

## **Effect of Innovative Digital Instructional Strategies on Class Performance of Pupil Teachers**

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**Abstract-** The most important tool of effective teaching learning process is teaching techniques. The use of innovation and digital equipment in the teaching processes has made learning process very simple, easy and student friendly. Digital innovation has revolutionized the instructional strategies for a sustainable development. Student teachers of today will become qualified teachers tomorrow and the demand for present time is that they should be trained with not only traditional learning methods but also trained them with new digital instructional techniques. Explain the differences between traditional learning methods and innovative techniques and bring awareness of new technique is the aim of our study.

The purpose of this exercise is to investigate the outcomes of Digital instructional strategies on the performance of the teacher's students. This experiment was conducted on a teaching subject Life Skill Education of fourth semester of teacher education program. A sample of 50 students was selected randomly out of 100 students of Semester IV in a teacher training college. Two groups of 25 students each were made. Pre -test was given to both the groups and the results were recorded. One group was taken as a control group which was taught the subject by the teacher who used conventional method of teaching while the other i.e. the experimental group was taught by the teacher who used innovative digital teaching techniques. After two week time of teaching, a post- test was conducted.

**Key words:** instructional strategies, teaching learning process, experimental group, pretest, post test.

*"The art of teaching is the art of assisting discovery"—Mark Van Doren*

**Introduction:** Today's Society is Information Centered Society and the Information and Communication Revolution combined all the people of the world together. This change on the world stage has meant the educationists need to reorganize the entire education process and place the innovation in education. Before the advent of the digital age the teachers were dependent on books and libraries only for reading and teaching. But in current time Technical development has begun a new age of information revolution and education dissemination. Through pressing a button you can gain knowledge about anything, in such a way to calm the curiosity of the children and to make them aware of the new dimension of knowledge is the biggest challenge for today's teachers

### **NEED OF STUDY**

Today in most of the school's, the classroom teaching is not limited to Chalk -n- Talk methods. Here the emphasis is given to the interaction between the teacher and students. With the use of digital technology, hard-to-hard subject matter can be explained to students in a simple and interesting form.

The innovative techniques included educational videos, power point presentations, movie screening, online lecture, e-learning and online training are being included in classroom teaching. Twentieth century is recognizing by revolution in communication technologies. The advancement of information technology change entire teaching learning process and its affected students as well as teacher too. In today's time, professional competitiveness of teachers is increasing continuously, all the school wants skilled teachers and because of the increasing responsibilities of the teachers in the changing environment getting a good job opportunity is become difficult that's why knowledge of the innovative digital instructional strategy of student teachers is essential for their personal and professional growth.

#### SOME INNOVATIVE DIGITAL INSTRUCTIONAL STRATEGIES AND THEIR EFFECT OF STUDENTS LEARNING PROCESS

- Educational Videos Use of educational videos during classroom has improved engagement level of students. Visual content enhance memory and students ability to retain new information. Relevant videos keep student more alert, motivated and focused on particular topic.
- Mobile Learning: Mobile learning and BYOD are becoming popular in digital classroom. It enable students to engage with their Multiple device like Tablet, Laptops, smart phones expand the boundaries of learning own comfort.
- E-Books and Digital Content: E-Books and Digital Content are enormous for teachers. They are cheaper than the text books and can be updated regularly to provide updated content.
- Interactive Learning: student engagement in an interactive environment open new horizons of learning and understanding. Availability of data makes it rich, easy to understand and relate.
- Process outside of the classroom: Stimulators bring virtual reality into the classrooms use of periscope or live streaming which offers opportunities to observe various culture and lives around the world.

#### OBJECTIVE

- To study the performance of pupil teacher.
- To compare the performance of experimental group and controlled group.

#### HYPOTHHESES

- There is no significance difference between the performance of the student taught by digital technique and the student taught by conventional method.
- There is no significant difference between mean score of experimental group and controlled group.
- There is no significance difference between clarity of conceptual knowledge of student between experimental group and controlled group.

#### DELIMITATION

## effect of innovative digital instructional strategies on class performance of pupil teachers

For this study we consider only 100 teacher students of fourth semester of teacher training college. This study organized for a particular subject Life Skill education

### SAMPLE

Sampling 50 student were selected by random sampling out of the total population of 100 students of semester IV of teachers training program .Out of these 50 students again systematic random sampling was done to divide them into two groups of 25 students each. Pre-test was taken. Now one group is the experimental group and other one is called controlled group.

- Controlled group; the controlled group was take as a constant and taught by traditional (lecture and discussion) method.
- Experimental group Experimental group was taught by the teacher using following digital instructional strategies.

Power point presentation

- Educational video
- E-Books and digital content
- Personalize Instruction

### METHODOLOGY

According to the nature of objective of study experimental method is more suitable. For further process we divide our sample into two groups experimental group and controlled group

- Controlled group: The controlled group was take as a constant and taught by traditional (lecture and discussion) method.
- Experimental group: Experimental group was taught by the teacher using Digital instructional strategies.

### TOOL USED

The researcher has used the teacher-made achievement test to collection of data and fulfillment of the objective of the study.

### STASTICAL TOOLS

- MEAN
- STANDERD DEVATION
- T-TEST

### EXPREMENT

The duration of the experiment was two week in the month of February 2019. According to the planner made by researcher three topics were taken from Life skill Education. Namely Core Life Skill, Key

Issue and Concerns of Adolescent students in emerging Indian context. Learning to live together with other living beings. These three topics were divided into two week .initially both the class room were set on the same standard pattern later the researcher rearranged the excremental classroom with modern equipment. After two week time, post test was conducted from those three topics. A remarkable difference was observed between the scores of the two groups.

## RESULTS

### a) PRE-TEST RESULTS

S.NO	Control Group Score	S.NO	Experimental Group Score
1	7	1	10
2	11	2	9
3	15	3	14
4	27	4	24
5	10	5	15
6	17	6	11
7	19	7	21
8	16	8	13
9	6	9	16
10	14	10	17
11	24	11	20
12	15	12	19
13	18	13	15
14	15	14	16
15	20	15	19
16	17	16	18
17	14	17	3
18	19	18	16
19	22	19	23
20	21	20	27
21	12	21	10
22	24	22	26
23	14	23	16
24	9	24	13
25	23	25	11

### b) STATICS

	SCORE	CONTROLLE	EXPERIMENTA
		D	I
1	MEAN	16.36	16.08
2	SD	5.36	5.52
3	VARIANCE	26	31
4	T-TEST	.33	

## INTERPRETATION

Pre -test result display a clear similarity between the control group and the experiment group, the mean score are matching;i.e16.36 and 16.08.The value of standard deviation quite similar and variance shows that the scores are equally distributed in the two groups. And the value of t- test is .33 at 0.05 level of significance and this value is less then 1.96 .it means the null hypothesis that there is no significance different between performance of controlled group and experimental group is accepted.

POST TEST RESULT

S.No	CONTROL GROUP	S.N.o	EXPERIMENTAL
1	16	1	24
2	11	2	17
3	22	3	26
4	6	4	29
5	14	5	28
6	17	6	27
7	9	7	25
8	13	8	29
9	23	9	24
10	18	10	20
11	14	11	28
12	15	12	14
13	5	13	25
14	21	14	22
15	12	15	18
16	15	16	16
17	8	17	27
18	11	18	20
19	20	19	26
20	13	20	28
21	19	21	29
22	11	22	23
23	27	23	24
24	10	24	21
25	2	25	28

STATISTICS

S.No	SCORE	CONTROLLED GROUP	EXPERIMENTAL GROUP
1	MEAN	14.08	24.41
2	S.D	5.96	4.38
3	VARIANCE	35.57	19.24
4	T-TEST	6.74	

INTERPRETATION

- According to the results of post-test there is a large difference between controlled groups mean score and experimental group mean score .The value of mean in controlled group is 14.08 and the value of mean in controlled group is 24.41 and value of standard deviation is 5.96 for controlled group and value of standard deviation for experimental group is 4.38 value of T-TEST is 6.74 at 0.05 level of significance and its value is greater than 1.96,its means the null hypothesis "There is no significant difference between mean score of experimental group and controlled group" is rejected.

By the score of posttest the null hypothesis "There is no significance difference between the performance of the student taught by digital technique and the student taught by conventional method" is also rejected and also we concluded the level of students performance of teaching with the help of digital instructional strategies is much better then teaching by traditional methods and clarity of conceptual knowledge is far batter by using digital instructional strategies.

## CONCLUSION

With the observation of result of pre- test and post -test conclusion is very clear that digital teaching methods is better than traditional methods and it increases students interest in classroom teaching .clearly of concept and they will be retained longer as compared to those taught with traditional method

With the help of this study researcher recommended that the teaching would be highly effective if the researcher use innovative digital instructional strategies. Hence innovation in digital instruction strategies is very vital tool for teacher's students not only their personal development but also their professional competency and career growth.

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