

# TEACHING COMPETENCY OF PRIMARY SCHOOLTEACHERS WITH VARIOUS QUALIFICATIONS

*In this study aimed at measuring and comparing the teaching competency of B Ed and D Ed trained teachers working at the primary level, besides studying the gender, locality, experience and quality differences in teaching competence, the investigators conclude that the B Ed trained teachers are not suitable for primary schools as they do not study child psychology and their training is tailored for secondary schools.*

Teachers have always played a pivotal role in the society. The future of the nation is being shaped in our classrooms, as children are our future nation builders. Therefore, the teachers have a great responsibility in moulding the character of children by giving quality education in the school.

The performance of good teachers depends upon the specialization of the subject or fields to be taught and professional knowledge and skill and an understanding of educational process and teaching skills. In order to equip the teachers with these abilities, teacher education programs are offered in various places at various levels. There are two teacher preparation courses at various levels. D.Ed. course is a teacher preparation course at primary level and B.Ed. course is a secondary teacher preparation course. Student teachers of D.Ed. are exposed to methodology of teaching all the subjects that are taught at primary level based on the pedagogy of childhood psychology, and student teachers of B.Ed course are exposed to two methods of school subjects based on their content specialisation at the graduation on the pedagogy of adolescent psychology.

In Andhra Pradesh, both B.Ed. and D.Ed. trainees are eligible for appointment as primary schoolteachers. While in the B.Ed. course training is given in pedagogy at secondary level for two school subjects, in the D.Ed. course the training is given in all subjects on pedagogy at primary level. It reflects that there may be difference in their teaching competency with different pedagogical knowledge. In

order to know these differences in teaching competence, the present study on **Comparison of the Teaching Competency of B.Ed. and D.Ed. Trained Teachers Working in Primary Schools of Andhra Pradesh** was undertaken.

## Objectives of the Study

- To measure the teaching competency of B.Ed. and D.Ed. trained teachers working at primary level.
- To compare the teaching competency of B.Ed. and D.Ed. trained teachers working at primary level.
- To study the gender, locality, experience and qualification differences in teaching competence.

## Hypotheses

- There is no significant difference in the teaching competency of teachers working in rural and urban areas.
- There is no significant difference in the teaching competency between male and female teachers working at primary level
- There is no significant difference between young and old teachers in teaching competency.
- There is no significant difference in the teaching competency of teachers working in monograde and multigrade schools.
- There is no significant difference in the teaching competency between teachers with less and more experience.
- There is no significant difference in the teaching competency of B.Ed. and D.Ed. trained teachers working at primary level.

## Definitions of the Study

- The study is limited to schools of Nalgonda district of Andhra Pradesh.
- The study is limited to selected variables of the teachers.

- The study is limited to classroom performance of the teachers

## Sampling

One of the major important aspects of a study is the selection of sample. The selection of the sample should be carefully done in order to arrive at valid conclusions and the sample should be appropriate representation of population.

The population of the present study is all B.Ed. and D.Ed. trained teachers working in primary schools of Andhra Pradesh. The multi-stage random sampling technique is used to select the sample. Forty primary teachers were selected for the study. Twenty primary teachers with B.Ed and another 20 teachers with D.Ed. were selected from 10 rural schools and 10 urban schools. Among them, 20 male teachers and 20 female teachers were selected.

## Tools Used for the Study

Teacher Profile, which consists of the personal information like gender, academic, professional and experience details, etc. and Teaching Competency Scale, which consists of nine components covering four areas are used. The components are:

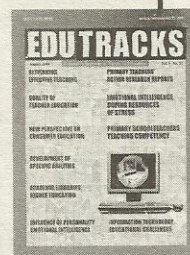
### I. Cognitive based teaching competency

#### 1. Lesson Introduction

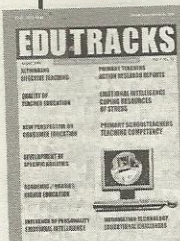
- Focus on the topic
- Tasks to be covered
- Aim of the lesson

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- Traces of historical development

- Reviews pre-requisites

- Utility of studying the topic

2. *Development of the Lesson*

- Uses appropriate teaching strategies
- Generalizes content with accuracy and clarity
- Presents in logical and sequential order
- Organizes group activities
- Provides opportunities for applying acquired knowledge/skills.
- Prepares and uses appropriate teaching aids
- Budgets time according to task and importance of objectives

## II. Performance-based teaching competency

### 3. *Explaining*

- Using appropriate beginning and concluding statements
- Using explaining links
- Covering essential points
- Continuity in narration
- Illustration with examples
- Language appropriate to the level of children

### 4. *Questioning*

- Clear, precise, relevant and grammatically correct
- Provides desired pauses for thinking
- Delivers with appropriate speed
- Adequately distributes among students
- Handling of the pupil responses
- Avoids mass responses

### 5. *Uses of Blackboard*

- Writes new points or pupil responses
- Draws neat diagrams
- Writes legibly, neatly with adequate space and size
- Maintains continuity in communication while writing
- Gives sufficient time to take down

## III. Affective-based teaching competency

### 6. *Pupils' participation*

- Sustained pupil interest and continuous pupil participation

- Using pupils own ideas in discussion

- Encouraging pupil-teacher and pupil-pupil interaction

- Pupil physical participation

### 7. *Classroom Management*

- Calls pupils by their names
- Make norms of classroom behaviors explicit to pupils
- Gives clear directions
- Ensures sufficient work for each pupil
- Keeps pupil in eye span
- Recognizes and reinforces attractive behaviors
- Checks in appropriate behaviour immediate

## IV. Consequence-based teaching competency

### 8. *Closure of the lesson*

- Reviews major points of the lesson
- Relates present learning with previous and future learning
- Provides meaningful tasks leading to integration of skills
- Creates a sense of accomplishment in pupils

### 9. *Evaluation*

(Review/Tests/Assignments)

- Ensures understanding of teaching points
- Ascertains the realization of overall objectives
- Identifies learning difficulties
- Provides follow-up to teaching by giving assignment.

Thus, the minimum score is 9 and maximum is 63 for this scale.

## Statistical Techniques

Statistical techniques like t- test and One-way ANOVA were used to test the formulated hypotheses.

## Analysis and Interpretation of Data

### *Hypothesis 1*

There is no significant difference in teaching competency of teachers working in rural and urban areas.

In order to test the above hypothesis, t-test was used. The results are as shown in the following table.

From table 1, it is clear that the Means of urban teachers and rural teachers are equal as the obtained t-value is not significant at 0.05 level. So the null

hypothesis is accepted. Therefore, there is no significant difference in teaching competency of urban and rural primary teachers in cognitive-based, performance-based, affective-based and consequence-based areas.

### *Hypothesis 2*

There is no significant difference in teaching competency of male and female teachers working at primary level

In order to test the above hypothesis, t-test was used. The results are as shown in the table-2.

From table 2, it is clear that the Means of male and female teachers are equal as the obtained t-value is not significant at 0.05 level. So the null hypothesis is accepted. Therefore, there is no significant difference in the teaching competency of male and female primary teachers in cognitive-based, performance-based, affective-based and consequence-based areas.

### *Hypothesis 3*

There is no significant difference between young and old teachers in teaching competency.

In order to test the above hypothesis, t-test was used. The results are as shown in the table-3.

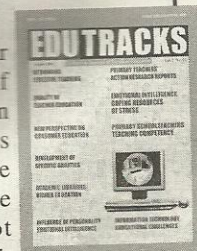
From table 3, it is clear that the Means of teachers within the age range 20-40 years and teachers above 40 years are equal as the obtained t-value is not significant at 0.05 level. So the null hypothesis is accepted. Therefore, there is no significant difference in teaching competency teachers within the age range 20-40 years and teachers above 40 years in cognitive-based, performance-based, affective-based and consequence-based areas.

### *Hypothesis 4*

There is no significant difference in the teaching competency of teachers working in monograde and multigrade schools.

In order to test the above hypothesis, t-test was used. The results are as shown in the table-4.

From table 4, it is clear that the Means of teachers working in multigrade and teachers working in monograde schools are equal as the obtained t-value is not significant at 0.05 level.





# RESEARCH

**Table-1: t-test for Teaching Competency with Respect to Locality**

Sl. No.	Competency	Urban			Rural			t-value
		N	Mean	SD	N	Mean	SD	
1	Cognitive-based	20	8.6	4.3	20	9.65	2.96	0.9 <sup>ns</sup>
2	Performance-based		16.05	4.21		17.05	3.43	0.82 <sup>ns</sup>
3	Affective-based		10.05	3.19		9.85	2.78	0.212 <sup>ns</sup>
4	Consequence-based		10.3	3.21		10.70	2.70	0.43 <sup>ns</sup>
5	Overall		45.0	14.47		47.25	11.28	0.55 <sup>ns</sup>

ns – Not significant difference at 0.05 level

**Table-2: Gender with Respect to t-test for Teaching Competency**

Sl. No.	Competency	Male			Female			t-value
		N	Mean	SD	N	Mean	SD	
1	Cognitive-based	20	9.30	3.66	20	8.95	3.79	0.297 <sup>ns</sup>
2	Performance-based		17.25	3.57		15.85	4.03	1.163 <sup>ns</sup>
3	Affective-based		10.20	2.88		9.70	3.08	0.531 <sup>ns</sup>
4	Consequence-based		10.80	2.73		10.20	3.17	0.642 <sup>ns</sup>
5	Overall		47.55	12.40		44.7	13.46	0.697 <sup>ns</sup>

ns – Not significant difference at 0.05 level

**Table-3: t-test for Teaching Competency with Respect to Age**

Sl. No.	Competency	20-40 years			Above 40 years			t-value
		N	Mean	SD	N	Mean	SD	
1	Cognitive-based	22	9.14	3.78	18	9.11	3.67	0.021 <sup>ns</sup>
2	Performance-based		16.36	3.97		16.78	3.73	0.337 <sup>ns</sup>
3	Affective-based		10.05	2.94		9.83	3.05	0.223 <sup>ns</sup>
4	Consequence-based		10.55	2.78		10.44	3.20	0.107 <sup>ns</sup>
5	Overall		46.1	12.85		46.1	13.23	0.018 <sup>ns</sup>

ns – Not significant difference at 0.05 level

**Table-4: t-test for Teaching Competency with Respect to Type of the School**

Sl. No.	Competency	Multigrade			Monograde			t-value
		N	Mean	SD	N	Mean	SD	
1	Cognitive-based	22	8.77	3.62	18	9.56	3.81	0.66 <sup>ns</sup>
2	Performance-based		16.59	3.88		16.50	3.87	0.07 <sup>ns</sup>
3	Affective-based		9.86	2.94		10.06	3.06	0.20 <sup>ns</sup>
4	Consequence-based		10.09	2.88		11.0	3.01	0.97 <sup>ns</sup>
5	Overall		45.32	12.77		47.11	13.25	0.43 <sup>ns</sup>

ns – Not significant difference at 0.05 level

So the null hypothesis is accepted. Therefore, there is no significant difference in the teaching competency of primary teachers working in multigrade and monograde schools in cognitive-based performance-based, affective-based and consequence-based areas even though the Means of teaching competency of teachers working in monograde are slightly higher than the multigrade schools.

## Hypothesis 5

There is no significant difference in teaching

competency of teachers with less and more experience.

In order to test the above hypothesis, t-test was used. The results are as shown in tables-5 and 6.

On the basis of experience the sample is divided into three groups namely, (a) teachers with below 10 years of experience, (b) teachers with experience of 10 to 20 years and (c) teachers with experience above 20 years.

From table 5 it is observed that those with experience between 10 and 20 years have higher teaching competency than the other two groups. Those with experience of 20 years and above also scored a little higher than those with experience below 10 years of experience, in all areas of teaching competency.

To test the above hypothesis one-way analysis was used. The results are given in table-6.

From table 6, it is clear that the obtained F-value is less than the table value for a df of 2 and 37 at 0.05 level. Therefore, the null hypothesis is accepted. There is no significant difference in teaching competency of teachers with various experiences in all areas.

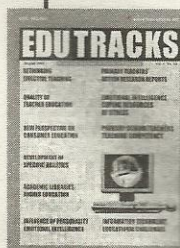
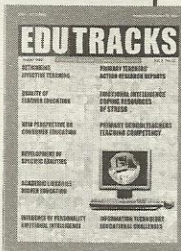
## Hypothesis 6

There is no significant difference in the teaching competency of B.Ed. and D.Ed. trained teachers working at primary level.

In order to test the above hypothesis, t-test was used. The results are as shown in the tables-7 and 8.

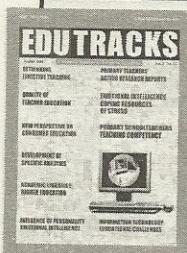
**Table-5: One Way-Descriptives of Teacher Experience**

Sl.No.	Competency	Experience	N = 40	Mean	SD
1	Cognitive-based	Below 10 years	20	8.85	3.59
		10-20 years	7	10.14	4.06
		20 years and above	13	9.00	3.83
2	Performance-based	Below 10 years	20	15.50	4.14
		10-20 years	7	18.43	2.23
		20 years and above	13	17.15	3.69
3	Affective-based	Below 10 years	20	9.75	2.90
		10-20 years	7	10.43	3.10
		20 years and above	13	10.00	3.16
4	Consequence-based	Below 10 years	20	9.85	3.10
		10-20 years	7	11.57	2.30
		20 years and above	13	10.92	2.93





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On the basis of educational qualifications, the sample is divided into four groups namely, (a) Inter + D.Ed., (b) Degree + D.Ed., (c) Degree + B.Ed. and (d) Others such as M.Sc. + M.Ed., M.Com. + M.Ed., B.Sc. + M.Ed., M.A.

+ M.Ed., etc.

From table 7, it is observed that the teachers with educational qualification of Inter + D.Ed. perform better than other groups. The teachers with educational qualification of Degree + D.Ed. also scored higher than the other remaining groups and teachers with educational qualification of Degree + B.Ed. and others scored lower in performance in all areas of teaching competency.

To test the above hypothesis one-way analysis was carried out.

From table 8, it is clear that the obtained F-value is greater than the table value for df of 3 and 36 at 0.05 level. Therefore, the null hypothesis was rejected. There is a significant difference in cognitive-based competency, performance-based, affective-based and consequence-based areas of teaching competency of teachers working at primary level. It is evident from the table that the teachers with required qualification i.e. Intermediate or Degree with D.Ed. perform better than the B.Ed. trained teachers.

### Implications of the Study

- ❖ The present study reveals that B.Ed. trained teachers are not suitable for primary schools, because they do not study child psychology and the training is tailored for secondary level. Therefore, the educational functionaries in Andhra Pradesh can take this into consideration in their future recruitment. They may follow the recruitment procedures as in Karnataka where relevant training is insisted. Prof. K. Ramakrishna Rao Commission (1994) also suggested appointing primary teachers with the required qualification.
- ❖ There is a need to start B.Ed. training with elementary education as specialization.

**Table-6: One-way ANOVA for Teaching Competency with Respect to Experience**

Sl. No.	Competency		Sum of squares	df	Mean Square	F
1	Cognitive-based	Between groups	8.97	2	4.48	0.319 <sup>ns</sup>
		Within groups	519.41	37	14.04	
2	Performance-based	Between groups	51.49	2	25.75	1.84 <sup>ns</sup>
		Within groups	518.41	37	14.01	
3	Affective-based	Between groups	2.44	2	1.22	0.134 <sup>ns</sup>
		Within groups	337.46	37	9.12	
4	Consequence-based	Between groups	18.81	2	9.41	1.097 <sup>ns</sup>
		Within groups	317.19	37	8.57	

ns - Not significance level 0.05

**Table-7: One Way - Descriptives of the Qualifications of Teachers**

Sl.No.	Competency	Educational Qualification	N = 40	Mean	SD
1	Cognitive-based	Intermediate+D.Ed.	10	12.50	0.707
		Degree + D.Ed.	9	12.22	1.481
		Degree + B.Ed.	14	6.00	2.353
		Others	7	6.57	2.936
2	Performance-based	Intermediate+D.Ed.	10	20.10	0.738
		Degree + D.Ed.	9	19.67	0.866
		Degree + B.Ed.	14	13.71	2.840
		Others	7	13.14	2.795
3	Affective-based	Intermediate+D.Ed.	10	12.70	0.675
		Degree + D.Ed.	9	12.56	0.527
		Degree + B.Ed.	14	7.36	1.646
		Others	7	7.86	2.478
4	Consequence-based	Intermediate+D.Ed.	10	13.20	0.632
		Degree + D.Ed.	9	13.11	0.782
		Degree + B.Ed.	14	7.79	1.528
		Others	7	8.71	2.498

**Table-8: One-way ANOVA for Teaching Competency with Respect to Educational Qualification**

Sl. No.	Competency		Sum of squares	df	Mean Square	F
1	Cognitive-based	Between groups	382.61	3	127.54	31.49*
		Within groups	145.77	36	4.05	
2	Performance-based	Between groups	407.29	3	135.76	30.06*
		Within groups	162.61	36	4.52	
3	Affective-based	Between groups	261.51	3	87.17	40.03*
		Within groups	78.39	36	2.18	
4	Consequence-based	Between groups	259.73	3	86.58	40.86*
		Within groups	76.28	36	2.12	

\* Significance level 0.05

### References

- Garret, H.E. (1996), "Statistics in Psychology and Education", David Mc Kay company Inc., New York.
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