

TEACHER PROFESSIONAL DEVELOPMENT AS A CATALYST FOR EFFECTIVE ELEMENTARY INSTRUCTION

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Abstract

This study explores the influence of teacher professional development (TPD) on effective instruction at the elementary school level. Using a quantitative survey design, data were collected from 100 teachers in Lahore through structured questionnaires. The study assessed teachers' perceptions of how professional development impacts instructional planning, instructional delivery, and classroom management. Data analysis, supported by descriptive statistics, showed that TPD significantly enhances teachers' ability to plan and deliver meaningful lessons, foster critical thinking, and create positive classroom environments. Findings indicate that when TPD programs are relevant, sustained, and practice-oriented, they strengthen teaching effectiveness and improve student learning outcomes. The study concludes that TPD is a catalyst for pedagogical innovation and recommends the institutionalization of continuous, context-sensitive professional learning opportunities.

Keywords: *teacher professional development, effective teaching, elementary education, instructional improvement, classroom management*

Introduction

Teaching at the elementary level requires more than subject knowledge; it demands innovative pedagogical approaches, effective classroom management, and sensitivity to diverse learner needs. In this context, teacher professional development (TPD) plays a transformative role. TPD is widely recognized as a mechanism for equipping teachers with updated instructional strategies, curriculum knowledge, and reflective practices.

Global literature emphasizes that high-quality TPD enhances teacher capacity to deliver effective instruction, supports classroom engagement, and improves student outcomes (Darling-Hammond et al., 2017; Desimone, 2009). However, many PD programs remain generic, one-time workshops, lacking sustained relevance and follow-up support (Kennedy, 2016). In Pakistan, this challenge is magnified by limited resources, underdeveloped training systems, and uneven implementation of education policies (Bashiruddin & Qayyum, 2020).

Background of the Study

Education in the elementary stage forms the basis of life-long learning and thus the quality of teaching in this stage becomes very important. Teaching in elementary level does not just involve delivery of subjects, but also the cultivation of critical thinking, problem solving skills as well as socio-emotional growth among learners in the younger age group. Educators, however, do not only

need excellent knowledge of the subject but also pedagogical skills and flexibility. Professional development (PD) has become an essential instrument to make teachers constantly refresh their abilities and coordinate their practices with the changing educational needs (Darling-Hammond et al., 2017).

Pakistan has had its share of challenges in the effectiveness of its elementary teaching, which have been initiated by problems like outdated teaching methods, lack of resources, and poor training opportunities to the teachers. PD programs tend to be very unsystematic and generic, and the teachers are not provided with concrete tools that they can implement in classrooms (Bashiruddin and Qayyum, 2020). Enhancing the PD practices could be the driving factor in changing the quality of instructions and closing the divide between the old-fashioned and the newest pedagogical practices.

Although the significance of PD is not undervalued, the program operated in many Pakistani schools is mostly 1-time workshops, not with continuity, relevance, and follow-ups. This creates a discrepancy between policy intentions and classroom practices. Therefore, teachers might find it difficult to cope with the changes in the curriculum, needs of the diverse students, and the new technologies. The proposed research identifies this as a problem by investigating the opinion of teachers with respect to the role of PD in instruction planning, delivery, and classroom management in elementary schools.

Objectives of the Study

The study aims to:

1. Examine how professional development contributes to effective teaching at the elementary level.
2. Explore the types of PD programs teachers participate in and their perceived impact.
3. Assess teachers' views on how PD influences instructional planning, delivery, and classroom management.
4. Identify challenges teachers face in accessing or applying PD opportunities.

Significance of the Study

This study demonstrates that TPD is relevant in improving effective teaching. The results will be useful to policy makers, administrators and school leaders in developing contextually relevant, sustainable and curriculum-based TPD programs. The study emphasizes the necessity of a change in the traditional workshop models toward the practices-based and constant professional learning systems by covering the views of teachers.

Literature Review

Leadership in school whether it is autocratic, transformational, instructional, or transactional leadership style, play a role in it. critical (and necessary) in executing and winning over TPD (Evers et al., 2016; Hallinger & Liu, 2017; He & Ho, 2017). Supervision and leadership is also a facilitating aspect of professional communities (Gast, Schildkamp, & Veen, 2017). A fundamental practice where school TPD is provided is through provision of school-based TPD. The administrators have the chance to be leaders to develop the capacity of a school and facilitate student learning (He & Ho, 2016). The most significant factor through which school leaders contribute to TPD is through positive support and involvement of school leaders. can influence the learning, results and betterment of students (Robinson et al., 2008). School leaders' commitment to TPD enhances teacher involvement in PD activities (Matsumura, Sartoris, Bickel, and Garnier, 2009). Fancera (2019) indicates that the school leaders should provide support and promotion to the delivery of TPD programs in order to concentrate on teacher growth. be able to achieve the

goals of a school. School leader support was detected in a study that was done in China. as having a positive effect on school-based TPD (Ke et al., 2019). The assistance that can be given by school administrators of TPD activities encompass the cost of funding in the activities laid down by teachers, giving teachers salary incentives, giving teachers a chance to grow and advance in terms of salary, long-term dedication to TPD, and resource and time supply (Badri et al., 2016).

TPD role in Gathering Faculty Development

The result of teacher institutions and teacher program is educational success and this is based on teacher teams who are efficient. professional development, the efficacy of the teachers can hardly be internalized (Kaushal, 2017). Several researchers found the positive effect of TPD on teacher quality (Bredeson, 2000, Darling-Hammond, Hyler, and). Gardner, 2017; Yue, Chen, Wang, & Liu, 2017). As reported by Darling-Hammond, Hyler, and Gardner (2017), a structured TPD implies a number of things that can be used to improve a school. Active learning and Active learning and. participating in building a collaborative working environment to be functional to facilitate school reform in enhancing teacher practice. and school improvement are some of the instances that can be referred to.

According to Wood et al., (2012), it is a complex issue. finding the successful methods of professional development. Nevertheless, the authors emphasized the role of reflection. on the improvement of professionalism as instructors. This professional learning, in turn, fosters responsiveness of 21 st century. student education requires and a lesson to policymakers (Darling-Hammond, Hyler, and Gardner, 2017; Chen, 2020). A In a study by De Vries, van de Grift, and Jansen, (2014), the relationship between greater participation in the use of more teachers in participation was positive. CPD and firm beliefs of student-oriented strategies that impact on decisions in learning. Well considered, prudently applied and long-term faculty development programs bring about the impression that teaching is a long-term process and exaggerate the impression. importance of continuing learning of the faculty (Brancato, 2003).

Abstraction of Teacher Professional Development.

The overall definition of teacher professional development (TPD) refers to ongoing, organized learning prospects that help to improve the knowledge of teachers, their pedagogical and professional skills, and identity. It includes both formal (workshops, in-service training, mentoring, and coaching) and informal learning by collaboration, reflection, and classroom-based inquiry (Avalos, 2016). There is unanimity among scholars that PD should be sustained, collaborative and content-based to bring sustainable changes in the teaching practice (Desimone, 2009).

International Views on Teacher Professional Growth.

TPD is considered one of the pillars of education reform all over the world and one of the most important factors of teaching quality. The PD systems in developed nations focus on lifelong learning, professional learning communities (PLCs), and evidence-based practices. The U.S. and European research demonstrates that, in case of PD maintained and context-related, the quality of teacher practice and student improvement is enhanced (Darling-Hammond et al., 2017). As an example, coaching models and mentoring models have been identified as more effective compared to the traditional workshops that are conducted once (Kraft, Blazar, and Hogan, 2018).

Teacher development is also important according to the international organizations. According to OECD (2021), the PD can enhance teacher autonomy, job satisfaction, and student outcomes. Likewise, UNESCO (2020) focuses on quality of teachers as the key to the realisation of the fourth

Sustainable Development Goal: Quality Education, and demands PD that is inclusive, equitable, and technologically oriented.

Characteristics of successful PD in the globe include:

1. Subject matter specificity: Training focused on specific subject areas (e.g. math, literacy, digital skills).
2. Active learning: Peer observation, lesson study, and role-play.
3. Duration and continuity: multi-session programs having long-term follow-up.
4. Collaborative models: inquiry cycles that are team-based and PLCs (Vescio, Ross, and Adams, 2018).

In summary, the global evidence base underscores that PD is most effective when it is practice-based, reflective, and embedded in school culture rather than isolated events.

Teacher Professional Development in the Pakistani Context

In Pakistan TPD role has been recognized, however its application has been faced with big challenges. Training of teachers has always been provided in the form of centralized workshops, which are of short duration, and their relevance is not related to its context (Bashiruddin & Qayyum, 2020). These programs do not have a follow up provision so that teachers can be able to convert training to classroom practice. However, recent research indicates potential results of PD in which PD has been localized and maintained. As an example, Qureshi (2022) concluded that the classroom management, lesson planning, and differentiated instruction of teachers who participated in continuous PD in secondary schools was better. There was also increased motivation and professional identity on the part of the teachers.

The Continuous Professional Development (CPD) Framework by the Government of Punjab at the policy level has been a significant step. The analysis of assessments has revealed an improvement in the content knowledge of teachers, the use of formative assessments, and student engagement (Akram and Malik, 2019). Nonetheless, there are still loopholes in surveillance, resource distribution and preparation of the trainers.

The difficulties that are normally observed in Pakistan are:

1. Resource limitations: Low budgets of the PD activities, particularly in rural regions.
2. Teacher workload: Teacher loads are high and this means that there would be limited time to engage in professional learning.
3. Generic design: Profiles of PD do not tend to capture the needs of particular schools or classrooms.

Leadership issues: Weak institutional support reduces program sustainability (Khan & Akhtar, 2021). Despite these barriers, there is growing recognition that PD can serve as a catalyst for reform. Locally designed, context-aware PD—especially school-based models—are more effective in changing teacher practice than imported or generic programs.

Theoretical Frameworks Guiding PD

Two models guide this study:

- Desimone's Framework (2009) Emphasizes content focus, active learning, coherence, duration, and collaboration as critical features of effective PD.
- Guskey's Model of Teacher Change (2002) Highlights that teachers are more likely to sustain changes when they see clear, positive impacts on student learning.

Together, these frameworks offer a robust lens for analyzing how PD influences teaching effectiveness at the elementary level.

Methodology

Research Design

This study employed a positivist research paradigm, quantitative research approach and a survey research design. A structured questionnaire with 15 closed-ended statements was distributed to elementary teachers in Lahore.

Population and Sample

The target population included female elementary teachers in Lahore public schools. A sample of 100 teachers was selected from five schools (20 from each).

Instrument

The questionnaire was designed on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). It covered three domains: instructional planning, instructional delivery, and classroom management.

Validity and Reliability

The instrument was reviewed by experts for validity. A pilot test with 30 teachers confirmed clarity. Cronbach's alpha reliability coefficient was 0.86, confirming high internal consistency.

Data Analysis

Data were analyzed using descriptive statistics (frequencies, means, and standard deviations).

Results

Table 1. Instructional Planning and Application

Sr. #	Statement	Mean	SD	Interpretation
1	Introduces applied knowledge	4.31	0.94	Teachers agree PD helps integrate applied knowledge.
2	Creates keenness by linking to real life	3.82	0.93	PD improves relevance of lessons.
3	Increases critical thinking	4.09	0.67	PD strengthens higher-order thinking skills.
4	Introduces specialized knowledge	3.94	0.68	PD enhances problem-solving teaching capacity.

Table 1 showed that teachers reported strong agreement that PD enriches their ability to make learning relevant, stimulate thinking, and integrate specialized knowledge.

Table 2. Instructional Design and Delivery

Sr. #	Statement	Mean	SD	Interpretation
1	Evaluates teaching materials continually	4.07	0.72	PD fosters reflective teaching.
2	Makes information meaningful via educational design	3.99	0.89	Teachers apply innovative designs.
3	Relates learning with prior/family knowledge	4.03	0.60	PD promotes contextualization of content.
4	Provides outlines for understanding concepts	3.88	0.87	PD supports concept-based teaching.
5	Uses suitable learning strategies	4.53	0.61	PD helps teachers adopt student-centered approaches.

The highest mean (4.53) indicates that PD greatly supports the adoption of appropriate teaching strategies.

Table 3. Classroom Management and Environment

Sr. #	Statement	Mean	SD	Interpretation
1	Creates suitable class environment	4.57	0.69	PD builds classroom management competence.
2	Uses principles for cooperation	3.82	0.63	PD enhances collaborative learning.
3	Creates positive atmosphere	3.86	0.92	PD improves class climate.
4	Keeps students informed of needed skills	4.25	0.74	PD develops student awareness and preparation.

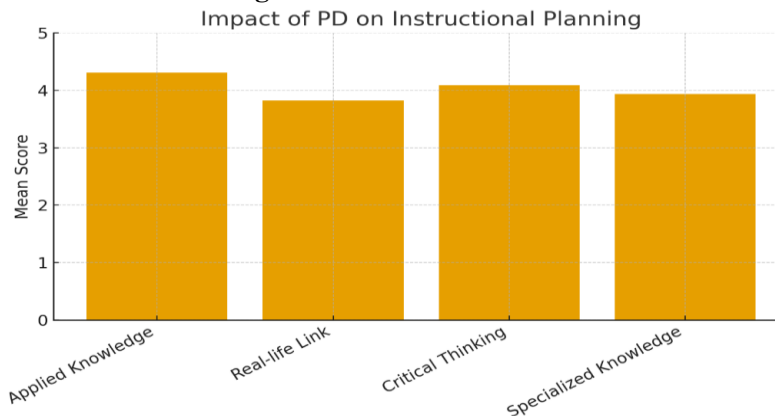
The highest mean (4.57) highlights that PD contributes significantly to creating effective learning environments.

Instructional Planning and Application

Teachers reported strong agreement that PD enriches their ability to integrate applied knowledge, link lessons to real life, stimulate critical thinking, and introduce specialized knowledge.

Figure 1.

Impact of PD on Instructional Planning

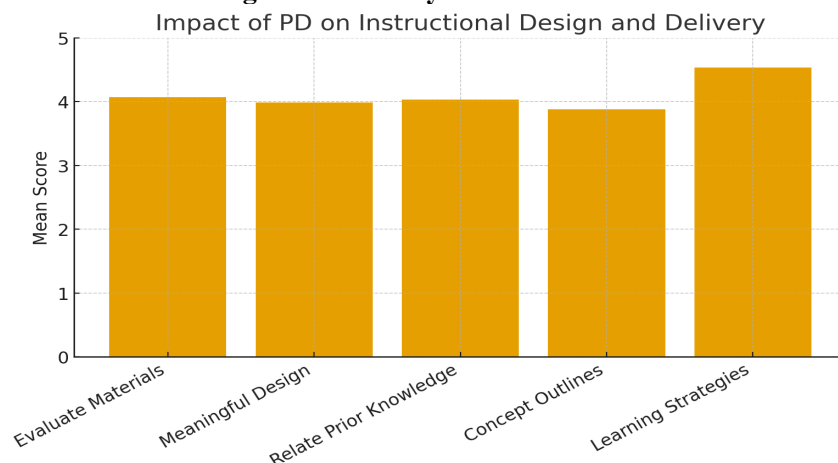


Instructional Design and Delivery

The highest mean (4.53) indicated that PD greatly supports the adoption of suitable learning strategies. Teachers also emphasized improvements in reflective teaching, contextualizing content, and designing meaningful instructional materials.

Figure 2.

Impact of PD on Instructional Design and Delivery

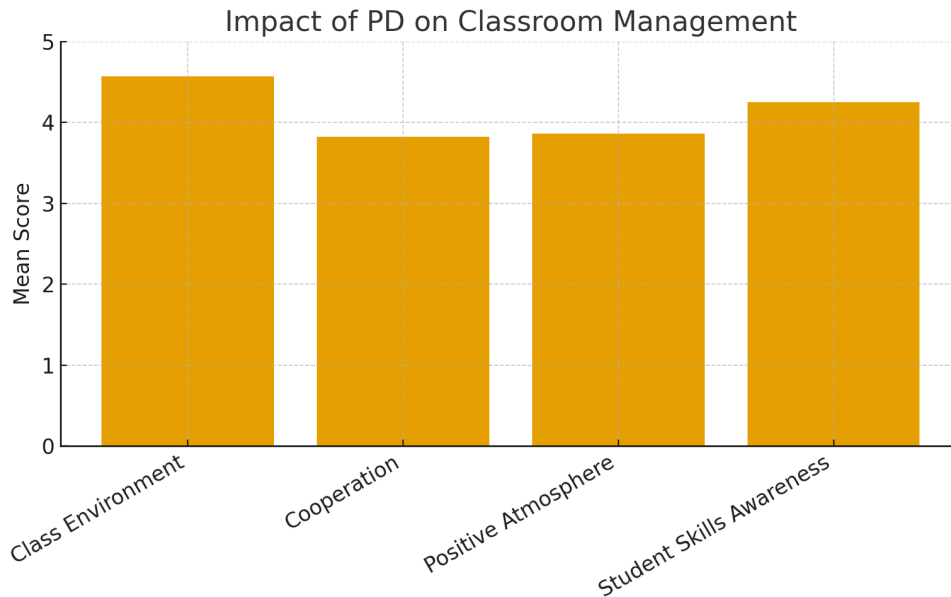


Classroom Management and Environment

PD was most influential in helping teachers create effective classroom environments (mean = 4.57). Teachers also highlighted its role in fostering cooperation, building positive atmospheres, and preparing students with necessary skills.

Figure 3.

Impact of PD on Classroom Management



Discussion

The results confirm that teacher professional development is a catalyst for effective elementary instruction. Teachers consistently reported that PD improved their instructional planning, enabled the use of meaningful strategies, and enhanced classroom environments. These findings echo Darling-Hammond et al. (2017), who emphasized that PD improves both pedagogy and student outcomes.

Desimone's (2009) framework is also validated: PD in this study was found effective when it involved content focus, active learning, sustained practice, and collaboration. The high mean scores across all domains reflect strong In creating opportunities of the staff members to design their own professional. learning through inquiry framework, it is of critical importance to enable the subjects to possess. discussion with each other and get feedback in a non-injudgmental manner. The inquiry process, which was full of collective discussions, enabled the teachers to exchange experience and advance. take the projects that another is doing as critical friends and associates (Bambino, 2002). This was also the main purpose of the researcher, who was not an administrator in the district. A sense of community came when the teachers of the district received experiences which they shared. would not otherwise have been comfortable in sharing. The reflections prove that teachers as well. it seemed to them significant to walk in inquiry milestones, between generation of topic and the sharing of learning; in order to provide time to think and reflect to teachers through establishment of a forum of shared accountability. teacher buy-in and practical application of PD learning.

Challenges remain, particularly ensuring contextual relevance and follow-up support. Nonetheless, the evidence suggests that investing in PD produces long-term improvements in teacher effectiveness, confirming its role as a catalyst for instructional transformation.

Conclusion

The study concludes that teacher professional development significantly enhances effective instruction at the elementary level. PD strengthens teachers' ability to design meaningful lessons, engage learners, and manage classrooms effectively. When PD is continuous, contextually relevant, and supported by leadership, it leads to sustainable teaching improvements and improved student outcomes. Conclusively, it became interesting to the administrator that at one point in time during the collaborative, accountable counterparts that the teachers used to think are referred to as the project. through their projects. They did not give self-guidance, reflection and feedback at the request of the. researcher-administrator facilitators. It was wonderful how, when the administrator came. in the facilitation as opposed to the supervisor role, inquiry occurred. Then the administrator could come out of the role and observe inquiry as a self-governing process of the staff members. The teachers accepted and well executed the cognitive process at such researching times.

Recommendations

1. Schools should embed PD into regular schedules rather than relying on occasional workshops.
2. PD must reflect local teaching realities and curriculum goals.
3. Encourage professional learning communities (PLCs) for peer mentoring and shared learning.
4. Provide funding, materials, and administrative backing for sustained PD.
5. Address digital literacy, inclusive education, and socio-emotional learning in PD programs.

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