Factors Affecting Teacher Competency Among In-Service Teacher Educators

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Abstract

In-service teacher education plays an important role in improving the quality of education by developing and supporting teacher competency continuously. This study aims to investigate the effectiveness of professional development programs for in-service teacher educators, explore the key components of teacher competency, and examine the significance of ongoing support and mentorship in enhancing teachers' effectiveness. Using a descriptive research methodology, data were collected from both primary and secondary sources. Primary data included data from various in-service teachers' program across the nation focusing more specifically in the state of Odisha, while secondary data comprised research articles, policies, and program documents. Analysis was conducted through qualitative content analysis. The findings reveal the effectiveness of various professional development programs, such as Faculty Development Programmes (FDPs) and online platforms like DIKSHA, NISHTHA, SWAYAM, and NCERT, in upskilling teacher educators. These programs focus on enhancing pedagogical content knowledge, access to research, and instructional quality. The availability of research, pedagogical content knowledge, professional development, and high-quality instruction are all important aspects of teacher competency. These elements have a big impact on how well students learn, highlighting how crucial it is for teachers to always be learning and adapting. Moreover, government programs like PSSCIVE, CIET, PARAKH, and SCERT—which offer continuous support and mentorship—are essential in promoting teacher efficacy. These programs provide educators with tools, orientation sessions, and training programs to help them acquire the skills and competences they need. The study's result emphasizes how crucial in-service teacher education is to advancing teacher competency and, eventually, enhancing student outcomes. Education professionals can establish inclusive and productive learning environments that cater to the different needs of students by giving priority to continuous support, mentorship, and professional development opportunities.

Keywords: Competency, Pedagogical Knowledge, FDP, In-service Teacher Educators.

Introduction:

The term competence is widely utilized in the fields of human resource and management, often interchangeably with other terms such as competency and competencies. Despite their common usage in scientific literature, there remains ambiguity regarding whether these terms hold identical meanings or warrant differentiation in theory and practice. The competency-based approach has been extensively employed in organizational settings to gauge employees' levels of knowledge, skills, and abilities. Similarly, competence and competency exhibit varying interpretations, ranging from general to specific contexts. Sykes (1980) defined 'competency' and 'competence' as the ability to perform a task, highlighting their interchangeable nature. However, inconsistencies in the definitions of 'competence' and 'competency' exist within management literature, as noted by Burgoyne (1989), who also defined competence as the ability to perform a task (Arifin, 2021).

The term signifies the standard or quality as the outcome of an individual's performance, embodying a combination of knowledge, thought patterns, skills, and characteristics leading to successful performance. Competency studies are contextual and essential for specific job positions, with different professions necessitating distinct competency elements within the framework.

The imperative need to integrate technology, pedagogical, and content knowledge has been emphasized by Romeo, Lloyd, & Downes, 2013; Sweeney & Drummond, 2013; Sang, Tondeur, & Chai, 2014; Voogt et al., 2014.

Recognizing teaching as a dynamic profession necessitating continuous learning and growth, the concept of in-service teacher education acknowledges the need for ongoing support and training throughout educators' careers. This provision is essential for their professional growth, aiding educators in enhancing their subject-matter expertise, addressing diverse student needs, staying abreast of educational changes, and refining pedagogical techniques. In-service training affords educators opportunities to adopt efficient teaching practices, evaluation tools, and classroom management tactics, thereby facilitating adjustments to curricular modifications, evaluation procedures, and pedagogy. Moreover, it equips educators with the tools to differentiate education, meet individual student requirements, and foster inclusive classroom environments. Additionally, in-service teacher education promotes professional development, self-evaluation, and reflective practice, fostering collaboration among instructors and promoting peer learning within a robust professional community. Ultimately, the primary objective of in-service teacher education is to improve student outcomes.

Designed for the manpower development of the school system and the educational enterprise as a whole, in-service education is indispensable for enhancing teachers' effectiveness and efficiency. As emphasized in the National Policy on Education (2014), the quality of education cannot surpass the quality of its teachers (Osamwonyi, 2016).

RATIONALE OF THE STUDY:

After reviewing numerous research articles, dissertations, research papers, review papers, as well as platforms like DIKSHA, NISHTHA, and OSEPA, it was observed that many researchers underscored the importance of teacher competency among in-service teacher educators. While several factors influencing their competency, such as pedagogy and content knowledge, were acknowledged, there was a lack of emphasis on environmental factors, communication, and the government's role in enhancing teaching competency. Consequently, this study aims to explore the effectiveness of various factors in shaping teaching competency and assess the government's efforts in facilitating the development of teaching competency among in-service teacher educators.

OBJECTIVE OF THE STUDY:

1. To study the effectiveness of professional development programs for in-service teacher educators.

2. To investigate the key components of teacher competency and their combined influence on student learning outcomes.

3. To study the role of ongoing support and mentorship for in-service teacher educators.

RESEARCH QUESTIONS:

1. What is the effectiveness of professional development programs for in-service teacher educators?

2. What are the key components of teacher competency, and how do they collectively impact student learning outcomes?

3. What is the significance of ongoing support and mentorship in enhancing the effectiveness of in-service teacher educators?

DELIMITATION:

This study is delimited to in-service teacher educators of District Institutes of Education and Training (DIET), B.Ed., and Integrated B.Ed.-M.Ed. programs in Balasore district, Odisha, India.

METHODOLOGY:

A descriptive research method is employed to analyze the factors affecting in-service teacher educators. Data collection involves a combination of primary and secondary sources, with primary data obtained from various in-service teacher programs across the nation, particularly focusing on Odisha. Secondary data comprises research articles, policies, and program documents.

ANALYSIS AND DISCUSSION:

Research Question 1: *What is the effectiveness of professional development programs for in-service teacher educators?*

The Faculty Development Programme (FDP) aims to enhance the knowledge and skills of teachers across various disciplines, including Engineering & Technology, Pharmacy, Hotel Management & Catering Technology, Architecture, Town Planning, and Applied Arts & Crafts. This program offers financial assistance for upgrading knowledge and provides induction training opportunities. The FDP covers a wide range of areas such as technical education policy, new concepts, methods, techniques, theory and skills development, pedagogy, educational technology, motivation, communication skills, and management. It is designed to keep educators abreast of changing scenarios in technical education and to foster a competitive teaching and learning environment. The program not only promotes professional practices relevant to technical education but also motivates faculty members to achieve excellence in academic qualifications and personal development (AICTE, 2021).

Government initiatives such as DIKSHA, NISHTHA, SWAYAM, SWAYAM Prabha, and NCERT play a significant role in the development and upgradation of teaching competency among in-service teacher educators. These platforms offer various programs aimed at enhancing the quality of teaching and learning for both teachers and students. For instance, DIKSHA provides several programs for the quality development of

teachers and students, leveraging online platforms like SWAYAM, SWAYAM Prabha, and NIPUN Bharat (DIKSHA, n.d.).
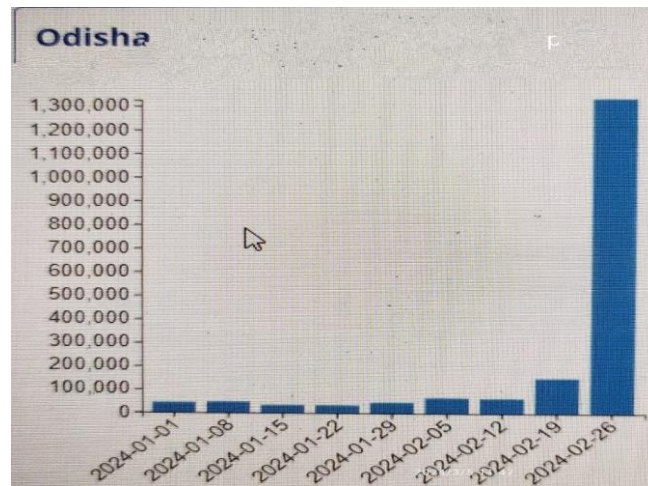

Figure 1: Enrollment ratio in DIKSHA

The data obtained from DIKSHA indicates the enrollment ratio between every week from January to February of the current year for learning in the state of Odisha. This reflects the active engagement of educators in continuous professional development activities facilitated by digital platforms like DIKSHA.

Additionally, NCERT integrates teaching content and methodology, offering long-term internships for teacher trainees and encouraging student participation in community work. In-service teacher education under NCERT encompasses lifelong professional development, ICT literacy, and the nurturing of teachers' self-help and professional development groups. It also extends support to educational leaders and managers (NCERT, n.d.).

Overall, these professional development programs and government initiatives contribute significantly to enhancing the effectiveness of in-service teacher educators by providing them with opportunities for continuous learning, skill development, and staying updated with advancements in education.

Research Question 2: What are the key components of teacher competency and what are their combined influence on student learning outcomes?

A vital component of the educational environment is Teacher competence which significantly impacts students' performance and the quality of instruction. Houstan (1987) defined Competencies in teacher education encompass the knowledge, skills, and values that a teacher-trainee must demonstrate for successful completion of a teacher education program (Nessipbayeva, n.d.). These competencies go beyond mere acquisition of knowledge and skills, emphasizing curricular knowledge, pedagogical skills, and values like humility, respect, empathy, interaction, leadership, planning, problem-solving, and resilience. Research has have explored diverse facets of teacher competence, emphasising its significance in moulding academic achievements. Furthermore, studies investigating the relationship between teacher competence and instructional quality have been carried out using tests of knowledge and cognitive skills (Gümüş, 2022).

The key components of teacher competence encompass various aspects that are crucial for effective teaching. These components include:

1. Access to Research: Teachers' access to research can enhance their professional competence. With this access, they can introduce "big research ideas" to their students' classes. Teacher research and enquiry play a crucial role in professional development, prepare them for a research-minded mindset, and encourage their engagement in research and inquiry in their professional contexts (Kirkwood & Christie,

2006). Still, this access is insufficient on its own, it must be placed in the context of a theoretical framework for teacher competency (Jones, n.d.).

2. <u>Pedagogical Content Knowledge</u>: Teachers' pedagogical content knowledge, professional beliefs, work-related motivation, and self-regulation are aspects of their professional competence. It equips teachers with various teaching methods and strategies to cater to diverse learning styles and needs (Channa & Sahito, 2022). Studies have shown teachers' content knowledge and pedagogical content knowledge (PCK) significantly improves student progress and achievement (Baumert et al., 2010; Chang et al., 2020).

3. <u>Professional Development</u>: One of the most important aspects in explaining student learning is teacher competence. To deal with regular problems, teachers must possess the necessary knowledge and abilities. Throughout the initial years of professional development, the framework for teacher competency may shift (Jones, n.d.). Teachers can acquire new topic knowledge, teaching techniques, and tactics related to their field through professional development (Kang et al., 2013).

4. <u>Instructional Quality</u>: There is a connection between student learning, instructional quality, and teacher competency (Jones, n.d.). Studies have found that teacher competence positively impacts student interest and achievement, with teaching quality mediating these relationships (Fauth et al., 2019). Teacher knowledge and skills are prerequisites for professional success and represent an important goal for teachers' professional development.

This review has examined the complex idea of teacher competency and how important it is to supporting students' academic performance. Several key components were identified as essential for effective teaching: access to research, strong pedagogical content knowledge, ongoing professional development, and high-quality instruction. fostering teacher competency is paramount to ensuring a thriving educational environment. By prioritizing access to research, continuous learning opportunities, and the development of strong pedagogical knowledge, educators can be empowered to create engaging and effective learning experiences that ultimately set students on the path to success.

Research Question 3: *What is the significance of ongoing support and mentorship in enhancing the effectiveness of in-service teacher educators?*

Continuous mentoring and assistance play a pivotal role in improving the efficacy of in-service teacher educators in several ways. Government initiatives have been instrumental in fostering teaching competency among educators, exemplified through various schemes:

1. <u>PSSCIVE</u>: The Training Programmes (TPs) conducted by PSSCIVE address specific needs identified by States/UTs in collaboration with state vocational authorities. These programs cover emergent issues in the vocational education sector, such as ICT integration, entrepreneurial skills development, and vocational skills enhancement. Specialized training programs focus on developing master trainers in vocational pedagogy and vocational teachers for specific job roles (Goswami, n.d.).

2. <u>CIET</u>: CIET facilitates conferences and platforms aimed at providing interdisciplinary collaboration opportunities for educators, practitioners, and researchers. The objective is to discuss recent innovations, trends, and practical challenges in fields like ICT in Education and Training. CIET emphasizes continuous professional development of teachers and school leaders, digital literacy, and the integration of technology into curriculum transaction (Technology, n.d.-a).

3. <u>Orientation of State Resource Groups (SRGs)</u>: The National Education Policy (NEP) 2020 emphasizes the development of e-content by various educational bodies like NCERT-CIET, CBSE, and NIOS. These e-contents are uploaded onto platforms like DIKSHA for teacher professional development. CIET-

NCERT conducts virtual training programs to familiarize SRGs with the development and dissemination of quality e-content, bridging the digital divide (Technology, n.d.-b).

4. PARAKH: PARAKH aims to build systemic capacities and standardize assessments across various education boards in India. It organizes training programs for teachers to understand competency-based approaches and align assessments with defined competencies. Additionally, DIETs engage in building teachers' capacity to implement competency-based teaching and assessments effectively (Samagam, n.d.).

5. SCERT: In 2021, SCERT undertook the reimagining of Teacher Education for over 80,000 teachers in Delhi based on the recommendations of NEP. This involved various stages, including needs analysis surveys, research, focus group discussions, and the launch of a Teacher Competency Framework. SCERT's initiatives aim to provide resources, support, and training programs to help teachers effectively implement competency-based approaches in their classrooms (SCERT, n.d.).

Teachers leverage the knowledge gained from professional development programs in their planning, teaching, and assessment practices. They collaborate with subject experts, communicate clear learning objectives, make connections to prior knowledge, use assessment data to improve their practice, and adapt their approaches based on feedback from various stakeholders. Additionally, teachers and students apply social skills of collaboration and communication, fostering a supportive learning environment (Samagam, n.d.).

CONCLUSION:

Ensuring the continuous professional development of in-service teacher educators is crucial to maintaining their competency in the ever-evolving field of education. This study has examined various factors influencing the competency of in-service teacher educators, including continuous support and mentoring, professional development programs, teaching experience, and the integration of instructional techniques and pedagogical knowledge. Professional development programs play a significant role in enhancing the pedagogical methods, knowledge, and skills of teacher educators, enabling them to stay abreast of emerging trends and best practices in education. It is imperative that these programs are relevant, research-based, and provide opportunities for active learning.

Moreover, the competency of in-service teacher educators is further augmented by their teaching experience and subject matter expertise, enabling them to effectively apply theoretical knowledge in the classroom and contextualize it appropriately. Continuous support and mentoring offer invaluable opportunities for personal growth, skill enhancement, emotional support, and community building, thereby enhancing teacher effectiveness. The development of in-service teacher educators' competency requires a multifaceted approach that encompasses comprehensive professional development programs, ongoing mentoring and support, and a solid foundation in instructional techniques and pedagogy. By investing in the professional development of teacher educators, education systems can improve student outcomes and elevate the overall standard of education.

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