An Analysis of Teachers' Professional Development Training at Elementary Level

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Abstract

This study explored the effectiveness of professional development training of the public and private sector at elementary level. A survey was conducted by involving elementary teachers from the public and private sector, who attended the training. A questionnaire was developed focusing the four key factors of the training: suitability of the resources; quality of the content and management; competency of the trainers; and usefulness of the training. A simple random sampling technique was applied to collect data from the trainee elementary teachers of the public and the private sector. From the public sector 750 trainee teachers and 600 elementary teachers from the private sector were selected from the five districts of the Punjab province. Data were analyzed on the basis of above mentioned four factors. Descriptive statistics and t-test were calculated to analyze the data. The findings based on sector-wise analysis discovered a significant differences in the opinion of trainees in both public and private sector in view of the "usefulness of the training" (pvalue=0.041). The rest of the three factors were insignificant which means trainees from the both public and private sector having the same opinion about the training. While on the other hand, gender-wise analysis discovered significant differences in the opinions of trainees in both sectors in view of the quality of content and management and competency of trainers. The rest of the two factors were insignificant. The possible reasons and implications of these insignificant findings were discussed.

Keywords: professional development, teachers' training, public sector, private sector.

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Introduction

Literature emphasized that the quality of education is linked with teachers' professional development. Literature also identified the key stages in teachers' professional development programs e.g., jobembedded, on-going, in-depth, and content-focused (Darling-Hammond, 2000; Guskey & Huberman, 1995). The core features of an effective professional development includes: content focused; active participation of the learner; and feedback/follow-up. The major characteristics of the effective professional development programs are the enhancement of teachers' content and pedagogical knowledge; use of adequate time and resources; mutual knowledge exchange among participants; activity-based learning; high-quality instructions; and proper evaluation (Guskey, 2003).

Professional development is regarded as "a comprehensive, sustained and intensive approach to improve teachers' effectiveness to improve students' academic achievements" (Johnson & Denise, 2001). Generally, teachers' professional development is marked by four types of growth i.e. (a) improvement in knowledge (b) improvement in skills (c) improvement in judgment (all of which are related to classroom), and (d) improvement in contribution teachers make to a professional community (Borko, 2004). Guskey and Yoon (2009) "argued that professional development is the key to improve the school". He further stated that professional development has a broader scope starting from developing teachers to overall school development (Elmore, 2002).

Newmann, King, and Youngs (2000) discussed that effective professional development should encompass the following salient features: it should be school specific and should concentrate on instructions and student outcomes; it should provide the opportunity for knowledge sharing with colleagues, helping them in their problems and providing them feedback; it should have the provision to connect teachers to some external efficiency as well as respecting teachers' creative thinking; and it should be an ongoing part of the school activities rather than of short period and divided into episodes.

Harris and Mujis (2005) state "if the participants are insensitive to the professional development opportunities and they do not make efforts to implement the learning experiences to their workplace, it is impossible to have any impact on their students' achievement". It is evident from the literature around the world that teachers need more professional learning focused on teaching and learning and subject disciplines (Schleicher, 2011). Garet, Porter, Desimone, Birman, and Suk Yoon (2001) found

that professional development is likely to be higher quality if it is not only consist of a substantial number of hours but also is sustained over time. The powerful component of effective professional learning is gaining knowledge from other professionals (Mourshed, Chijioki, & Barber, 2010).

In addition to teachers' professional development, an organizational arrangement by the school supports the teachers to apply the learned knowledge and skills. The productive working relationship in schools results in greater consistency in teaching and learning, sharing practices and solving classroom problems (Darling- Hammond, Wei, Andree, Richardson, & Orphanos, 2009). Organizational arrangements support the teachers to apply knowledge and skills. Next, follow-up is crucial for such development programs. But, the necessary follow-up activities for teachers have not always been the priority for teachers' professional development programs (Darling-Hammond, 1996).

The evaluation process is an essential part of the professional development programs that are aimed to improve teacher and student's learning and performance. The most widely cited result of a significant number of studies in the field of professional development concluded that there is the need to focus on enhancing the content and pedagogical knowledge of the teachers (Guskey, 2003). But, most of the studies in this field have shown that these programs have been moderately effective and often fail to achieve the objectives (Wade, 1985; Kealey, Peterson, Gaul &Dinh, 2000; Guskey, 2003).

Some studies have shown that one of the most crucial problems of professional development programs is the absence of adequate follow-up after the training programs. One or two seminars or workshops as follow-up are insufficient to improve the pedagogical knowledge and skills of teachers (Barnett, 2002; Desimone et al., 2002). Similarly, studies in the field of professional development concluded that effective professional programs had some common salient features such as sufficient duration, the inclusion of theory, demonstration, practice, feedback mechanism, and classroom application of the learned experiences (Linn et al., 2010).

In Pakistani context, the quality of teachers' professional development programs have always been low due to certain reasons e.g., lack of well qualified trainers, lack of professional enthusiasm in teachers to participate in professional development training, lack of physical resources, distance of training centers, lack of transport facility for the teachers working in far-flung areas, and many others. Besides the public sector, the private sector is playing role in providing education to

the nation. But, despite the continuous efforts and spending a reasonable budget, the educational standard and ration could not be increased.

Besides the other certain reasons, the quality of the teachers may be one of the reasons. Both the public and private sector have been trying to provide professional development training to their teachers. In the light of available literature on professional development, the present study aimed to investigate the opinions of trainee teachers from the both public and private sector about the effectiveness of professional development program. This study will help to identify the effectiveness of the teachers' professional development program as well.

Objectives of the Study

The following objective guided the study:

- i. To investigate the effectiveness of the professional development training at elementary level.
- ii. To analyze the effectiveness of the professional development training in the public and private sector schools at elementary level.

Research Question

How do the elementary teachers of the public and the private sector rate the effectiveness of the professional development training resources, management, trainers, and its usefulness for trainees?

Methodology

Procedure

This study investigated the effectiveness of the professional development training conducted for elementary teachers in public and private sector schools. A quantitative survey was conducted by inviting elementary teachers, who were involved in teachers' professional development training from the public and private sectors schools in Punjab. The lists of the participants were obtained from the district level authorities of both sectors. In the public sector, Directorate of Staff Development (DSD), and in the private sector The Citizens Foundation (TCF), Association for Academic Quality (AFAQ), and Punjab Education Foundation (PEF) were organizing trainings for the elementary teachers. Informed consent was obtained and fulfilled all the

formalities to get approval before the data collection. Participants were asked to fill up the survey questionnaire. The researcher was available to the participants if they need any clarity in filling up the questionnaire.

Sample

All the male and female elementary teachers from the public and private sector, who attended the professional development training were the population of this study. Since the private sector is adopting various types of curriculum, we only involve those private schools that are offering the same syllabus as their counterparts. The sample was collected from the five districts of Punjab province: Sahiwal, Khanewal, Khushab, Mianwali, and Rajanpur.

A simple random sampling technique was applied to select the sample. Random sampling is the best single way to obtain a representative sample (Gay, 2003; Plano Clark, & Cresswell, 2010). From the public sector out of 4731 trainee teachers 750 (15.85 %) teachers, and from the private sector out of 2845 trainee teachers 600 (21.08 %) teachers were selected as the sample of the study. Gay (2003) claims that the larger the population size, the smaller the percentage of population is required to get a representative sample. As to demographic variables, overall 57.18% teachers participated from the public schools and 42.82% teachers from the private schools participated in this research. Next, 28.86% male teachers and 71.14% female teachers took part in this study. Their teaching experience was ranging between 1 to 15 years. The minimum qualification was Matriculation and maximum qualification was Ph.D. Moreover, we also asked about professional qualification, the minimum level was PTC and maximum M. Ed in the both public and private sector.

Data Collection

A self-developed scale was used to collect the data. The research instrument was based on 5-point Likert scale. The scale consisted of 36 items. The range of scale was divided as (strongly agree: 5, agree: 4, undecided: 3, disagree:2, and strongly disagree: 1). The research instrument was based on the content of the professional development training. The training was related to compulsory subjects of elementary level (i.e. English, Mathematics, Urdu, and Science and Pedagogy). The duration of the training of the both sectors was different. In the public sector it comprised on maximum two months. While on the other hand

the duration of the training was maximum two weeks. The items of the questionnaire were based on four key factors: suitability of resources (i.e., separate training centers for male and female teachers, suitable furniture for adult learners, cooperation of the administration, computer labs, science labs, libraries, spacious classrooms etc.) quality of content and management (i.e., trainees' selection policy, availability of the training manual, accordance of training content with trainees' needs, achievement of training objectives, strict implementation of the training schedule, sufficient incentive to the trainees, use of modern pedagogical skills, use of effective communication skills, transparent evaluation of training, appropriate duration of training, easy access to the training centers etc.), competency of trainers (committed and devoted to their work, use of appropriate teaching aids, concept clarity, motivation for questioning, variety of teaching techniques for different topics, situation handling techniques, activity based training, friendly attitude with the trainees.), usefulness for trainees (enrichment of knowledge about lesson planning, expertise in the preparation of low cost/ no cost A.V. aids, enabled to handle the discipline problems in the classroom and schools, enrichment of knowledge about the use of new assessment techniques, maintenance of school record, problem solving techniques, better classroom management techniques etc.). Following steps were taken to develop the questionnaire.

First, the available literature on the professional development training was reviewed including the training manual/ training schedule of both sectors. Secondly, pilot interviews were conducted with twelve elementary teachers (6+6) from the both public and private sector to determine the themes and items pool for the instrument.

On the basis of the previous studies and interviews with the trainee teachers, items of the questionnaire were categorized and specific headings were assigned to different categories of the questionnaire. The research instrument was developed under the guidance of the experts in the field of Education, Bahauddin Zakariya University, Multan. Expert opinion was obtained to determine the face and content validity of the questionnaire. The research instrument was pilot tested on a small sample to examine its reliability and validity. Initially, 42 items were developed, but on the basis of expert opinion and pilot testing out of 42 items six items were dropped and 36 items were retained.

The researcher administered the questionnaire during the teachers' training conducted in various training centers for public and private sector teachers. From the public sector 737 questionnaires and from the

private sector 552 questionnaires were received. The response rate of the questionnaire was 95.48%.

Validity of the Research Instrument

The instrument was validated through expert opinion and pilot testing. Furthermore, a Factor Matrix was drawn to assess the correlation among all the factors of the instrument. A positive correlation was identified among the factors of the instrument. The minimum value of 'r' was 0.35 while the maximum value was 0.64. These positive moderate values showed that all factors of the research instrument were positively correlated with one another. It could be concluded that factors of scale were internally related with one another.

Reliability of the Research Instrument

To assess the reliability of the instrument Chronbach Alpha was calculated. The Cronbach Alpha value of the research instrument was .87, which is considered excellent by following the benchmark of Law (2004).

Table 1

Demographic Characteristics of the Respondents

		F	%
Sector	Public	737	57.18
	Private	552	42.82
Gender	Male	372	28.86
	Female	917	71.14
Teaching	0-2	291	22.58
experience	3-5	313	24.28
	6-15	255	19.78
	>15	430	33.36
Academic	Matric	122	9.46
qualification	Inter	142	11.01
	Graduation	413	32.04
	Masters	602	46.70
	M.Phil/ PhD	10	0.78
Professional qualification	PTC/CT	449	34.84
	ATTC/OT/DM/PE/Lib	75	5.81
	B.Ed	533	41.35
	M.Ed	226	17.54
	Other	6	0.46

Table 2
Sector Wise and Gender Wise Comparison of the Opinions of Teachers

Areas of training			N	Mean	SD	t	p
Suitability of resources	Sector	Private	552	21.26	4.77	0.534	0.539
		Public	737	21.13	4.37	*****	*****
	Gender	Male	372	20.90	4.71	-1.42	0.155
		Female	917	21.30	4.48		
Quality of content and management	Sector	Private	552	46.28	5.99	1.178	0.239
		Public	737	45.87	6.38		
	Gender	Male	372	44.58	6.67	-5.40***	0.000
		Female	917	46.63	5.94		
Competency of trainers	Sector	Private	552	34.25	3.88	0.908	0.364
		Public	737	34.05	4.00		
	Gender	Male	372	33.48	4.46	-3.82***	0.000
		Female	917	34.41	3.69		
Usefulness for the trainees	Sector	Private	552	40.97	4.68	-2.045*	0.041
		Public	737	41.53	4.99		
	Gender	Male	372	41.02	5.19	-1.24	0.22
		Female	917	41.39	4.73		

^{*}*p* < 0.05

Table depicts that no significant difference was found in the opinion of trainees both in the public and private sector regarding the suitability of resources (p-value= 0.593). Similarly, no difference of opinion was identified between male and female trainees (p-value 0.155). It can be concluded that trainee teachers of both sectors were equally satisfied with the factor "suitability of resources."

Next, no significant difference was identified in the opinions of trainees both in the public and the private sector in relation to the quality of content and management (p-value = 0.239). It can be concluded that trainee teachers of both sectors were equally satisfied with the factor "quality of content and management." However, a significant difference was found in the opinions of male and female trainee teachers on the factor "quality of content and management" (p-value 0.000). Mean score of female teachers (46.63) shows that female teachers were more satisfied than male teachers (Mean= 44.58).

Similarly, no significant difference was found in the opinion of trainees both in the public and private sector regarding the competency of trainers (p-value= 0.364). It indicates the high-level satisfaction of the participants with the trainers' competency. It can be concluded that trainee teachers of both sectors were equally satisfied with the factor

"competency of the trainers." In contrary to sector wise comparison of the opinions of the teachers, gender-wise comparison found a significant difference (p-value= 0.000). Mean value of female teachers (34.41) was greater than male teachers (33.48). It can be concluded that female teachers showed their greater satisfaction than male teachers.

However, a significant difference was found in the opinion of trainees in both the public and the private sector in view of the "usefulness for trainees" (p-value= 0.041). Furthermore, the Mean value of the public sector is (41.53) which was greater than the private sector (40.97). It can be concluded that the professional development training for the teachers of the public sector was more useful than the private sector training. However, gender-wise comparison of the results shows that no significant difference was found in the opinions of male and female teachers on the factor "usefulness for trainees" (p-value= 0.22). It can be concluded that training was equally useful for male and female teachers.

Discussion

This study aimed to evaluate the effectiveness/appropriateness of the teachers' professional development training at the elementary level. The results of this study show that the trainees of both the public and private sector were satisfied with the resources of the professional development training. These resources included separate training centers for female and male teachers, proper furniture facility for adult learners, appropriateness of training rooms (e.g., lighting, capacity of the rooms, and temperature), availability of equipment at computer labs, library facility, availability of equipment at science labs, and some other necessities like pencils, notebooks etc.

These finding were not in line with the earlier research that identified the unsuitability and lack of these resources of the professional development training venues (Akram & Khan, 2007; Saeed & Wain, 2011; AKU-IED & SAHE, 2004; Chand, 2015; Dahar, 2011; Hussain, Hameed & Malik, 2015; Imran, 2008). In past, the dilemma of shortage/inadequacy of resources was also discussed by the Government of Pakistan in the educational policy statement that the teacher training institutions were facing budgetary constraints and that is why these institutions are unable to provide quality teacher education and it was stressed in the policy provisions that budget for the quality teacher education should increase (Government Of Pakistan, 1998-2010). It can

be asserted that professional development training venues have been furnished and well equipped.

As the data were collected from the district level training venues and these training venues have been made the centers of excellence. However, at tehsil level training centers, the situation may be different. Similarly, the private sector might have arranged the better resources at their training venues. Furthermore, the result showed that the trainees of both the public and private sector were almost equally satisfied with the items included in the factor of "quality of content and management." The items included in this factor were: on time information, the availability of training manual well before time, training material's accordance with the participants' needs, achievement of the objectives of the training, fair assessment of training, appropriate duration of time, appropriate cooperation of the administration, and appropriateness of the training material. This finding is also contrary to the earlier research studies (Chand, 2015; Dahar, 2011; Hussain, Hameed, & Malik, 2015).

As Fullan (2007), Guskey (2003), Harris (2011), and Spillane (2006) identified that training was unorganized, failed to achieve the objectives, participants' needs were not met and lack of interest of the administration. It can be concluded that the quality of content and management of professional development training might have been improved by both sectors. Sufficient and necessary arrangements might have been assured regarding the execution of the training. The objectives might have been achieved, training might have met the needs of the participants, and fair assessment might have been assured. Similarly, on the factor of the "competency of trainers", the results of the present study showed that there is a consensus of the trainees on the trainers' competency.

Gamoran, Secada, and Marret (1998) claimed that if the instructors focus on facilitating the learners rather than lecturing then the learners becomes more focused on learning and the process of learning and instruction becomes successful. It can be concluded that the trainers of both sectors might have focused on facilitating the participants. The trainers might have been expert in their subjects, their pedagogical and communication skills might have been good, they might have kept the participants busy in active learning, trainees' questions might have been encouraged and answers might have been given accordingly, and collaborative participation might have been ensured.

In view of identifying the effectiveness and appropriateness, the factor "usefulness of the training" for the trainees, the difference was significant. The trainees of the public sector were more satisfied than the

private sector trainees. It can be concluded that the training of public sector might have been well organized and proved more useful for the public sector. But, the training of the private sector might not have met the needs of the participants, might not have increased the attention of the participants to their subjects, the participants might not have felt motivated for training, and the content of the training might not have been comprehensive for the trainee teachers. In view of this factor our findings were in line with the available research but with the international research. In this regard Fullan (2007), Guskey (2003), Harris (2011), Spillane (2006) concluded that unorganized trainings bring no significant change in the knowledge and skills of the participants. Moreover, our study findings are also in accordance with the results of Gokmenoglu and Clark (2015) who conducted the evaluation of such programs in Turkish context. They identified that such trainings have not been helpful for participants. Similarly, female teachers were more satisfied with training as compared to male teachers. Khan (2004) found that female teachers had lesser opportunities to participate in in-service trainings. So, the result of this research study has shown their satisfaction with the training. The findings regarding gender were not in line with the study conducted by Gökmenoğlu and Clark (2015). They found that gender, has no effect on the professional development of teachers.

Conclusion

This study aimed to explore the effectiveness of the training conducted for teachers' professional development in the public and private sector at elementary level. It can be concluded that the findings of this study indicated that the teachers from the both public and private sector were satisfied with the suitability of the resources, quality of the content management, competency of the trainers but as to the usefulness of the training program, teachers in both sectors were not satisfied with the training.

This calls for a strict monitoring and evaluation of such training programs. Since a huge amount of budget and other resources are allocated for professional development training but these training have not been achieving its objectives. This should elicit a serious and comprehensive re-evaluation by the stakeholders of the professional development training. The planners should obtain the data of the teachers in detail and a needs assessment survey may be conducted before planning to avoid the loss of wastage of resources and time.

Implications

The need and importance of professional development training in the career of teachers is inevitable. The results of this study have some underlying implications in this regard. The training may be made more effective if the participants' needs may be assessed well before the planning. Trainees may be categorically divided into groups by their experience and subject areas. The planners may keep in view the needs of adult learners and the resources may be arranged as per the participants' needs. Highly qualified and skilled trainers may be deputed for training. The trainers may play their role as facilitator. The trainers should engage the participants in activities related to their topics. The trainers may focus on the weak areas of the participants. Policymakers of the professional development training may design a variety of trainings, as a single workshop or short period training may not be useful for trainees. A public and private partnership/ cohesion may be effective in relation to conduct such trainings.

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