



RESEARCH PAPER

Time and Opportunity for In-house Professional Development of Teachers

¹Dr. Ali Gohar Chang, ² Ayaz Latif Siyal * and ³ Sheema Gohar

1. Principal, IBA Public School Sukkur, Sindh, Pakistan
2. Subject Specialist – Biology, IBA Public School Sukkur, Sindh, Pakistan
3. Faculty Member Department of Education Begum Nusrat Bhutto University, Sukkur, Sindh, Pakistan

***Corresponding Author:** ayazlatifsiyal@ibacc.edu.pk

ABSTRACT

Professional Development (PD) courses demand that teachers learn and practice new roles and ways of teaching/learning and assessment to create independent, critically conscious and confident life-long learners. That translates into a long-term contextual PD process to focus on dynamic role of teachers. Here, the problem is; where do teachers find time and support for that higher-level change in their already busy schedules? This issue explores the vital concern for the coordinators, head-teachers that how to carve out time, opportunity, and other relevant resources that teachers need to realize and practice the vision of PD. Therefore, in-service PD courses were introduced in the past decades. But, again time has emerged as key issue on most of the analysis of school change. Hence, while working with the teachers, we could explore and interpret a unique in-service PD strategy that addresses additional challenges of implementing required educational standards. Findings include; the teachers are getting updated feedback and information to improve their classroom practices, and address day-to-day issues. It has filled the prevalent gap between the teachers and the coordinators/managers. The coordinators could implement the learning theories through the teachers who are the right resources to implement the theories to bring change. It has also helped the teachers to manage time to do multiple responsibilities. The implications of the study reveal that it can help the coordinators, teacher educators and managers to further explore, design and implement effective in-service PD strategies to meet high expectations.

KEYWORDS Learning and Implementation, Professional Development, Teachers Training

Introduction

Pakistan is a country where many educational initiatives are underway, supported by different funding agencies to bring about reforms in education. It has been observed that the focus of each reform is very specific in terms of type of schools, sections or disciplines to achieve their set targets. However, the analysis indicate that since 2000-2001 there is slight increase in literacy rate but the quality education which includes students' learning, teachers' professionalism, and institutional capacity building still puts a big question mark (Muzaffar, 2016 & Muzaffar, et. al. 2020). May be focus of most of the reforms relies on cascade models which is mismatching with emerging ground-realities and experiential thinking of key stakeholders. Among these key stakeholders headteachers/principals and teachers have basic responsibility to make students learn in socially secure school environment.

It is strongly suggested that the teachers are the most important stakeholders having an impact on students' achievements, and school principals have an overall impact on school improvement as they are the gatekeepers to welcome any reform. Our experience of working as teachers, coordinators, and the head-teacher attests that quality

of students' results is correlated to qualified teachers who are providing and exploring opportunities of learning for the students. But the teachers need support to improve their practices to update their own and students' knowledge. Therefore, one of the significant aspects of the school management is to provide classroom-based PD opportunities to the teachers which in turn could lead to the students' progress. In this regard, different schools/institutions/organizations explore different strategies for their teachers' professional development. Below contextual example is of the schools belongs to one of the largest educational organization.

The school established in 1943, is one of the oldest school of the Aga Khan Education Service, Pakistan (AKES, P). It accommodates Early Childhood Development (ECD), Junior and Secondary sections, library, computer lab, science lab, offices and staff room. Currently, the school is providing quality education to 450 students out of which 47% are girls (with 1:17). AKES, P provides quality educational access to more than 62, 000 students. It has become largest and oldest private educational network of institutions in Pakistan working for the holistic development of the students through enabling approach with plenty of contextual resources. With over 67% female enrolment the organization has played a critical and torchbearer role in the development of women in the regions. The core purpose of the organization is; *to reach out to inspire better live*. AKES, P continues to work with government, non-governmental organizations, and communities to develop models of public and private partnership, which plays a vital role towards implementing the innovative Educational Reforms all over Pakistan.

AKES, P believes teachers as the key component in "**achieving excellence**". To make the teachers personal and professional role models for the students and the community and to make them valuable for school, this system is providing a lot of long-term and short-term PD opportunities to the teachers. These PD courses include; in-house summer refresher courses, need-based workshops, seminars, lectures, conferences, and certificate, diploma and degree courses at different reputable institutions in Pakistan like M.Ed from AKU-IED etc. The organization also motivates and appreciates the creativity of teachers and provides opportunities to do research and explore different strategies not only to uplift themselves but also others. Along with this, the organization has developed workable flexible supportive mechanism to operate the schools through facilitating its teachers and other human resources at school level. However, in few schools of AKES, P the quality and outcome was questioned not only by the higher management of the organization but also the community when half of the students could not succeed to matriculate from AKU-EB. This poor performance was linked with the teachers' busy schedule, extra workload, parental over interference, teachers' turnover, and lack of sustainable policies and practices. The teachers rationalized that they do not find time and opportunity to plan and implement innovative instructional practices to improve the students' results. Hence, finding time and opportunity to improve results emerges as research problem in the context..

Literature Review

Professional Development Models / Systems

Professional Development (PD) refers to the development of a person in his or her professional roles and responsibilities to bring positive change. More specifically, "Teacher development is the professional growth teacher achieves as a result of gaining increased experiences and examining his or her teaching" (De Jong 2022 Glathorn 1995, p.41). Effective communication skills are essential for individuals embarking on their professional journeys, PD of a teacher includes; formal experiences such as attending

workshops, professional meetings and mentoring. It also includes informal experiences such as; reading professional publications or watching documentaries related to teaching professions (Ataullayeva 2024 Ganser, 2000). PD covers a broad range of activities designed to improve teacher practices, increase their knowledge, and change their attitude and perspectives toward teaching, while looking at the professional development one must examine that content of the experiences, the processes by which these occur, and the contexts in which it will take place (Schachter, 2015 and Cadima 2024 Gaser; Fielding and Schalock, 1985). Furthermore, there must be an active involvement of the teachers in the whole change process for the element of “ownership” of the innovation (Gulbahar & Guven 2008). In this, we think contextual PD should be adopted not only for the ownership but also it should provide opportunities to the teachers to implement their learning in their day-to-day classroom activities. These resources were generated through coherence between the PD, teacher pedagogical beliefs, and existing instructional routines, as well as observing student learning while trying out PD strategies. This could lead to the exploration of a new model, a revolution or a new paradigm of PD (Kathryn et al., 2024 Cochran Smith & Lytle, 2001; Willing & Lewis, 2000). There are different systems and models of PD. Ostinelli and Crescentini (2024) Cochran Smith and Lytle (2001) suggested three types of PD systems:

1. Knowledge-for-Practice (University-based researchers generate knowledge for teachers to improve their practice)
2. Knowledge-in-Practice (Knowledge that embedded in practice)
3. Knowledge-of-Practice (Teachers are provided opportunity to inquire, reflect and learn effective teaching)

Before adopting any of PD model or system, schools should be aware about different aspects of the school and these PD programmes should have to be considered within a framework of social, economic and political trends and events Perry and Booth (2024) and Woods (1994).

In-Service Professional Development

Successful professional development experiences have a noticeable impact on teachers’ work, therefore; recent researches have provided a new perspective of PD which has several characteristics:

1. It is based on constructivism rather than on a transmission-oriented model (McLaughlin and Zarrow, 2001)
2. It is perceived as long-term process (Ganser, 2000; Dudzinski et al., 2000)
3. It is perceived as a process that take place within a particular context (Abdal-Haqq, 1996; Ancess, 2001)
4. It is intimately linked to school reform (Guskey, 1995b)
5. It should treat teachers as a reflective practitioner (Cochran-Smith and Lytle, 2001)
6. It is conceived of as a collaborative process (Darling-Hammond and McLaughlin, 1995)
7. PD may look and be very different in diverse setting (Scribner, 1999)
8. Support from colleagues (Baker & Smith, 1999)

These characteristics imply that teachers should be treated as active learners and PD courses should serve as a series of related experiences rather than on-off presentations. The most effective form of PD is that it should be based in schools and is related with the daily activities of teachers and learners, PD should serve as a process of

culture building and not of mere skill training. It also implies that PD system should not consider teachers as empty vessels but it should provide an opportunity to the teachers to acquire new knowledge and experiences based on their prior knowledge. Moreover, PD models should provide an opportunity for meaningful interaction among teachers, administrators, coordinators and managers. Thus, these all characteristics proceed towards an idea of exploring an in-service PD Model.

Furthermore, recent in-service PD models are located within a school, program, or other local context as part of an effort to create ongoing professional communities (Egert et al., 2018, Egert et al., 2020 Hord, 1997). In these PD models “teachers do the talking, thinking and learning” (Fischer et al., 2018 Feiman Nemser, 2001, P1042), these models are rooted in the belief that students will benefit when teachers are knowledgeable about their subject matter and about the problems students face in their learning. When teachers study students’ work together with other teachers and try new tactics to address teaching and learning problems, students achieve more. Thus, these models viewed PD as part of the daily work of teachers, administrators and others in the system. From these PD models most common are mentoring, peer coaching and reflective practices.

Mentoring means guiding and supporting trainees to ease them through difficult transitions; it is about smoothing the way, enabling, reassuring as well as building self-confidence, self-esteem and a readiness to act as well as to engage in ongoing constructive interpersonal relationships. Mentoring is concerned with continuing personal and professional development (Boylan 2016 and Fletcher, 2000). In mentoring experienced teacher guides novice teachers through creating reflective, collaborative, cooperative environment to develop personally and professionally (Darling et al., 2017 and Anderson & Shannon, 1995). “Mentoring is generally defined as a process of establishing personal and professional contacts between mentors and mentees” (Deng and Turner 2024 and Memon et al., 2006). There should be network of support in school for the new mentor – a sharing of ideas, skills, and personal support that puts professional development of all staff at the heart of what a school does. The mentor must be capable of listening, sizing up the situation and offering appropriate action, advice and sometimes, silence. Good mentors will realize that they need to diminish the power differential between mentor and mentee and, although novice teachers may err like wayward pupils, telling one of like a child is not very productive! (Fletcher).

Another, recent PD model is Peer coaching, which fosters mutual growth of peers and frequent visits to colleague’s classrooms, enable us to get accurate picture of their typical performances (Ruhter and Karvonen 2024 and Pellicer & Anderson, 1995). This seems a symbol of good schools to foster collegial interaction among teachers and headteacher by culture of creating professional environment that facilitates the work of teachers.

Reflection derives from a cognitive perspective in which participants rethink their practice to learn from their experiences and helps them to cope with similar situations in the future. It is a process that helps teachers to gain insights into their practices. (Datnow et al., 2021 and Fullan 1999) argued that it is only through reflection at the personal, group and organizational levels that teachers will begin to question their practice and think differently about teaching and learning. “The recognition that reflection in and on action can facilitate understanding and change in practice has led to the development of the notion of reflective practice” (Darling 2017 and Schon as cited in Dean 2003). “Building on socio-cultural theory reflection is constituted as collaborative,

communicative action through which an object of reflection is constructed and expanded by the participants" (Anisur 2023 and Ottesen, 2007).

Although, these three in-service PD models have few of the characteristics mentioned above for an effective PD model but these have few limitations as in the case of mentoring, the selection of mentors could lead to the problems as sometimes mentors are more experienced but younger than their mentees, this could lead to ego problems. As mentoring is a very demanding activity and never to be undertaken lightly thus becoming time consuming activity for both mentor and mentee. However, in the case of peer coaching, there is a fear of revealing failures, creating trust may take time and teacher resistance. These are the few issues in initiating peer coaching as an in-service PD module. Likewise, in reflective practice time is the major concern, because few of the schools are syllabus-oriented and focus mainly on the course completion; sometimes it could lead to forced reflections (Bambang 2023 and Jane, 2005).

In this regard, there was a need to explore a unique in-service strategy that could utilize teachers' time effectively in their PD and that strategy could also provide opportunities to the teachers to learn and implement their learning simultaneously.

Role of headteacher/coordinator in teachers' PD

Typically, it is assumed that the headteacher / coordinator acts largely as administrators and are only responsible for the smooth-running organization with emphasis on keeping activities in the school manageable in the midst of pressures for change (Garcia et al., 2023 and Crowson & Poter Gehrie, 1980). Therefore, many of the PD models were explored which have the potential to take school administrators and their staff on a path of effective and sustainable organization (King 2011, Limerick & Cunnington, 1993) and which could lead towards providing an enhanced learning environment for both students and teachers (Whitworth and Chiu 2015, Rizvi 2008). But, still sometimes, it is thought that in few of the in-service PD models, as also discussed earlier like mentoring or peer coaching, teachers feel fear from the mentor as they are thought to have the power, therefore, there is a need to explore such a strategy that could fill the gap between the teachers and administrators of the school.

Impact of PD on students' learning

The impact of Professional Development on teachers is immense. Successful professional development experiences have a noticeable impact on teachers' work, both in and out of the classroom. In Pakistan, a study reveals that pedagogical content knowledge and pedagogical content belief can be affected by professional development programmes (Ventista and Brown 2023)(Warnick & Reimers, 1995). In this regard, some other studies showed that improved professional development could increase the levels of students' achievement (Falk, 2001 and Abrahams 2014)(Tatto, 1999; Grasso de Lean, 2001). This reveals that PD does not only impact on teachers' learning but also it helps the schools in achieving its ultimate aim i.e. improved students' learning and achievement, because, Young (2001) also found that PD generally strengthen teachers' knowledge, skills and dispositions. However, this is of importance: if it is a requirement that schools support children to become ready to face the challenges of the 21st century, then PD should positively impact on student achievement, since it should enable teachers to provide such effective support (Bacakova & Closs 2023).

Emergence of Research Questions

Being professional teachers, we could actively participate in many short-term and long-term PD courses offered by the system, which are helping us in our long run towards teaching and learning. But during those courses, there was lack of the implementation paradigm in our own context, no doubt sometimes during those courses we were also offered opportunities to visit different schools and implement our learning but still there was a need to study different theories and other paradox simultaneously with implementation, because time remained a major hindrance to implement learned PD strategies/models/theories. Therefore, in practice need emerges to explore a unique PD strategy which provides in-service classroom-based opportunities to the teachers, so that they could implement their learning into practices and also reflect on their praxis (changing theory into practice). To address the need and problem emerging research question is/could be;

- What are the perspectives of the teachers that how to find and utilize time and opportunity for the professional development in a private/ school, in Sindh, Pakistan? The subsidiary questions are;
- What are the possibilities to bring continuous improvement in classroom practices?
- What is /could be the contextual strategy to work as teacher educator to implement his/her learning in the classroom through the teachers?
- How can we fill the gap between teacher and headteacher/ coordinator/ manager to improve instructional practices?
- To what extent in-service PD strategy has an impact on students' learning?

Material and Methods

Brand and Moore (2011); Bodagan and Bicklen (1998, p.8) supported us to select qualitative research as it emphasizes on how "people construct meaning and describe what those meanings are", and "people are expert on their own experience so best able to report how they experienced a particular event or phenomenon" (Darlington & Scott, p.48). Keeping in view our own experience and expertise to construct contextual study, this approach enabled us to understand and dig in depth the contextual realities and the participants' views to address the issue. Our research question also helped us to study the case (coordination meeting practices at the school) to ask, explore, and interpret to make meanings. The question demands purposeful sampling to know the views of the participants. This all is related with qualitative research (Frei et al., 2021).

Furthermore, research question obviously clues the case, coordination meeting practices at one of the schools of AKES, P in Sindh. In this mechanism, coordinator or Head Teacher did pre-meeting (mutual planning) then mutually agreed classroom observations followed by coordination meetings to improve instructional practices, for one year. Two male and two female teachers voluntarily participated in the study to share their perspectives.

Data Collection and Data Analysis Methods

Semi-structured interviewing, document analysis (filled classroom observation checklist, lesson plans, students work), classroom observations, audio recording and field notes were used to collect data. During this period, we could analyze data bit-by-bit then whole data was analyzed in the end. Multiple data collection tools helped us to triangulate the data to fall in codes, categories, and themes.

Results and Discussion

The analysis of the data illustrated that all the 4 teachers are supporting the idea of coordination meeting as a tool for in-service professional development. Moreover, the research participants focused on having subject-wise meetings in between the subject specialist and the subject teacher. This indicates to modify school structure to create culture of co-learning in the school where subject specialist can work with relevant teachers. They were also in favour of the mechanism of having a pre meeting, classroom observation and post meeting and the time constraints could be solved in a friendly environment. The pre-meeting focuses on the mutual planning and on the expected issues related to the conceptual understanding of the students. Whereas; during the classroom observation the observer should only take notes but two of them were in favour that during teaching, if a teacher is developing a wrong concept, then it is the duty of the observer to handle the situation in such a way that it would not underestimate the teacher and the correct concept could also be taught in the same time. During the post meeting, the research participants stated that first the teacher should be provided an opportunity to reflect on his/her teaching and if possible the teacher could highlight the issues. Then the observer should share the classroom observation notes / checklist and discuss the strengths and weakness. With regard to the time, which could serve as the hindrance for teachers' PD, it was suggested that every Saturday, this mechanism could be followed and during the pre-meeting both headteacher/coordinator/subject teacher should plan for at least 1 or 2 weeks ahead. Moreover, on these on-Saturday's teachers could have a micro-teaching sessions, in which they could explore the expected challenges and their remedies before directly teaching that lesson in the class.

With regard to the implementation of headteacher's/ coordinator's learning in the classroom through teachers, data reveals that during the pre and the post meeting they discuss the strategies like warm up activities, how to end/sum up or conclude the lesson and classroom management tips etc, this helps in their teaching and learning process.

Data also reveals that CMs are serving as gap-filler in between the headteacher/coordinator, which sometimes become a dominating factor and could hinders in creating a conducive learning environment in the school. Data also reveals that these CMs are also helping us in improving students' interest in the classroom activities which in turn could lead to improve students' learning. To improve this practice, data reveals that individual teacher's data should be analyzed and proper check and balance mechanism should be adopted.

The above findings could be divided into four themes i.e. the contextual strategy for teacher educator, a strategy to fill the gaps in between the stakeholders in the school and implementation of coordinator's / headteacher's learning through teachers and impact of CM on students' learning. These themes are discussed below.

Discussion

The contextual realities play a vital role in the PD of teachers, therefore, it was also earlier discussed that the PD strategies should be adopted according to the context (Fernandes et al., 202; Scribner, 1999; Ancess, 2001). In most of the school, one of the major reasons for the failure of different PD strategies was the time, the same is with our school. Therefore, it is necessary to have the Job-embedded PD system (Gerken et al., 2016; Hord, 1997) to be adopted from which CM is considered as the contextual strategy for our

school. As one of the research participant stated that: "We don't have to take out an extra time for these CM but we think these as part of our routine practices"

This implies that these CMs serve as a part of the daily teaching and learning practices, hence proved to be the specific contextual strategy.

As discussed earlier that there is a need to explore such a PD strategy that could help the school administrators to help teachers to develop as professionals through collaboration with colleagues and the coordinator (Rizvi, 2008). Therefore, CM is adopted in our school and the mechanism was built in such a way that whenever, the teacher needs help the headteacher/coordinator support the teacher and try to resolve the issues. As one of the research participant reported that: "Once I was facing a problem in teaching a particular concept (Trapezium) in Geometry, although I discussed and we (coordinator and herself) both planned together but still there were some confusions, so I asked him to teach it in the class and during that teaching, I observed and learned a lot how to introduce and what to introduce first, and I shared my learning in our post meeting. Later on, it helped me to teach the geometry concepts well". This implies that CM is serving as bridge to fill in the gaps between the administration of the school and the teachers in order to improve instructional practices in the class. Due to administrative load, the headteacher/coordinator are sometimes unable to implement their learning in the classroom (Bendtsen et al., 2022), therefore there must be an in-service plan, so that their learning could be shared with the teachers who are the right pathways to implement. In this regard, CM meetings serve as a mode, through which during discussions, subject specialist/headteachers/coordinators share their learning and through mutual planning teachers learn and implement their learning in the classroom. As one of the teacher stated that "Through the pre-meetings and post meeting, I learnt different and unique warm-up and conclusion activities" Another teacher stated that "Through these meetings, I learnt different classroom management skills, which are helping me in my day-to-day teaching". Thus, CM is serving as a two way model, as it is not only enhancing teachers' learning but also providing a sense of satisfaction to the headteacher/coordinator as their learning is implemented in the class (Nehez & Blossing 2020).

There is a strong relationship between teachers' PD and students' learning. As research participants were also asked that whether they could see any changes or improvement in students' learning as a result of using CM as their PD platform. In response, one of our research participants reported that "Before CMs, I sometimes face classroom management problem due to one of the student and most of the time that child hinders the teaching and learning process in the class, although I've tried a lot of things to divert his attention towards studies. Once, during my classroom observation my headteacher also observe this act and during our post meeting, I also share the same. At that time, he advised me a strategy of individual counseling. The day I adopted that strategy, I noticed a tremendous change, not only in that child's behaviour but also there was an improvement in his learning and achievement".

This is one of the examples which suggest that due to friendly environment teachers could discussed the day to day issues in these CM and also explore the remedies which could lead to students' success.

Conclusion

On weekly basis coordination meeting of the teacher with the subject-leader/coordinator/headteacher can be considered as integral part of academic practices to improve the students' performance and fill the gap between teacher and coordinator.

CM seems better opportunity and time for the teachers to improve their learning to implement in their classrooms. The subject-leader/coordinator/headteacher must observe teaching/learning practices with the consent of the teacher and they must not underestimate the teacher in front of the students. It is also suggested that the structure of the school could be reviewed to consider subject leader of each critical subject to create conducive teaching learning environment to foster students learning..

References

- Abdal-Haqq, I. (1996). *Making time for teacher professional development*. ERIC Digest. Washington, DC: ERIC Clearinghouse on Teaching and Teacher Education
- Abrahams, I., Reiss, M. J., & Sharpe, R. (2014). The impact of the 'Getting Practical: Improving Practical Work in Science continuing professional development programme on teachers' ideas and practice in science practical work. *Research in Science & Technological Education*, 32(3), 263-280.
- Ancess, J. (2001). Teacher learning at the intersection of school learning and student outcomes. In: Lieberman, A.; Miller, L. (Eds.), *Teachers caught in the action: professional development that matters*. New York: Teachers College Press.
- Anderson, E. and Shannon, L. (1995). Toward a Conceptualization of Mentoring. *Journal of Teacher Education*: 28(1), 11 - 19.
- Anisur Rahman, M. (2023). Professional development in an institution through the GROW model. *Assyfa Learning Journal*, 1(2), 112-121
- Ataullayeva, M. (2024). Communicative competence as a factor of personal and professional development of a future specialist. *New Uzbekistan journal of academic research*, 1(2), 17-22.
- Bacakova, M., and Closs, A. (2013). Continuing professional development (CPD) as a means to reducing barriers to inclusive education: Research study of the education of refugee children in the Czech Republic. *European Journal of Special Needs Education*, 28(2), 203-216.
- Baker, S. and Smith, S. (1999). Starting off on the right foot: the influence of four principles of professional development in improving literacy instruction in two kindergarten programs. *Learning Disabilities Research and Practice*, 14(4), 239-253
- Bambang Purwanto, M. (2023). Professional Growth and Staff Development (How to Encourage Employees to Pursue Professional Development. *International Journal of Technology and Education Research*, 1(01), 153-165.
- Bendtsen, M., Forsman, L., & Bjorklund, M. (2022). Exploring empowering practices for teachers' sustainable continuing professional development. *Educational Research*, 64(1), 60-76. <https://doi.org/10.1080/00131881.2021.2000338>
- Bogdan, R. C. & Biklen, S. K. (1998). *Qualitative research for education: an introduction to theory and methods* (3rd ed.). Bostan, USA: Allyn & Bacon
- Boylan, M., 2016. Deepening system leadership: teachers leading from below. *Educational management administration & leadership*, 44 (1), 57-72. doi:10.1177/174114321350131
- Brand, B. R., & Moore, S. J. (2011). Enhancing teachers' application of inquiry-based strategies using a constructivist sociocultural professional development model. *International Journal of Science Education*, 33(7), 889-913.
- Cadima, J., Ferreira, T., Guedes, C. (2024) Does Support for Professional Development in Early Childhood and Care Settings Matter? A Study in Four Countries. *Early Childhood Educ J.* <https://doi.org/10.1007/s10643-024-01669-x>

- Cochran Smith, M. and Lytle, S.L. (2001). Beyond certainty: taking an inquiry stance on practice. Lieberman, A.; Miller, L. (Eds.), *Teachers caught in the action: Professional development that matters*. New York: Teachers College Press
- Cohen, D. & Hill, H. (1997). *Policy, Practice, and learning*. Paper presented at the Annual meeting of the American Educational Research Association, March (1997). Chicago, IL
- Crowson, R. and Porter-Gehrie, C. (1980). The discretionary behaviour of principals in large city schools. *Educational Administration Quarterly*, Winter
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European Journal of Teacher Education*, 40(3), 291-309. <https://doi.org/10.1080/02619768.2017.1315399> .
- Darling-Hammond, L. and McLaughlin, M.W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597-604
- Darling-Hammond, L., (2017). Teacher education around the world: what can we learn from international practice? *European journal of teacher education*, 40 (3), 291-309. <https://doi.org/10.1080/02619768.2017.1315399>
- Darlington, Y., and Scott, D. (2002). *Qualitative research in practice stories from the field*. Buckingham: Open University Press
- Datnow A., Lockton M., Weddle H. (2021). Capacity building to bridge data use and instructional improvement through evidence on student thinking. *Studies in Educational Evaluation*, 69, 100869. <https://doi.org/10.1016/j.stueduc.2020.100869>.
- De Jong, L., Meirink, J. & Admiraal, W. (2022). School-based collaboration as a learning context for teachers: A systematic review. *International Journal of Educational Research*, 112, 1-15. <https://doi.org/10.1016/j.ijer.2022.101927>.
- Deng, C. and Turner, N. (2024), "Identifying key mentor characteristics for successful workplace mentoring relationships and programmes", *Personnel Review*, 53(2), 580-604. <https://doi.org/10.1108/PR-08-2022-0535>.
- Dudzinski M.; Roszmann-Millican, M. and Shank, K. (2000). Continuing professional development for special educators: reforms and implications for university programs". *Teacher Education and Special Education*, 23(2), 109-124
- Egert, F., Dederer, V., & Fukkink, R. G. (2020). The impact of in-service professional development on the quality of teacher-child interactions in early education and care: A meta-analysis. *Educational Research Review*, 29. <https://doi.org/10.1016/j.edurev.2019.100309>.
- Egert, F., Fukkink, R. G., & Eckhardt, A. G. (2018). Impact of In-Service Professional Development Programs for Early Childhood Teachers on Quality Ratings and child outcomes: A Meta-analysis. *Review of Educational Research*, 88 (3), 401-433. <https://doi.org/10.3102/0034654317751918>.
- Falk, B. (2001). *Professional Learning Through Assessment. Teachers Caught in the Action: Professional Development That Matters*, (Edt.). Ann Lieberman and Lynne Miller. New York: Teachers College Press.

- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 10(3), 1113-1055.
- Fernandes, Sandra, Alexandra M. Araujo, Isabel Miguel, and Marta Abelha. 2023. "Teacher Professional Development in Higher Education: The Impact of Pedagogical Training Perceived by Teachers" *Education Sciences* 13(3), 309. <https://doi.org/10.3390/educsci13030309>
- Fischer, C., Barry F. Chris D. Arthur E. Kim F. Brandon F. Frances L. Abigail J. L. Ayana M. (2018). Investigating relationships between school context, teacher professional development, teaching practices, and student achievement in response to a nationwide science reform. *Teaching & teacher education*, 72, 107-121. <https://doi:10.1016/j.tate.2018.02.011>.
- Fletcher, S.J. (2000). *Introduction: What is mentoring? Mentoring in Schools: A handbook of teaching and policy* (pp.150-170). New York: Longman
- Frei, A. K., Kocher, M., & Buschor, C. B. (2021). Second-career teachers' workplace learning and learning at university. *Journal of Workplace Learning*, 33(5), 348-360.
- Fullan, M. (1999). Change Forces: The Sequel. *Journal of Educational Change*, 1(2), 138-248
- Ganser, T. (2000). An ambitious vision of professional development for teachers. *NASSP Bulletin*, 84(618), 6-12
- Garcia-Alvarez, Diego, Maria Jose Soler, Rubia Cobo-Rendon, and Juan Hernandez-Lalinde. 2023. "Teacher Professional Development, Character Education, and Well-Being: Multicomponent Intervention Based on Positive Psychology" *Sustainability* 15, (13), 9852. <https://doi.org/10.3390/su15139852>
- Gerken, M. Beausaert, S. Segers, M. (2016). Working on Professional Development of Faculty Staff in Higher Education: Investigating the Relationship between Social Informal Learning Activities and Employability. *Hum. Resour. Dev. Int.* 19, 135-151.
- Glathorn, (1995). *Quality Teaching Through Professional Development (principals Taking Action)*. New York: Teachers College Press
- Grosso de Leon, A. (2001). *Higher Education's Challenge: New Teacher Education Models for a New Century*. New York: Carnegie Corporation of New York..
- Gulbahar, Y. and Guven, I. (2008). A Survey on ICT and the perceptions of Social Studies teachers in Turkey. *Educational Technology and Society*, 11(3), 37-51
- Guskey, T.R. (1997). Research needs to link professional development and student learning". *Journal of Staff Development*, 18, 36-40
- Hord, S. (1997). *Professional learning communities: Communities of continuous inquiry and improvement*. Austin, TX: Southwest Educational Development Laboratory.
- Jane, H. (2005). *Reflective Practice – The key to innovation in international education: Using Learner Diaries in a Study on Learner Beliefs Toward Group Learning (in an EAP Course)*. International Conference, 23-26 June, 2005: Jane Hislop, University of Otago
- Kathryn N. Hayesa, Linda Premingera & Christine L. Bae (2024). Why does teacher learning vary in professional development? Accounting for organisational

- conditions. *Professional Development in Education*, 50, 1, 108-128
<https://doi.org/10.1080/19415257.2023.2283433>.
- King, F. (2011). The role of leadership in developing and sustaining teachers' professional learning. *Management in Education*, 25(4), 149-155.
<https://doi.org/10.1177/0892020611409791>
- Limerick, D. & Cunnington, B. (1993). *Managing the New Organisation*. Sydney: Business and Professional Publishing
- McLaughlin M.; Zarrow, J. (2001) Teacher engages in evidence-based reform: trajectories of teachers' inquiry, analysis and action. In: Lieberman, A.; Miller, L. (Eds.), *Teachers caught in action: Professional development that matters*. New York: Teachers College Press
- Memon, M., Lalwani, F., & Meher, R. (2006). *Mentoring as an alternative approach to in-service teacher education in Balochistan: Some successes and challenges*. Partnerships in educational development. United Kingdom: Symposium Books
- Muzaffar, M. (2016). *Educational Institutions and Political Awareness in Pakistan: A Case Study of Punjab*, Unpublished Ph. D Dissertation, International Islamic University Islamabad, Pakistan
- Muzaffar, M., Hussain, B., Javaid, M. A., Khan, I. U., & Rahim, N. (2020). Political Awareness in Educational Policies of Pakistan: A Historical Review, *Journal of Political Studies*, 27(1), 257-273
- Nehez, J., and U. Blossing. 2020. "Practices in Different School Cultures and Principals' Improvement Work." *International Journal of Leadership in Education* 1-21.
- Ostinelli, G., & Crescentini, A. (2024). Policy, culture and practice in teacher professional development in five European countries. A comparative analysis. *Professional Development in Education*, 50(1), 74-90.
<https://doi.org/10.1080/19415257.2021.1883719>
- Perry, E., & Booth, J. (2024). The practices of professional development facilitators. *Professional Development in Education*, 50(1), 144-156.
<https://doi.org/10.1080/19415257.2021.1973073>
- Rizvi, M. (2008). "The Role of School Principals in Enhancing Teacher Professionalism" Lessons from Pakistan. *Educational Management Administration and Leadership*, 36(1) 85-100
- Ruhter, L., & Karvonen, M. (2024). The Impact of Professional Development on Data-Based Decision-Making for Students with Extensive Support Needs. *Remedial and Special Education*, 45(1), 44-57. <https://doi.org/10.1177/07419325231164636>.
- Schachter, R. E. (2015). An analytic study of the professional development research in early childhood education. *Early Education and Development*, 26(8), 1057-1085.
<https://doi.org/10.1080/10409289.2015.1009335>.
- Schon as cited in Dean (2003) Reflecting on reflective practice for professional education and development in health promotion. *Issitt Health Education Journal* 62 (2), p. 173

- Scribner, J. (1999) Professional development: Untangling the importance of work context in teacher learning. *Educational Administration Quarterly*, 35(2), 238-266
- Tatto, M. T. (1999). *Conceptualizing and Studying Teacher Education Across World Regions: An Overview*. Paper prepared for the Conference on Teachers in Latin America: New Perspectives on their Development and Performance. San Juan, Costa Rica.
- Ventista, O.M. & C. Brown (2023). Teachers' professional learning and its impact on students' learning outcomes: Findings from a systematic review. *Social Sciences & Humanities Open*, 8, 1, 100565 <https://doi.org/10.1016/j.ssaho.2023.100565>.
- Walling, B. and Lewis, M. (2000). Development of Professional identity among Professional development school pre-service teachers: longitudinal and comparative analysis: *Action in Teacher Education* 22(2A) 63-72
- Warnick D. and Reimers, F. (1995). *Hope or despair. Learning in Pakistan's Primary schools*. Westport, Connecticut: Praeger
- Whitworth, B.A., Chiu, J.L. (2015). Professional Development and Teacher Change: The Missing Leadership Link. *J Sci Teacher Educ* 26, 121-137 (2015). <https://doi.org/10.1007/s10972-014-9411-2>
- Woods, P. (1994). *The conditions for teacher development*. In: Grimmett, P.; Newfeld, J. (Ed.), *Teacher development and the struggle for authenticity: Professional growth and restructure in the context of change*. New York: Teachers College Press
- Young, P. (2001). District and state policy influences on Professional development and school capacity. *Educational Policy* 15(2) 278-301