Continuous Professional Development of Teachers: A Case of Public Universities in Pakistan

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Abstract

This research aimed at investigating university teachers' engagement in CPD activities, perceived importance of different CPD activities, skills to be focused in future training and barriers in professional development of teachers. Comparison of teachers' opinions was also made by gender and discipline. A self-developed questionnaire was administered to 700 conveniently selected teachers that belonged to four faculties. The data were analyzed by applying descriptive statistics including frequency of responses, mean scores and standard deviation, and t-test of independent samples for comparing views of respondents from different groups. The results showed that teachers were moderately engaged in all the fifteen professional development activities included in the questionnaire. Producing research papers, reviewing articles for journals, and developing teaching and learning materials were activities rated highly important by teachers. There was no significant difference in male and female teachers' opinions about their involvement in CPD activities. However as compared to teachers of social sciences, teachers of science disciplines were more involved in CPD activities. The respondents considered communication skills, management skills and research skills important for inclusion in their future training. Time, funding and unavailability of study leaves were major barriers that affected continuous professional development of teachers. It was suggested that professional development of university teachers may be taken as ongoing process. For helping teachers improve their academic and research skills, workshops and seminars must be frequently planned and organized by the universities.

Keywords: Professional development, professional development activities, academic skills, communication skills, research skills

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Introduction

The importance of higher education cannot be denied for shaping the civilized nations. Higher education plays central role in the training and provision of leaders for different spheres of life including government and other professions. The economic growth of any country is closely linked with the system of higher education which provides educated and skilled manpower for the national economy. Teacher is backbone of any institution including institutions of higher education if they have to materialize their visions and missions. The effectiveness of higher education institutions is largely dependent on the performance of teachers. For this reason, teachers must be trained and developed so that they may perform their duties efficiently and effectively.

Throughout the world, teacher education programs are designed for providing educators with the certification and competencies required in their professional careers (Rao, 2004). In-service training opportunities deliberately created by the management of institutions ensure quality instruction and retention of high-quality faculty (Ali, 2008).Underlining the significance of professional development, Guskey (2002, p. 381) observes: "high-quality professional development is a central component in nearly every modern proposal for improving education". Similarly Seyoum (2011) holds that the goal of educational reforms can only be achieved by ensuring that "teachers are equipped with subject matter knowledge and an evidence-and-standards-based repertoire of pedagogical skills" (p.381). Given the key importance of professional development programs for the successful realization of any educational transformation, the quality of learning activities for school staff is a major issue in both policy discussion and educational research (Wilson & Berne, 1999).

Professional development of teachers refers to "activities that develop teachers" skills, knowledge, expertise and other characteristics as a teacher" (OECD, 2009, p.49). Levin (2014) maintains that these days more appropriate alternate term for professional development is professional learning, which is "ongoing, often intensive, and always focused on improving student learning." (Levin, 2014). While defining the basic features of professional development, Day (1999) explains:

"Professional development consists of all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school, which contribute, through these, to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purpose 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 throughout each phase of their teaching lives" (p.4).

Continuous professional development (CPD) is a term employed to explain all the interventions in which teachers involve themselves during the course of their careers. CPD includes all practices which are needed to impact the classroom. The purpose of CPD is to enhance the work performance of educators in the classroom and increase learners' academic achievement. Effective professional development programmes engage teachers in learning events which are comparable to those they may employ with their pupils, and inspire them to create teachers' learning forums. There is a rising trend in considering schools as learning organizations, which help teachers share their academic skills and practices in an organized fashion (Bacchus & Grove, 1996).

It is observed that higher education institutions have inclination to consider formal courses as the most suitable mode of training intervention, but a different viewpoint has been taken by the practitioners (Becher, 1996). As indicated by the empirical evidence, professional development in tertiary education takes place extensively varied forms including "discussions with colleagues, responding to student feedback and peer review, as well as more formal activities such as qualifications, workshops and conferences" (King, 2004, p. 27). Becher (1996, p. 54) has pointed out seven types or modes of professional learning: "Courses and conferences; Professional interactions; Networking; Consulting experts; Personal research; Learning by doing; and Learning by teaching".

According to Levin and Lockheed (1993), developing nations such as Pakistan, are confronted with problems in provision of education facilities to their youth and there is a dearth of basic resources including trained and qualified educators. Apart from preservice teacher education in Pakistan, there is a policy for in-service training of teachers at governmental level but opportunities for educators' professional development are limited. The current teachers' training provisions do not adequately meet the demands for quality education in school sector (Government of Pakistan, 1998). However recently in Punjab province, Directorate of Staff Development (DSD) (now converted into Quaid- e-Azam Academy for Educational Development) has launched a rigorous programme of school teachers' training under the CPD framework that includes induction training as well as short in-service training courses.

In Pakistan pre-service training is not prerequisite for the entry to faculty positions in universities. According to Saleem, Masrur and Afzal (2014), there are no agreed upon instructional competencies for university teachers either at national or provincial level in Pakistan. The systematic mechanism for in-service training of university faculty is also missing. Aslam (2011) rightly points out that there is absence of effective professional development system at universities because universities in Pakistan have no appropriate human resource department that may design such policy. It is however important to note that Higher Education Commission (HEC) has established Learning Innovation Division (LID) with the mandate for provision of in-service faculty professional development. Short and long courses are organized by LID for the university

teachers. (Saleem, Masrur & Afzal, 2014). The major objectives of LID include "to orient teachers in specified subject and teaching techniques; to enable teachers to acquire knowledge, skills and techniques regarding efficient teaching; and to empower the teaching faculty of universities and degree awarding institutions with the latest tools, pedagogical skills and techniques pertaining to their disciplines" (HEC, 2017). Despite all these developments regarding professional development of faculty, university teachers' participation in CPD activities is not mandatory.

It is observed that limited research has been conducted in Pakistan to look into the issues related to professional development of university teachers. A reasonably good number of studies (e.g. Gujjar et al., 2010; Hussain, 2004; Sultana, 2010) have focused on school teachers' training and professional development. Amongst few researches conducted on faculty development of higher education institutions, Sultana (2007) attempted to assess need for professional development of college teachers. In his doctoral research, Ali (2008) analyzed the need and proposed a faculty development programme for universities of Pakistan. Saleem, Masrur and Afzal (2014), in their study, investigated effect of professional development on enhancing knowledge level of university teachers in Pakistan. Similarly, issues and challenges regarding professional development mechanisms of public universities of Pakistan were investigated by Aslam (2011). In this context, there is a dire need to explore the current status of CPD activities of university teachers in Pakistan. This study is expected to fill the afore-mentioned research gap.

Research Objectives

In Punjab continuous Professional Development of school teachers is being focused through intensive training programme. But there exists no uniform mechanism for CPD of teachers across the universities. So this study was designed to investigate continuous professional development of university teachers in Southern Punjab, which was delimited to five public universities (IUB, GSCWU Bahawalpur, BZU Multan, UE Multan and Ghazi University D.G Khan) including their campuses located in Southern Punjab. Following research objectives were focused in this study:

- 1. To investigate professional development activities in which teachers are involved.
- 2. To find out importance of different professional development activities as perceived by teachers.
- 3. To compare teachers' involvement in professional development and perceived importance of different professional development activities by gender.
- 4. To compare teachers' involvement in professional development and perceived importance of different professional development activities by discipline.
- 5. To investigate teachers' opinions about skills to be focused in their future training
- 6. To examine barriers those are affecting professional development of university teachers.

Research Questions

This study endeavored to answer the following research questions:

- 1. To what extent teachers are involved in professional development activities within last two years?
- 2. To what extent different activities are important for teachers' professional development?
- 3. Was there any significant difference in the opinions of male and female teachers about their involvement in professional development and importance of different professional development activities?
- 4. Was there any significant difference in the opinions of teachers from arts and science disciplines about their involvement in professional development and importance of different professional development activities?
- 5. What skills do faculty members need to be more effective teachers?
- 6. What barriers are affecting professional development of university teachers?

Research Methodology

Population of this study includes all the teachers working in different teaching departments of public universities located in Southern Punjab. This study was delimited to five public universities of Southern Punjab. Convenient sampling technique was used to select the sample for this study. Seven hundred teachers were accessed from four faculties of the selected universities. The return rate of questionnaires was 82.14%. Using Statistical Package for Social Sciences (SPSS), teachers' responses were analyzed by working out mean values, standard deviation and applying t-test of independent samples. Statistical significance for t-test was determined at 0.05 alpha level.

The demographic data shows that out of 575 respondents, who filled the questionnaires, 56% were male and 44% were female teachers. Regarding designations of teachers, 47.8% were Lecturers, 30% were Assistant Professors, 14.6% were Associate Professors and 7.5% were Professors. Thirty three percent respondents had M.A./M.Sc. qualification, 31% were M.Phil., and 36% were having Ph.D. degree. Majority of teachers (61%) had 1-10 year teaching experience. For the purpose of comparison of respondents' professional development activities, the departments were grouped into two major categories i.e. arts and science. Sixty three percent teachers were from arts disciplines and 37% belonged to science departments.

Research Instrument

This study employed a self-designed questionnaire having 30 close ended and three open ended questions which were related to different barriers, skills teachers needed and suggestions for their professional growth. Fifteen close ended items were focused on teachers' involvement in different professional development activities, and were asked on five-point Likert scale (from 'no extent' to 'a great extent'). The importance of different professional development activities were asked in other 15 close ended items on five-point Likert scale (from 'little important' to 'highly important'). The Cronbach Alpha values (0.74 for subscale I and 0.71 for subscale II) indicate reasonably good reliability of the instrument. Demographic information such as gender, qualification, designation etc. were also included in the questionnaire.

Data Analysis

Data were analyzed by using Statistical Package for Social Sciences (SPSS). For item analysis, the researcher calculated frequency, percentage, mean and standard deviation for each item. Comparison of opinions about different groups was made by applying t-test of independent samples. The significance of difference was checked at 0.05 level of significance. Following mean range was used to determine levels of teachers' involvement in professional development activities: 1.00 to 2.33(low involvement), 2.34 to 3.66 (moderate involvement) and 3.67 to 5.00 (high involvement). Similarly, following mean range was used to determine professional development activities: 1.00 to 2.33 (little important), 2.34 to 3.66 (moderately important) and 3.67 to 5.00 (high important).

Results and Discussion

The summary of data is presented and discussed in the following section.

Table 1

Teachers' opinions about their involvement in professional development activities

Sr.No.	Activities	Mean	S.D.
1	Read books/ articles in your academic area	3.31	1.200
2	Studied for higher qualification (M.Phil./Ph.D./Post-doc.)	3.25	1.350
3	Developed teaching-learning materials (books/ manuals etc.)	3.18	1.295
4	Attended teaching and learning workshops/ seminars/ conferences	3.16	1.259
5	Produced research papers/ reports	3.14	1.336
6	Conducted research	3.11	1.296
7	Participated as presenter/ resource person in teaching and learning workshops/ seminars/ conferences	3.11	1.317
8	Mentored your colleagues	3.09	1.318
9	Reviewed books of other authors	3.07	1.283
10	Reviewed research papers for journals	3.07	1.351
11	Attended short training courses	3.06	1.278
12	Obtained membership of academic/ professional organizations	2.95	1.303
13	Developed online academic resources (website etc.)	2.95	1.407
14	Developed networking with colleagues from other institutions	2.89	1.301
15	Applied for funded research projects	2.88	1.376
	Total Scale	3.08	1.311

Table 1 shows teachers' opinions about their involvement in professional development activities. The mean score (3.08) falls in the range of moderate level. The results show that university teachers of southern Punjab were moderately engaged in professional development activities. Harris (2002) observes that due to shortage of appropriate training facilities for the university faculty, the current status of teachers regarding adequate professional skills and training is alarmingly low. The data of current study reflect that faculty members were mostly involved in 'reading books/ articles' (M =3.31), followed by 'studying for higher qualification' (M = 3.25), 'developing teachinglearning materials' (M = 3.18), 'attending teaching-learning workshops etc.' (M = 3.16), and 'producing research papers/ reports' (M = 3.14). The activity in which teachers were least involved was applying for funded research projects (M = 2.88). King (204) conducted a study to analyze the CPD activities of university teachers in UK. She concluded that discussions with colleagues in their departments, supporting colleagues to develop their teaching, networking with colleagues from other institutions, reading books / articles on learning & teaching, reading web-based information, and participating in learning & teaching workshops were some of major activities the UK teachers were engaged in. (King, 2004).

Table 2

Teachers' opinions about importance of professional development activities

Sr.	Activities	Mean	S.D.
No.			
1	Producing research papers/ reports	3.72	1.253
2	Reading books/ articles in your academic area	3.68	1.252
3	Reviewing research papers for journals	3.49	1.171
4	Developing teaching and learning materials (books/ manuals etc.)	3.48	1.209
5	Obtaining membership of academic/ professional organizations	3.43	1.189
6	Conducting research	3.42	1.248
7	Studying for higher qualification (M.Phil./Ph.D./Post-doc.)	3.41	1.247
8	Attending teaching and learning workshops/ seminars/ conferences	3.39	1.200
9	Developing online academic resources (website etc.)	3.36	1.194
10	Participating as presenter/ resource person in teaching and	3.35	1.180
	learning workshops/ seminars/ conferences		
11	Reviewing books of other authors	3.35	1.152
12	Applying for funded research projects	3.30	1.271
13	Networking with colleagues from other institutions	3.30	1.320
14	Mentoring your colleagues	3.29	1.219
15	Attending short training courses	3.28	1.198

Table 2 shows teachers' opinions about importance of different professional development activities. Teachers perceived 'producing research papers/ reports' and 'reading books/ articles' highly important for professional development of faculty as mean scores were noted 3.72 and 3.62 respectively. However, all the remaining activities were rated moderately important by the teachers. Some of them included 'reviewing research papers' (M = 3.49), 'developing teaching and learning materials' (M = 3.48), 'obtaining membership of academic/ professional organizations' (M = 3.43), 'conducting research' (M = 3.42), and 'studying for higher qualification' (M = 3.41). It is important to note that 'attending short training courses' (M = 3.28) got least rating by the university teachers.

Table 3

Comparison of teachers' opinions by gender

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Variables	Gender	Ν	Mean	SD	t-value	Sig.
Involvement	Male	323	3.07	.658	478	.633
	Female	352	3.09	.613	470	.035
Importance	Male	323	3.40	.629	127	.022*
	Female	352	3.37	.599	.437	.022**

As depicted in Table 3, t-value is not significant at 0.05 level of significance for male and female teachers' involvement in professional development. It means that as a whole there was similarity in the pattern of male and female teachers' participation in professional development activities. However for two individual items, significant difference was observed. For both the items mean scores were in favour of male faculty members. As compared to female teachers, male university teachers produced more research papers/ reports, and reviewed more research papers for journals. When teachers however were asked to rate different professional development activities, t-value indicates significant difference in the opinions of male and female teachers. It may be inferred that male teachers, as compared to female faculty, attach more importance to CPD activities in their careers.

Comparison of tec	ichers' opinions by	, discipline				
Variables	Discipline	Ν	Mean	SD	t-value	Sig.
Involvement	Arts	364	3.04	.608	066	002*
Involvement	Science	211	3.13	.630		.003*
Immontance	Arts	364	3.08	.615	.334	720
Importance	Science	211	3.07	.678	.334	.738

Table 4

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It is clear from the data of Table 4 that there was significant difference in arts and science teachers' involvement in professional development activities. As compared to arts teachers (M = 3.04) faculty of science disciplines (M = 3.13) were more engaged in their professional development. On the other hand, similarity was observed in arts and science teachers' rating of different professional development activities. It means that CPD activities were considered equally important by the faculty of both arts and science disciplines. The analysis of individual items suggests significant difference in the engagement of faculty from arts and science departments in several CPD activities. The results highlight that teachers of science disciplines were more into obtaining membership of academic/ professional organizations, and developing teaching and learning materials (books/ manuals etc.) in their respective fields. As compared to faculty of social science departments, teachers of science subjects reviewed more research papers for journals, and were more engaged more in mentoring their colleagues. There may be multiple reasons for higher involvement of science subjects' teachers in CPD activities. Comparatively faculty of science disciplines may have varied and increased opportunities for training workshops, seminars etc., funded research projects and publication of their research papers in local and international journals. Above all, university teachers of science backgrounds are likely to have higher motivation for enhancement of their professional growth and expertise.

Table	5
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Teachers' opinions about the skills needed to be more effective teachers

	Little	Moderately	Highly	Mean	S.D.
Skills	important	important	important		
	(%)	(%)	(%)		
1. Communication skill	39	20	41	2.16	.777
2. Management skill	22.9	44.2	32.9	2.10	.742
3. Research skill	30	33.6	36.4	2.07	.812
4. Computer skill	23.4	37.2	39.4	2.01	.897
5. Teaching skill	33	39	28	1.96	.784
6. Writing research paper skill	42	38.2	19.8	1.79	.762
7. Developing grant research	52.2	27.8	20	1.67	.784
proposal					

Table 5 shows teachers' opinions about the skills needed to be more effective teachers. The mean score (2.16) shows that "communication skill" was highly important skill that needed to be more developed for being effective teachers at university level. Likewise, "management skill" (M = 2.10), "research skill" (M = 2.07) and "teaching skill" (M = 1.96) were major important skills for professional development. However mean score (1.67) shows that "developing grant research proposal" was perceived least important skill for continuous professional development at university level.

	Little	Moderately	Highly	Mean	S.D.
Item	important	important	important		
	(%)	(%)	(%)		
1. Time	17	15.1	67.9	2.52	.763
2. Funding	24.2	45	30.8	2.07	.742
3. Un-availability of study leaves	33.3	42.3	24.4	1.91	.758
4. Lack of encouragement	42.0	26.1	31.9	1.90	.856
5. Lack of opportunity	37.3	37	25.7	1.89	.789
6. Work-life-balance	31.9	48.1	20	1.87	.716
7. Over-emphasis on teaching	40.3	32.4	27.3	1.87	.815
8. Lack of personal interest	38	46.8	15.2	1.78	.700
9. External demands	66.2	26.4	7.4	1.41	.628

Table 6

Teachers' opinions about barriers that affect professional development of teachers

Table 6 shows teachers' opinions about the barriers in professional development of university teachers in southern Punjab. The mean score show that "lack of time" (M =2.52) and "funding" (M = 2.07) were highly important barriers that affected professional development of university teachers. Besides them, "un-availability of study leaves" (M =1.91), "lack of encouragement" (M = 1.90) and "lack of opportunity" (M = 1.89) were little important barriers of professional development. However the mean score (1.41) shows that "external demands" was least important barrier for professional development of university teachers working in southern Punjab. According to the findings of King's (2004) study, lack of time and pressures from other assignments (i.e. research) were major barriers in professional development of university teachers in UK.

Conclusion and Recommendations

The present study was designed to investigate the continuous professional development of university teachers in southern Punjab. This study was delimited to five public universities located in southern part of Punjab province. This research aimed at exploring teachers' engagement in CPD activities, perceived importance of different CPD activities, skills to be focused in future training and barriers in professional development of teachers. Comparison of teachers' opinions was also made by gender and discipline. This study is significant because it added to the scanty empirical knowledge about the status of continuous professional development of university teachers in Pakistan. The results showed that teachers were moderately engaged in all the fifteen professional development activities included in the questionnaire. Producing research papers, reviewing articles for journals, and developing teaching and learning materials were activities rated highly important by teachers. There was no significant difference in male and female teachers' opinions about their involvement in CPD activities. However as compared to teachers of social sciences, teachers of science disciplines were more involved in CPD activities. The

respondents considered communication skills, management skills and research skills important for inclusion in their future training. Lack of time, funding and un-availability of study leaves were major barriers that affected continuous professional development of teachers.

On the basis of this study's findings, it is suggested that professional development of university teachers may be taken as ongoing process. Higher Education Commission may provide increased opportunities for professional growth of university teachers from both science and social science disciplines. University management must encourage and facilitate their teachers for participation in CPD activities. For helping teachers improve their academic and research skills, workshops and seminars must frequently be planned and organized by the universities. To enhance the motivation of teachers, their participation in different formal and informal professional development activities must be given adequate weightage in annual rating and vertical elevation of the university faculty.

References

- Ali, S. (2008). Faculty development program for universities of Pakistan: The need to develop a model, (Unpublished doctoral thesis). Lahore: University of the Punjab.
- Aslam, H. D. (2011). Analyzing professional development practices for teachers in public universities of Pakistan. *Mediterranean Journal of Social Sciences*, 2(4), 97-106.
- Bacchus, F., & Grove, A. J. (1996). Utility independence in a qualitative decision theory. *KR*, *96*, 542-552.
- Becher, T. (1996). The learning professions. Studies in Higher Education, 21(1), 43-55.
- Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer Press.
- Ferman, T. (2002). Academic professional development practice: What lecturers find valuable. *International Journal for Academic Development*, 7(2), 146-158
- Government of Pakistan. (1998). *National education policy 1998-2010*. Islamabad: Ministry of Education,
- Gujjar, A. A., Naoreen, B., Saifi, S., & Bajwa, M. J. (2010). Teaching practice: Problems and issues in Pakistan. *International Online Journal of Educational Sciences*, 2(2), 339-361.
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3), 381-391.
- Higher Education Commission (2017). *Learning innovation division*. Retrieved on 29 August 2017 fromhttp://www.hec.gov.pk/english/services/faculty/CPD/Pages/ default.aspx

- Harris, A. (2002). Effective leadership in schools facing challenging contexts. *School Leadership & Management*, 22(1), 15-26.
- Hussain, S. (2004). Effectiveness of teacher training in developing professional attitude of prospective secondary school teachers, (Unpublished doctoral thesis). Rawalpindi: Arid Agriculture University.
- King, H. (2004). Continuing professional development in higher education: What do academics do? *Planet*, *13*(1), 26-29.
- Levin, B. (2014). *Professional development and the promotion of highly-effective teaching*. Paper presented in 29th annual Emerging Issues Forum in North Carolina- USA on 10-11 February 2014.
- Levin, H. M., & Lockheed, M. E. (1993). *Effective schools in developing countries*. London: Falmer Press.
- Rao, R. R. (2004). Method of teacher training. New Delhi: Discovery Publishing House.
- Raza, S. A., & Khawaja, F.N. (2013). Faculty development needs as perceived by departmental heads, teachers, and students of Pakistani universities. *Literacy Information and Computer Education Journal (LICEJ)*, 4(1), 992-998.
- Raza, S. A., Naqvi, S. A. H., & Lodhi, A. S. (2011). Assessing need for teaching development of faculty at universities of Pakistan: A students' perspective. *Bulletin of Education and Research*, 33(2), 49-62.
- Saleem, A., Masrur, R., & Afzal, M.T. (2014). Effect of professional development on enhancing the knowledge level of university teachers in Pakistan. *Journal of Research & Reflections in Education (JRRE)*, 8(2), 162-168.
- Sultana, N. (2007). Need assessment for professional development of college teachers. *Journal of Educational Research*, 10(1), 70-83
- Sultana, N. (2010). Need for professional training of secondary school heads. *Journal of Educational Research*, *13*(1), 273-288.
- Wilson, S., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209. Retrieved from http://www.jstor.org/stable/ 1167270.