ATTITUDE TOWARDS EDUCATIONAL TECHNOLOGY AMONG TEACHER EDUCATORS IN TIRUVALLUR DISTRICT

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ABSTRACT

Education is one of the important factors for the development of the individual and nations. In a world, based on science and technology it is education that determines the level of prosperity welfare and security of the people. That quality and number of people coming out of the schools and colleges that determine the success of the great enterprise of national reconstruction whose principal objectives is to raise the standard of living of the people.

Science and technology have registered a rapid progress from the beginning of the century. In fact, there is an explosion of knowledge in all branches of science and technology has doubled in span of ten years. Every day passes with some discoveries or inventions made in the science and technology besides the explosion of knowledge there has been explosion of population also. Both this explosion caused a serious repercussion on the structure and function of Education.

Teachers may have positive or negative attitude towards the use of educational technology. Only if they have a positive attitude towards educational technology, they will use them in teaching their subjects. Use of audiovisual aids and modern techniques will help the students to learn the concept clearly. Many innovative techniques and methods have been adopted by the teachers.

KEYWORDS: Educational Technology, Attitude, Teacher Educators.

EDUCATIONAL TECHNOLOGY

Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources. The term educational technology is often associated with, and encompasses, instructional theory and learning theory. While instructional technology covers the processes and systems of learning and instruction, educational technology includes other systems used in the process of developing human capability. Educational Technology includes, but is not limited to, software, hardware, as well as Internet applications and activities.

TYPES OF EDUCATIONAL TECHNOLOGY

Lumsolaine (1965) has distinguished three type of educational technology.

1. Educational Technology -I (or) Hardware Technology (or) Media Technology
2. Educational Technology-II (or) Software Technology
3. System approach

(1) Educational Technology-I

The applications of the electronic gadgets such as radio, television, computer, video etc., which helps the teacher in the process of teaching and which helps the students in the process of learning is called technology in education. Some of the hardware technologies are charts, slides and filmstrip etc.

Every one involved in education is bothered about the problem of forgetting. We all have seen a formula for helping us to learn well and teach well. Learning is like to
i. Well motivated
ii. Clearly purpose and value oriented
iii. Based on practice application or use

(2) Educational Technology-II

Educational technology is also a process and a way of thinking about a problem. Substantial contribution of social sciences, principles of psychology, operant conditions of skinner, led to the development of educational technology. Technology of education or educational technology refers to “detailed application of psychology of learning to practical teaching.

The emphasis is one of the scientific ways of teaching- signing, structuring and implementing to achieve well defined objectives. The behavior of the teacher himself/herself is also a technology of education. So this type of technology is also called behavioral technology or low-cost technology or not-cost technology.

(3) System Approach

One of the approaches of the educational technology is the system approach. It is a systematic attempt to coordinate all aspects of a problem towards scientific objectives. In the context of the education system is a unit of whole incorporating all aspects of parts, namely, pupils, teachers, curriculum content and evaluation of instructional objectives. The teaching learning process is viewed as communication and control taking place between the components of the system. In this case the system is composed of a teacher a student and a programmer of instructions all in particular pattern of interaction.

Elements of the system are independent and they interact to achieve the goal of the system. The effectiveness and efficiency of a learning system actually depends upon how compatibly the system components interact. It can be achieved by selecting the right components and arranging table conditions. So, that the component can work together. System approach include both hardware and software approaches to make learning effective.

ATTITUDE

An attitude is a hypothetical construct that represents an individual's degree of like or dislike for something. Attitudes are generally positive or negative views of a person, place, thing, or event—this is often referred to as the attitude object. People can also be conflicted or ambivalent toward an object, meaning that they simultaneously possess both positive and negative attitudes toward the item in question.

MAJOR CHARACTERISTICS OF ATTITUDE

1. It is a learned behavior and it is not inherited.
2. It is more or less permanent for a responsible period of time.
3. It is directed towards an object or a goal.
4. They are essential components of one's personality.
5. They represent the behavior towards one object.
6. It is used for motivation.
7. The attitude scale can help to know the attitude of the students and the teacher can teach the subjects according to the attitude of the students.

METHODS OF MEASURING ATTITUDE

1. The direct questions are asked to know the idea of the pupils.
2. The checklists are prepared and it is given to the interviewer in order to fill up it, the knowing answers of the person’s the attitudes of the persons are judged.
3. The rating scales are used to measure the attitudes.
4. Special tests like sea gram analysis and situational test are used to measure the attitude.
5. Standardized attitude scales like,
   (a) Thurstone Scale of equal appearing intervals.
   (b) Likert's Method of summated ranging are used to measure the attitudes.

ROLE OF EDUCATIONAL TECHNOLOGY IN TEACHING LEARNING PROCESS
The Earlier concept of educational technology was limited to the use of simple audiovisual aids meant for direct teaching and learning. Later on with the industrial development and technical advancement sophisticated scientific instruments, mass media educational aereals were being used. It brought the use of sophisticated hardware and software like radio, television, tape recorder, films, transparency etc., in the field of education. The Concept of 'programmed instruction' and 'theories of learning', 'system approach', 'micro teaching', 'interaction analysis' and computer assisted instruction added new dimension to the meaning and scope of educational technology.

USE OF EDUCATIONAL TECHNOLOGY IN INDIA
In India, before 1960, the term educational technology was almost unknown to educational system. Certain times, this was used as synonym to audio-visual teaching aids. In the early sixties, the term educational technology took its root through programmed learning and later through other applications began in 1965. Some of the significant developments in this direction may be summarized below.
   • There has been wider and efficiency utilization of radio for broadcasting educational programmes through out the country.
   • Another significant development in the use of educational technology is concerned with television programmes.
   • It is concerned with the problem of, training and re-training of the large number of teachers effectively and economically. The in service training courses by using multimedia packages developed by the center of the educational technology of NCERT represents a major break through in this direction.
   • It is used in the field of distance education.
   • Another field of operation of Educational Technology in our country is concerned with correspondence courses.

ADVANTAGES OF USING EDUCATIONAL TECHNOLOGY
1. To simulate speedy technological development of the country.
2. To promote the efficiency of education.
3. To improve the effectiveness of instruction.
4. For providing equal educational opportunities.
5. For transmission of knowledge.
6. For imparting quality education.
7. For solving problems of Indian education.
8. It is helpful in the development of science.

APPLICATION OF EDUCATIONAL TECHNOLOGY
• Multi-Sensory approach.
• They provide adequate impression and direct experience.
• They provide clarity to the subject matter.
• They provide reinforcement to the learners.
• They are helpful in the development of scientific attitude.
• They meet the individual difference requirements.
• They keep teaching interesting and make it effective.
• They provide effective substitutes for direct contact of students with environment.

VARIABLES
The following demographic variables are,
1. Age
2. Gender
3. Location of The College
4. PG Qualification
5. Research Qualification
6. Teaching Experiences in B. Ed Colleges
7. Salary Per Month

OBJECTIVES:
1. To find out the level of attitude of Teacher Educators in Tiruvallur District towards Educational Technology.
2. To find out whether the level of attitude of Teacher Educators differ in their attitude towards Educational Technology with respect to demographic variables.

MATERIALS AND METHODS:
Normative survey method was used to conduct study.

For the present study, the questionnaire was prepared with a view to gather information in detail regarding the “Attitude towards Educational Technology among Teacher Educators in Tiruvallur District”.

The tool was developed by Dr. T. K. Swatantra devi and it is named as “Attitude towards Educational Technology Scale”. There are 30 items in the questionnaire. They are rated in 3 point scale namely A, DA, UD.

VALIDITY OF THE TOOL:
Validity of a test can be defined as the degree to which the test measure what is intended measure achievement in Educational Technology. Here in the study, the tools with 30 items are given to a panel of experts to find out the content validity of the tool. The suggestions given by the panel were included in the tool.

RELIABILITY OF THE TOOL:
The reliability is an important test of sound measurement. Two aspects of reliability viz, stability and equivalence deserve special mention. The stability aspects are concerned with securing consistent results with repeated measurement of the same person and with the same instrument. To find out the reliability was found the tool-test-retest method was used.

SAMPLE OF THE STUDY:
The sample of the study for the present is 63 Teaching Faculties of 8 Teachers’ Colleges who are randomly selected. The primary purpose of research is to discover principles that have universal application but to study whole population to arrive at generalizations would be impracticable, if not possible. So in research studies a small proportion (sample) is selected for observation and analysis. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn.

DISTRIBUTION OF THE SAMPLE:
Based on the objectives and variables of the study the sample selected have been distributed as follows,

<table>
<thead>
<tr>
<th>Variables</th>
<th>Division</th>
<th>Total</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Below 30</td>
<td>11</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Above 30</td>
<td>52</td>
<td>63</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>18</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Locality</td>
<td>Rural</td>
<td>8</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>PG Qualification</td>
<td>M. A. M. Ed.</td>
<td>28</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>M. Sc. M. Ed.</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M. Com M. Ed.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Research Qualification</td>
<td>Ph. D</td>
<td>21</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>M. Phil</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nil</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>Below 5 years</td>
<td>36</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>6-10 Years</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above 10 Years</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Salary For Month</td>
<td>Below 5000/-</td>
<td>4</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Rs. 5001-Rs. 10,000/-</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rs. 10,001-Rs. 15,000/-</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Above 15,000/-</td>
<td>29</td>
<td></td>
</tr>
</tbody>
</table>

HYPOTHESIS TESTING:
There is no significant difference in the attitude towards Educational Technology scores among Teacher Educators belonging to Various Educational Qualification.
RESULTS

As calculated 't' value of 3.15 is greater than the table value of 1.96 at 0.05 level of significance, the hypothesis is rejected i.e. there is significant difference in attitude towards Educational Technology scores among Teacher Educator belonging to different Educational Qualification (M.Sc., M.Com).

Table 2: Test for significant in attitude towards educational technology scores among Teacher Educators belonging to different P. G. Qualification.

<table>
<thead>
<tr>
<th>Educational Qualification</th>
<th>DF</th>
<th>Sum Of Scores</th>
<th>Mean Scores</th>
<th>F Ratio</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2</td>
<td>189.1352</td>
<td>94.5676</td>
<td>4.5754</td>
<td>S</td>
</tr>
<tr>
<td>Within Groups</td>
<td>60</td>
<td>1240.1347</td>
<td>20.6689</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As calculated 't' value of 2.81 is greater than the table value of 1.96 at 0.05 level of significance, the hypothesis is rejected i.e. there is significant difference in attitude towards Educational Technology scores among Teacher Educator belonging to different Educational Qualification (M.A., M.Sc).

As calculated 't' value of 0.08 is less than the table value of 1.96 at 0.05 level of significance, the hypothesis is accepted i.e. there is no significant difference in attitude towards Educational Technology scores among Teacher Educator belonging to different Educational Qualification (M.A., M.Sc).

Table 3: Testing Significance in attitude towards Educational Technology Scores among Teacher Educators belonging to different P. G. Qualification.

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. Of Cases</th>
<th>Mean</th>
<th>SD</th>
<th>Calculated Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.A.</td>
<td>27</td>
<td>83.8519</td>
<td>4.897</td>
<td>0.08</td>
<td>NS</td>
</tr>
<tr>
<td>M.Sc.</td>
<td>33</td>
<td>83.7576</td>
<td>4.330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.A.</td>
<td>27</td>
<td>83.8519</td>
<td>4.897</td>
<td>2.81</td>
<td>S</td>
</tr>
<tr>
<td>M.Com</td>
<td>3</td>
<td>75.6667</td>
<td>2.887</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M.Sc.</td>
<td>33</td>
<td>83.7576</td>
<td>4.330</td>
<td>3.15</td>
<td>S</td>
</tr>
<tr>
<td>M.Com</td>
<td>3</td>
<td>75.6667</td>
<td>2.887</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As calculated 't' value of 2.81 is greater than the table value of 1.96 at 0.05 level of significance, the hypothesis is rejected i.e. there is significant difference in attitude towards Educational Technology scores among Teacher Educator belonging to different Educational Qualification (M.A., M.Com).

The Teacher Educator do not differ in their attitude towards Educational technology with respect to their P.G. Qualification.

- The Teacher Educator do not differ in their attitude towards Educational technology with respect to their age.
- The Teacher Educator do not differ in their attitude towards Educational technology with respect to their teaching experience.
- The Teacher Educator do not differ in their attitude towards Educational technology with respect to their salary for month.

CONCLUSION:

India is a developing country. The literacy of India is about 68%. The classroom is the place for bringing up the future citizens. It is rightly said in that the Kothari Commission Report, “The destiny of India Is Shaped with in the four wall of the classroom”. Classroom is not only a place to gain knowledge, but also to modify the behavior of students.

The teacher plays an important role as the communicator and transmits knowledge to the students. It is universally accepted that the teacher is the pivot of educational system. The use of educational technology will make teaching very effective and efficient. The teachers should have a positive attitude towards the use of educational technology. There is a need to find out their attitudes towards educational technology so that steps will be taken to modify their attitude if needed.

The broadening of the concept of educational technology to include all major techniques useful in the improvement of learning, coupled with the dynamic expansion of the field during the recent decades have revolutionized the teaching-learning process at all levels.

The present study has investigated the attitude towards Educational Technology among Teacher Educator in Tiruvallur District. It is found that the Teacher Educator have favorable attitude towards educational technology.

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