.Ed. Trainees on the basis of Institute

| Dimensions          | GOVERNMENT (N = 62) | PRIVATE (N = 168) | t-value | REMARKS |
|---------------------|---------------------|-------------------|---------|---------|
|                     | Mean    | SD     | Mean    | SD     |         |         |
| Enactive Reproducing| 25.548  | 3.692  | 25.256  | 3.835  | 0.527  | NS      |
| Enactive Constructive| 26.484  | 3.749  | 27.482  | 3.906  | 1.771  | NS      |
| Figural Reproducing | 21.516  | 3.674  | 21.881  | 4.029  | 0.651  | NS      |
| Figural Constructive| 24.355  | 4.251  | 24.851  | 4.783  | 0.759  | NS      |
| Verbal Reproducing  | 26.645  | 3.951  | 27.029  | 4.360  | 0.636  | NS      |
| Verbal Constructive | 28.209  | 3.837  | 28.512  | 4.858  | 0.491  | NS      |
| Learning Styles     | 152.758 | 16.519 | 155.011 | 19.811 | 0.868  | NS      |

(At 5% level of significance, the table value of ‘t’ is 1.97)

It is inferred from the table that the calculated value of ‘t’ is less than the table value of ‘t’ (1.97) at 5% level of significance. Therefore, the null hypothesis is accepted. Hence, there is no significant difference between Learning Styles and its dimensions i.e. Enactive Reproducing Learning Styles, Enactive Constructive Learning Styles, Figural Reproducing Learning Styles, Figural Constructive Learning Styles, Verbal Reproducing Learning Styles and Verbal Constructive Learning Styles on the basis of Type of Institution.

**Ho 4:** There is no significant difference between Learning Styles of B.Ed. Trainees on the basis of Medium of Study.

**Table No. 4:** Learning Styles of B.Ed. Trainees on the basis of Medium of study

| Dimensions          | ENGLISH (N = 127) | HINDI (N = 103) | t-value | REMARKS |
|---------------------|-------------------|-----------------|---------|---------|
|                     | Mean    | SD     | Mean    | SD     |         |         |
| Enactive Reproducing| 25.709  | 3.566  | 24.874  | 4.021  | 1.646  | NS      |
| Enactive Constructive| 27.259  | 3.718  | 27.155  | 4.091  | 0.200  | NS      |
| Figural Reproducing | 21.858  | 3.620  | 21.689  | 4.302  | 0.317  | NS      |
| Figural Constructive| 25.220  | 4.785  | 24.097  | 4.402  | 1.850  | NS      |
| Verbal Reproducing  | 26.921  | 4.172  | 26.932  | 4.361  | 0.019  | NS      |
| Verbal Constructive | 28.850  | 4.641  | 27.912  | 4.516  | 1.547  | NS      |
| Learning Styles     | 155.819 | 18.577 | 152.66  | 19.395 | 1.251  | NS      |
(At 5% level of significance, the table value of ‘t’ is 1.97)

It is inferred from the table that the calculated value of ‘t’ is less than the table value of ‘t’ (1.97) at 5% level of significance. Therefore, the null hypothesis is accepted. Hence, there is no significant difference between Learning Styles and its dimensions i.e. Enactive Reproducing Learning Styles, Enactive Constructive Learning Styles, Figural Reproducing Learning Styles, Figural Constructive Learning Styles, Verbal Reproducing Learning Styles and Verbal Constructive Learning Styles on the basis of Medium of Study.

Conclusion:
This study points out that Verbal Constructive Learning Style was found to be more prevalent Learning Style among B.Ed. Trainees of Patna. Results show that Enactive Reproducing, Enactive Constructive, Figural Reproducing, Figural Constructive, Verbal reproducing and Verbal Constructive Learning Styles are not significantly different which leads to conclude that male and female, Private and Government institute and English and Hindi medium B.Ed. Trainees show similar preference towards these Learning Styles. Furthermore, there is a significant difference between Graduate and Post-Graduate B.Ed. Trainees in their Learning Styles and its dimensions i.e. Figural Reproducing Learning Styles, Figural Constructive Learning Styles. Post Graduate B.Ed. Trainees have a much higher mean score than that of the Graduate B.Ed. Trainees. This may be due to the fact that the Post Graduate B.Ed. Trainees have a great deal of independent Learning in addition to the lectures and classes. Moreover, the Graduate B.Ed. Trainees may still need help in developing their ability to absorb information, think about information, and evaluate the application of information in real world situations. This information is quite useful to the teachers as by understanding the preference of the students for different Learning Styles would aid them in aligning the course delivery in conjunction with students’ preferred Learning Styles.

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