Attitude of B.Ed. students towards information and communication technology (ICT)

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Abstract
The present study aims to examine the attitude of B.Ed. students towards ICT. The investigator has adopted the survey method of research. The sample consists of 250 B.Ed. students from four colleges of education selected by stratified random sampling technique. The investigator developed a self-made questionnaire of 25 items to measure the attitude of the B.Ed. students towards ICT. The investigator established content validity and reliability by split-half method, and the value is 0.76. To find out the meaning, interpretation of the raw scores, the data were analysed using mean, standard deviation ‘t’ test. The findings show (a) there is no significant difference in the attitude of B.Ed. students towards ICT with regard to (i) gender, (ii) discipline, (iii) course of study, and (iv) locality, and (b) aided colleges of education B.Ed. students are better than government college students in their attitude towards ICT.

Keywords: ICT, attitude, B.Ed. students, information and communication technology

1. Introduction
The education systems around the world are highly motivated to implement the innovations of Information and Communication Technology (ICT) to improve the knowledge and skills of the learners. ICT refers to the technologies which are being used for collecting, storing, editing and passing on information to the learners in various forms (SER, 1997) [7]. As colleges and universities respond to today’s workforce and the demographic needs are challenged, they have begun to examine their assumptions about the teaching by the faculty and learning of the students and how knowledge is acquired and retained. For the educators who are preparing the students in the information age, the challenges of introducing and integrating ICT into education have become even more complicated. The teachers of the future must not only be accomplished with the use of ICT but also by the effective integration of ICT components into the ever sprouting curriculum. Teacher education consists of sets of events and activities which are deliberately intended to help candidates to acquire the skills, dispositions, knowledge, habits, attitudes values, norms, etc., which enable them to enter the occupation of teaching. The educational system is dependent more upon the teachers than on other faculties selecting the right type of student teachers and provide relevant professional education. Teacher education includes all the formal and informal activities and experiences that help to qualify a person to assume the responsibilities effectively (Aggarwal, 2004) [1]. Information and Communication Technology have brought new possibilities into the classroom, at the same time; they have placed more demands on teachers. Information and Communication Technologies exemplified by the internet and interactive multimedia are obviously of great significance for teachers. It needs to be effectively integrated into the formal classroom teaching and learning conditions. The integration of ICTs in teaching in general and teacher education in particular is the need of the day. Its adequate recognition and fulfillment of relevant needs is crucial for integration and effective utilization of quality education programmes.

1.1. Need for the Study
The present study throws light on the attitude of B.Ed. students towards ICT. ICT has great potential for enhancing teaching in the educational setting. Teacher-students can use ICT components in different ways to aid teaching by providing information to the students. It helps the individual to improve the overall efficiency of being a teacher. For B.Ed.
Trainees who have not developed favourable attitude towards ICT as an instructional technology, its adoption in the teaching learning process would not have given fruitful results. ICT helps the teachers to appreciate and adopt emerging ICT and the related innovative practices in the instructional perspectives. It is generally observed that a teacher with training becomes more mature and confident to perform his task more efficiently (Tariq et al., 2012) [9]. It is very obvious that it tells upon the nature and the quality of the training and practices a student teacher gets. Good expertise and the polished skill of a student teacher is reflected on the students and the quality of the education they get. From the present day Information and Communication Technology point of view, exposure of student teachers to different components of ICT and their application aspects with special reference to educational technology would ensure not only the required skills and competencies, but also make them to imbibe desirable attitude and love for the profession. So to say, “To see in order to foresee and to foresee in order to gain power” is a sound advice to the prospective student teachers. Thereby the significance of the present study is felt by the investigator probing into the attitude of B.Ed., trainees towards ICT.

1.2. Objective
- To find out whether there is any significant difference in the attitude of B.Ed. students towards ICT with regard to certain demographic variables – (i) gender, (ii) discipline, (iii) course of study, (iv) locality and (v) type of school.

1.3. Null Hypothesis
- There is no significant difference in the attitude of B.Ed. students towards ICT with regard to (i) gender, (ii) discipline, (iii) course of study, (iv) locality and (v) Type of school.

1.4. Operational Definitions of the Key Terms
- **Attitude** is a predisposition or a tendency to respond favourably or unfavourably towards a designated class of stimuli such as idea, object, person, or situation, here it is towards ICT (Lawrence, 2012, p.39) [6].
- **B.Ed. Students** The students studying their B.Ed. degree programme after completion of their UG/PG degree through regular mode in Colleges of Education which are affiliated to Tamil Nadu Teacher Education University.
- **ICT** stands for information and communication technologies and are defined, for the purposes of this primer, as a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information in the field of education. (Wikipedia)

2. Methods and Procedures
The investigator has adopted the survey method of research, to study the attitude of B.Ed. students towards ICT. The present study consists of 250 B.Ed. students from four colleges of education selected by stratified random sampling technique. The investigator developed a self-made questionnaire of 25 items to measure the attitude of the B.Ed. students towards ICT. The investigator established content validity and reliability by split-half method, and the value is 0.76. To find out the meaning, interpretation of the raw scores, the data were analysed using mean, standard deviation’s test.

3. Data Analysis
3.1. **H01:** There is no significant difference in the attitude of B.Ed. students towards ICT with regard to gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>‘t’ value</th>
<th>Remarks at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>91</td>
<td>89.74</td>
<td>10.61</td>
<td>0.16</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Women</td>
<td>159</td>
<td>89.51</td>
<td>10.35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is learnt from the table that there is no significant difference between men and women B.Ed. students in their attitude towards ICT as the calculated ‘t’ value 0.16 is less than the table value 1.96 at 5% level of significance. Hence the null hypothesis is accepted.

3.2. **H02:** There is no significant difference in the attitude of B.Ed. students towards ICT with regard to discipline.

<table>
<thead>
<tr>
<th>Discipline of study</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>‘t’ value</th>
<th>Remarks at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>141</td>
<td>88.91</td>
<td>9.47</td>
<td>1.15</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Arts</td>
<td>109</td>
<td>90.48</td>
<td>11.53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is inferred from the table that there is no significant difference between the science and arts B.Ed. students in their attitude towards ICT. Since the calculated ‘t’ value 1.15 is less than the table value 1.96 at 5% level of significance. Hence the null hypothesis is accepted.

3.3. **H03:** There is no significant difference in the attitude of B.Ed. students towards ICT with regard to course of study.

<table>
<thead>
<tr>
<th>Course of Study</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>‘t’ value</th>
<th>Remarks at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>UG</td>
<td>167</td>
<td>89.02</td>
<td>11.05</td>
<td>1.32</td>
<td>Not Significant</td>
</tr>
<tr>
<td>PG</td>
<td>83</td>
<td>90.75</td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is clearly understood from the table that there is no significant difference between UG and PG B.Ed. students in their attitude towards ICT as the calculated ‘t’ value 1.32 is less than the table value 1.96 at 5% level of significance. Hence the null hypothesis is accepted.

3.4. **H04:** There is no significant difference in the attitude of B.Ed. students towards ICT with regard to locality.

<table>
<thead>
<tr>
<th>Locality</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>‘t’ value</th>
<th>Remarks at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>111</td>
<td>90.59</td>
<td>10.62</td>
<td>1.34</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Rural</td>
<td>139</td>
<td>88.80</td>
<td>10.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table reveals that there is no significant difference between urban and rural B.Ed. students in their attitude towards ICT as the calculated ‘t’ value 1.34 is less than the table value 1.96 at 5% level of significance. Hence the null hypothesis is accepted.

**H05: There is no significant difference in the attitude of B.Ed. students towards ICT with regard to type of school.**

**Table 5: Difference in the Attitude of B.Ed. Students towards ICT with regard to Type of School**

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>‘t’ value</th>
<th>Remarks at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>163</td>
<td>88.39</td>
<td>10.01</td>
<td>2.47</td>
<td>Significant</td>
</tr>
<tr>
<td>Aided</td>
<td>87</td>
<td>91.85</td>
<td>10.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is understood from the above table that there is significant difference between government and aided college of education B.Ed. students in their attitude towards ICT, since the calculated ‘t’ value 2.47 is greater than the table value 1.96 at 5% level of significance. It is also clear that aided college of B.Ed. students have more favourable attitude towards ICT. Hence the null hypothesis is rejected.

4. Findings and Discussion

There is no significant difference in the attitude of B.Ed. students towards ICT with regard to (i) gender, (ii) discipline, (iii) course of study, and (iv) locality.

There is significant difference in the attitude of B.Ed. students towards ICT with regard to type of school. The ‘t’ test results of the present study reveal that there is no significant difference between men and women B.Ed., students in their level of attitude towards ICT. This finding confirms the finding of Suganthi (2013) [8] & Victor (2013) [12]. Similar results have been derived with regard to the significance of differences between science and arts, UG and PG and the B.Ed. students of urban and rural colleges of education. Victor (2013) [12] conducted the same kind of study in Bangalore and he confirmed that there is no significant difference in the attitude of B.Ed. students with respect to locale.

The table 1, 2, 3 and 4 shows the meager level mean differences between the above mentioned demographic variables. There is no wonder that the omnipotent and the all pervading components of ICT with their wider applications help everyone to develop a favourable attitude towards ICT despite their gender, discipline of study, graduation and locality. But still, there is significant difference between the B.Ed. students of government and aided colleges of education. It is quite natural that the aided institutions provide their students with wider opportunities to get along with the walks. The aided institutions, help their learners to aspire a lot about the multidimensional implications of ICT and its components. Thereby the B.Ed. students of aided colleges are well aware of its applications. Comparatively the B.Ed. students of Government Colleges lag behind a lot getting all such privileges in plenty showing lower level of attitude towards ICT. By conducting seminars and workshops about ICT awareness and by giving training in many applications of ICT aspects, one can develop favourable attitude among B.Ed. students towards ICT, which is one of the constructive traits of the dynamic personality of the B.Ed. students.

5. Reference