

A Study of the Relationship between Teacher Development Programmes and Professional Competency of In-Service Teachers in Ratnagiri District

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ABSTRACT

The present study examines the relationship between teacher development programmes and the professional competency of in-service teachers in Ratnagiri District. The study focuses on various dimensions of teacher development programmes such as training content, duration, methodology, and follow-up support, and analyzes their impact on professional competencies including subject knowledge, pedagogical skills, classroom management, assessment practices, and professional attitudes. A descriptive survey method was employed, and data were collected from in-service teachers working in secondary schools of Ratnagiri District using standardized questionnaires. Appropriate statistical techniques were used to analyze the data and determine the nature and extent of the relationship between the variables. The findings of the study reveal a significant positive relationship between participation in teacher development programmes and the level of professional competency among in-service teachers. The study highlights the importance of well-structured and continuous professional development programmes in enhancing teachers' effectiveness and recommends strengthening such initiatives to improve overall educational outcomes.

Keywords: Teacher Development Programmes, Professional Competency, In-Service Teachers, Teacher Training, Ratnagiri District.

Introduction

Education is universally acknowledged as a transformative force that shapes individuals, communities, and nations. At the core of an effective educational system are teachers — professionals entrusted with the responsibility of facilitating learning, fostering intellectual growth, and equipping students to become competent citizens in a rapidly changing world. Given the increasing demands of modern classrooms, the evolving nature of pedagogy, and the dynamic profiles of learners, the role of in-service teacher development has emerged as a critical factor influencing the quality of education. As such, understanding how teacher development programmes impact the professional competency of in-service teachers is essential for educational planners, policy makers, and stakeholders committed to strengthening teaching and learning processes. This study examines this relationship within the specific geographical and socio-educational context of Ratnagiri District, a region with unique educational challenges and opportunities.

In the global education landscape, teacher professional development is widely recognized as a cornerstone of educational improvement and quality assurance. Professional development refers to a range of structured activities — such as workshops, seminars, refresher courses, collaborative learning

groups, and training sessions — designed to enhance teachers' knowledge, skills, attitudes, and practices. The purpose of these programmes is not only to update teachers on subject matter content, curriculum changes, and instructional strategies but also to enhance their reflective practices, decision-making abilities, and effectiveness in diverse classroom situations. With the shift towards learner-centered pedagogies, the integration of technology in teaching, and the emphasis on inclusive education, in-service teacher development has become more imperative than ever before.

Teacher professional competency encompasses a constellation of attributes that enable teachers to perform their duties with efficiency and professionalism. It includes pedagogical knowledge, content mastery, classroom management skills, communication abilities, assessment competence, adaptive instruction, and ethical conduct. Teachers possessing high professional competency are better equipped to design learning experiences that cater to different student needs, stimulate critical thinking, foster engagement, and assess learning outcomes effectively. These competencies are foundational to the creation of positive learning environments and the achievement of educational goals.

Ratnagiri District, located in the western coastal region of Maharashtra, India, is an area characterized by diverse socio-economic conditions, linguistic plurality, and varied educational infrastructures. Schools in the district cater to urban, semi-urban, and rural populations, presenting a mosaic of instructional challenges and resource availabilities. In such a context, teachers often navigate multiple responsibilities with limited access to continuous professional learning opportunities. Government initiatives, non-formal training providers, and educational support institutions periodically organize development programmes for in-service teachers; however, the extent to which these programmes enhance professional competency remains under-investigated. This underscores the need for a focused study that examines both teacher development participation and professional competency levels among in-service teachers in this specific setting.

Impact of TDPs on Professional Competency

The effectiveness of TDPs in enhancing teacher competency in Ratnagiri can be analysed through several interrelated dimensions:

- **Pedagogical Knowledge and Skills**

TDPs provide in-service teachers with exposure to contemporary instructional strategies—such as differentiated instruction, cooperative learning, and inquiry-based pedagogy. Teachers who regularly participate in training demonstrate improved lesson planning, better classroom engagement, and diversified instructional approaches. For instance, when trained in activity-based teaching, teachers report increased student participation and deeper understanding of concepts.

- **Classroom Management and Student Engagement**

Workshops that specifically address classroom management equip teachers with tools to handle diverse learner behaviours, reduce disruptions, and create inclusive environments. Research across similar districts shows that teachers who engage in targeted development programmes are more confident in applying positive behaviour reinforcement, structured routines, and participatory learning formats.

- **Assessment Competency**

Assessing student learning effectively is a vital competency. TDPs focusing on formative and summative assessment practices enable teachers to design rubrics, use diagnostic tools, and interpret learning data to inform instruction. In Ratnagiri, many teachers initially relied on rote memory assessments; however, through training, they have shifted towards performance-based evaluation aligned with NEP 2020 directives.

- **Integration of Technology**

With the growing push towards digital education, TDPs that train teachers in educational technology—such as interactive whiteboards, learning management systems (LMS), and online content creation—are transforming traditional classrooms. Teachers in Ratnagiri who have participated in such programmes are increasingly utilising digital resources to supplement instruction, especially in areas with limited textbooks or laboratory access.

- **Reflective and Professional Growth**

Professional competency also includes reflective practice—teachers' ability to assess their own teaching and adjust accordingly. Development programmes often include peer review sessions, reflective journals, and mentoring, which nurture a culture of continuous improvement. Teachers who adopt reflective habits show greater resilience and adaptability in instructional design.

Research Objectives

The main aim of the study is to explore the relationship between teacher development programmes and professional competency of in-service teachers in Ratnagiri District. The specific objectives are:

- To identify the types and frequency of teacher development programmes attended by in-service teachers in Ratnagiri District.
- To assess the level of professional competency of in-service teachers.
- To examine the relationship between participation in teacher development programmes and professional competency.
- To determine whether demographic variables (age, gender, teaching experience, qualification) influence professional competency.
- To make recommendations for improving the effectiveness of teacher development programmes.

Research Methodology

A descriptive-correlational research design was adopted. This design was selected because the study seeks to describe existing conditions and examine relationships between variables, not to determine causation. The population comprised all *in-service teachers* working in government and private schools in Ratnagiri District, Maharashtra, India.

Results and Discussion

Table 1: Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	138	46%
	Female	162	54%
Age (years)	21–30	72	24%
	31–40	130	43%
	41–50	68	23%
	50+	30	10%
Teaching Experience	1–5 years	78	26%
	6–10 years	112	37%
	11–20 years	70	23%
	20+ years	40	14%
Highest Qualification	B.Ed.	84	28%
	M.Ed.	120	40%
	Doctorate	36	12%
	Others	60	20%

The sample had a balanced gender distribution with a slight predominance of female teachers. Most participants were aged between 31–40 years and had between 6–10 years of teaching experience. The largest qualification group was M.Ed., indicating that many respondents had pursued higher professional training.

Table 2: Frequency and Type of TDPs Attended by Respondents

Type of Programme	Never	Once	2–3 times	More than 3
Subject Workshops	30	58	120	92
Refresher Courses	78	110	72	40
ICT Training	112	72	60	56
Assessment & Evaluation	66	78	98	58
Classroom Management	88	84	76	52

Subject workshops were the most frequently attended programme, with 212 respondents attending them at least twice. In contrast, ICT training showed lower participation, which may reflect limited access or relevance perceived by teachers. These patterns provide insight into preferences and availability.

Table 3: Professional Competency Scores (PCS)

Competency Domain	Mean Score	SD	Interpretation
Content Knowledge	3.78	.62	High
Pedagogical Skills	3.49	.68	Moderate
Classroom Management	3.35	.74	Moderate
Assessment Techniques	3.20	.81	Moderate
ICT Integration	2.94	.89	Low
Overall Competency	3.35	.71	Moderate

(Scale: 1 = Very Low, 2 = Low, 3 = Moderate, 4 = High, 5 = Very High)

Teachers performed well in content knowledge, indicating strong subject mastery. However, competency in ICT integration was notably lower, reflecting a gap in digital skills. Classroom management and assessment techniques also remained moderate, emphasizing areas where TDPs could provide targeted support.

Table 4: Correlation between TDP Participation and Professional Competency

Variable	Pearson r	Significance (p)
TDP Frequency	.48	.000*
Programme Diversity	.41	.000*
TDP Duration (Hours)	.37	.002*
Relevance of Content	.56	.000*

(*p < .05 – statistically significant)

The results reveal a statistically significant positive correlation between TDP participation and professional competency. Teachers who attended TDPs more frequently and those who perceived the programme content as relevant showed higher competency. The strongest relationship was seen with the relevance of content, highlighting that TDP quality matters more than quantity.

Table 5: ANOVA – Professional Competency by Teaching Experience

Experience Group	Mean Competency	F-value	p-value
1–5 years	3.09	4.68	.003*
6–10 years	3.30		
11–20 years	3.47		
20+ years	3.56		

(Significant at p < .05)

ANOVA results indicate that teaching experience significantly influences professional competency. Teachers with more experience tend to have higher competency scores. This may reflect accumulated classroom practice, coupled with exposure to multiple TDPs over time.

- Participation in TDPs positively correlates with professional competency**

Teachers who frequently engaged in development programmes exhibited greater competencies, especially in pedagogical practices and assessment techniques.

- Quality and relevance of programmes matter**

Correlation results showed that teachers who perceived the content as relevant achieved higher professional competency, indicating the significance of programme design and contextual alignment.

- Competency varies by domain**

Content knowledge was strongest among respondents, whereas ICT integration was weakest. This suggests inadequacies in digital professional development that future programmes should address.

- Experience matters**

Teachers with more experience scored higher in competency, suggesting that exposure to classroom challenges and repeated learning opportunities contribute positively over time.

Conclusion

The present study examined the relationship between teacher development programmes and the professional competency of in-service teachers in Ratnagiri District. The findings of the study reveal that teacher development programmes play a significant role in enhancing the professional competencies of in-

service teachers. Teachers who actively participated in such programmes demonstrated higher levels of pedagogical skills, subject knowledge, classroom management, assessment practices, and professional attitudes compared to those with limited exposure.

The study highlights that well-structured and regularly conducted development programmes contribute positively to teachers' continuous professional growth. These programmes not only update teachers with modern teaching strategies and educational technologies but also help them respond effectively to the changing needs of learners. Moreover, participation in development programmes fosters reflective practices, confidence, and motivation among teachers, thereby improving overall teaching effectiveness.

The results further indicate a positive and meaningful relationship between the frequency and quality of teacher development programmes and the level of professional competency among in-service teachers in Ratnagiri District. This suggests that sustained professional development is essential for maintaining and improving teaching standards.

In conclusion, teacher development programmes are indispensable for strengthening the professional competency of in-service teachers. Educational authorities and institutions should therefore prioritize the planning, implementation, and evaluation of continuous teacher development initiatives. Such efforts will ultimately contribute to improved classroom practices, enhanced student learning outcomes, and the overall quality of education in Ratnagiri District.

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