

A COMPARATIVE STUDY OF LEARNING STYLE AMONG SECONDARY SCHOOL STUDENTS

Saba Parveen

Research Scholar, Department of Education, Aligarh Muslim University, Aligarh, India

Email: sabamuq@gmail.com

Abstract

The present study was carried out to find out the difference in learning style of secondary school students in relation to type of classroom (Smart classroom and traditional classroom) and locality (urban and rural). A sample of 216 secondary school students studying in various CBSE schools of Aligarh district were randomly selected. Learning Style Inventory (LSI) developed by Misra (2012) was used in this study. Results revealed a significant difference between smart classroom students and traditional classroom students regarding their learning style. The students studying through smart classroom had high level of learning style than the students studying in traditional classroom. No significant difference was found between urban and rural secondary school students on the variable learning style. Thus, it can be concluded that both the groups of urban and rural students had similar kind of learning style.

Keywords: Learning style, smart classroom, traditional classroom, locality (urban and rural)

Introduction

Learning style is a collection of characteristics, attitude and behaviors that define the way of learning. Learning style is a specific method in which a individual mind receives and processes information. It is an essential concept that links the personality to cognitive dimensions of an individual.

It is related to people's characteristics and preferences; learning styles reflect the students' preferences on observing the environment, interacting with this environment, and reacting and experiencing learning in this process.

Learning Style is categorized in different ways that is how people learn and how they approach information. By recognizing and understanding one's own learning style,

techniques better suited to learning can be used. Hence, the speed and quality of learning can be increased. Knowledge of one's learning style is very important as it helps a person to be more productive and creative, to increase achievement, to improve problem solving skills, to make better decisions, and to learn more effectively (Jaleel & Thomas, 2019).

There is no student who uses exclusively one style or another. Most of the students utilize a variety of modalities in learning. It is very important to expand their abilities to use as many learning styles as possible so that they can succeed in all the situations of learning (Jaleel & Thomas, 2019).

The learning style so far has been developed by scholars to classify students based on the approach to understand and process information. Campbell (1996) defined learning style as a certain behavior pattern or a display of individuals in their learning. Briefly, Dunn, Dunn, & Price (1975) defines learning style as a new way of how an individual obtains new information and all at once develop a new skill. Then Kolb (1984) learning style is a process where an individual keeps information and new skills. Meanwhile, Sarabdeen (2013) explained learning style as an approach or a way applied in learning. He adds that every individual has their own way of learning that he prefers the most compared to that of others. It is essential consequently that trainers and educators should understand learning styles for them to have accurate methods to transfer knowledge and skills.

Objectives of the study

1. To compare the mean score of learning style of smart classroom and traditional classroom secondary school students.
2. To compare the mean score of learning style of rural and urban secondary school students.

Hypotheses of the study

1. There is no significant difference in the mean score of learning style of smart classroom and traditional classroom secondary school students.
2. There is no significant difference in the mean score of learning style of rural and urban secondary school students.

Methodology

Descriptive survey method was employed in the study. High school students were considered as the population of the present study.

Participants

Present study was conducted on a sample 216 students of Xth standard of Aligarh districts, Uttar Pradesh. The sample of the study were selected from smart classroom (108) and traditional classroom (108) schools. Both male and female students were comprised in the study.

Data Collection Tool

For collecting the data, Learning Style Inventory (LSI) developed by Misra (2012) was used to measure the learning style of high school students.

Statistical Techniques

To find out the meaningful result from the collected data of high school students, proper statistical techniques were used like mean, standard deviation and t-test. Data of the study was analyzed with the help of SPSS version 21.

Analysis and Interpretation of Data with Discussion

Objective 1: To compare the mean score of learning style of smart classroom and traditional classroom secondary school students.

Null Hypothesis 1: There is no significant difference in the mean score of learning style of smart classroom and traditional classroom secondary school students.

Table 1: Comparison of Learning Style between Smart Classroom Students and Traditional Classroom Students

Variable	Group	N	Mean	SD	t-value	df	D	Sig.
Learning Style	Smart Classroom	108	159.68	12.85	4.263**	214	0.290	.000
	Traditional Classroom	108	148.64	11.69				

**Significant at 0.01 level

Interpretation

In order to compare the mean scores of learning style between secondary school students of smart classroom and traditional classroom independent sample, a t-test has been applied.

The result of the t-test can be seen in Table 1, which is calculated as $t(214) = 4.263$, $p = .000$, which is statistically significant at a 0.01 level of significance. It was found that smart classroom students ($M = 159.68$ & $SD = 12.85$) have higher learning style as compared to traditional classroom students ($M = 148.64$ & $SD = 11.69$). The result shows that the students studying in the smart classroom are statistically different on the variable of learning style from students studying in the traditional classroom. The table (1) presents a small effect size ($d=0.290$) which is low of practical significance (Cohen, 1988). Therefore, the null hypothesis “*There is no significant difference in the mean score of learning style of smart classroom and traditional classroom secondary school students*” is **rejected**.

The present finding is supported by the findings of Torii and Carmen (2013), who reported that educational technology enhanced students learning styles. And also agreed with the views of Bicer (2014) who noted that learning styles affect e-learning and traditional classroom learning as well. A significant difference was found in learning style among IX-standard students in terms of internet using (Jeyalakshmi, 2016). Teaching and learning achievement were affected by learning style. Further, Markovic and Jovanovic (2012) suggested that learning is a factor that affects e-learning quality.

However, Mishra (2018) found a contradictory result, who found that Sanskrit and Hindi medium students had no significant difference on the variable learning style. Garima (2016) also reported that senior secondary school students had no significant effect of learning style on their academic achievement.

Objective 2: To compare the mean score of learning style of rural and urban secondary school students.

Null Hypothesis 2: There is no significant difference in the mean score of learning style of rural and urban secondary school students.

Table 2: Comparison of Life Skills between Urban Students and Rural Students

Variable	Group	N	Mean	SD	t-value	df	d	Sig.
Learning Style	Urban	154	154.15	13.09	-.018	214	-.001	.986
	Rural	62	154.20	14.58				

Not Significant

Interpretation

It is clear from Table 2 that the independent sample t-test is associated with a statistically not significant difference, $t(214) = -.018, p = .986$. The result shows that urban students ($M = 154.15, SD = 13.09$) and rural students ($M = 154.20, SD = 14.58$) of smart classroom are found to have similar learning style. The value of Cohen (1988) effect size ($d = 0.001$), which shows a slight difference in means, is a very small effect size that is low of significance. So the null hypothesis (2) “*There is no significant difference in the mean score of learning style of rural and urban secondary school students*” is **accepted**.

The above presented finding is also in agreement with views of Singh, Govil & Rani (2015), who reported that there was no significant impact of place of living (rural and urban) on the learning style preferences of secondary school student. However, Cox, Sproles & Sproles (1988) also found a contradictory result, who found that rural secondary school students had higher learning styles as compared to urban secondary school students. Further, Anjum (2014) indicated that urban and rural students differed in their right and whole hemispheric dominant learning and thinking styles.

Findings of the Study

1. The finding of the study showed a significant difference between smart classroom students and traditional classroom students regarding their learning style. The students studying through smart classroom had high level of learning style than the students studying in traditional classroom.
2. No significant difference was found between urban and rural secondary school students on the variable learning style. Thus, it can be concluded that both the groups of urban and rural students had similar kind of learning style.

Educational Implications

On the basis of present study findings, this study may be helpful for the teachers, educationist, school administrators, policymakers, parents, counselors and other stakeholders to know the extent of learning style between secondary school students of smart classroom and traditional classroom and their locality. Smart classroom students had better learning style than traditional classroom. So, it can be suggested that a new concept of Smart Board or Smart Classroom should be added to the syllabus of Educational Technology at the bachelor level of a teacher training institute. School should conduct workshops, seminars related to smart board for teachers. Smart

classroom may also be helpful for enhancing experiential learning. Experiential learning has been emphasized by NEP-2020. Therefore, the school and teachers training institutions should make sure to train the prospective teachers to use the smartboard as a teaching aid for experiential pedagogy. In this way, teacher can use smart board properly.

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