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Flipped Classroom: A Case Study of B.Ed students of Prayagraj

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ABSTRACT

Presently during B.Ed teaching, teacher teaches in class but learning actually starts at home when student interacts with leaning material and clear it concept. Flip means inverting if we invert this process whether it will effect on the achievement. This is the key interest of the researcher. Since no study was done on the B.Ed student to test the effectiveness of achievement . Hence this study was performed on B.Ed students of Prayagraj district and result was found to be very significant.

Introduction:

When we simply pronounced the word teaching, it reflects three pillars first is teacher second is student and third one is curriculum. In the classroom scenario actually this happens, teacher teaches the content with the help of all possible techniques and aids. Student carefully listen quietly or sometimes asks queries and teacher tries to solve the academic queries of children/students. And in the end teacher gives home work to the student in order to make learning firm. In this whole scenario learning occurs at home not in the classroom when student tries to solve the questions, reads books takes the help of internet to understand the concept. In this traditional scenario learning actually occurs at home not in the class so educationist thought of inverting the whole procedure i.e. learning in the classroom and teaching in the home. This inverted process / classroom is named as Flip Classroom. Origination stories differ, but most credit Jonathan Bergmann and Aaron Sams for giving this concept in education . Lacopo Falciani (2020) in his article named "Flipped classroom" defines Flip classroom as an instructional strategy and a type of blended learning, which aims to increase student engagement and learning by having pupils complete readings at home and work on live problem-solving during class time.

Review of literature:

Various researches has been carried out on this topic some of which are Chang and Hwang (2018) stated that , flipped learning could better enhance students' learning motivation and attitude than traditional teaching. Bakla (2018) explained it as promoting students' active learning, Lin et al. (2018) combined a flipped classroom with mobile learning for mathematics teaching in elementary schools. Zhang (2019) on learning style received students' positive support to prove that students preferred the learning style of the flipped classroom, compared to traditional learning styles. Alexander (2018) considered that flipping enhanced job satisfaction and students made progress in learning performance .Karabulut et al. (2018) indicated that the effectiveness of flipped learning was not simply on academic performance but could also enhance cooperation and thinking among students. Dhawan(2020) , Fatani(2020), Agarwal and Kaushik(2020) and Guraya(2020) are on the learning styles and effectiveness of the flip



classroom to elementary schools . But none of the study is not based on Teacher educating programs . So this question make researcher curious to work on this above topic.

Objective of the study:

1. To study the effectiveness of flipped classroom for B.Ed. Students of Prayagraj .

Hypothesis:

In the view of the above stated objective the null hypothesis is being frames which is presented below: H1. There is no significant difference in achievement of B.Ed. students taught through Flipped class room strategy.

Design and methodology:

This is the experimental study consist of two groups i.e. G1 and G2. G1 is experimental group and G2 is control group . G1 students taught with Flip strategy while G2 students were taught with traditional method for 30 days and then achievement test was administered on both of them and the result was analyzed.



Sample:

Convenient sampling technique was employed to sample the population, and the sample comprised of 94(males 62, Females 32) B.Ed. students of K P Training College Prayagraj. The Students of session 2022-23 was distributed randomly into two groups.

Delimitation of the Study:

This study belongs to B.Ed. students of Prayagraj district for the session 2022-23.

TOOL:-

A achievement test was used to measure effectiveness. Reliability and validity of the acheviement test was 0.82 and 0.76 respectively.

Statistical techniques used:

The descriptive statistics techniques was used to analyze data .The analysis of data was done with the help of IBM SPSS statistics software 20.0. For analysis Mann-Whitney Test (U test).

Result:

Result of the questionnaire was given below :

Descriptive Statist	ics:	Tal	ble : 1		
	Ν	Mean	Std. Deviation	Minimum	Maximum
TRADITIONAL	47	58.55	11.129	13	69
FLIPPED	47	65.68	7.078	42	78
GENDER	47	1.34	.479	1	2



Mann-Whitney Test:

Ranks : Table 2								
	GENDE	Ν	Mean Rank	Sum of Ranks				
	R							
TRADITION AL	male	31	22.08	684.50				
	female	16	27.72	443.50				
	Total	47						
FLIPPED	male	31	20.61	639.00				
	female	16	30.56	489.00				
	Total	47						

Test Statistics : Table 3

	TRADITIONAL	FLIPPED
Mann-Whitney U	188.500	143.000
Wilcoxon W	684.500	639.000
Z	-1.340	-2.363
Asymp. Sig. (2-tailed)	.180	.018

Interpretation:

As it is evident from analysis of SPSS table 1. mean achievement score for traditional method comes out to be 58.55, while of flipped class room was 65.88 i.e. (mean score increases), standard deviation for traditional method comes out to be 11.13 with range of 56 while flipped class room comes out to be 7.08 of range 36 i.e. (range of score decreases). The value of z and p comes out to be -1.34 and 0.18 for traditional method and -2.363 and 0.018 for flipped class room. Since p value of flipped class room for 2-tailed is less then 0.05. This would normally be considered a significant result (the standard alpha level is .05). Therefore, we can be confident in rejecting the null hypothesis that there is no significant difference in achievement of B.Ed. students taught through Flipped class room strategy.

Educational implication:

This study reveals that flipped class room method should be used more and more by teachers during B.Ed. course . For strengthen the method teacher should use

different types of flipped class room depending upon distribution of study material, use of classroom time, or type of students .

- Standard Inverted Classroom
- Micro Flipped Classroom
- Discussion-Oriented Flipped Classroom
- Demonstration-Based Flipped Classroom
- Faux-Flipped Classroom
- Group-Based Flipped Classroom
- Virtual Flipped Classroom
- Role-Reversal 2.0 (Flipping The Teacher)



Teacher should provide study material in flipped classrooms which comprises of video lectures, slideshows, audio lectures, screen cast content, and engaging animation.

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