IMPACT ANALYSIS OF HEC- BASED TRAINING PROGRAMS ON THE PERFORMANCE OF THE UNIVERSITY TEACHERS IN PAKISTAN

Dr. Khalid Hussain Shaikh
Associate Professor, Institute of Commerce, University of Sindh
Jamshoro (Sindh), Pakistan.

Ikhtiar Ahmed Ghumro
Assistant Professor , Deptt: of Commerce
Shah Abdul Latif University Khairpur Mirs

Asif Ali Shah
Assistant Professor, Deptt:of Commerce,
Shah Abdul Latif University-Khairpur

Faiz M. Shaikh
Assistant Professor
SZABAC-Dokri
Larkana-Sindh-Pakistan
Email:faizmuhammed_2000@yahoo.com

Miss. Tahira Afridi
Lecturer- IER-University of the Punjab-Lahore

ABSTRACT

The current research investigates the HEC based training for the University teachers in Pakistan and its impact on the performance on University teachers. The Higher Education Commission (HEC) in Pakistan seeks to improve the quality of teaching by University teachers. The Commission has initiated different forms of training according to the areas of expertise in order to improve skills and impact on the performance of University teachers. HEC based training plays a crucial role in the personal development among the University Teachers in Pakistan. Survey was conducted from 200 University teachers who have recently got training from HEC skill development or professional development training from HEC from all provinces. Structural questionnaire was design for reliability and accuracy the data.   Analysis and evaluation was done by using GENSTAT statistical software. Major findings of the study showed that training should be provided according to discipline and more interactive training should be design for the University teachers. It was revealed that HEC based training not only equipped with knowledge but also improving the confidence level of the University teacher. Moreover due to the government policies, rules and regulations, such as introduction of the Tenure Track System, the and hiring the foreign faculty in various all Public sector universities it also has impact on the performance of students in job market.   It revealed that teacher training was beneficial for professional development as well as for teaching performance. It also suggested that improved knowledge, skills and attitudes was necessary for the teacher aides to support the teaching program and facilitate learning and communication. It was further revealed that effective teacher aides required competencies in broad areas of human relations, instructional activities, non-instructional activities, and basic skills. The study concluded that basic and advanced level training is necessary for future training programs in Pakistan and 190 respondents responded to the questionnaires, by producing 95.0% response rate. Among which 70 % were male respondents and 30% were female respondents

Keywords: *Impact, Training, Development, Performance, University Teachers*

1. INTRODUCTION
This research explores the impact analysis of Higher education Commission (HEC) based trainings and its possible impact on the performance of University Teachers. The Higher Education Commission (HEC) in Pakistan seeks to improve the quality of teaching by University teachers. The Commission has initiated different forms of training according to the areas of expertise in order to improve skills and impact on the performance of

University teachers. HEC based training plays a crucial role in the personal development among the University Teachers in Pakistan.

1.1. Quality Assessment

It is generally observed by many researchers that impact of similar trainings of various disciplines, among the University teachers has little impact on their performance but HEC based specialized trainings has better impact on the performance of University teachers.   There are many issues in the quality assessment of HEC based trainings and training contents and theme of the training. The other issues like PhD enrollments before 2005 there is no condition of GRE and any other requirement which mean that HEC has given freedom those who has done PhD with out course work just produce a thesis and submitting them and get their PhD degree. According to survey 80% of the PhD produced with out any requirement their productivity is 0 compare with those who are currently enrolled in different PhD programs. Now who should assess quality of those PhDs who are getting equal allowance and got their promotions on the basis of Doctoral degrees in various disciplines? In a series of papers, Dolton and van der Klaauw (1995, (1999) investigate the impact of alternative opportunities on teacher transitions. They find evidence that opportunity wages affect the probabilities of both entry and exit. These results are consistent with earlier work by Murnane and Olsen (1989, (1990), which found that opportunity wages affected duration in teaching in both Michigan and North Carolina. Podgursky, Monroe, and Watson (2004) analyze the relationship of exits to teacher test scores.

The analysis confirms the existence of large and important variation in teacher quality including substantial learning in the first year on the job. It also supports the notion that good teachers tend to be superior across the achievement distribution. Virtually none of the variation in quality is explained by commonly measured (and rewarded) characteristics with the exception few While the development of this methodology is discussed below, recent methodological work on the approach is found in Rivkin, Hanushek, and Kain (forthcoming 2005), Aaronson, Barrow, and Sander (2003) and Rockoff (2004). The interaction with measurement error issues can be traced to discussions in Kane and Staiger (2002). A somewhat different but related strand of research comes out of the Tennessee value-added work of William Sanders and his co-authors (Sanders and Horn (1994); Sanders, Saxton, and Horn (1997)); see also the methodological discussions in Ballou, Sanders, and Wright (2004). 5 Bacolod and Tobias (2003), in a related discussion, raise doubts about the appropriateness of a simple value added model because of the possibility of a nonlinear relationship between pre and post tests.

2.   DATA COLLECTION AND METHODOLOGY

Survey was conducted from 200 University teachers who have recently got training from HEC skill development or professional development training from HEC from all provinces. Structural questionnaire was design for reliability and accuracy the data.   Analysis and evaluation was done by using GENSTAT statistical software.

Table-1. Geographical Location

Sindh	60	30%
Punjab	80	40%
NWFP	40	20%
Balouchistan	20	10%

Past analyses, even those with detailed data about Universities and teachers, have been unable to characterize reliably the important aspects of Universities and teachers by fitting simple parametric models using commonly observed University and teacher characteristics (Hanushek) Random assignment or instrumental variables techniques might be used to purge the estimates of confounding influences, although serial correlation in the variables of interest often complicates the interpretation of the results. Another alternative is estimation models of test score levels with student fixed effects. While this removes fixed unobserved factors that affect the performance level, it does not control for time varying influences in the past including the quality of recent teachers.

3.   UNIVERSITY TEACHERS PERFORMANCE

The University teachers performance is vary from University to University in Pakistan because some universities are weaker and some are in A category and HEC has also categories Universities according the research performance, further classified Universities ABCD categories and few of them weaker universities in terms of their performance. As noted, separating the elements of teacher quality from other possible influences

on achievement is difficult, and some ambiguity will necessarily remain. Moreover, this analysis is further limited in important ways: It is clearly conditional upon both the test instruments and the institutional structure of the University In addition, the second and fourth specifications regression adjusts for differences in observable characteristics. Differences among the specifications provide information on the extent of student sorting and on the magnitude of within relative to between University and year variation in classroom average gains. The top row reveals that controlling for observable student characteristics and using only within University and year variation reduces the between teacher variance in standardized gain. As expected given that most sorting occurs among Universities, controls for measured student heterogeneity have a much larger effect in specifications not restricted to within University and year variation.

Table: HEC Based Trainings

HEC Based Trainings	Mean University Teachers St. Deviation
Training	
2002(April)	0.072 (0.28)
2003 (Jan)	0.06 (0.23)
2003(April)	0.24 (0.43)
2004 (Jan)	0.40 (0.49)
2004 (April)	0.22 (0.41)
2005 (Jan)	0.05 (0.21)
2005 (April)	0.07 (0.34)
2006 (Jan)	0.076 (0.079
2006 (April)	0.080 (0.034)
2007 (Jan)	0.770 (0.0.334)
2008 (April)	0.885 (0.418)
2009-	0.6765 (0.6765)

Survey-2009

Table-3: General Linear Model of HEC based Trainings on the Performance of University teachers.

	Technical Soundness	Raising Quality Education Standard	Confidence Level Increased	Leadership	Personal development	F-test
Mean % Time	0.1711* (0.0001	0.1397* 0.0002	0.3222* 0.0001	0.2212* 0.0001	0.1455* 0.0001	30.75 0.0001
Deviation	From Mean % Time					
Training 2002 (Jan)	-0.03369 (0.3307)	0.0208 (0.5485)	0.0243 (0.4826)	-0.0033 (0.9233)	-0.0059 (0.8655)	0.37 (0.87)
2002 (April)	-0.03470 (0.2539)	0.0410 (0.1787)	0.00270 (0.9297)	0.0082 (0.7885)	0.0009 (0.9770)	0.64 (0.67)
2003 (Jan)	-0.0473 (0.1132)	0.0562 (0.0602)	-0.0097 (0.7451)	0.0035 (0.9057)	0.0027 (0.9287)	1.23 (0.29)
2003 (April)	-0.022 (0.2333)	0.0552 (0.12343)	0.00453 (0.000543)	(0.06675) -00.6756	(0.08978) 0.06553	0.66 (0.65)

2004 (Jan)	-0.34555 (0.4543)	0.223132 (0.29799)	-0.56565 (0.68757)	-0.65345 (0.25634)	-0.5645 (0.22333)	0.70 (0.68)
2004 (April)	-0.22345 (0.2334)	-0.5757 (0.4363)	-0.06675 (0.2345)	-0.45452 (0.45434)	-0.0655 (0.45643)	0.75 (0.72)
2005 (Jan)	-0.300 (0.3794)	-0.0543 (0.1269)	-0.67867 (0.9315)	-0.05645 (0.7055)	-0.334 (0.08158)	0.80 (0.76)
2005 (April)	-0.088 (0.8413)	-0.0360 (0.56465)	-0.0007 (0.78676)	-0.00087 (0.78786)	-0.0898 (0.564654)	0.85 (0.81)
2006 (Jan)	-0.0678 (0.7857)	-0.06876 (0.57657)	-0.02786 (0.6868)	-0.678687 (0.65589)	-0.07979 (0.7896)	0.90 (0.85)
2006 (April)	-0.0088 (0.8414)	-0.0360 (0.4115)	-0.0085 (0.56545)	-0.07876 (0.267856)	-0.022 (0.2333)	0.93 (0.89)
2007 (Jan)	-0.0777 (07686)	-0.0360 (0.4115)	-0.0085 (0.56545)	-0.07876 (0.267856)	-0.022 (0.2333)	0.93 (0.89)
2008 (April)	-0.0777 (07686)	-0.0360 (0.4115)	-0.0085 (0.56545)	-0.07876 (0.267856)	-0.022 (0.2333)	0.93 (0.89)
2009-	-0.0777 (07686)	-0.0360 (0.4115)	-0.0085 (0.56545)	-0.07876 (0.267856)	-0.022 (0.2333)	0.93 (0.89)

4. RESULTS

Comparison to the results of table.2.for firms with those in Table.3 for HEC based trainings indicates certain differences between the variation in the quality and impact on the performance on the quality and standard of the University teachers in various different trainings offered by the HEC Islamabad and various centre in all provinces . To statically test these differences, a general linear model can once again be implemented by redefining the matrix. The model is again of the form

$$Y = \mu + X1\beta1 + X2\,(X1)\beta2 + \in$$

Where Y = mnχ 1 vector of allocation time mean for given by the HEC based training , X1, is mn χ m vector of amin or treatment. Again β1, β2 are parameters vectors $\in$ is the disturbance term, m= number of categories of the Universities in Pakistan. The four types of University categories according to the research productivity based by the HEC categories treatment effects, β1, β2 are comfortable parameter vectors and $\in$ is the disturbance term. The index m denotes the number of categories, which in this case is four, and the index n denotes the number of Universities among in A B C and categories, which are total universities 40 were surveyed.

Table.3. presents the General Linear Model of HEC based Trainings on the Performance of University teachers quality, leadership, before and after training impact analysis The row labeled Mean % Time presents HEC based trainings mean responses to the question regarding how A B C D categories university teachers were trained by the HEC and how they assess the quality and impact after the training on the performance of University teachers in Pakistan.   The F-test indicates that the First hypothesis is rejected at 0.001 levels. Therefore the allocation time across activities do differ from University to University and are not uniformly distributed. This is evident by associated in values of 0.001 and 0.0012 respectively in the variation in the quality and personal development among the University teachers

Table.3. present the levels for the teachers model. The row labeled "Mean" percentage Time now presents the teachers mean responses to the question of how a all four categories University teachers have combined training and how assess the quality Again these means sum to 100%. The F-test indicates that the second hypothesis is rejected at 0.001 levels.

Major findings of the study showed that training should be provided according to discipline and more interactive and productive training should be design for the University teachers. It was revealed that HEC based training not only equipped with knowledge but also improving the confidence level of the University teacher. Moreover due to the government policies, rules and regulations, such as introduction of the Tenure Track System, the and hiring the foreign faculty in various all Public sector universities it also has impact on the performance of students in job market.   It revealed that teacher training was beneficial for professional development as well as for teaching performance. It also suggested that improved knowledge, skills and attitudes was necessary for the teacher aides to support the teaching program and facilitate learning and communication. It was further revealed that effective teacher aides required competencies in broad areas of human relations, instructional activities,

non-instructional activities, and basic skills. The study concluded that basic and advanced level training is necessary for future training programs in Pakistan and 190 respondents responded to the questionnaires, by producing 95.0% response rate. Among which 70 % were male respondents and 30% were female respondents

5. CONCLUSIONS

 This paper investigates a number of dimensions of the HEC based trainings and their impact on University teachers on their performance of various public sector universities and their market for teacher quality: the magnitude of the variation in quality; the contributions of experience and teacher education to that variation; the importance of student teacher matching; quality differences between those who remain in the large, urban province and those who leave for other province or professions; and the extent to which suburban districts use salary and student characteristics to attract better teachers. Three methodological issues are important. First, because of the psychometric characteristics of the Pakistan, it is crucial to standardize the test for the initial level of achievement in order to compare teachers across the entire distribution. Second, we control for potential non teacher factors through both direct measurement of student body characteristics and, at times, by restricting attention just to within-University variations in quality. Third, we use repeated measures of teacher performance to obtain estimate of measurement error versus systematic quality differences. To the contrary, teachers exiting the public Universities are significantly less effective on average in the year prior to leaving than those who remain, and those moving to other Provinces are quite similar in terms of effectiveness. Similarly, there is little systematic evidence in support of the view that the rural universities loses its better teachers because they prefer to work in urban or big cities. . Much has been made of the fact that salary differentials in metropolitan areas exist and that these may frequently lead to a drain of high quality teachers. This view is reinforced by analyses that show urban areas to be net suppliers of teachers to other districts and that show urban to lose teachers disproportionately from Universities with low achievement and high minority populations. Although high turnover teachers because of the lower performance of inexperienced teachers, the evidence does not support the related concern that the best teachers are those most likely to leave. The identification of large variation in the quality of instruction within Universities notwithstanding the presence of substantial measurement error has at least two additional implications for education policy. First, even if the test score has a larger signal to noise ratio, the appropriately constructed achievement gain is the proper measure with which to measure value added. It is much more closely related to current teacher performance and controls for important family and community differences that tend to confound estimates of teacher value added. And second, any formal or informal teacher evaluation program that aggregates performance to the University level or across years misses the majority of the variation in the quality of instruction.

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