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HIGHER EDUCATION PERSONNEL TRAINERS COMPETENCE

Abstract

Present study was to explore into the trainers competence involved in faculty development program of National Academy of Higher Education (NAHE) in Phase II. All the course coordinators, resource persons and trainees were selected as population from 38 trainings centres at public universities of Pakistan. Majority of the respondents agreed that continuous professional development (CPD) programmes were helpful in improving their professional competence. The trainees in their interview further insisted on a formal Post Graduate Certificate (PGC) for university/college faculty. The study provoked insights for public universities in Pakistan, and the institutional, cultural, and academic context which affect their performance. We hope this study will be helpful highlighting opportunities for public university reforms.

Keywords: Competence, Faculty Development, Public University, Pakistan

Introduction

There are different components of educational process i.e. curriculum, learner, classroom, administration and teacher (Rodriguez, 2008). Role of a teacher is the most important component of the education system and higher education has no exception in this regard. A well-motivated and well-trained teacher is an essential feature for the wholesome development of a nation (Kakkar, 1996). It is a matter of fact that the expertise of a teacher like academic qualifications, mastery of the subject, competence in teaching, and devotion has significant impact on teaching learning process (M. Khan, 2005). Higher education, in general, aims at improving teachers' qualities; enhancing understanding and knowledge; and helping to shape a civilized and democratic society (Scott, 2000). It is a great source of cultural and socio-economic development of a country (M. Khan, 2005). By attaining excellence in the field of higher education any nation can be grown up to a developed nation within the life span of a single generation (Government of Pakistan, 2002).

Considered of having an impeccable focus on *continuous professional development* (CPD) of higher education personnels in Pakistan the establishment of *National Academy of Higher Education* (NAHE) was brought into being in 1983 under the auspices of the *University Grants Commission* (UGC, 1989). After the establishment of *Higher Education Commission* (HEC) in 2002 NAHE continued its functioning under the umbrella of HEC. Its major objectives include: arranging in service teachers training programmes for both college and university teachers; to carry out and improve research; to develop curricula at higher education level; to arrange workshops, conferences, symposia, seminars, etc.; to work as a hub to retrieve and to spread information on administration,

curriculum and evaluation of higher education; and to launch centres for faculty development and research (NAHE, 2010).

Faculty development is an inclusive and continuous process of professional development, and self-recognition within the framework of organizational development and growth (Shroyer, 1990). Quality of education heavily depends on the quality of faculty. Sole purpose of faculty development is to enhance the expertise, skills and knowledge of the employees so that they can perform more efficiently in their particular jobs. Hence, faculty development can be defined as the activities planned to improve skills, understanding and knowledge of teachers that lead to transform the teacher's thinking and classroom behaviour.

To this end NAHE has been organizing *faculty development programmes* (FDP) for the professional development of university teachers under the patronages of HEC. The objectives of teachers training program, as documented in *Eighth Five Year Plan* (1993-1998) are: to attain the practical skills that can be useful in actual classrooms situation (Government of Pakistan, 1994); to enhance the excellence of teacher competence at higher education level (Government of Pakistan, 2002); to update teacher's subject knowledge and teaching techniques so that they can do justice with their jobs (Kakkar, 1996).

In order to add to competence of university teachers through professional development courses NAHE started providing this facility of CPD at their door step. As part of the faculty development program, Phase I (*Professional Competency Enhancement Program for University Teachers* (PCEPT)) was launched in 2004 under *Learning Innovation Division* (LID) which is a subdivision of HEC and actively playing its role. Principal investigator of present study was assigned the task of evaluation of Phase I. It was found that the training had been very successful and beneficial for university teachers.

Keeping in view the dire needs and demand of university community NAHE launched its sequel i.e. the Phase II in July 2008 (NAHE, 2010). In Phase II 38 Human Resource Development Centres were established at public sector universities. It was funded by USAID Pre-Service Teacher Education Program in Pakistan. The objective of NAHE Phase II is to equip the faculty of higher education with seven basic principles of professional teaching skills making them certified Professionals. It also aims to impart professional development trainings to 2500 faculty members of higher education institutions. It targeted 2100 faculty members under PCEPT (Professional Competency Enhancement Program for Teachers) component and 400 under ITE (Incorporating Technology in Education) component. The main emphasis was on the enrichment of basic teaching competencies of the faculty members of different disciplines. Its aim is to convey technology based and research oriented trainings to create practicality in the teaching learning situation. Another aim of NAHE is to enhance computer literacy of the faculty members of higher education institutions. It also aims to organize trainings in the form of workshops/ seminars/ conferences/ lectures for the teachers of higher education institutions in order to expose them to the modern trends in teaching/ education. It also aims at to boost the professional and managerial skills of the personnel involved in conducting these trainings, through national and international forums. It also aims at development of Androgical and research skills of the Higher Education Faculty through conducting professional development programmes at their door steps.

Present study was aimed at to evaluate the competence of resource persons involved in NAHE's CPD programme Phase II.

Litrature Review

The review of literature has revealed that Teacher Education has always been given importance in all our

educational policies but it has been given a serious consideration when The Ministry of Education undertook a National policy review to answer many others significant question raised in the Green Papers on Teachers' Training, including: (a) What are the shortcomings of the current training systems? (b) How can teacher education be upgraded? (c) Will an authorization system exist? (d) What would be a good certification structure? Before service and during service the Teacher Education is a significant feature of National Education policies 1992, 1998 and Education Sector Reforms, 2001-2006 (UNESCO, 2006).

The Higher Education Commission made the rules for the Pakistan accreditation Council for Teacher Education in 2005. The purpose of this Council was to control all the existing teacher Education degrees and postgraduate diploma programs. All new programs in teacher education will be consulted by the Council for their approval. Moreover the approval will be for peculiar degree program not for institutions. In addition, approval shall be compulsory for all associated education academic programs offered by public and private sector institutions in planning their academic programs and will also support the academic progress of the in-service teachers and deliver professional support to the related organization. The main objectives of the Council comprise: (a) to formulate and assess the policies and processes for approval of teacher education program, (b) to make standards on which teacher education Program will be assessed and compared, (c) to issue a list of grade of teacher education program, (d) to ratify intellectual development and understanding of subject areas in the teaching profession, (e) to collect, socialize, and expose information and research findings on teaching profession and to support the teacher education institutions in quality reassurance (Higher Education Commission, 2005).

An important aspect of teacher education is to inculcate constructive attitude, compassionate ideas, high moral principles and strong good understanding in teachers related to accepting

their duties for the training and education of the students (Forlin, 2010).

But teacher training is taken by the trainees as a formality or just certification to meet the criteria rather than an opportunity to make polish one's teaching skills and get deeper understanding of the subject (UNESCO, 2006).

Training and teacher education programs are planned in fact for evolving efficacy in a teaching career Shaukat and Iqbal (2012). Teacher education programs deliver problem solving tasks and learning based activities to student teachers to improve their self-efficacy beliefs for teaching (Shaukat & Iqbal, 2013).

The teacher education program plays a dynamic role in the improvement of teaching skills, professional growth and professional knowledge of new teachers. Professional growth can be defined as changes over time in the conduct, knowledge, descriptions, views or insight of novice teachers. Keeping in view the teacher position and future tasks of teachers, three aspects of teacher training, academic training, teaching skills and teaching practices are considerably significant (Kagan, 1992).

The main responsibility of the higher education institutions is to provide teachers sound training for their future professional contribution. They should be taught teaching and management skills so that they can utilize these skills in their real teaching (Capel, 1997).

The teacher education program should include the skills that increase not only the social competence but also the knowledge of the problem that students face and the ability to tackle with them skill fully (Heikkinen, Jokinen, & Tynjälä, 2012).

Faculty may be described as a whole teaching and administrative force of an institution i.e. university, college, or school (Ioannou, 2009) . Amundsen et al. (2005) stated that the term 'faculty development' is commonly used to describe activities and programs designed to improve coaching. Puri, Graves, Lowenstein, and Hsu (2012) defined Faculty Development

as an effort aimed at promoting faculty success and academic acculturation.

There are different models of faculty development suggested by different authors and educationists. These models differ to each other due to their characteristics. A model is, in fact, a study conducted to understand the system or some aspects of complex system. The four famous models of faculty development are given:

Bergquist and Phillips (1975) presented their faculty development model characterized by comprehensiveness of teaching-learning enterprise and diversity of strategies.

University of the Waikato after three year research funded by the New Zealand Ministry of Education presented the following model for faculty development applicable for all levels and programs that covers broader aspects of a faculty development program. This model emphasis on organizational/social, professional and personal/instructional development (Brown, 1997).

Sultana (2004) presented a model for professional development of college teachers where a panel of experts set vision and objectives. Then the model covers pre-requisite, needs assessment, types of training, courses, training material, training methods, monitoring and evaluation and follow-up stages.

Khan (2005) presented a faculty development model for universities. The model covers objectives of higher education, need assessment, training objectives, planning for training, training curriculum, individual content area, presentation in the actual class room situation, evaluation, and on the job assessment steps.

The teacher is the most significant factor, which influence on students in terms of knowledge and skills development, self-assurance, or class room performance. They further elevate that teacher's professional development is a main component and result of institutional development (Stoll, Bolam, McMahan,

Wallace, & Thomas, 2006). Professional development is different from other career development and staff development. Career development means, as the teacher moves through the professional career cycle the growth occurs (Glatthorn, 1995). Indian National Commission (1964-66) also acknowledges that the importance of professional development for teachers as they admit the quality, competence and character of teachers are certainly the most significant among all different factors, which impact the quality of education and its influence to national development (Acharya, 1994).

Staff development can be defined as the delivery of planned in-service programs for the growth of group of teacher and it is only one of the logical steps that can be taken for teacher development (Glatthorn, 1995)



Fig. Objectives of professional development

Staff or faculty development is an obligation to enhance the occasions for all staff to increase their levels of skills and knowledge to advance the quality of workforce output and contentment (University of Western Australia, 2006). Another term, which frequently used is teacher development. It is the professional growth a teacher attains as a result of getting better experience and probing his or her teaching thoroughly" (Glatthorn, 1995).

Professional development programs are intended to achieve all the above mentioned objectives and have always been essentially significant for supporting teachers to become exceptionally qualified by improving, increasing and advancing their

knowledge. Professionally faculty development programs are important because these have influence not only on the teacher's personal fulfilment and on economic improvement that have also substantial effect on teachers' proficiencies and inspiration. Teacher's proficiencies and enthusiasm both are key variables in the success of an educational plan or system in service training (Glatthorn, 1995).

Faculty Professional Development Program (FPDP) of HEC is the independent variable of present research that is an 'in-service' education. In service education and training consist of those education and training actions engaged in the primary and secondary school teachers, college and university teachers and principals, following their early professional certification and envisioned chiefly or solely to increase their professional knowledge, skill and approach in order that they can teach children more efficiently (Bolam, 1982). In other words, in-service training is intended for improving teacher's enthusiasm and capabilities, which are required for effective teaching as variables as mentioned by Bolam (1982) like knowledge skills attitudes are related to enthusiasm and capabilities of teachers. The term staff development is identical to the term in-service education, on job training, human resource development, comprising education and professional development. Staff development not only improves teacher's knowledge and educational skills but at the same (Robinson, 1993). While Shroyer (1990) says, it is an uninterrupted process of professional growth and self-recognition. At high education level, syllabus, measurement and instructional skills are important because in changing situation of the worldwide educational prospect, inventions and newest technology have altered traditional ways of conveying knowledge (Shroyer, 1990). The teachers must improve and organize themselves with all that is desired to meet the scenarios of the present day educational system (Hussain, Sarwar, & Anwar, 2010). Greenland (1983)

described the following four categories of in-service education and training.

1. For unqualified teachers (mainly certification courses)
2. For promotion of teachers
3. To prepare teachers for new roles, such as teacher instructors or principals
4. Curriculum associated, mainly when there are curriculum changes in the system or when teachers need some form of refresher course.

There are different in-service training programs for teachers in different parts of the world depending upon the teacher's professional requirements but Professional Faculty Development Program (PFDP) is a same program, teachers from different departments get the same professional training. The modules designed as suitable for all. Although both NAHE's staff development program and PFDP are different in terms of their duration and nature but there are same philosophies and reason behind them to improve the teacher's proficiencies (Hussain et al., 2010).

Methodology

Combination of qualitative and quantitative approaches was employed in this descriptive study. Underlying idea is that the use of quantitative and qualitative approaches provide a better understanding (Creswell & Clark, 2011). All the course coordinators, resource persons and trainees of Phase II from 38 centers established at public sector universities of Pakistan were the population of the study. Fifty percent (i.e. 19) of the centres were included as a sample of centres. About ten trainees, one course coordinator and two resource persons from each of 19 centres were included in the sample.

Four instruments were used in this study. First instrument was a self-developed 70 items questionnaire (Annexure - I) consisting of 11 indicators, used to collect quantitative data on 5-point rating scale (see the table below). Pilot testing of the research instruments were carried out at the NAHE training centre at University of Sargodha. Universal sampling technique was used. The data were collected from 25 trainees available at that time and were analysed. Value of Cronbach Alpha (0.983) indicated very high reliability of the instrument.

Table 1: Indicators in the Study

Indicators	No of Items
1. Planning, Coordination and Management of Training	12 (01 to 12)
2. Module Effectiveness	05 (13 to 17)
3. Resource Persons	04 (18 to 21)
4. Teaching as Profession	06 (22 to 27)
5. Academic Planning and Management	06 (28 to 33)
6. Curriculum Development	06 (34 to 39)
7. Assessment and Evaluation	06 (40 to 45)
8. Learner's Psychology	04 (46 to 49)
9. Andragogical Skills and Abilities	08 (50 to 57)
10. Communication Skills	05 (58 to 62)
11. Research	08 (63 to 70)

The second instrument was interview schedule for course coordinators (Annexure - IX) which contained 9 questions. The third instrument was interview schedule for resource persons (Annexure - X) which included 8 questions. Both interview schedules were validated by the experts (Annexure - XIII). The fourth instrument comprised set of modules review format separately developed for each module (Annexure - II to Annexure - VIII) keeping in view the objective of modules, validated by experts' (Annexure - XIII) in order to check the relevance of modules content with their objectives.

Table 2: Resource Persons Competence

Statements	SA	A	SA+A	Neutral	DA	SDA	SDA+DA
1. The resource persons well managed the sessions	28.1	50.0	78.1	16.7	4.1	1.0	5.1
2. The method of teaching was appropriate for university faculty	21.9	55.9	77.0	17.1	4.1	1.0	5.1
3. The selection of content presented by resource persons was as per needs of university faculty	23.6	51.8	75.4	13.2	11.0	0.4	11.4
4. The resource persons were competent enough to teach university faculty	21.5	54.7	76.2	19.3	4.3	0.2	4.5
Total (Resource Persons Competence)	23.77	53.1	76.67	16.57	5.87	0.65	6.52

Table 2 shows that the respondents were of the view, that resource persons well manages the sessions, method of teaching was appropriate, selection of the content was as per need of the university and resource persons were competent enough to teach the university faculty.

1. Most of trainees (78.1%) were in the favour of the statement 'the resource persons well managed the sessions' only 5.1% trainees were not in the favour of the statement. Whereas 16.7% respondents remained neutral.
2. Majority of trainees (77.0%) were in the favour of the statement 'The method of teaching was appropriate for university faculty', only 5.1% trainees were not in the favour of the statement. Whereas 17.1% respondents remained neutral.
3. About 75.4% trainees were in the favour of the statement 'The selection of content presented by resource persons was as per needs of university faculty' only 11.4% trainees were not in the favour of the statement. Whereas 13.2% respondents remained neutral.
4. About 76.2% trainees were in the favour of the statement 'The resource persons were competent enough to teach university faculty', only 4.5% trainees were not in the favour of the statement. Whereas 19.2% respondents remained neutral.

According to overall percentage of resource person's competency 76.67% trainees responded that the resource persons were competent enough according to the need of training; only 6.52% trainees were not in the favour of the competency of resource persons, whereas 16.57% respondents did not comment on the factor of resource person

H₀₄: There is no significant difference among the responses of trainees of different provinces of Pakistan regarding competency of resource persons of faculty development program by National Academy of Higher Education.

Table 3: Resource Persons Competence (Province Comparison)

	Sum Squares	of df	Mean Square	F	P
Between Groups	15.972	4	3.993	0.540	0.707
Within Groups	3722.208	503	7.400		
Total	3738.179	507			

The table 3 indicates that one-way between subjects ANOVA was calculated to check the province wise analysis of responses of trainees regarding competency of resource persons of faculty development program by National Academy of Higher Education. There is a significant difference among the responses of trainees of different provinces of Pakistan at $p < 0.05$ [$F(4,503) = 0.540, p = 0.707$]. Hence the null hypotheses "There is no significant difference among the responses of trainees of different provinces of Pakistan regarding competency of resource persons of faculty development program by National Academy of Higher Education" is fail to reject.

H₀₄: There is no significant difference among the responses of trainees of different provinces of Pakistan regarding competency of resource persons of faculty development program by National Academy of Higher Education.

H₀₁₆: There is no significant difference between male and female trainees' responses regarding competency of resource persons of faculty development program by National Academy of Higher Education.

Table 4: Resource Persons Competence (Gender Comparison)

Gender	N	Mean	SD	df	T	P
Male	316	15.86	2.86	506	1.306	0.192
Female	192	15.54	2.46			

The table 4 shows that an independent-samples t-test was conducted to compare the responses of male and female trainees regarding competency of resource persons of faculty development program by National Academy of Higher Education. There was no significant difference in responses of male ($M = 15.86$, $SD = 2.86$) and female ($M = 15.54$, $SD = 2.46$) trainees, $t(506) = 1.308$, $p = 0.192$ regarding competency of resource persons of faculty development program by National Academy of Higher Education. These results indicates that there was no significant difference between the responses of male and female trainees regarding competency of resource persons of faculty development program. So the null hypothesis "There is no significant difference between male and female trainees' responses regarding competency of resource persons of faculty development program by National Academy of Higher Education" is failed to reject. It means that male and female trainees had same responses regarding competency of resource persons of faculty development program by National Academy of Higher Education.

Discussion And Conclusion

The study explored into the trainers competence who had been involved in Continuous Professional Development Program of NAHE Phase II. Trainers were found competent enough to fulfill the training need of university faculty. Majority of the trainees insisted upon the continuity of such training programmes as they were helpful in increasing their professional competence.

The Responses on only two subscales (Curriculum Development 49.1% and research 22.08%) were noted below average. There are different studies on the effects of pedagogical training for the teachers of higher education that offer differing views of the effectiveness of such pedagogical training. A study on faculty development program was conducted by Hussain et al. (2010); nine indicators (improvement and development in skills/

abilities, modules effectiveness, resource person evaluation, coordination and management, duration of training, parental and institutional support, and incentive paid) were employed. In this study indicators of research methods and skills, and curriculum development were not included; so, excluding these indicators, the results of the study were found similar to that of the present study. Another similar study was conducted by (Kayani, Morris, Azhar, & Kayani, 2011) that included five indicators (improvement in skills and abilities, coordination and management, classroom management, conducting research and teacher efficiency and training). The results of the study supported that of the current results. Yet another similar study was conducted by Postareff, Lindblom-Ylänne, and Nevgi (2007) that included two indicators (improvement in skills and classroom management). Their results were also noticed to be similar to that of this study. The results of that study further showed that positive changes took place in teachers who had attended more in-service pedagogical trainings. Similar results were noted in another study conducted by Fakhra (2012) which was mainly focussed on instructional, professional and organizational development. Aziz and Akhtar (2014) found similar results while studying pedagogical assessment and management and research.

Keeping in view the findings of the study and conclusions, following recommendations may be proposed.

1. Majority of the respondents agreed that continuous professional development (CPD) programmes were helpful in improving their professional competence. Therefore its continuation may be strongly recommended. NAHE can play its unstudied effective role in order to provide professional support to university and college teachers.
2. Module 3 (i.e. curriculum development) and module 7 (i.e. research methods and skills) were reported not to be beneficial for the trainees from pure sciences. Therefore, separate research modules for pure sciences and social sciences may be

recommended; further, separate training sessions for module developers and resource persons should be envisaged to make such CPD Programmes more beneficial for the trainees.

3. It was found that a sizeable chunk (25.30%) of respondents were neutral on the fruitfulness of the programme. Perceptible reason was respondents' absence during some parts of the course on account of their official responsibilities in their respective departments. The participants are recommended to be relieved from their routine duties for training so that they may take full advantage of the programme.

4. Effectiveness of the training was much emphasised by the participants; usually university/college faculty need not to have obtained any professional degree. Post Graduate Certificates (PGC) was recommended for university/college faculty during the interview of the trainee.

5. Keeping in view the differing needs of various disciplines it is recommended by the participant that such CPD programmes should be conducted separately for various disciplines with the experts from the relevant domains.

6. It was found that the module 7 (i.e. research methods and skills) is too brief; therefore more content and more training in relevant software (like Excel, SPSS, NVIVO, etc.) is recommended to be included in module 7.

7. Foreign qualified resource persons should be involved.

8. Training duration should be squeezed to fifteen days but with eight hours per day with lunch and two tea breaks.

9. Staff development training should be conducted during semester breaks.

10. The facilities like multimedia, projector, digital camera, movie camera, TV and laptop should be available.

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References

- Acharya, P. (1994). Universal Elementary Education: Receding Goal. *Economic and Political Weekly*, 27-30.
- Alam, M. T. (2002). *A Study to Develop a Model for In-Service Training of Teachers in Pakistan*. (Doctoral Thesis), PMAS-Arid Agriculture University, Rawalpindi.
- Ali, S. (2008a). *Faculty Development Program for Universities of Pakistan: The Need to Develop a Model*. (Unpublished Doctoral Thesis), University of the Punjab, Lahore.
- Ali, S. (2008b). *Faculty Development Program for Universities of Pakistan: The Need to Develop a Model*. (Unpublished Doctoral Thesis), University of the Punjab, Pakistan: Lahore.
- Alkin, M. C. (1970). Products for improving educational evaluation. *Evaluation comment*, 2(3), 1-15.
- Altricher, H., Feldman, A., Posch, P., & Somekh, B. (2005). *Teachers investigate their work: An introduction to action research across the professions*. NY: Routledge.
- Amundsen, C., Abrami, P., McAlpine, L., Weston, C., Krbavac, M., Mundy, A., & Wilson, M. (2005). The what and why of faculty development in higher education: An in-depth review of the literature. *Retrieved on June, 17, 2005*.

- Auerbach, C., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. NY: NY University press.
- Aziz, F., & Akhtar, M. M. S. (2014). Impact of Training on Teachers Competencies at Higher Education Level in Pakistan. *Researchers World-Journal of Arts, Science & Commerce*, 5(1), 121-128.
- Bergquist, W. H., & Phillips, S. R. (1975). Components of an effective faculty development program. *The Journal of Higher Education*, 46(2), 177-211. doi:10.2307/1980880
- Bolam, R. (1982). *School-focussed in-service training*. London: Heinemann Educational Publishers.
- Bolton, K. M. (2011). *Effects of an online education program on self-efficacy and knowledge of the clinical teacher role*. (Master's thesis), Queen's University, Canada.
- Brown, R. I. (1997). *Quality of life for people with disabilities: Models, research and practice*. London: Nelson Thornes.
- Capel, S. A. (1997). Changes in students' anxieties and concerns after their first and second teaching practices. *Educational Research*, 39(2), 211-228.
- Chalk, R., & King, P. (1998). Assessing family violence interventions. *American journal of preventive medicine*, 14(4), 289-292.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research Methods in Education* (6th ed.). NY: Routledge.
- Coskun, A., & Daloglu, A. (2010). Evaluating an English Language Teacher Education Program through Peacock's Model. *Australian Journal of Teacher Education*, 35(6), 24-42.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. Thousand Oaks, CA: SAGE Publications.
- Creswell, J. W., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research* (2nd ed.). Washington DC: SAGE Publications.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological bulletin*, 52(4), 281.
- deAlmeida, G. R. (2006). *Performance Measurement and Accountability for a Research Career Training Program*. (Ph.D

- Doctoral Dissertation), Capella University, ProQuest. Retrieved from <https://books.google.com.pk/books?id=UBHNbNbak-sC>
- Denscombe, M. (2007). *The good research guide: for small-scale social research projects* (3rd ed.). Buckingham: Open University Press.
- Fakhra, A. (2012). *Impact of Faculty Professional Development Program of Higher Education Commission on Teachers Competencies And Motivation at Higher Education Level in Pakistan*. (Doctoral thesis), University of the Punjab, Lahore.
- Forlin, C. (2010). Teacher education reform for enhancing teachers' preparedness for inclusion. *International Journal of Inclusive Education*, 14(7), 649-653.
- Fraenkel, J., Wallen, N., & Hyun, H. (2011). *How to Design and Evaluate Research in Education* (8th ed.). NY: McGraw-Hill Education.
- Glatthorn, A. (1995). Teacher development. *International encyclopedia of teaching and teacher education*, 41-46.
- Heikkinen, H. L., Jokinen, H., & Tynjälä, P. (2012). *Peer-group mentoring for teacher development*. London: Routledge.
- Hussain, S., Sarwar, M., & Anwar, H. N. (2010). Sustained Impact of Professional Enhancement Program of National Academy of Higher Education (NAHE) In Pakistan. *Asian Social Science*, 6(12), p73.
- Ioannou, A. (2009). *Development and Initial Validation of a Satisfaction Scale on Diversity*. Retrieved from New York:
- Kayani, M., Morris, D., Azhar, M., & Kayani, A. (2011). Analysis of professional competency enhancement program of NAHE on the performance of college teachers. *International Journal of Business and Social Science*, 2(18), 23-29.
- Khan, M. (2005). *Designing a model for staff development in higher education in Pakistan*. (Unpublished doctoral thesis), University of Arid Agriculture, Rawalpindi, Pakistan.
- Khan, S. M. (2011). *Comparative Analysis of Teacher Education Programmes in Pakistan and UK*. Sarhad University of Science and Information Technology, Peshawar.
- Khatoon, A. (2008). *Impact of ADB Assisted Teacher Training Project on Quality of Teacher Education in Pakistan*. (Ph.D), International Islamic University, Islamabad.

- Kramarow, E., Lentzner, H., Rooks, R., Weeks, J., & Saydah, S. (1999). *Health, United States, 1999 with health and aging chartbook* ((PHS) 99-1232). Retrieved from Hyattsville (MD) National Center for Health Statistics:
- Kumar, R. (2011). *Research Methodology: A Step-by-Step Guide for Beginners* (3rd ed.). Western Australia: SAGE Publications.
- Lawton, D., & Gordon, P. (1993). *Dictionary of education*. London: Hodder & Stoughton.
- Madaus, J. W. (2006). Employment outcomes of university graduates with learning disabilities. *Learning Disability Quarterly*, 29(1), 19-31.
- Mayer, J. D., & Salovey, P. (1993). The intelligence of emotional intelligence. *Intelligence*, 17(4), 433-442.
- Postareff, L., Lindblom-Ylänne, S., & Nevgi, A. (2007). The effect of pedagogical training on teaching in higher education. *Teaching and Teacher Education*, 23(5), 557-571.
- Puri, A., Graves, D., Lowenstein, A., & Hsu, L. (2012). New faculty's perception of faculty development initiatives at small teaching institutions. *ISRN Education*, 2012, 9. doi:10.5402/2012/726270
- Reeve, C. D. C. (1992). *Practices of reason: Aristotle's Nicomachean ethics*. New York: Clarendon Press.
- Robinson, B. (1993). *The Primary Teachers' Orientation Course, Allama Iqbal Open University*. London: Routledge.
- Rossett, A., & Kendra, S. (2001). *Beyond the podium: Delivering training and performance to a digital world*. San Francisco: Jossey-Bass/Pfeiffer.
- Rossi, P. H., & Howard, E. (1993). *Evaluation: A Systematic Approach*. London: Sage.
- Saracevic, T., Braga, G. M., & Afolayan, M. A. (1985). Issues in information science education in developing countries. *Journal of the American Society for Information Science*, 36(3), 192-199.
- Shaukat, S., & Iqbal, H. M. (2012). Teacher self-efficacy as a function of student engagement, instructional strategies and classroom management. *Pakistan Journal of Social and Clinical Psychology*, 9(3), 82-85.

- Shaukat, S., & Iqbal, H. M. (2013). PROSPECTIVE TEACHERS' LOCUS OF CONTROL, PERSISTENT BEHAVIOUR, CLASSROOM ANXIETY AND PROFESSIONAL MASTERY BELIEFS. *Pakistan Journal of Psychology*, 44(2).
- Shawer, S. F., & Alkahtani, S. A. (2013). Career Development in Language Education Programmes. *Australian Journal of Teacher Education*, 38(6), 17-33.
- Short, L., Hennessy, M., & Campbell, J. (1996). Tracking the work. *Family violence: Building a coordinated community response: A guide for communities*, 59-72.
- Shroyer, M. G. (1990). Effective Staff Development for Effective Organization Development. *Journal of Staff Development*, 11(1), 2-6.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of educational change*, 7(4), 221-258.
- Sultana, N. (2004). *Need assessment and designing a model for professional development of college teachers in Pakistan*. (Ph.D), PMAS-Arid Agriculture University, Rawalpindi, Rawalpindi.
- Tehseen, A. (2011). *Analysis Of Discrepancies Between Skills Acquired During Teacher Training Programmes (b. ed & M. ed) And Skills Required In Actual Class Room*. International Islamic University, Islamabad.
- Thapa, K., & Adhikari, D. (2013). *Employee Motivation at IKEA Espoo*. (Bachelor's Thesis), Laurea University of Applied Sciences, Laurea Leppävaara.
- Tyler, R. W. (1950). Basic principles of curriculum development. *Chicago: University of Chicago Press. Performance Improvement Quarterly*, 3(1), 65-70.
- UNESCO. (2006). *Situation analysis of teacher education: towards a strategic framework for teacher education and professional development*: Islamabad: USAID.
- Wheeler, D. (1974). Curriculum concepts and conceptual clarity. *Journal of Curriculum Studies*, 6(2), 112-119.