A comparative study of teaching competence among prospective science and social study teachers

Dr. Khushwant Kaur

Abstract
The present study has been designed to investigate the comparison of teaching competence among prospective science and social study teachers. The Study was intended to find out the difference between means of Teaching competence. Sample of the study consisted of 80 teacher trainees from colleges of Education of Ludhiana district, equal representation was given to Science and Social Studies streams. General Teaching Competence Scale by Passi and Lalitha (2009) [4], was used for the collection of data. The results of the study showed that male prospective teachers of Social Studies stream have more teaching competence than male prospective teachers of Science stream.

Keywords: General teaching competence, science and social study, prospective teachers

Introduction
The system of education revolve around the teacher. No system of education can rise above the level’s of its teachers. The teacher therefore, occupies central position in any system of education. He has been regarded as architecture of a Nation. The success of education system depends upon the teaching competence of working and prospective teachers of the society. According to Srivastava and Pratibha (2009) [7], “The term teaching competency may be defined as effective observable teaching behaviors or composite skills, that are required for the transaction of the content and can be specified in behavioral term, which is aimed to bring about desired pupil outcomes.”

Thus, the term teaching competency includes accountability and responsibility as a teacher. It is generally considered as the ability of a teacher to behave in specified ways within a class room situation. It makes the teacher more efficient and more confident.

Due to the new circumstances occurring in the field of education, quality of education suffer to a large extent and day by day it (quality of education) is decreasing on. In all these circumstances it becomes the need of time to study the teaching competence among prospective teachers to evaluate the prevailing situation of the education.

Objectives and Hypotheses
Objectives of the study
1. To find out the difference in the mean scores of teaching competence among prospective teachers of S.St. and Science stream of Ludhiana district.
2. To find out the difference in the mean scores of teaching competence among male and female prospective teachers of Ludhiana district.
3. To find out the difference in the mean scores of teaching competence among male prospective teachers of S.St. and Science stream of Ludhiana district.
4. To find out the difference in the mean scores of teaching competence among female prospective teachers of S.St. and Science stream of Ludhiana district.

Hypotheses of the study
1. There will be a significant difference in the mean scores of Teaching Competence among prospective teachers of S.St. and Science streams of Ludhiana district
2. There will be a significant difference in the mean scores of Teaching Competence among male and female prospective teachers of Ludhiana district.
3. There will be a significant difference in the mean scores of Teaching Competence among male prospective teachers of S.St. and Science streams of Ludhiana district.

4. There will be a significant difference in the mean scores of Teaching Competence among female prospective teachers of S.St. and Science streams of Ludhiana district.

**Method and Procedure**

**Method**

Based on the present study, descriptive method was used to collect the data, adopt the suitable technique to arrive at desired results and verification of the hypotheses.

**Population**

The present study was delimited to 80 teacher trainees from colleges of Education of Ludhiana district, equal representation was given to Science and Social Studies streams.

**Sample**

In present study keeping the limited source of time and money only, 80 prospective teachers of Ludhiana district were randomly selected. Out of this 40 were prospective teachers of Science stream and 40 were prospective teachers of S.St. stream. Out of 40 prospective teachers of Science stream 20 were male and 20 were female. Similarly out of 40 prospective teacher of S.St Stream 20 were male and 20 were female.

**Tool Used**

The tools used to collect data was Baroda General Teaching Competence Scale by Passi & Lalitha (2009) [4].

**Analysis and Discussion**

**Verification of Hypotheses: Results related with various hypotheses are presented below:**

**H1:** There will be a significant difference in the mean scores of Teaching Competence among prospective teachers of S.St. and Science stream of Ludhiana district

**Table 1:** Showing Mean scores of Teaching Competence among prospective teachers of S.St. and Science stream of Ludhiana district.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.St</td>
<td>40</td>
<td>77.48</td>
<td>19.07</td>
<td>4.23</td>
<td>1.26</td>
</tr>
<tr>
<td>Science</td>
<td>40</td>
<td>72.13</td>
<td>18.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table shows the t-ratio of Teaching Competence of prospective teachers of S.St. and Science streams of Ludhiana is 1.26. The t-ratio of prospective teachers of S.St. and Science stream is not significant at both levels of confidence i.e. 0.05 and 0.01 levels.

**Results:** There will be a significant difference in the mean scores of Teaching Competence among prospective teachers of S.St. and Science stream of Ludhiana district, stands rejected.

**H2:** There will be a significant difference in the mean scores of Teaching Competence among male and female prospective teachers of Ludhiana district.

**Table 2:** Showing Mean scores of Teaching Competence among male and female prospective teachers of Ludhiana district.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>40</td>
<td>73.73</td>
<td>18.60</td>
<td>4.27</td>
<td>0.50</td>
</tr>
<tr>
<td>Female</td>
<td>40</td>
<td>75.88</td>
<td>19.57</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table shows the t-ratio of Teaching Competence of male and female prospective teachers of Ludhiana district is 0.50. The t-ratio of male and female prospective teachers is not significant at both levels of confidence i.e. 0.05 and 0.01 levels.

**Result:** There will be a significant difference in the mean scores of Teaching Competence among male prospective teachers of S.St. and Science stream of Ludhiana district,” stands rejected.

**H3:** There will be a significant difference in the mean scores of Teaching Competence among male and female prospective teachers of S.St. and Science stream of Ludhiana district

**Table 3:** Showing Mean scores of Teaching Competence among male prospective teachers of S.St. and Science stream of Ludhiana district.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male S.St</td>
<td>20</td>
<td>79.60</td>
<td>15.68</td>
<td>5.72</td>
<td>2.05*</td>
</tr>
<tr>
<td>Male Science</td>
<td>20</td>
<td>67.85</td>
<td>19.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table shows t-ratio of Teaching Competence of male prospective teachers of S.St. and Science stream of Ludhiana district is 2.05. The t-ratio of male prospective teachers of S.St. and Science stream is significant at 0.05 level of confidence. This reveals that there is significant difference in the Teaching Competence of the male prospective teachers of S.St. and Science stream at 0.05 level.

**Result:** There will be a significant difference in the mean scores of Teaching Competence among male prospective teachers of S.St. and Science stream of Ludhiana district,” stands partially accepted and partially rejected

**H4:** There will be a significant difference in the mean scores of Teaching Competence among female prospective teachers of S.St. and Science stream of Ludhiana district

**Table 4:** Showing Mean scores of Teaching Competence among female prospective teachers of S.St. and Science stream of Ludhiana district.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SED</th>
<th>t-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female S.St</td>
<td>20</td>
<td>75.35</td>
<td>22.16</td>
<td>6.34</td>
<td>0.17</td>
</tr>
<tr>
<td>Female Science</td>
<td>20</td>
<td>76.40</td>
<td>17.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table shows the t-ratio of Teaching Competence of female prospective teachers of S.St. and Science stream of Ludhiana district is 0.17. The t-ratio of female prospective teachers of S.St. and Science stream is not significant at both levels of confidence i.e. 0.05 and 0.01 levels.

**Result:** There will be a significant difference in the mean scores of Teaching Competence among female prospective teachers of S.St. and Science stream of Ludhiana district, stands rejected.
References