

## Enhancing Abilities of Student Teachers through Social Capital and Knowledge Sharing Intervention Programme

<sup>a</sup>T.Niresha, <sup>b</sup>S.Malathi

<sup>a</sup>Project Fellow (UGC-MRP) & Research Scholar N.K.T. National College of Education for Women Triplicane, Chennai-5, India

<sup>b</sup>Associate Professor & Principal Investigator (UGC-MRP) N.K.T. National College of Education for Women Triplicane, Chennai-5, India

### Abstract

The present experimental study was undertaken with two objectives in view (i) to devise an module based on social capital and knowledge sharing (ii) to verify the abilities of student teachers. A clear need to teach student teachers to generalize newly acquired abilities across time and settings has been established in the literature. Three factors emerge as important to sustaining abilities in classrooms based on a review of the research. An intervention module for enhancing generalization of abilities of student teachers using social capital and knowledge sharing is described using immediate feedback to enhance teaching skills, teaching goals and classroom management. To assess the effect of social capital and knowledge sharing module on the acquisition of abilities of student teachers, 126 student teachers were selected for the study. Student teachers were split into two groups as experimental group and control group each having 63 student teachers respectively. Post test data was collected on abilities of student teachers. Social capital and knowledge sharing intervention module resulted significantly higher mean in abilities of student teachers. The results suggest that this type of intervention training module may help teacher educators to increase their use of effective social capital and knowledge sharing procedures.

**KEYWORDS:** Abilities, teaching skills, teaching goals, classroom management.

### INTRODUCTION

A teacher educator is a person who helps other people to acquire the knowledge, competences, skills, goals and attitudes they require to be effective teachers. It is used to help teacher educators, and those involved with the professional development of teacher educators, to think about and further develop the overall competence, knowledge, understanding and skills required for effective and supportive teacher education. The major functions of a good teacher educator is having good teaching skills, and teaching goals and classroom management will be valuable in helping student teachers to develop and succeed. The teaching skills are defined as a group of teaching acts or behaviors intended to facilitate students learning directly or indirectly. Teaching goal is to promote learning and impart subject knowledge among student teachers which helps to keep students organized, orderly, focused, attentive, on task, and academically productive in classroom. Classroom management supports the proper execution of curriculum development, developing best teaching practices, and putting them into action. Classroom management can be explained as the actions and directions that teachers use to create a

successful learning environment; indeed, having a positive impact on student teachers achievement and goals. Student teachers are devoted to continuous development of their ability to deliver their service. Student teachers should have professional knowledge, teaching skills, teaching goal and classroom management through formal preparation and experience.

### **OPERATIONAL DEFINITION**

#### **ABILITIES OF STUDENT TEACHERS**

Student teachers abilities refers to the, student teachers abilities such as

- Classroom management – the ability to manage the classroom discipline
- Teaching Skills – the ability to impart knowledge
- Teaching Goals: The ultimate goal of teaching is to promote learning.

### **METHODOLOGY**

The various steps followed in the methodology of this study are devising an instructional module based on the framework of social capital and knowledge sharing module. Construction of research tool for socio-emotional competence and abilities of student teachers for identifying the various levels of student teachers and applying the instructional strategies for developing classroom management, teaching skills and teaching goals. Administration of the tool for pretest and posttest and employing appropriate statistical techniques for arriving at scientific conclusion.

#### **IDENTIFYING VARIOUS LEVELS OF STUDENT TEACHERS**

For the for the purpose of this investigation two levels of student teachers were identified on the basis of scores obtained in the pretest of abilities of student teachers. Those student teachers who scored low scored low in the pretest were selected for the further study.

#### **CONSTRUCTION OF RESEARCH TOOL**

To measure the abilities of student teachers in both control group and experimental group, abilities of student teachers scale was constructed by the investigator on the basis of item analysis. The content validity of the tool by expert opinion, item validity by item analysis and the reliability of the tool by Cronbach's method were established.

#### **SAMPLE DESIGN**

For the purpose of the investigation, 126 student teachers from N.K.T. National College of Education for Women and Lady Willingdon institute of Advanced study of education respectively. The student teachers were selected based on the low scores obtained in the pretest of abilities of student teachers. They were divided into two halves to constitute the experimental group (63) and the control group (63). The experimental group was taught through social capital and knowledge sharing instructional module strategy.

#### **APPLYING INSTRUCTIONAL STRATEGY**

After the pretest, the experiment was carried out for a period of one month. The control group student teachers were not taught instructional strategy and the experimental group student teachers were taught the instructional strategy like social capital and knowledge sharing module. Here, social capital refers to trust, norms and networks that can improve the efficiency of student teachers by facilitating coordinated actions. Knowledge sharing refers to enriching experience, values beliefs, and understanding the data, information, knowledge and expertise.

## DATA COLLECTIONS

The experiment was conducted for a period of one month. At the end of the experimental period, a post test was conducted on the student teachers of the experimental group and the control group. The responses given by the student teachers in both the control group and the experimental group in the pretest and post test formed the vital data required for the analysis.

## SCORING PROCEDURE

The abilities of student teachers scale consists of five point Likert scale. The student teachers were selected on the basis of item analysis. There were no negative items. The minimum and maximum score of a subject to the abilities of student teachers are 63 and 315 respectively. The response from student teachers were evaluated on the basis of the responses given by the respondents.

### Statistical techniques used in the study

- ❖ Mean
- ❖ S.D
- ❖ t-test

## ANALYSIS OF DATA – PRE AND POST TEST SCORES OF VARIABLES

**Table 1.1**

**Significance of Mean difference between the pre-test and post-test scores of control group abilities of student teachers**

Variable with its dimensions	Tests	Mean	Standard Deviation	t value	Level of significance
Classroom Management	Pre	45.0952	8.37372	1.05	NS
	Post	46.8413	7.70255		
Teaching Skills	Pre	46.2063	5.65569	1.98	0.05
	Post	48.3175	4.00735		
Teaching Goals	Pre	47.1587	17.95982	1.57	NS
	Post	50.9365	16.64749		
Overall Abilities of Student Teachers	Pre	138.4603	23.59389	1.25	NS
	Post	145.0952	19.30963		

It is observed from the above table that there is significant difference between pre-test and post-test scores of control group student teachers in the dimensions of abilities of student teachers namely teaching skills at 0.05 level. Fiona (2018) studied the teachers mindset to improve their own teaching abilities. Valarie et. al., (2018) administered mixed method which improved the teachers' abilities through training. Therefore, it is concluded that control group student teachers are similar in pre-test and post test scores of their teaching skills.

It is evident that there is no significant difference between pre-test and post-test scores of control group student teachers in the dimensions of abilities of student teachers namely classroom management, teaching goals and overall abilities of student teachers.

Hence the formulated hypothesis that there will be significant difference between pre-test and post-test scores of control group in abilities of student teachers is rejected.

**Table 1.2**  
**Significance of Mean difference between the pre-test and post-test scores of**  
**Experimental group abilities of student teachers**

Variable with its dimensions	Tests	Mean	Standard Deviation	t value	Level of significance
Classroom Management	Pre	43.9048	14.09154	22.478	0.01
	Post	85.5238	7.65771		
Teaching Skills	Pre	57.5238	19.12342	12.946	0.01
	Post	84.7460	10.67099		
Teaching Goals	Pre	52.8254	17.15352	16.865	0.01
	Post	87.7460	6.36768		
Abilities of Student Teachers	Pre	154.2540	18.52981	42.539	0.01
	Post	258.0159	12.50225		

It is observed from the above table that there is significant difference between the pre-test and post-test scores in the dimensions of abilities of student teachers namely classroom management, teaching skills, teaching goals at 0.01 level. According to Lakshmi Shanmugam (2016), the results proved that the abilities of teachers will improve the teaching competence of student teachers. Similarly it is found that post experimental group students (258.0159) have high classroom management, teaching skills, teaching goals and abilities of student teachers than the pre experimental group (154.2540) students. Hence, it is concluded that post experimental group students have more abilities of student teachers than the pre experimental group students. Further the results of Murat and Gokalp (2016) indicated a significant and positive relationship between the sub dimensions of pre service teachers' teaching competencies to enhance the teaching abilities of students.

Hence the formulated hypothesis that there will be significant difference between pre-test and post-test scores of experimental group students in abilities of student teachers is accepted.

#### POST-TEST SCORES OF VARIABLES

**Table 1.3**  
**Significance of Mean difference between the Control and Experimental**  
**group in the post-test scores of Abilities of Student Teachers**

Dimensions/Variable		Control	Experimental	t value	Level of Significance
Classroom Management	Mean	58.8413	85.5238	19.499	0.01
	S.D	7.70255	7.65771		
Teaching Skills	Mean	60.3175	84.7460	17.010	0.01
	S.D	4.00735	10.67099		
Teaching Goals	Mean	76.9365	87.7460	5.697	0.01
	S.D	13.64749	6.36768		
Abilities of Student Teachers	Mean	196.0952	258.0159	21.365	0.01
	S.D	19.30963	12.50225		

It could be observed that there is significant difference between the control and

experimental group students in the post-test scores of abilities of student teachers and its dimensions namely classroom management, teaching skills, teaching goals at 0.01 level. It is found that experimental group students (258.0159) have higher abilities than the control group students (196.0952) in post test scores. The study conducted by Faida Imhemid Salem EI Warfali and Nik Mohd Rahimi Nik Yusoff (2014) revealed that training can improve the teachers in their classroom management similar to the findings of the present study.

Stought (2015) and Tran (2016) emphasized on techniques to improve teaching abilities of teachers which is also evident in the post test statistically significant score of the present study.

Hence the formulated hypothesis that there will be significant difference between Control and Experimental group students in the post-test scores of abilities of student teachers is accepted.

**Table 1.4**  
**Significance of Mean difference between the control group and experimental group in the gain scores of abilities of student teachers**

Variable with its dimensions	Group	Mean	Standard Deviation	t value	Level of significance
Classroom Management	Control	13.7460	10.62554	12.199	0.01
	Experimental	41.6190	14.69631		
Teaching Skills	Control	14.2540	11.10067	5.135	0.01
	Experimental	27.2222	16.69020		
Teaching Goals	Control	29.7778	20.65261	1.547	NS
	Experimental	34.9206	16.43492		
Abilities of Student Teachers	Control	57.6349	24.38224	11.760	0.01
	Experimental	103.7619	19.36051		

It is evident from the above table that there is significant difference between the control and experimental group students in the dimensions of abilities of student teachers namely classroom management and teaching skills at 0.01 level. It is found that experimental group (103.7619) students have high class room management, teaching skills and abilities of student teachers than the control group (57.6349) students.

Further it is inferred that there is no significant difference between the control and experimental group students in teaching goal. Therefore it is concluded that the experimental group students have similar to control group students in their teaching goal.

Hence the formulated hypothesis that there will be significant difference between Control and Experimental group in the gain scores of abilities of student teachers is accepted.

#### **IMPLICATIONS OF THE STUDY**

The results of the study have established that the instructional strategy like social capital and knowledge sharing in more effective, in developing classroom management, teaching skills and teaching goals among student teachers. Since the instructional strategy has been effective for student teachers, it can be used with significant success in various

levels of school teachers. Teachers of colleges and universities can be given orientation as to how to apply the instructional strategy like social capital and knowledge sharing for the benefit of various institutions of students.

Keeping the result of the study in mind, the UGC, NCERT and SCERT can conduct orientation programs for the teachers in all levels like primary, upper primary, secondary, higher secondary schools, colleges and universities for creating awareness among them about the effectiveness of the instructional strategies which will find an expression in their classroom practices. Since, the use of the instructional module enhances among student teachers in the low group it will enhance the abilities of student teachers which will help them to incorporate these strategies in schools at all levels. So, a necessary orientation can be given at NCERT level also, so that awareness can be developed among all levels of school teachers also.

### CONCLUSION

From the analysis, it is observed that there is significant difference exists between the pre-test and post-test scores in the variable abilities of student teachers. Hence, it is evident that the intervention modules of social capital and knowledge sharing are very much effective in enhancing abilities of student teachers.

Considering the gain scores of student teachers, it is interesting to note that there is significant difference between control and experimental group student teachers in their abilities of student teachers. Hence, it is understood that knowledge sharing and social capital plays a vital role in enhancing the abilities of student teachers. Therefore, it is important that curriculum developers and eminent educationists should develop the teacher education curriculum by integrating the techniques of knowledge sharing and social capital components in the syllabus so as to enhance abilities among student teachers which is the need of the hour and that can improve the quality of teacher education as well.

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