CONSTRUCTION AND STANDARDIZATION OF TEACHING COMPETENCY SCALE (TCS) FOR PRE SERVICE TEACHERS

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Abstract

The Teaching Competency Scale (TCS) has been constructed and standardized to measure the Teaching Competency of the Pre-service Teachers. The items were constructed based on the Likert's five point scale. Initially the scale consists of seventy items. The pilot study was conducted with one hundred and fifty pre-service teachers, randomly selected from seven B.Ed colleges located in Villupuram district. The responses thus collected were analysed by using statistical techniques. The scores of the item that satisfies 't' value alone were taken for the main study. Out of the seventy items, twenty one items were not selected and the remaining forty nine items were taken for main study. The reliability of the tool was found to be 0.93 by using Chronbach alpha method. Further the validity of the tool was established by using face validity method.

INTRODUCTION

The progress of the country depends upon its educational system. Education systems also serve as strong foundation for the economic status of the individuals as well as the country. All the educational should be focused on the vision of the country for its prosperity. Curriculum is defined as "the planned and guided learning experiences and intended outcomes, formulated through the systematic reconstruction of knowledge and experiences under the auspices of the school, for the learners' continuous and willful growth in personal social competence" (Tanner, 1980). So teachers should have an adequate teaching competency to deliver the content in an effective manner. The Bachelor of Education Programme, is a professional course that prepares teachers for middle level, secondary level and senior secondary level (NCTE New Regulation,2014). They should possess the teaching competency for their future career. During the course, pre-service teachers are exposed to have training on each and every skills of teaching such as explanation skill, skill of stimulus variation, blackboard skill, skill of questioning, skill of reinforcement, skill of closure and so on. They prepare micro lesson plan, teach and get feedback from the peer group. Based on the feedback they re-plan and re-teach and continue their practice till they attain the perfection.

TEACHING COMPETENCY OF PRE SERVICE TEACHERS

Competency is defined as a requirement of a "competency-based" teacher education which includes the knowledge, skills and values of a teacher-trainee to demonstrate for the successful completion of a teacher education programme (Houstan,1987). Teaching competencies include the acquisition and demonstration of the composite skills required for student teachers like establishing a lesson, fluency in questioning, probing questions, rapidity of lesson, strengthening, child psychology, recognizing performances, classroom supervision and general assignment. Competency development is a continuous process in the institution. According to B.K.Passi and M.S.Lalitha (1994) defined that the teaching competency is an effective performance of all observable teachers' behavior that brings about desired novice effects. Halls & Jones (1976) defined that "the competencies are the composite skills, manners or acquaintance that can be demonstrated by the learner and desired from explicit conceptualization of the preferred outcomes of learning competencies through assessment of student learning through direct observation of learner's behaviour". The competency are the attributes which enable an individual or group to perform a role to an appropriate grade of quality and thus make the individual or group experienced in that responsibility (Walker,1992).

REVIEW OF RELATED LITERATURE

Ponmozhi.D (2017) studied the teaching competency of twenty first century student teachers in Tamil Nadu. Six hundred and twenty two student teachers were selected from various B.Ed Colleges in Tamil Nadu state through random sampling technique. Normative survey method was used. The main objective of the study is to find out the levels of teaching Competency of student teachers and to find out the significant difference between the selected pairs of sub-samples. Teaching Competency scale (2014) constructed and validated by the invigilator was used to collect the data. Findings show that the majority of student teachersTeaching Competency were average. Also there exists significant difference between sub samples related to Locality, Email holders, Computer literacy and Parental income.

Jimmi Copriady (2014) examined the contribution a teachers' with respect to competency in teaching and learning practical chemistry from the interrelated dimension of designing, planning, implementing and evaluating practical training or experiment in improving the quality and standards of teaching and learning practical chemistry. This is a survey method. The investigator has to determine the four aspects of the competencies. Findings show that the level of competency with respect to all aspects such as designing, planning, implementing and evaluating of practical training are at the moderate. Research suggests that efforts need to be taken to improve teacher's competency and acquisition of more laboratory materials.

MAIN OBJECTIVE OF THE STUDY

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To construct and standardize the Teaching Competency Scale to measure the level of Teaching Competency of the Pre-service Teachers.

SAMPLE OF THE STUDY

One hundred and fifty Pre-service Teachers studying in B.Ed colleges at Villupuram District were randomly selected as sample for the study.

PILOT STUDY

Teaching Competency scale for Pre-service Teachers has been constructed and validated by the investigator and the Research Supervisor. Relevant literatures related to Teaching Competency and test construction procedures were analysed for the construction of the tool. The Teaching Competency scale was constructed after having discussions with the Assistant Professors, Psychologists, Pre-service teachers and experts in the field of education.

The tool has been prepared based on Likert's five-point rating scale. Initially, seventy items were prepared in both Tamil and English. For positive items, the scoring procedure for Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree are given as 5, 4, 3, 2, 1 respectively. In case of negative items, the scoring procedure for Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree is given as 1, 2, 3, 4, 5 respectively. The minimum score for the tool is seventy and maximum score of the tool is three hundred and fifty.

ITEM ANALYSIS
The pilot study tool consists of seventy items. There are sixty six positive items and 4 negative items. Each and every item has five responses namely strongly agree, agree, undecided, disagree and strongly disagree.

Table: 1 Scoring Procedure for Teaching Competency Tool

Response	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Scores for Positive Items	5	4	3	2	1
Scores for Negative Items	1	2	3	4	5

The responses thus calculated were analysed by using critical ratio analysis ('t' test).

't'- values of the item

Item Number	t- value	Selected / Not selected
1	1.32	**Not selected**
2	2.24	Selected
3	0.98	**Not selected**

4	1.19	**Not selected**
5	0.86	**Not selected**
6	1.98	Selected
7	2.45	Selected
8	1.21	**Not selected**
9	1.36	**Not selected**
10	2.78	Selected
11	2.45	Selected
12	1.99	Selected
13	1.23	**Not selected**
14	2.11	Selected
15	2.34	Selected
16	1.01	**Not selected**
17	1.99	Selected
18	2.56	Selected
19	2.71	Selected
20	1.12	**Not selected**
21	0.86	**Not selected**
22	2.28	Selected
23	2.65	Selected
24	0.97	**Not selected**
25	1.98	Selected
26	1.06	**Not selected**
27	1.67	**Not selected**
28	2.19	Selected
29	1.44	**Not selected**
30	2.59	Selected
31	2.44	Selected
32	2.98	Selected
33	2.73	Selected
34	1.68	**Not selected**
35	2.99	Selected
36	2.17	Selected
37	2.54	Selected
38	1.98	Selected
39	1.06	**Not selected**
40	2.78	Selected
41	2.34	Selected
42	2.11	Selected

43	2.67	Selected
44	2.08	Selected
45	2.68	Selected
46	2.01	Selected
47	1.12	**Not selected**
48	3.02	Selected
49	2.56	Selected
50	2.33	Selected
51	0.71	**Not selected**
52	2.71	Selected
53	0.85	**Not selected**
54	0.97	**Not selected**
55	2.22	Selected
56	2.55	Selected
57	2.09	Selected
58	3.07	Selected
59	2.89	Selected
60	2.09	Selected
61	2.77	Selected
62	3.12	Selected
63	1.65	**Not selected**
64	2.67	Selected
65	2.02	Selected
66	2.78	Selected
67	3.24	Selected
68	2.89	Selected
69	2.07	Selected
70	2.66	Selected

In this pilot study, the score of the items that satisfy 't' value alone were taken for main study. The number of items taken for pilot study was seventy. Out of these seventy items, twenty nine items were not selected and therefore forty nine items were taken for the main study.

DESCRIPTION OF THE FINAL TOOL

The final draft of the teaching competency scale consists of forty nine items. It consists of forty seven positive items and two negative items. The scoring procedure of positive items are 5,4,3,2,1 for Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree respectively. The scoring procedure of negative items are 1,2,3,4,5 for Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. The minimum score of the tool is 49 and the maximum score of the tool is 245.

RELIABILITY OF THE TOOL

The reliability of the tool was established by using Chronbach Alpha test. The reliability of the Teaching Competency scale was founded to be 0.93, which is considered to be highly reliable.

VALIDITY OF THE TOOL

The teaching competency scale was validated by using face validity method. To establish validity the tool was distributed to ten experts including Teacher Educators, Psychology Experts, Professors and to some Pre-service Teachers. Experts were asked to check whether the items in the tool are related to the present study and also to check whether it satisfies the objectives of the study. Based on the suggestions given by the experts, few corrections were done in some items.

CONCLUSION

The investigator is hopeful that this scale would be helpful to measure the level of teaching competency of Pre-service teachers. Hence, the constructed teaching competency scale will be very useful for the investigator to measure the level of teaching competency of Pre-service teachers in their future teaching profession.

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