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An Empirical Investigation into Teaching Effectiveness and Teaching Competency of Government & Private Secondary School Teachers

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ABSTRACT

This study examines the levels of teaching effectiveness and teaching competency among secondary school teachers. Adopting a descriptive research design, the survey method was employed to collect data from 80 secondary school teachers in Jalandhar district of Punjab using standardized scales on teaching effectiveness and teaching competency. The data collected were analyzed using percentage analysis, t-test, ANOVA, and correlation techniques. The findings reveal that most teachers demonstrated moderate levels of teaching effectiveness, with 28.8% categorized as highly effective, 25.0% as effective, and 38.7% as average, while only a small proportion were identified as ineffective. In terms of teaching competency, most teachers were found within the average to above-average range, with 50.0% exhibiting moderate competency and 30.0% above average, whereas very few fell into lower competency categories.Further analysis indicates that there is no significant difference in teaching effectiveness and teaching competency based on gender or type of school management (government, aided, and private). However, a moderate positive correlation was observed between teaching effectiveness and teaching competency, suggesting that higher competency contributes to improved teaching effectiveness. The study emphasizes the need to strengthen teaching competencies to enhance overall instructional effectiveness among secondary school teachers.

Key words: Teaching Effectiveness, Teaching Competency, Educational Research, Teacher Performance and Government and Private Schools.

Introduction:

Education is widely recognized as the foundation of national development, and teachers play a crucial role as architects of human capital. The effectiveness and competency of teachers are therefore central to the success of any education system. High levels of teaching effectiveness are essential for improving student learning outcomes and ensuring quality education.

Teaching effectiveness is a multidimensional construct that encompasses teacher behaviors, instructional strategies, classroom management, and their impact on student achievement. It involves clarity in instructional goals, strong subject knowledge, understanding of learners' needs, and the ability to adapt teaching methods accordingly. Effective teachers also anticipate students' misconceptions, promote higher-order thinking, and support the development of metacognitive skills. Furthermore, they employ appropriate assessment techniques, engage students actively, and create a conducive learning environment that enhances understanding and long-term learning.

Teaching competency, on the other hand, refers to a combination of professional knowledge, skills, attitudes, and values that enable teachers to perform effectively in diverse teaching-learning situations. It includes competencies such as communication skills, classroom management, planning and organization, assessment practices, collaboration, inclusiveness, and adaptability. These competencies are essential for facilitating meaningful learning and responding to the dynamic nature of classrooms.

In the context of the COVID-19 pandemic, the role of teaching effectiveness and competency gained even greater significance. The sudden shift from traditional face-to-face instruction to online and hybrid modes of teaching required teachers to rapidly adapt to digital platforms and integrate technology into their pedagogy. This transition highlighted the importance of digital competence, flexibility, and resilience among teachers. Studies have indicated that teachers' competence in online teaching significantly influences students' learning outcomes and engagement during remote education. Moreover, the pandemic exposed challenges such as limited access to digital resources, lack of training, and increased psychological stress, all of which affected teaching effectiveness.

The COVID-19 crisis also accelerated the need for continuous professional development, particularly in technological and pedagogical skills. Teachers were required to redesign instructional strategies, adopt innovative approaches, and maintain student engagement in virtual environments. Consequently, teaching competency has expanded beyond traditional classroom practices to include digital literacy, online classroom management, and the ability to ensure inclusive and equitable learning opportunities.

Considering these developments, strengthening teaching effectiveness and competency remains essential not only for improving student outcomes but also for preparing teachers to evolve educational challenges in the post-pandemic era.

Operational Definition:

Teaching effectiveness refers to the extent to which teaching practices result in the intended student learning outcomes through appropriate instructional strategies and classroom behaviours. It is commonly conceptualized as those observable classroom processes primarily attributable to teacher behaviour that leads to expected student learning gains (Brophy & Good, 1986; Muijs & Reynolds, 2005). In this view, effective teaching systematically facilitates student achievement and positive learning outcomes based on process–product models of instruction and learning (Carroll, 1963; Hattie, 2012)

Teaching competency is defined as the set of professional knowledge, skills, attitudes, and dispositions that enable teachers to perform their teaching roles successfully in diverse classroom contexts. It includes subject matter knowledge, pedagogical skills, classroom management, communication, planning, and the ability to adjust teaching practices to learner needs (Selvi, 2010). Competencies manifest in a teacher's ability to apply this integrated set of capabilities effectively in real teaching situations is defined as the set of professional knowledge, skills, attitudes, and dispositions that enable teachers to perform their teaching roles successfully in diverse classroom contexts. It includes subject matter knowledge, pedagogical skills, classroom management, communication, planning, and the ability to adjust

teaching practices to learner needs (Selvi, 2010). Competencies manifest in a teacher's ability to apply this integrated set of capabilities effectively in real teaching situations.

In this study, **secondary school teachers** are those educators responsible for teaching students typically in upper primary through pre-university levels (classes 9–12), facilitating academic learning, evaluating student performance, and contributing to overall educational development.

Government schools are educational institutions that are publicly funded and administratively controlled by state or central government authorities, providing education according to government policies and standards.

Private schools are educational institutions managed by private organizations or individuals that operate independently of direct government management, though generally following educational regulations, and are funded primarily through tuition fees and private resources.

Objectives:

- To determine the level of teaching competency among secondary school teachers.
- To determine the level of teaching effectiveness among secondary school teachers.
- To examine the significant difference in teaching effectiveness between male and female secondary school teachers.
- To examine the significant difference in teaching competency between male and female secondary school teachers.
- To investigate the significant difference in teaching competency among government, aided, and private secondary school teachers.
- To investigate the significant difference in teaching effectiveness among government, aided, and private secondary school teachers.
- To assess the relationship between teaching effectiveness and teaching competency among secondary school teachers.

Hypotheses:

1. There is no significant difference in teaching effectiveness between male and female secondary school teachers.
2. There is no significant difference in teaching competency between male and female secondary school teachers.
3. There is no significant difference in teaching effectiveness among government, aided, and private secondary school teachers.
4. There is no significant difference in teaching competency among government, aided, and private secondary school teachers.
5. There is no significant relationship between teaching effectiveness and teaching competency among secondary school teachers.

Design of the Study:

The study adopted a descriptive survey research design, which systematically describes characteristics of a target group without manipulating variables. This approach uses surveys to collect quantitative data on teaching effectiveness and teaching competency among secondary school teachers, enabling statistical analysis of patterns, differences, and relationships in their

responses. Descriptive research is ideal for identifying what exists in the present context and reporting how variables vary across groups (e.g., gender and school type), without establishing causal links.

Sample and Sampling Procedure:

The population of the study comprised teachers from **10 secondary schools in Jalandhar district**. A total of **80 teachers** were selected using **random sampling**, including **39 male** and **41 female** teachers. Random selection helps ensure that every teacher in the population has a known chance of being included, thereby increasing the representativeness of the sample.

Instruments Used:

Data was collected using two standardized scales:

- **Teaching Effectiveness Scale** developed by *Dr. Pramod Kumar and D.N. Mutha*, a **5-point Likert scale** ranging from *Totally Disagree (1)* to *Totally Agree (5)*.
- **Teaching Competency Scale** developed by *Dr. B.K. Passi and Dr. M.S. Lalitha*, a **7-point scale** ranging from *Not at all (1)* to *Very much (7)*.

Statistical Techniques Used:

The data collected were analyzed using the following statistical procedures:

- Percentage analysis
- *t*-test for comparing two groups
- One-way ANOVA for comparing more than two groups
- Correlation analysis to examine relationships between variables
- Correlations of co-efficient test were used to analyze the collected data and verify hypothesis.

Table 1: Level of Teaching Effectiveness among Secondary School Teachers

Sr. No.	Level of Teaching Effectiveness	Percentage (%)	Number of Teachers
1	Very Effective	0.288	23
2	Effective	0.25	20
3	Average	0.387	31
4	Ineffective	0.037	3
5	Very Ineffective	0.038	3
	Total	1	80

The analysis indicates that among 80 teachers, 28.8% were very effective, 25.0% effective, 38.7% average, 3.7% ineffective, and 3.8% very ineffective. This shows that the majority of teachers demonstrate average to high levels of teaching effectiveness.

Table 2: Level of Teaching Competency among Secondary School Teachers

S. No.	Level of Teaching Competency	Percentage (%)	Number of Teachers
1	Superior	0	0
2	High	0.05	4
3	Above Average	0.3	24
4	Average/Moderate	0.5	40
5	Below Average	0.075	6
6	Low	0.05	4
7	Inferior	0.025	2
	Total	1	80

Among 80 teachers, 0% were superior, 5.0% high, 30.0% above average, 50.0% average/moderate, 7.5% below average, 5.0% low, and 2.5% inferior, indicating that most teachers possess moderate teaching competency.

Table 3: Difference in Teaching Effectiveness between Male and Female Teachers

Variable	Group	N	Mean	S.D.	t-value	Level of Significance	Result
Teaching Effectiveness	Male	40	72.5	8.4			
	Female	40	73.8	7.9	0.72	0.05 & 0.01	Not Significant

The obtained t-value was less than the critical value at both 0.05 and 0.01 significance levels. Hence, the null hypothesis is accepted: there is no significant difference in teaching effectiveness between male and female teachers.

Table 4: Difference in Teaching Competency between Male and Female Teachers

Variable	Group	N	Mean	S.D.	t-value	Level of Significance	Result
Teaching Competency	Male	40	68.2	7.5			
	Female	40	69.1	7.1	0.58	0.05 & 0.01	Not Significant

The obtained t-value was also less than the critical value. Therefore, the null hypothesis is accepted: there is no significant difference in teaching competency between male and female teachers.

Table 5: Difference in Teaching Effectiveness among Government, Aided, and Private Teachers

Source of Variation	Sum of Squares	df	Mean Square	F-value	Level of Significance	Result
Between Groups	—	2	—			
Within Groups	—	77	—	1.25	0.05 & 0.01	Not Significant
Total	—	79	—			

The obtained F-value was less than the critical value at 0.05 and 0.01 levels. Thus, the null hypothesis is accepted: no significant difference exists in teaching effectiveness across school types.

Table 6: Difference in Teaching Competency among Government, Aided, and Private Teachers

Source of Variation	Sum of Squares	df	Mean Square	F-value	Level of Significance	Result
Between Groups	—	2	—			
Within Groups	—	77	—	1.1	0.05 & 0.01	Not Significant
Total	—	79	—			

Similarly, the obtained F-value was less than the critical value. Therefore, the null hypothesis is accepted: no significant difference exists in teaching competency across school types.

Table 7: Relationship between Teaching Effectiveness and Teaching Competency

Variables	N	r-value	Level of Significance	Interpretation
Teaching Effectiveness & Competency	80	0.49	0.01	Moderate Positive Correlation

The obtained r-value was 0.49, indicating a moderate positive correlation. This suggests that teachers with higher teaching effectiveness tend to also demonstrate higher teaching competency.

Conclusion:

Teachers' effectiveness is a key determinant in the success of the teaching–learning process. Educators who are effective possess not only a deep understanding of their subject but also the instructional skills needed to engage students and facilitate meaningful learning experiences. Teaching competency includes planning, classroom management, communication, assessment, and interpersonal skills significantly contribute to students' academic growth and overall development.

The findings of this study reveal that secondary school teachers in Jalandhar district generally demonstrate moderate to high teaching effectiveness and moderate teaching competency. No significant differences were observed based on gender or school type (government, aided, or private). Furthermore, a moderate positive correlation between teaching effectiveness and teaching competency suggests that improvements in one area are likely to enhance the other.

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