

IMPACT OF INSERVICE TEACHERS TRAINING PROGRAMMES ON CLASSROOM TEACHING LEARNING PRACTICES: A SYSTEMATIC REVIEW

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Abstract

In-service teacher training programmes play a crucial role in enhancing teachers' professional competencies and improving classroom teaching-learning practices. The present study systematically reviews existing literature to examine the impact of in-service training on pedagogical practices, teacher effectiveness, and student learning outcomes. Relevant studies were identified through a comprehensive search of peer-reviewed journals, reports, and educational databases, focusing on research conducted in the last two decades. The review highlights that well-structured and sustained training programmes contribute significantly to the development of pedagogical skills, subject knowledge, and reflective practices among teachers. Additionally, collaborative learning, active participation, and job-embedded training approaches were found to positively influence classroom engagement and instructional quality. However, the findings also reveal several challenges, including inadequate needs assessment, lack of follow-up support, and limited contextual relevance of training programmes. These constraints often reduce the effectiveness of such initiatives, particularly in developing educational settings. The study concludes that for in-service training programmes to be effective, they must be continuous, context-specific, and aligned with teachers' professional needs. Implications for policy and practice are discussed, emphasizing the importance of designing comprehensive professional development frameworks to improve the overall quality of education.

KeyWords: In-service Teacher Training, Teacher Education, Educational Setting, professional competencies, Pedagogical skills.

INTRODUCTION: Since over period of time education has adopted many new methods, techniques, theories and curriculum. To adopt these changes teacher requires in-service training (IST) to meet these changes (Demirtaş, 2010). In other words, it can be said that the employed teachers require to be familiar with new developments in educational technologies with the help of IST. On the basis of different reports it has been identified that the excellence and eminence of the school hinges on teachers' capacity and their specialised skills (Borko, 2004, Garet, Porter, ADesimone, Birman, & Yoon, 2001). As it has been mentioned by the Castillo, Fernández-Berrocal, & Brackett (2013) that "For the positive development of students for both academic and non-academic teachers, play a vital role. Effective teachers promote positive interactions and influence a wide range of student-level outcomes, including cognitive, emotional and social functioning". It has been witnessed by the field experts that the triumph of the teachers is low if they are not coming under the policies of education. Thus, it can be said that IST is one of the key features to carry successful education at schools, it helps the teachers to increase their professional qualities. Birman et al. (2000) stated that in-service teacher training programs help the teachers to enhance their professional skills with

the current developments in education. Hewson (2007) found that the IST programs ensures the usefulness for the teachers in the classroom and also increases the students' success.

The IST method of teacher training helps to improve an immediately proportional relationship among the instructors and the teachers participated in the training program. In this concern, Damar, (1996) stated that the more teachers take part in in-service education packages, the greater scholar success can be attained.

In this regard, it is important that IST program can be planned and executed well in order to get the proper benefits. Else, time and monetary losses arise. The Office for Official Publications of the European Union, (2010) report affirmed that, there are some cases where IST courses were not handled properly for example it has been mentioned in the report of the University of Twente, Netherlands. To achieve more success in-service training course the Turkey government agencies and scholars had taken initiative to effectively utilise the training. The major problem generally witnessed in this course is they couldn't go apart from the needs-based analysis and identifying problems. Alternatively, need based evaluation, performed without taking professionals opinion, misled to the individuals who arrange IST courses (Balta, Arslan, Duru, 2015). In this need analysis it has been found that it doesn't include the knowledge of the field, it shows that evaluation was now not complete or good enough. Günbay and Taşdoğan (2012) stated that, class teachers and subject teachers, who participated in the study carried out by means. Particular the matters of IST courses that they would really like to take part as such: "promoting of new programs, techniques and strategies, speed reading, computer programming, special education, English coaching, emotional intelligence and individual improvement, Commenius-Socrates, verbal exchange, drama, country wide placement test, child rights, lecture room management, making mathematics an amusing course, psychology, discipline and countrywide education. any other observe, which can be an example for an incomplete desires evaluation, is the study carried out through the government for the class teachers (Balta, Arslan, Duru, 2015)."

According to the different studies in related to teacher training the course should include-new methods in education, strain coping techniques, growing and the use of dimension and evaluation equipment, teaching children whose suing different types of games, use of recent academic technologies, reactions determined inside the households of children in need of distinct schooling and their answers, characteristics of autistic and talented kids who show studying problems, lack of interest and hyperactivity disorder, and dimension and evaluation for institution studying activities (MEB, 2008). The endorsed programs, as can be understood, are far from containing content material information which is one of the capabilities of effective professional improvement programs.

A popular in-service training program needs to enhance the pedagogical knowledge of teachers which are the signs of classroom activities (Blank and Alas, 2010). Some scholars like (Birman, Desimone, & Porter, 2000; Darling-Hammond,1996; Tanriverdi & Günel, 2012; Hawley & Valli, 1998; Loucks-Horsley,1995; Yoon et al., 2007; Corcoran, 2007; Desimone, 2009; Guskey, 2003; Joyce & Showers, 2002) mentioned that the in-service training course or programs that are "(a) delivered in conductive setting, (b) enabling collective participation, (c) making active learning possible, (d) increasing content knowledge, (e) coherence, (f)

intensive (the courses, which are under 14 hours, are considered to be ineffective according to the literature), (g) sustained, (h) long duration and (i) job embedded) (cited in Balta, Arslan, Duru, 2015).”

In-Service Teacher Training in India: Schools are one of the most important pillars of the society as they not only provide knowledge but also inculcate good habits among students-due to this we have special respect in our society. For the development of the quality of the teacher education, National Council for Teacher Education (1998) stated that “in any educational program a teacher plays a key role. For successful implementation of the educational process, a teacher holds the key responsibility- it is often said that for the secure future of the nation, it is crucial to invest in the preparation of teachers.” People should not over emphasise of the significance of capable teachers to the nation’s school system. In the National Curriculum Framework (NCF) in the year 2005, it is emphasised that both initial and continuing teacher’s education perform a vital role for the holistic empowerment of the teacher. In this concern it is important to define the concept of teacher education. The NCTE has (1998) defined the teachers’ education as “Teacher education is a programme that is related to the development of teacher proficiency and competence that would enable and empower the teacher to meet the requirements of the profession and face the challenges therein”. Moreover, in Goods Dictionary of education, the teacher education is defined “Teacher education means, all the formal and non-formal activities and experiences that help to qualify the teachers to take the responsibilities for the development of the students and of the entire educational system”.

Teacher preparation was called teacher training in 1906-1956. During this period, teachers were prepared as technicians or mechanics. At that point of time, teacher education had limited outlook. As it has been mentioned by W.H. Kilpatric (1951) “Training is given to animals and circus performers, while education is to human beings”. The researcher further stated that “Teacher education encompasses teaching skills, sound pedagogical theory and professional skills”.

Different Approaches to In-service Teacher Training in India: In 2017, a survey conducted by franchise India, found that because of teacher’s absence and negligence in school classroom almost 65 percent of the teacher resources are wasted in India. The other reason might be that in many school system when the government is providing fund for the development of teaching learning practice, due to in-proper teacher training programs, the teaching resources are not in use or becoming outdated, especially in government school system. On the other hand the private schools are not interested to improve their new resources to develop the teaching learning practice that according to the demand of the situation and time as they want to manage the school system with minimum expenditure and maximum gain/profit purpose. Future of the nation depends upon these themselves depend upon their teachers who provide them education. Teachers and their skills and competencies in the classroom are the single most important components in supporting a system of quality education. In this concern, Bose (2017) mentioned that in Indian sector, it is observed that unfortunately, in present scenario, the expectation of the society are so high that no pre service or in-service teacher education can easily cope with them. The teacher not only provides knowledge and culture to her students but also play a role of a ‘change agent’ in the

society. Indian constitution reflects its commitment to the freedom of thought and spread of knowledge among its citizen. It is also observed that teacher absenteeism is common in India (Bose, 2017). Moreover, according to Bose (2017) only half of the teachers who are actually present in the class room teach effectively. The major factor for non-performance of the education system in our country is the non-accountability of the teachers which itself depends upon a number of factors like—corruption, salary structure, strength of teacher unions and selection of teachers.

Effectiveness of In-service Teacher Training in India: Every year a number of teachers graduate from District Institute of Education and Training (DIET). Many times, the circumstances they face in classroom teaching are totally different from what they experience in their teaching practice. Moreover, situation is worst in low-cost government schools—where a large number of students are the first-generation learners who do not get any support in their homes. The performance of many students is affected by lack of proper nutrition in their diet and the low-income levels of their families. We need a proper professional development program so that a teacher can deal with all these issues effectively (Samhita, 2016).

According to a study on ‘Primary Education in India’, one of the most important factors which affects the learning outcome of children is the pedagogy chosen by a teacher to deliver a lecture in the class. Though a significant progress has been made in many aspects like access in research in the field of education in India, still a lot more yet to be achieved. Things will change if teachers are trained properly and if there is an improvement in governance (Muralidharan, 2013). There are two broad areas in teacher education in India that’s training prior to the service and training during the service. While the first one is career oriented preparation, the second one keeps the teachers updated in their subject areas. But there are a lot of problems in the correct implementation of both the models.

Pre-service teacher education: Desirable importance is not given to the pre-service teacher education in India. According to NCERT, the major problem lies in the short duration of the degree programs, very less practical experience, inability to learn through self-reflection and less understanding of prevalent social problem (Bhog,& Ghose, 2014). According to NCERT and the Verma Commission (2012), the education programs only provides basic fundamental skills to the teachers which at many times affects the practical application of their learning. The psychological aspects of how children learn are also not fully addressed by the curriculum (Samhita, 2016). Hence, the ‘practical experience’ of the curriculum must be reorganised so that teachers are unveiled to the inevitable circumstances of teaching. The limited duration of the program does not give enough scope to the teachers to inspect their learning. Also, at many times, practical experience is at not at all satisfactory. A mentorship program for student-teacher would help in understanding the common problems faced in the classroom and would support the trainee teachers (Chennat, 2014).

It is the students who are finally affected by the inadequacies which are prevalent in pre-service teacher training program. According to study conducted in Andhra Pradesh, there was a very little difference in learning outcome of students taught by two teachers who have done a professional course and the two teachers who have only undergraduate degree (Singh, 2013). Then what is the benefit in going for a professional degree if it does not

improve teaching method. In DIET one of major problem is lack of human resources (Sujatha, 2015).

Impact of In-Service Teacher Training on Classroom Teaching Learning Practices: In the past two decades, professional development of teachers has gone through a major change due to the complexities in teaching. Now a days, professional development doesn't stand for skill development and knowledge acquisition only. Darling-Hammond and McLaughlin (1995) had mentioned in their article on policies which support professional development that ““The vision of practice that underlies the nation's reform agenda requires most teachers to rethink their own practice, to construct new classroom roles and expectations about student outcomes, and to teach in ways they have never taught before”’. They said that both teaching and learning should take place simultaneously in a professional development program. Now visions of learning should be developed for teachers. A fundamental change in the institutional structure is required for the proper functioning of this model of development.

The program used the action research strategy which was based on the model of Elliott (1991). This strategy prescribed various tasks for teachers. Firstly, teachers needed to follow a five-step plan involving formulation of an overall idea, exploration of that idea, and creation of a general plan, then planning implementation and evaluation of specific actions for further improvement and lastly creation of a case study elaboration a teacher's specific action research, including an end to end plan to ensure completion of task. The next task was an interesting one where teachers would help each other by functioning as each other's' critical friends. Their main function would be to support each other to reflect on what they did something and why they did it.

The fourth task, considered as the professional standard was where teachers introspected to consider a number of aspects of the research process. According to researchers (e.g. Ponte, 2002a, b; Carr & Kemmis, 1986/1997; Elliott, 1991; Zeichner & Noffke, 2001) the major aspects of action research include (i) *Vision*- on what assumptions is my research based upon and how can they work within the framework, including the school, authorities, etc. (ii) *Evidence*-is there any confirmation that my assumption are correct and what is the likelihood of achieving intended outcome from my actions? (iii) *Interpretation and explanation*-How do the facts generated during the research communicate the need to tweak my action with a changing situation and is there any connection between them? (iv) *Dialogue*- Is there a way to involve others (Pupils, teachers, students etc.) in planning, implementing and evaluating my activities. (v) *Improvement*-How can I change be considered as an improvement and for whom? (vi) *Ethics*- Are my actions ethical and if not how can I make them? If possible for teachers to improve their overall teaching framework through action research. This is based upon the idea that development and application of professional knowledge work as a scaffold—they build on one another. The development and application of this knowledge from the basis of a continuous process for which teachers have to take personal responsibility. They apply this acquired knowledge every day and based on the results, they add another scaffold to their existing knowledge. The chain continues in this sense that they keep playing their knowledge and keep improving it. A point to be noted here is that there is a slight difference between how academics use this approach versus teachers. Academics try to build

their knowledge around reality. However, teachers have to develop knowledge around specific sometimes complex and uncertain situation. According to Elliot (1991), 'Professional' knowledge consists of practical insight and understanding that enable teacher to achieve the set objectives-educational and moral. In practice. This point of view is in line with a contemporary thought within and outside the educational landscape. A few names to mention here include Anglo Saxen-tradition including Dewey (1929/1984), Lewin (1946), Stenhouse (1975), Carr and Kemmis (1986/1997), Grundy (1987/1995), Elliott (1991) and Tabachnickand and Zeichner (1991).

There have been a lot of publication on action research in the last 30-50 years. However, there is a doubt if any systematic study has been done to the progress of specialized knowledge with the help of action research conducted by the teacher facilitator or teachers in this process to facilitate the process. The study described here aims to fill this gap. The problem at hand concerns how and what extent can teachers develop professional knowledge with the help of action research. It also defines how and to what extent the facilitation affects their knowledge. We will look at this question in detail in the next section.

Let's talk about this concept in light of Riedel's (1977) model. Riedel's (1977) model concerns pedagogy as a branch of educational science. However, his model can also be used to analyse the development of professional knowledge of teachers through action research. He defined professional knowledge as that knowledge which teacher acquire to serve a certain purpose to deliver certain responsibilities. Teachers acquire this knowledge through praxis. The professional knowledge that is acquired through praxis is easily distinguishable from am general kind of knowledge which is based on simple theory and techniques. This kind of knowledge which is based on theory and technique is different from insight and understanding we has discussed earlier. This is the beginning level of knowledge that teachers gain through learning but not practicing. It is to be noticed here that educational literature does not strictly distinguish between theory and technique. According to Riedel's (1977), it could be because both are form of systematic knowledge –regular knowledge. Theory primarily helps in understanding how different phenomena are related in different situation. For example –research confirms that the so far the students feel the higher is their progress in learning. Techniques on the other hand, is about knowledge around certain specific situations. Both theory and technique directly influence practice. Techniques does not focus on any specific objective; however, praxis exerts a direct influence on practice. For example, students should feel safe in my class for which I need to create a safe environment of those goals that the teachers take the responsibility. This involves purposeful intervention too. For instance when teachers try to teach theory study something they make certain choices to achieve the desired result.

As one can tell, both 'Theory' and 'Techniques' can be used in this case, but their specific use does not encompass 'Praxis'. Praxis arises in specific instances- limited in both time and space—where teachers function in line with their purpose with complete responsibility for their action (Kessels & Korthagen, 1996). Research shows that one can gather insight into professional knowledge through a meaningful interaction with other involves parties-students, colleagues and authorities (Fenstermacher, 1994; Kessels & Korthagen, 1996; Sachs, 2003).

Teachers' educators use their general knowledge to gather ideas for plan their activities in the classroom. However, the point to be noted is that this knowledge cannot be used in specific situations. According to Tom and Valli (1990) "Academic research can be a source of insight, a way of transforming how the practitioner perceives teaching and other educational phenomena. In the end, the decision on which knowledge to use and how to relate this knowledge to practice is seen as being a decision rightfully made by the practitioner." Riedel's (1977), also believes that we can connect praxis with how facilitators facilitates. It is believed that facilitator cannot transfer their professional knowledge about teaching to other; however, they can help other facilitators to build their own knowledge through praxis. A situation limited in time and space can help them in interaction in this scenario involves a certain level of exchange i.e. a reciprocation between the teachers who are sharing their professional knowledge with others. The question we should now think about is the kind of insights teachers should develop and the process to do that. There are three domains in which teachers develop knowledge and two levels in which their knowledge can relate.

Riedel's (1977) differentiated these three domains namely the ideological, technological and empirical domains of knowledge. He assumed that knowledge in these domains is acquired on its own if teachers have to act with the purpose and to be responsible for their own actions.

Ideological domains include insights into teachers' education and moral norms and values. It also focuses on the specific objectives derived from these norms and values. On the other hand, technological domain covers the insight into educational tools, techniques and methods. Lastly, empirical domain of knowledge focuses on the connections between phenomena in the educational reality.

Riedel (1977) developed these domains of knowledge on the basis of the concepts of 'demonstration' and 'consequences.' By demonstrations, we refer to certain aspects of education that should be easily observable. For example, teaching methods used by teachers can be noted easily. In case of 'consequences' these are influences of education on students which are not always observed directly. For example, how teachers' actions can affect students' motivations which can be educated from the student's behavior. We can relate demonstration' and 'consequences' with the three domains of knowledge. First the ideological domain of knowledge—which includes objective based on the norms and values which teachers want to achieve. In other words we can say that, it includes their desired effects of their teaching. Second, the empirical domain of knowledge—includes teachers' cognizance about contemporary educational reality. Thirdly, the technical domain of knowledge—includes teachers' knowledge of methods, techniques and approach which the use in order to achieve their objectives.

In action research the teachers are taken as 'clients' when they are performing their role as teachers. In the first level of knowledge, the method adopted by teachers to enhance the knowledge of 'clients' through the action research—ideological, technological and practical experience in their own knowledge sphere. The second level of knowledge developed as 'clients' through action research facilitation to the school teachers. The teacher apprehension skill based on their integrated knowledge and professional activities. The teachers' knowledge can be seen from three domains the ideological, technical and practical. The

teachers' perspective and understanding develops on the basis action knowledge, research, experience and training.

The teachers' participation in the action-based research represents the choice they make on day to day basis. Teachers are also part of society, where the natives, family, colleagues, government also have hope for the education. This hope from the social community play key role to establish the framework, but teachers make their explanation of these structure. On the other way it can be said that the teachers always contribute their decision on independent basis (Eraut, 1994, Hargraeves, 1998). It means that the one's own decisions are based on their own agenda and objectives. It is always influenced by own ideology, technical insight, practical information and knowledge. Thus on this basis, it can said that the teacher builds their perception on three realm of knowledge; *first* the more they exercise, *second* their freedom of choice by linking the objectives of the others and *finally* their own objectives (Elliott, 1991).

At last it can be said that teachers also use their general knowledge to perform their own action research. Moreover, Rudduck & Hopkins (1985) mentioned that teachers can't utilize their skills but they also use the assets like hypothetical procedures that will reflect the ideas into the action. This means that teachers correlate the understanding of others analytically. Hence, it can be said that the teacher builds their understanding on knowledge, discussions and own ambitions.

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