DEVELOPMENT E-CONTENT FOR B.ED STUDENT TEACHERS AND TO STUDY ITS EFFECTIVENESS

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Abstract

Today, Information Communication Technology is used in the field of education, the teaching and learning process is seen to be effective due to this. The whole world came to a standstill due to the infectious disease Corona, its impact on education was seen. At such times the concept of e-content becomes important. The research was conducted on B.Ed students in which e-content was developed on the subject of advanced pedagogy and application of information communication technology and explored its impact on student learning. For this, a total of 50 students were selected and divided into two groups of 25 each and one group was taught through traditional teaching methods while the other group studied through e-content. Both the groups were answer tested and it was found that the e-content was useful for the students' study.

Keywords : E-Content, Development, Effectiveness.

1.1   Introduction

Today, Information Communication Technology has a great progress in every field. Human progress Seems to be happening at very a fast pace due to this technology and Education sector is a step ahead of this. Efforts are being made to make good use of information and communication technology in this field of education. Today, it is seen that the work of teaching along with the work of study and various examinations are being done through this technology. Today, the teacher uses various types of audio-visual tools to help the students understand a content or concept better. These tools help the student to understand a concept or content effectively and efficiently and help to consolidate it. Approaches like blended learning seem to be useful, where teaching and learning are done with the help of technology along with traditional teaching. Today, the study process has become dynamic due to the invention of various technology. Although the teaching is done

informally the result seems to be an increase in the knowledge and understanding of the students. Due to CORONA and Pandemic situation everywhere, there was locked down so expert in this field recommend the use of technology and e-content. Today, the concept of a e-content seems at the great importance. So many teachers, schools and expert are developing and using e-content effectively. E-content means, where e-content is created for learning through electronic media with the help of various software. The content attracts to the young mind for study, supplement and easily accessible anywhere students can access and study as per their convenience by 24 hours and enhance their knowledge. E-content is a concept that complements the traditional teaching and learning process, taking it a step further where a person from any corner of the word can do his studies properly. A wide variety of gadgets are available in the market and students are attracted to them and assimilate them for e.g., Children are attracted to mobiles as a small thing. Naturally, children play and enjoy various intellectual games on mobiles. If this is the case study supplemental content can be easily available in these small mobile gadgets and if that content is developed online or offline, it will help the student to study at his / her own pace. This allows for revision and mastery of the content.

1.2   Need of Research

Student teachers are moving through the process of becoming teachers. The benefit of their knowledge will be to their students when they actually start teaching, so it is important to give student teachers complete knowledge of various subjects while doing B.Ed but since last 2 years the corona disease has spread all over the world and the result is that the word has came to a complete standstill and the worst effect is seen on the student teacher education where the students teacher is seen taking a step back where he should be taking a step forward. Education is the need of the hour and it makes the student self reliant and if this education stop somewhere, it definitely affects the students, society and the country then in such cases the concept of a e-content becomes very important and he can add to his knowledge well and complete his academic work properly without stumbling or stopping anywhere so the researcher thought to develop a e-content for student teachers.

1.3   Importance of Research

Student teachers are future teachers in this B.Ed course, students have to take practice lesson students, internship program, various cultural programs. Considering all these things that one has to do various social service activities and also have to study the subject sometimes the hours for teaching may fall short students feel the need for self study, so if a e-content is developed for these student teachers, it will be obviously help them to get a perfect knowledge of the subject. Along with that, even if an epidemic like corona occurs in the future the study work can be completed. Along with that even if a content in the teaching is left incomplete to be taught by the teacher

through this a e- content the student teacher can understand that concept or that content well through self study and while doing this study work he is not limited by place and time he can complete the study work according to the time available to his needs.

1.4   Statement of Problem

The study focuses on development e-content for B. Ed Student Teachers and to study the Effectiveness of it.

1.5   Objectives of Research

1.   To developing e-content for B.Ed students teacher.

2.   To implementation the developed e-content in the class of B. Ed student teachers.

3.   To compare the result of girls and boys students.

4.   To study the effectiveness of e-content.

1.6   Hypothesis

Statistical Hypothesis

E-content proves effective as compare to traditional methods for the learning of B.Ed students.

Null Hypothesis

There is no significant difference between the learning through e-content and traditional learning of B.Ed students.

1.7   Assumptions

1.   In every B. Ed college the traditional methods are used for teaching.

2.   Student teachers use mobile and social media or technology to clear their concepts in learning.

3.   Due to pandemic every student is well verse with mobile and the use of technology.

1.8   Operational Definition

1.   Student teacher :- Students those who are admitted in the college of education and undergoing pre-service training to become teacher.

2.   E-content :- Development of content through computer with the help of various software is called e-content.

3.   Effectiveness :- The result obtained through data analysis will state the effectiveness of the study.

1.9   Scope and Limitation

Scope

1.   There are 07 B. Ed colleges of education in Nashik district, was the population of the research.

2.   The Total population of students from these colleges of education is 450 was the population for this study.

3.   450 students from all these seven institutes will avail the benefit of e-content.

4.   As the study deals with ICT, it has great importance all over India.

Limitation

1.   The research study was limited to Nashik city only.

2.   The research study was undertaken only for the students admitted in Matoshri College of Education, Eklahare, Nashik.

3.   The research is limited to the subject of Advanced Pedagogy and Application of Information Communication Technology in First Year B. Ed Course.

4.   The research is limited to the academic year 2021-22 only.

1.10   Variables

1.   Independent Variables :- Study by E-Content.

2.   Dependent Variable :- Comprehension of subject Content.

1.11   Research method

The study deals with the effect of developed e-content on the learning of B.Ed students, the Experimental method was used for data collection.

1.12   Sample

As the study was undertaken only for the students admitted in Matoshri College of Education, Eklahare, Nashik, the 50 student teachers were the sample for this study. The purposive sampling method was used for it.

1.13   Design

Researcher has selected 50 student teachers from Matoshri College of Education, Eklahare, Nashik by choosing equal group and divided them into two equal groups of 25 each. One of them is called as traditional group and other was experimental group.

1.14   Data Collection tools

The question papers were prepared for Pre-Test and Post-test. First of all, the Pre-test was administered on both the groups. The collected data was analyzed. After that, the traditional group was isolated from the experimental group. The experiment that is the e-content learning was conducted for three months for the experimental group. Then Post-test was administered on both the groups. The collected data was analyzed with Mean, S.D and t-value and the results were put forth.

1.15   Data Analysis

Table No. 1. Marks obtained by the girls in Pre-test

Sr. No	Name of Student	Marks out of 25
1	Sangale Jyoti Dattatraya	12
2	Tayade Shweta Ishwar	13
3	Gare Kalyani Ramesh	16
4	Mogal Varsha Kacharu	14
5	Dumbare Aishwarya Ramesh	12
6	Khapare Mayuri Bhagvan	14
7	Jadhav Sonali Baburao	15
8	Mhaske Vaishanavi Ashok	13
9	Sawant Archana Raosaheb	13
10	Jagtap Priyanaka Anil	14
11	Waghmare Gayatri Kakasaheb	15
12	Shinde Chhaya Keru	16
13	Borse Sanjivani Amrit	17
14	Bhoye Bhagyashri Somnath	12
15	Gawande Madhuri Kailas	13
16	Mate Hirabai Vishnu	15
17	Nage Sangita Sahebrao	10
18	Wadghule Anuja Vijay	12
19	Wagh Rutuja Arun	13
20	Shirsath Asmita Madhukar	14
21	Gite Kanchan Ramesh	15
22	Sanap Kajal Vilas	16
23	Samant Rupali Jitendra	17
24	Kasav Puja Shivaji	15
25	Khalkar Gayatri Bastiram	12

Table No. 2. Marks obtained by the boys in Pre-test

Sr. No	Name of Student	Marks out of 25
1	Khedkar Gaurav Deelip	18
2	Sonoshi Santosh Popat	14
3	Patil Hemant Vinayak	20
4	Ajay Kumar Yadav	21
5	Pawar Gaurav Ashok	14
6	Vishwajeet Sharma	13
7	Rahane Yogesh Sahebrao	20
8	Kale Rameshwar Shivaji	14
9	Hemant Kumar Sharma	18
10	Raut Nitesh Walu	14
11	Nikhade Sangram Sanjay	15
12	Pawar Pratik Ashok	17

13	Brij Kishor Upadhyay	14
14	Suresh Kumar Bagaria	21
15	Bhale Sopan Shankar	14
16	Kangane Ramdas Sajan	15
17	Deen Dayal Sharma	17
18	Pagar Mahesh Vasant	15
19	Vinay Kumar Yadav	16
20	Hinge Yogesh Balkrushna	17
21	Pote Sagar Sitaram	18
22	Dinesh Kumar Dubey	19
23	Virendra Singh	18
24	Daund Mayur Balasaheb	18
25	Palade Dattatry Ramnath	17

Table No. 3. Data Analysed of Pre-test scores of Girls and Boys.

Types of test	Number of Student	Mean	Standard Deviation	't' Test	Degrees of Freedom	Levels of Significance
Girls	25	13.95	1.5	8.052	23	0.01
Boys	25	17.2	1.36			

In the above said table the data collected from Pre- test was analysed. The mean score of Girls is 13.95 and the S.D is 1.5 where as the Mean score of Boys is 17.2 and the S.D is 1.36 and the t-value for it is 8.052 for the df of 23. The table t-value for the significant level of .05 is 2.009. The obtained t-value (8.052) is greater than the table t-value (2.009) at the significant level of .05.

Table No. 4. Marks obtained by the girls in Post-test

Sr. No	Name of Student	Marks out of 25
1	Sangale Jyoti Dattatraya	14
2	Tayade Shweta Ishwar	16
3	Gare Kalyani Ramesh	15
4	Mogal Varsha Kacharu	18
5	Dumbare Aishwarya Ramesh	17
6	Khapare Mayuri Bhagvan	16
7	Jadhav Sonali Baburao	17
8	Mhaske Vaishanavi Ashok	15
9	Sawant Archana Raosaheb	15
10	Jagtap Priyanaka Anil	17
11	Waghmare Gayatri Kakasaheb	16
12	Shinde Chhaya Keru	18
13	Borse Sanjivani Amrit	15
14	Bhoye Bhagyashri Somnath	16

15	Gawande Madhuri Kailas	17
16	Mate Hirabai Vishnu	15
17	Nage Sangita Sahebrao	14
18	Wadghule Anuja Vijay	15
19	Wagh Rutuja Arun	14
20	Shirsath Asmita Madhukar	19
21	Gite Kanchan Ramesh	18
22	Sanap Kajal Vilas	16
23	Samant Rupali Jitendra	15
24	Kasav Puja Shivaji	15
25	Khalkar Gayatri Bastiram	13

Table No. 5. Marks obtained by the boys in Post-test

Sr. No	Name of Student	Marks out of 25
1	Khedkar Gaurav Deelip	22
2	Sonoshi Santosh Popat	18
3	Patil Hemant Vinayak	19
4	Ajay Kumar Yadav	23
5	Pawar Gaurav Ashok	22
6	Vishwajeet Sharma	20
7	Rahane Yogesh Sahebrao	22
8	Kale Rameshwar Shivaji	20
9	Hemant Kumar Sharma	23
10	Raut Nitesh Walu	21
11	Nikhade Sangram Sanjay	24
12	Pawar Pratik Ashok	20
13	Brij Kishor Upadhyay	15
14	Suresh Kumar Bagaria	18
15	Bhale Sopan Shankar	18
16	Kangane Ramdas Sajan	19
17	Deen Dayal Sharma	22
18	Pagar Mahesh Vasant	24
19	Vinay Kumar Yadav	18
20	Hinge Yogesh Balkrushna	20
21	Pote Sagar Sitaram	16
22	Dinesh Kumar Dubey	22
23	Virendra Singh	23
24	Daund Mayur Balasaheb	22
25	Palade Dattatry Ramnath	17

Table No. 6. Data Analysed of Post-test scores of Girls and Boys.

Types of test	Number of Student	Mean	Standard Deviation	't' Test	Degrees of Freedom	Levels of Significance
Girls	25	12	1.40	14.78	23	0.01
Boys	25	16.16	1.37			

In the above said table the data collected from Post-test was analysed. The mean score of Girls is 12 and the S.D is 1.40 where as the Mean score of Boys is 16.16 and the S.D is 1.37 and the t-value for it is 14.78 for the df of 23. The table t-value for the significant level of .05 is 2.009. The obtained t-value (14.78) is greater than the table t-value (2.009) at the significant level of .05.

Table No. 7. Data Analysed of Pre-test and Post-test .

Types of test	Number of Student	Mean	Standard Deviation	't' Test	Degrees of Freedom	Levels of Significance
Pre-test	50	5.9	1.74	28.8	48	0.01
Post-test	50	14.83	1.81			

In the above said table the data collected from Pre- test and Post- test was analysed. The mean score of Pre- test is 5.9 and the S.D is 1.74 where as the Mean score of Post- test is 14.83 and the S.D is 1.81 and the t-value for it is 28.8. for the df of 48. The table t-value for the significant level of .05 is 2.009. The obtained t-value (28.8) is greater than the table t-value (2.009) at the significant level of .05.

So the Statistical Hypothesis, " e-content proves effective as compare to traditional methods for the learning of B.Ed students." is accepted. And it strongly proves that it is the effect of e-content.

The null hypothesis, " There is no significant difference between the learning through e-content and traditional learning of B.Ed students." was rejected.

1.16   Conclusion

1.   When e content is developed for student teachers the student teachers can perform the study task well according to their needs.

2.   E-Content is available anywhere for student teachers he is able to grasp any concept well and repeatedly which has an impact on his studies.

3.   Through this a e-content the student teacher are able to understand the difficult aspects of advanced paedology and application of information and communication technology in a

better way..

4. The e content concept makes it easy to assign a portion of the syllabus to students for self study.

5. Student teachers get into the habit of self study.

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