A Study of Primary and Secondary Schools Teachers' Awareness towards Educational Technology with Reference to Certain Variable

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Abstract:
The present world is of Science and Technology. Science and Technology has Change the life human beings in all the fields. Technology has been use in the Kitchen, Farm, Factory, industry, Agriculture, Hospital, Communication, Engineering and Space etc. Technology has brought lots of change in the field of Education too. Because of Science and Technology Work has become easy, fast and low cost. It spread the work in no time to whole human society. Education Technology means to obtain the goal, aims of Education Technology means techniques today everyone has accepted it to solve their problem. Today the student / children who come to school are not an empty state. He has so many questions in his mind; he has learned a lot from the outside of the world. As the changing dimensions of the time teachers have to satisfy needs of students. He needs to adopt something new in his teaching method so the investigator has tried to find out of school teachers awareness towards Education Technology. The investigator has selected the granted primary and secondary school of Mehsana district. It was done by stratified method and selection of teachers were taken by cluster methods 10-10 teachers of rural and urban area of primary and secondary school were taken has sample. Total 273 teachers of all schools were taken. In this study Education Technology awareness scale was use for data collection. Total Weigh Score (TWS) was used to measure the awareness about individual items. It was found that types of school areas found different on teachers awareness towards education technology. Also found that male teachers were positive than female. Via this it has been found that research it has been found out that government schools assist financially to the schools to make it well equipped. Board should introduce new, Technology new course about Education Technology. Every school must have audio visual room, computer, scanner, L.C.D. projector, T.V. and Internet etc. Teachers and student should be encouraged to use Education Technology.

Keywords: Awareness, Education technology, TWS, Projector

1. Introduction
This is the time of science and technology. Science and technology touches each and every corner of human being. There are so many lacks in present education. Today’s student takes so, much information from home so it does not feel anything new which teacher teaches him. Many times teaching work become teachers oriented so. Student becomes inactive. Total teaching work becomes fruitless. As the changing dimensions of time, teachers have to satisfy needs of student. And have to put new things in the syllabus. And also have to use new teaching methods.

"Educational Technology can be conceived as a science of techniques and methods by which educational goals could be realized."

- S. K. Mitra
It compulsory that to increase the quality of technology in teaching; it have to use educational technology in teaching. Even knowing about that teacher does not using proper means and mediums of educational technology. This is all happens due to unawareness of teachers about educational technology. So, this study is taken in research to know the awareness in the educational technology.

2. Objectives
Objectives of present study were as follows.
1. To study the awareness teachers towards Educational technology.
2. To study the effect of the gender on awareness of teachers towards Educational Technology.
3. To study the effect of the type of the school on awareness of teachers towards Educational Technology.
4. To study the effect of the area of the school on awareness of teachers towards Educational Technology.
5. To study the effect of interaction between the gender and the type of the school on awareness of teachers towards Educational Technology.
6. To study the effect of interaction between the gender and the area of the school on awareness of teachers towards Educational Technology.
7. To study the effect of interaction between the area and the type of the school on awareness of teachers towards Educational Technology.
8. To study the effect of interaction among independent variable on awareness of teachers towards Educational Technology.

3. Hypotheses
The Null Hypotheses of the present study were as follows.
- \( H_{01} \) There will be no significant effect of the gender on mean scores of awareness of teachers towards Educational Technology.
- \( H_{02} \) There will be no significant effect of the type of the school on mean scores of awareness of teachers towards Educational Technology.
- \( H_{03} \) There will be no significant effect of the area of the school on mean scores of awareness of teachers towards Educational Technology.
- \( H_{04} \) There will be no significant effect of interaction between the gender and the type of the school on mean scores of awareness of teachers towards Educational Technology.
- \( H_{05} \) There will be no significant effect of interaction between the gender and the area of the school on mean scores of awareness of teachers towards Educational Technology.
- \( H_{06} \) There will be no significant effect of interaction between the area and the type of the school on mean scores of awareness of teachers towards Educational Technology.
- \( H_{07} \) There will be no significant effect of interaction among independent variable on mean scores of awareness of teachers towards Educational Technology.

4. Variables
4.1 Independent Variables
The present study was conducted under the three independent variables and one Dependent variable.

A. Types of the School
In this variable there were two types’ schools included which were as follows.
1. Primary School and
2. Secondary School

B. Area of the school
In this variable there were two types’ schools included which were as follows.
1. Rural school and
2. Urban school

C. Gender
In this variable there were two types’ schools included which were as follows.
1. Male and
2. Female

4.2 Dependent Variable
The Score of Awareness test was the dependent variable of this study.

5. Population
The Population of this study was consists all the Gujarati medium granted primary and secondary schools’ teachers of Mehsana District.

6. Sample of the Study
All the teachers from selected schools from rural and urban area, Primary and Secondary granted schools of Mehsana district were taken as sample. Selection of schools was taken by stratified method and selections of teachers were taken by cluster method.

Table 1
Sample of the Study (2x2x 2 Factorial Design)

<table>
<thead>
<tr>
<th>Type of school (A)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary (A₁)</td>
<td>Secondary (A₂)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area of school (B)</td>
<td>Rural (B₁)</td>
<td>Urban (B₂)</td>
<td>Rural (B₁)</td>
<td>Urban (B₂)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (C)</td>
<td>Male (C₁)</td>
<td>Female (C₂)</td>
<td>Male (C₁)</td>
<td>Female (C₂)</td>
<td>Male (C₁)</td>
<td>Female (C₂)</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>32</td>
<td>27</td>
<td>38</td>
<td>50</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>65</td>
<td>76</td>
<td>69</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>128</td>
<td></td>
<td>145</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>273</td>
<td></td>
<td></td>
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</tbody>
</table>

Here, total teachers of all schools were 273. Therefore, all 273 teachers were taken as a sample.

7. Tool Used
In this study, Education Technology Awareness Scale was used for data collection. Education Technology Awareness Scale, originally developed by Amardeep and Singh and adopted in Gujarat by Chandrakant Bhogayata, was used. The scale was validated by Maiyani. Dr. Bharat Joshi used this tool to know the awareness of 52 M.Ed. students. Researcher got this tool from Dr. Bharat Joshi. Amardeep and Singh used the degree of familiarity of teachers with different instructional materials, devices and method as an indicator of awareness. In this tool there are a list of selected materials, devices and method. A five point scale was introduced i.e. ‘not heard’,
‘heard only’, ‘know’, ‘can use/produce’ and ‘can explain to other people’ for this study. The answers are credited 0, 1, 2, 3, 4 respectively. It shows as below.

<table>
<thead>
<tr>
<th>Component</th>
<th>Not heard</th>
<th>Heard only</th>
<th>Know</th>
<th>Use/Produce</th>
<th>Explain to others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+0</td>
<td>+1</td>
<td>+2</td>
<td>+3</td>
<td>+4</td>
</tr>
</tbody>
</table>

8. Techniques of Data Analysis
Each of the responses of the prospective teacher were assigned scores 0 to 4. The sum total was used as indicator of awareness. Total weighted score (TWS) was used to measure the awareness about individual items. In order to formulate the categories of awareness and arithmetic mean were used which is mentioned in following table.

<table>
<thead>
<tr>
<th>Categories of Awareness of Individual Items</th>
<th>Level of TWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>70 up</td>
</tr>
<tr>
<td>Moderate</td>
<td>45 to 70</td>
</tr>
<tr>
<td>Low</td>
<td>Less than 45</td>
</tr>
</tbody>
</table>

9. Findings
9.1 Findings about Awareness of Teachers
1. The types of the school don’t seem differ on teachers' awareness towards Educational Technology.
2. The areas of the school don’t seem differ on teachers' awareness towards Educational Technology.
3. The genders make differ on teachers' awareness towards Educational Technology. Male teachers of school have more positive awareness towards Educational Technology then female teachers of the School.
4. The genders and types of school don’t seem differ on teachers' awareness towards Educational Technology.
5. The genders and areas of school don’t seem differ on teachers' awareness towards Educational Technology.
6. The types of the schools and areas of the schools don’t seem differ on teachers’ awareness towards Educational Technology.
7. The gender, types of the schools and areas of the schools seem differ on teachers’ awareness towards Educational Technology.

9.2 Findings about each statements of Awareness Scale
A. High Awareness of Teachers in the following Components
1. Poster
2. Charts
3. Models
4. Specimens
5. Blackboard
6. Graph
7. Camera
8. Lecture
9. Group Discussion
10. Field Visit
11. Demonstration
12. Assignment
13. Group Project

B. Moderate Awareness Of Teachers in the following Components
1. Slide
2. Video Cassettes
3. Audio Cassettes
4. Computer Assisted Instruction
5. ITV
6. Video Cassettes Player
7. Audio Cassettes player
8. OHP
9. Slide Projector
10. Internet
11. Slide Show

C. Low Awareness of Teachers in the following Components
1. Transparency
2. Programmed Learning
3. Tele Text
4. Video Text
5. CCTV
6. Epidiascope

References
5. http://education.nic.in/Elementary/Policyle/presidentspeech-14082004.asp