

Applying and Evaluating Teacher Professional Development Models – A Case Study of a Pakistani School

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Abstract

There is recently a shift towards competency-based education in Pakistan, which is the outcome of its National Education Policy. This research investigates the professional development activities that teachers embark on related to this change and in turn the extent to which the in-service teacher development taking place in schools of Pakistan. Through a case study approach, this research will investigate one of the best schools of Karachi in terms of its board results and probe to see how a school system encourages its teachers to develop them professionally. It is concluded that three models of teacher development were being followed unintentionally at the school: Individually-Guided Staff Development model, Observation/Assessment model and the Training Model. The problem was that these models were not followed in their full spirit due to lack of motivation from the administration. Even though school systems are trying to professionally develop their teachers, they lack the competency as to how to conduct a successful teacher development program.

Keywords: *Continuing Teacher Development, In-service Teacher Development Professional Development, National Education Policy*

THE PURPOSE

The view of Shulman (1992) is that case studies should be used to understand the theory and to gauge how the theories are being used in various contexts. Keeping in mind these benefits of case studies in the field of Education, case study approach was used to fulfil the purpose of this research. This is a unique case study as it will help the readers understand what models of teacher development are used in a school in order for it to become ‘The Best School of the year’ in Karachi as the school under investigation got this title from the Secondary Board of Karachi for obtaining the best board results. Through this study we are able to look into two things: Firstly, how is the in-service teacher development taking place in schools of Karachi and secondly, this research also seeks to understand how teachers involve themselves in teacher development and what role does a school system play in encouraging its teachers to develop themselves professionally in light of the National Education policy.

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INTRODUCTION

UNESCO realizes the importance of teacher education institutes and stresses that these institutes play a major role in building global education community by bringing and adapting to changes in the educational system (Hopkins & McKeown, 2005). Thus schools are responsible for the skills and knowledge of the future generations (Hopkins & McKeown, 2005). Nevertheless, teacher education programs work on the belief that teachers are made not born and that teacher development is possible through these programs.

A teacher understands and deliverance of curriculum depends upon the skills that a teacher possesses; not to mention that a student's assessment and interpretation of their work also depends upon how skilful a teacher is (Darling-Hammond, 1997). A teacher may have good intentions in mind but may cause damage to students or the system due to lack of training and skill. To keep teachers at par with the changing dynamics of this world and to help them perform better not only teacher education programs are fundamental but teacher continuous development programs are also essential. Teacher development encompasses personal and professional lives of teachers along with the state and school policy which all are responsible for their career development (Day, 1999). It is important for teachers to keep updating their professional knowledge according to their circumstances (Day, 1999) where professional development may be natural or opportunistic or it may be planned (Day, 1999). Thus, according to Day (1999), teacher professional development can be summed up in these words,

“It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives” (p. 4).

On the other hand, Sparks and Loucks-Horsley (1990) defined staff development as “processes that improve job-related knowledge, skills or attitudes of school employees” (p.235). To sharpen these job-related skills teachers need to be trained. But what should the teachers need to be exactly trained in?

This question is answered by Darling-Hammond (2008). According to her, the teachers first and foremost need to have a grip on the pedagogical content knowledge that would allow them to help students create mental maps and do away with misconceptions. She further says that a teacher should know what the students know about a particular topic and should be able to judge their individual strengths and weaknesses. Also, a teacher should have the capacity to motivate students by using various teaching and assessing strategies. Darling –Hammond further notes that teachers should have a good grip on curriculum and in delivering that curriculum; should be able to collaborate with others and reflect on his/her own practices. Thus a teacher must know much more than just the subject knowledge (Darling-Hammond, 1997). To make sure that the teachers are able to deliver all that is a part of a well-groomed professional, various teacher education programs have sprung up. There are three types of teacher development programs, (a) pre-service programs, (b) in-service programs and (c) continuous development programs.

Thus, education systems globally are struggling to keep teachers well informed and well skilled through teacher education or teacher development programs. Pakistan is also trying to align itself with the rest of the world in educating its teachers. Teacher training in Pakistan after the 18th amendment has fundamentally become the responsibility of the provinces. Usually, the applicants for these programs outnumber the seats whereas the training itself is of low quality due to lack of resources. The reforms are usually ineffective as the reformers have not taken necessary measures that would sustain and support the reforms (Mahmood, 2014). Nevertheless, the National Education policy 2009 vows to standardized and institutionalized teacher training arrangements, accreditation and certification procedures and to make a teaching degree a must for all school teachers by 2018. The policy also seeks put special attention to in-service teacher training and development programs that will be responsible for harnessing teachers' skills in wide areas such as, "pedagogy and pedagogical content knowledge; subject content knowledge; testing and assessment practices; multi-grade teaching, monitoring and evaluation; and programs to cater to emerging needs like trainings in languages and ICT" (NEP, 2009, p.43). But it must be kept in mind that reforms are only effective if schools are committed to bringing the prescribed change (Darling-Hammond, 1997).

NEP 2009 seeks partnership with the private schools in order to deliver education. These private schools are continuously providing in-service training programmes to their teachers. Case study approach is used in this research to see the usage and effectiveness of in-service teacher development in Pakistan at a semi-private school.

Unit of Investigation and Participants

The unit of the investigation was a semiprivate school was set up in 1978 with a mission to provide quality education to its students. It works with the collaboration of a private organization and the Sindh Government. Currently, it has the strength of 2500 students (800 in the pre-primary and primary wing; 1200 in middle school wing; 500 in secondary school wing). There are 106 teachers employed at the school. The school follows matriculation system whereby it was declared 'The Best School' by Board of Secondary Education Karachi for achieving the best secondary results. In the senior section of the school, there are six language teachers where three teach English and three teach Urdu.

The participants of the study consisted of the Principal of the school, six senior language teachers – three teachers were teaching English and the other three teaching Urdu. Two of these teachers were also the HoDs of their respective departments whereas one HoD had done the teacher training certified program (B.ED). Also, document analysis of the yearly performance form and teacher criterion forms was conducted.

RESEARCH METHODOLOGY

This research was a case study. Merriam (2009) defined case study as "A case study is an in-depth description and analysis of a bounded system" (p. 40). Merriam further elaborates that a case study investigates into a single unit or a certain setup; for example, a single class, a single institute or a particular program. She also points out that the data collection must be finite in order for it to be a case study. On the other hand, Merriam explained that a research may draw from multiple data sources in order to answer the research question.

Data Collection and Analysis

As prescribed by Merriam (2007), multiple methods for investigation were used to investigate the research questions.

- a) In-depth interview was conducted with the school principal using open-ended questions
- b) Interviews were conducted with senior teachers using open-ended questions
- c) Document analysis of the yearly performance form and teacher criterion forms form was conducted

The data from the interviews was assessed using thematic analysis whereas the document was analysed for the parameters used to evaluate teacher performance. Triangulation was done and themes were thus extracted.

Ethical Considerations

The principal and the participants were told about the research and they gave their verbal consent. In addition, the principal gave her consent and showed the yearly evaluation form and the teacher criterion forms.

RESULTS AND DISCUSSION

Sparks and Loucks-Horsley (1989) have given five models for teacher development that explain the process that teacher educators can follow in order to develop teachers for the future and current challenges. These five models are 1) Individually-Guided Staff Development, 2) Observation/Assessment, 3) Involvement in a Development/Improvement Process, 4) Training and 5) Inquiry. Sparks and Loucks-Horsley (1990) have given in detail the underlying assumptions, the phases of activity (the process of implementing these models), and the outcomes of these models in detail. A closer look at these models shows that all these models start with an aim, a goal or a problem. Therefore, the school management should be clear in their minds as to what is the area in which a teacher or a group of teachers need development. Then they must chalk out a suitable model to overcome the problem or the weakness. Then the next step is planning. Planning a teachers' development program in such a way that it meets all requirements of teachers is crucial. An ill-planned program may not be able to bear fruits that the schools and educators are looking for. Also, it is important for educators to follow the outcomes of these programs and see if any changes may be required in either goal formation or in the planning phase or in the implementation phase.

It was observed that three models of teacher development were being followed at the School: Individually-Guided Staff Development model, Observation/Assessment model and the Training Model (Figure 1). But since the institute did not have any mission or vision statement regarding continuous teacher development; therefore, these models were not followed in their full spirit.

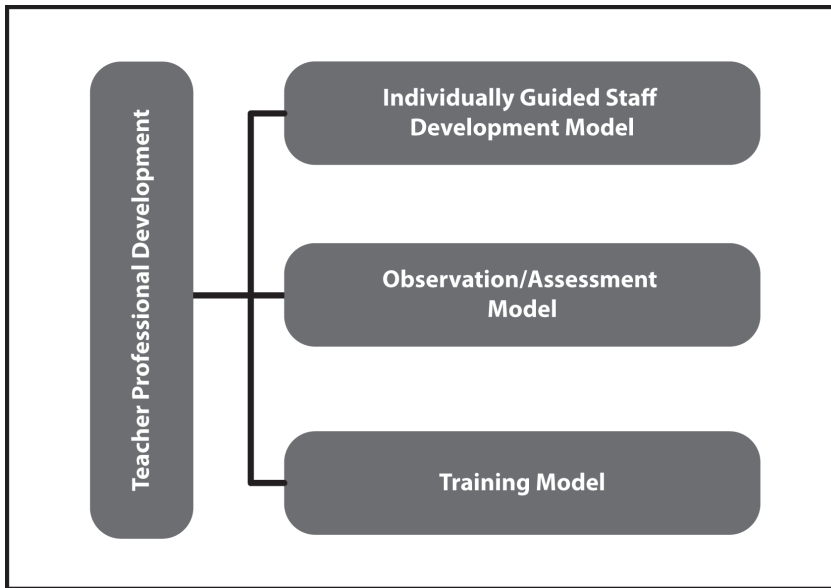


Figure 1. Teacher Professional Development model used in the school under investigation
Teacher Induction and the Observation/Assessment Model

Since this school is a semi-private school, therefore, the pay scales of teaching staff are better than at other private schools and the job type is permanent in nature; hence, its induction criteria is very tough. There is an unbalance between teacher supply and demand. For every one vacancy, there are around 40 applicants who are shortlisted through a tedious selection procedure. To begin with, the basic qualification of a teacher should be thus:

- The applicants of pre-primary section should have a Montessori teaching diploma or a certificate.
- The teachers applying for primary school should have a bachelor's degree.
- Applicants for middle and secondary schools should hold a master's degree.

There is no requirement of pre-service training except in pre-primary classes in order to secure a job at the school. The selection procedure consists of the following steps:

- A written test is taken to see gauge an applicant's content knowledge.
- A class demonstration is conducted to evaluate a teacher's teaching style, class control and use of pedagogy.
- An interview is conducted to gauge the communication, confidence and approachability of the applicant.

The applicants who fulfilled all three criterions of selection are finally selected.

For the new inductees who have not been involved in pre-service training, it is mandatory to accompany a senior teacher for a period of three months at most in order to fully grasp the working of the institute. When the senior teacher feels that the new inductee is fully capable of taking over the class on her own, she makes a recommendation and sends it to the section coordinator (for the pre-primary and primary section)/HoD for secondary sections) who after

going through the recommendation, sends it to the principal. The principal then appoints a teaching class to the new inductee. But the case is a little different with English teachers as there's a shortage of English teachers; therefore, the teachers are given a class to teach as soon as they come in. The coordinator or the HoD observes her classes and gives her feedback on how to improve. The Principal elaborated,

"This is how we have developed our system. The teacher understands the dos and donts of the school when she's with a senior teacher. The senior teachers help them with the problems that they may be having. It works very well and the whole system runs on this practice."

The Observation/Assessment model was probably one of those models being followed in its true spirit as compared to the other two because the school prepared its teaching staff according to the requirement of the school system through this model. The effectiveness of this model came into play as the purpose for using this model was clear in the minds of administrators and teachers. The teachers had a probation period of three months, therefore their strengths and weaknesses were noted and they were made aware of them and asked to improve upon them. But to what extent were these improvements made were not later followed up in to. Some of the comments of the senior teachers are thus:

"I help the teachers in whatever way I can."

"It also helps build a rapport between the senior and the junior faculty and helps in team building."

"Sometimes we also learn from the junior teachers."

"How else will they get trained, they haven't taught anywhere, most of them and they have not been trained so this is an easy solution."

Nevertheless, this was also a way to transfer the pedagogical content knowledge (Schulman, 1986) from the senior teachers to the junior ones. Class observations and mentoring has replaced the traditional methods such as teacher training programmes and workshops and are more effective (Garet, Porter, Desimone, Birman, & Yoon, 2001). Day (1999) has the view that schools offer limited practice of observation/assessment model; where mostly observation is conducted of the lesson planning and class practices are not commonly observed. But real classroom teaching was observed in the school under investigation and therefore in this scenario contradicts Day's claim.

Ross and Bruce (2007) claimed that observation assessment model is one way of reinforcing one another. When teachers are involved in reinforcing each other, magnitude beliefs about competency are established. Such schools they argue have high collective self-efficacy which affects student performance. Thus, higher student grades are achieved. We may say that the observation assessment practice might be responsible for the school being chosen as the best school by the Board of Secondary Education, Karachi. It can be seen that the pedagogical content knowledge was successfully being transferred from one generation of teachers to the next and it must be kept in mind that none of these teachers was trained teachers.

In-Service Teacher Development and the Training Model

The school provided regular training sessions to its teachers, for a period of two weeks, in the month of June each year, where teacher trainers, as well as senior teachers, were called in for conducting workshop and training sessions. Some of these training programmes and workshops were generic in nature, while others were subject oriented. All six teachers were of the view that since these training programmes were not conducted as per the need analysis; therefore, their effectiveness remained limited. They elaborated that if there was a need analysis done prior to the training then the seminars, training programmes or workshops would be more fruitful. A teacher was of the opinion,

“We have no choice, we have to attend these trainings”

Another pointed out,

“They must be having something in mind when they call trainers for training, but I have no idea what it is (laughing)”

One teacher said,

“I wouldn’t say that these are useless but they’re not directly related to what we want.”

A teacher was of the opinion,

“They should ask us what we want to train in, sometimes we are English teachers and we are sitting in maths training.”

On the other hand, the Principal said that these training and workshop sessions are scheduled and implemented by the head office which heads ten semi-government schools; therefore, need analysis is not possible. All teachers from these ten schools are trained together and these seminars or workshops are compulsory for all to attend regardless of what their actual needs may be.

“We don’t decide what trainings we want for our teachers, we are told about them. Even I have been giving these trainings as I was told to do so. And you can see in the audience some teachers are interested if it is relevant with their subject others are just there.”

The yearly workshops or training programmes were not evaluated or looked into once they were over in summer. According to the Principal, each person had her own way of understanding the training and implementing it, whereas the teachers were of the view that it became difficult at times to actually implement what they had learnt as there was ample of paperwork that needed to be done other than the daily diary which needs to be written. They elaborated that the homework, as well as the class work copies, need to be checked in time. To meet the latest educational demands, teachers need a much more robust training and support from their organizations than what they currently get (Rotherham & Willingham, 2009), therefore, support from the organization for implementation is duly needed.

Garet, Porter, Desimone, Birman and Yoon (2001) point out that workshops and training programmes have been criticized on the basis that they are conducted outside a teacher's classroom, they don't provide teachers sufficient time, needed activities and knowledge that are tailor-made for a teacher. Therefore, they point out that meaningful change should not be expected from training programmes and workshops. The same was felt in this case study, the teachers felt that the training programmes and workshops helped a little as there is always something to learn but they did not seem to be too enthusiastic about the workshops conducted by their organization. But they felt that workshops and training programmes that were need-based were more fruitful. According to Sparks and Loucks-Horsley (1990), the teacher training workshops essentially helped teachers change their perception and beliefs and therefore we can say that they are more generalized in nature than other models; to expect that they will cater to the individual needs of a teacher is out of their scope, even though they may be able to cater to the needs of a group. Thus, only training programmes are not enough to fulfil individual needs (Rotherham & Willingham, 2009). The teachers must be given full planners which they would follow, along with providing them with feedback and then again planning to keep in mind the weaknesses that emerged from the previous planner (Rotherham & Willingham, 2009).

Evaluating Teacher Development and the Individually-Guided Staff Development Model

The institute did encourage Individually-Guided Staff Development model by paying half the training or workshop fee if a teacher registered in one on her own for her professional growth. On the other hand, teachers were sometimes selected by the administration for workshops or training programmes other than the scheduled ones if the administration felt the need. According to the school principal, the teachers were selected by the administration for any special training keeping in mind the following criteria:

- New inductees are given preference
- A workshop or a training being peculiar to a subject
- At times need-based

The document analysis of the performance appraisal forms and teacher criterion forms showed that teacher development was not quantifiably measured. The teacher criterion form had three slots to write a brief qualitative summary about the teacher. These summaries were first written by the HoD, then the Principal and then the Director of Education of all the ten schools that come under him and thus the teacher was finally inducted into the workforce. On the other hand, the yearly appraisal form had 20 qualities of a teacher jotted down such as moral values, discipline, responsibility etc. each carrying 05 marks. Thus, the yearly evaluation consisted of 100 points where two qualities, initiative and urge to improve, were directly linked with teacher development whereas the rest were indirectly linked with teacher development. Even though the school was supporting its teachers in their professional development, yet there was no policy document that elaborated upon teacher's professional development. This led to a discrepancy in the way teachers approached teacher professional development and in the way the administration perceived it. The same results were obtained by Seezink and Poell (2011) and thus they recommended that the school policies must be made clear to the teachers.

Even though qualities like innovation in teaching methodology, classroom management time management were a part of the evaluation form, yet those who did not come up to the standard were not given any special training unless something came up by chance and the

principal remembered a certain teacher needed training in a particular area. Hence we can say there was no check and balance where teacher development was concerned. Thus the principal said,

“No, we don’t have any such policy that makes it mandatory for teachers to involve themselves in teacher development.”

On the other hand, a teacher said,

“The more we get certificates and training the more chances of promotion we have and also a better appraisal”

And another teacher said,

“I’m not sure whether the institute gives any benefit but it’s good for us.”

According to Sparks and Loucks-Horsley (1990), the Individually-Guided Staff Development model is the most effective for teacher development as the teachers themselves chalk down their needs and plan accordingly. This is definitely the case as according to a teacher, “One important feature of researching our own program is that we have built-in motivation to change unsound ideas because, unlike outside researchers, we have to live with the consequences” (Hubbard & Power, 2006, p. 139). Therefore motivation plays an important role in the Individually-Guided Staff Development model. In this case study, the motivation was the promotion and the annual increment for some teachers who thought that it would affect their job status. And it was the self-development for others.

So even though the evaluation forms did not much focus upon the Individually-Guided Staff Development model, and also the principal did not give any clear indication of their importance, yet it seemed that it was kept in mind while promoting teachers and giving them yearly increments.

Perception Regarding Teacher Training Programs

All teachers agreed that teacher training programs were important for teacher grooming. Even though it was noticed that the teacher who had done her B.ED valued teacher training program over a subject degree, yet all the other teachers who had not done a teacher training certification valued the degree more. For the certified teacher, pedagogy, student psychology, curriculum development and evaluation were areas that were of great importance and she felt that one can professionally learn about all these through a teachers training program. On the other hand, the teachers who were not trained felt that one can learn all these skills during one’s time as a teacher through trial and error but a teacher must have knowledge of the content that she will teach in her class. The teacher with the B.ED was of the view,

“It’s very important that if you are a teacher, you should have done your B.ED. To tell you the truth, you learn so many things like how to teach, why are children being naughty and basically the logic behind what you’re doing.”

The certified teacher asserted that teacher training programs help teachers to align their

thinking process with the task at hand and saves teachers time from trial and error. She was highly in favour of teacher training programs and proposed that teachers should be inducted after being trained as teachers.

When Schulman (1986) draws from the history of teacher education programs, he points out that there was a time when teacher education programs focused only on the content knowledge – what teachers should know; whereas now the shift has changed from content to pedagogy – how will the teachers deliver what they know? It is important that teacher education programs strike a balance between content and pedagogical knowledge as both are equally important (Schulman, 1986). The teachers must have a firm grip on the content that they will teach where they should not merely transmit knowledge but must be able to explain why a particular proposition holds, what its importance is and how it relates to other propositions (Schulman, 1986). The second step for a teacher is to present that knowledge to the learners. Schulman elaborates the pedagogical content knowledge by saying that there is no single way in which a proposition can be represented, where some pedagogical techniques are derived from research and others from experience; yet, the teacher must know which pedagogical technique will be used in his/her context. This thus brings us to a fact that teachers must also know how students learn and what concepts will be difficult for students to learn and exactly which doors to tap so that effective learning may take place.

An action research conducted upon the San Francisco Head Start Program showed that among other factors, ‘providing continuous in-service and pre-service training’; and ‘coaching and mentoring on-site contributed most in the professional development of teacher (Waqar, 2007). Even though National Accreditation Council for Teacher Education (NACTE) has been established by HEC Pakistan to ensure the quality of pre-service teacher education programs for ensuring the quality of these programs (Mahmood, 2014), yet, the professional development of the in-service teachers have been left upon the schools to manage and take care of. A case study conducted by Rehmani (2006) in a Pakistani school showed that the teachers were not willing to learn as the whole school system discouraged innovation and there was no culture of problem and solution sharing. Such was not the case in the school under investigation in this particular study. The teachers seemed to exercise the culture of sharing and learning and innovation was encouraged at all levels. A teacher explained,

“If students don’t understand something, we try teaching them through some other way.”

Another teacher said,

“We are free to make changes in the lesson plan because not all classes are the same.”

One teacher highlighted the limitations and said,

“We have to manage time, if we can try something new in the given time then its ok but otherwise its not possible.”

It can be said that innovation and teacher development have a direct link with the school culture. A culture that promotes these will harvest more innovative, creative and well-groomed teachers.

Theoretical Implications

One of the major problems that the school has for not harvesting as much as they can from the in-service teacher education is due to the lack of vision, mission and policy with reference to teacher education. This also made implementation of what had been learnt in training programmes and workshops difficult for teachers. It is very important for the school to have continuous development as one of their objectives in accordance to NEP. Next, the school needs to implement the Professional Development Pathways Model by Lieberman and Wilkins (2006). It points towards four basic steps to implement a teaching model as given in the following steps:

Step 1: Assess the needs.

Step 2: Determine the appropriate professional development pathways

Step 3: Reflect

Step 4: Revisit the school improvement plan

The National Professional Standards for Teachers in Pakistan (2009) gives ten standards upon which teachers should be professionally developed. Even though it highlights the areas in which the teachers should be groomed and trained, what it does not do is answer the question of 'how'. How will these teachers be trained? Which models are best for in-service teacher development? The 'how' of the National Professional Standards for Teachers in Pakistan has been left upon the institutions for themselves to decide according to their needs and resources. As is recommended by Yüce, Şahin, Koçer, and Kana (2013) "Authorities in underdeveloped and developing countries should investigate teacher training models, and teacher recruiting and retaining strategies of developed countries so as to ameliorate the current case of their countries (p.304)." On the contrary when the Australian National Professional Standards for Teachers (2011) were evaluated against Pakistan's National Professional Standards for Teachers (2009); there were a few things that seemed lacking in the former one. Firstly, it was apparent in from the Australian National Professional Standards for Teachers that a pre-service teachers training system was in place that means that all teachers were not only familiar with but also trained in the standards considered important for teachers. The standards thus talked about the progression of a graduate teacher to a lead teacher which is done by, "They identify their own learning needs and analyze, evaluate and expand their professional learning both collegially and individually" (MCEECDYA, 2011). On the other hand, since the National Professional Standards for Teachers in Pakistan do not presume all teachers to have pre-service teachers training, hence they must incorporate the how part.

Professional Development Pathways Model is a simple model which can solve the 'how' question for not only this school but also for other schools which want to immerse their teachers in professional development. First, a need analysis must be done to understand the weak areas for teacher development that need to be focused upon keeping in mind the adult learning theory, the levels of teachers and the certification that needs to be given out. The next step is to determine which development model to follow for a particular need. The third step is very crucial and in most cases neglected; the school administration should reflect on the fruitfulness of the model that were previously implemented to bring about the required change. Lastly,

revisit the school improvement model to make necessary changes. A school may use multiple models in its school improvement plan but the changes incorporated must be continuous and longitudinal because prolonged interventions are more effective than shorter ones, and that combinations of tools for learning and reflective experiences serve the purpose in a better way (Avalos, 2011).

Therefore, it can be conveniently said that even though various models for teacher professional development are being used in a school, yet they need to be streamlined and focused to bear the required results.

Pakistan like other countries across the globe is also trying its level best to train its teachers according to the globally changing environment. It emphasizes upon continuous teacher professional development by stating that teachers are effective members of a professional community who through reflective practices pursue opportunities for an enhanced teaching and learning process (National Professional Standards for Teachers in Pakistan, 2009). The government of Pakistan has set up Professional standards for teachers in order to set parameters for teacher professional expectations (National Professional Standards for Teachers in Pakistan, 2009).

Yet, Zhu (2013) hits the hammer on the head by saying that high-quality teacher training is possible only through a good model of teacher training. The core elements of a teacher training model that determine its success consist of its design, its implementation and management and the assessment modes that are used during the training (Zhu, 2013). Garet, Porter, Desimone, Birman and Yoon (2001) point out at the core features of a teacher development program. They are of the view that first of all the focus of these programs should be on the content, that is the content taught is relevant and useful. Next, these programs should promote active learning such that the teachers are given opportunities to be involved in meaningful discussions and planning. The third feature they talk about is coherence. Most teacher education programs lack coherence and the activities are not linked with one another. The last core feature is teacher outcome, which is to gauge the effectiveness of the program itself.

Thus, these features should be kept in mind while formulating a teacher development program. Nevertheless, the main aim of these teacher development programmes is to foster individuals who are effective teachers and understand the meaning, value, purpose, reason of education along with techniques to deliver it.

Study Limitations and Practical Implications

The case study design used for this study had several limitations. Only one institute was taken into consideration; therefore, the results cannot be generalized to all schools of Pakistan. However, an attempt was made to explore how teacher development is taking place in Pakistan.

Secondly, we must understand that it is the duty of a school system to develop its teachers professionally, yet, they lack the competency as to how to conduct a successful teacher development program. The policymakers need to make sure that the school heads understand why teacher development is important and how should it be conducted and evaluated. How teachers are evaluated affects the learning and teaching environment of an organization (Harris, Ingle & Rutledge, 2014). The results of this case study led to the following recommendations.

- 1 The school systems should make teacher professional development a part of their vision and mission
- 2 The school systems should develop need-based teacher development programs.
- 3 Whatever model a school implements for teacher development should be evaluated.
- 4 The teacher should be given the opportunity to test what they have learned through a teacher development model.
- 5 The Professional Development Pathways Model should be a part of National Teaching standards.

REFERENCES

- Avalos, B. (2011). Review: Teacher professional development . *Teaching and Teacher Education, 27*, 10-20.
- Buehl, M. M., & Beck, J. S. (2015). The relationship between teachers beliefs and teachers practices. In H. Fives, & M. G. Gill, *International Handbook of Research on Teachers' Beliefs* (pp. 66-84). New York: Routledge.
- Seezink, A., & Poell, R. (2011). The role of schools' perceived human resource policies in teachers' professional development activities: a comparative study of innovations toward competence-based education. *Asia Pacific Education Review, 12*(1), 149-160.
- Darling-Hammond, L. (1997). *Doing what matters most: Investing in quality teaching*. New York: National Commission on Teaching & America's Future.
- Darling-Hammond, L. (2000). How teacher education matter. *Journal of Teacher Education, 51*(3), 166-173.
- Darling-Hammond, L. (2008). Teacher learning that supports student learning. *Educational Leadership, 55*(5), 91-100.
- Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer Press.
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915-945.
- Harris, D. N., Ingle, W. K., & Rutledge, S. A. (2014). How teacher evaluation methods matter for accountability: A comparative analysis of teacher effectiveness ratings by principals and teacher value-added measures. *American Educational Research Journal, 51*(1) , 73-112.
- Hopkins, C., & McKeown, R. (2005). *Guidelines and recommendations for reorienting teacher education to address sustainability*. Paris: UNESCO.
- Hubbard, R., & Power, B. (2006). Researching the Program. In *Innovations in teacher education: a social constructivist approach* (pp. 131-146). New York: State University of New York Press.

- Levin, B. B. (2015). The Development of teachers' Beliefs . In H. Fives, & M. G. Gill, *International Handbook on Teachers' Beliefs* (pp. 48-65). New York: Routledge.
- Lieberman, J. M., & Wilkins, E. A. (2006). The professional development pathways models: From policy to practice. *Kappa Delta Pi Record*, 42(3), 124-128.
- Mahmood, K. (2014). *Journal of Research and Reflections in Education*, 8(2), 146-161.
- Policy and Planning Wing. (2009). *National professional standards for teachers in Pakistan*. Islamabad: Ministry of Education.
- MCEECDYA. (2011). *National Professional Standards for Teachers*. Australia: Australian Institute for Teaching and School Leadership.
- Rehmani, A. (2006). Teacher education in Pakistan with particular reference to teachers' conceptions of teaching. *Quality in education: Teaching and leadership in challenging times*, 20, 495-524.
- Ross, J. A., & Bruce, C. (2007). Teacher Self-Assessment: A Mechanism for Facilitating Professional Growth. *Teaching and Teacher Education*, 23(2), 146-159.
- Rotherham, A. J., & Willingham, D. (2009). 21st Century Skills: The Challenges Ahead. *Teaching for the 21st Century*, 67(1), 16-21.
- Schulman, L. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- Shulman, L. (1992) Toward a pedagogy of cases. In J. Shulman (Ed.), *Case method in teacher education* (pp. 1-30). New York: Teachers College Press.
- Sparks, D., & Loucks-Horsley, S. (1990). Models of staff development. In R. H. (Ed), *Handbook of Research on Teacher Education* (pp. 40-57). New York: Macmillan.
- Waqar, Z. (2007). An Action Research at San Francisco State University/San Francisco Head Start: A Continuous, and Effective Improvement Plan for Early Childhood Teachers. In S. Ali, & M. Rizvi, *Quality in education: Teaching and leadership in challenging times. Vol. 2* (pp. 735-745). Karachi: Aga Khan University, Institute for Educational Development.
- Yüce, K., Şahin, E. Y., Koçer, Ö., & Kana, F. (2013). Motivations for choosing teaching as a career: a perspective of pre-service teachers from a Turkish context. *Asia Pacific Education Review*, 14(3), 295-306.
- Zhu, X. (2013). Discussion of the reconstruction of rural teacher training configuration in China. In X. Zhu, & K. Zeichner, *New frontiers of educational research: Preparing teachers for the 21st century* (pp. 79-97). New York: Springer-Verlag Berlin Heidelberg.