



CREDIBILITY AND RELIABILITY OF QUALITY PERFORMANCE MEASURES

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ABSTRACT

The present study is conducted to investigate the relationship between performance measurement (Teacher Evaluation Performa) of Quality Enhancement Cell (QEC) and quality of teacher's performance. The research is conducted by the questionnaire and test-retest method. The study involved two variables, namely; quality performance measurement and teacher's performance. Quality performance measure is consisted on credibility and reliability. It is the general fact that education is a vehicle for human development and for running this vehicle there is need of good teachers as well as quality teaching because in the guidance of teachers, students explore their hidden abilities. On the other hand fragile guidelines results poorer outcome, so it is important for teachers to do best in their own performance. For fulfilling the above requirements it is important to measure teacher's performance through more credible and reliable measurement tools. However the result of the study shows that it is not adequate to use only one measurement tool to assess the quality of teacher's performance This study also revealed that proper methods for evaluating teacher's performance in higher education is greatly needed and that it is desirable to avoid a situation in which each institution has arduously to develop its own approach. It is better to use more than one valid and reliable method rather than stick on to one technique. As there is always chances of biasness in each method which cannot be overtake and only the way to evade this factor is to use different methods.

INTRODUCTION

In this fast changing world, it doesn't take long for skills and knowledge to become outdated. Technological advances and the flood of new information make it difficult to keep up with what's current. Lifelong learning is the only way to remain competitive in the job market and be able to navigate the information highway. You should invest in your own growth, development and self-renewal. This is the most rewarding investment that you can make. In the economy of information, education is the biggest currency. Do this the way a company invests in research and development, and come up with "new and better products or services" you can offer. Remember that the best product you can offer is yourself, and, if that product is not competitive then it is not wanted or needed. Education is the quality assurance that as a product you are competitive and possess the skills and knowledge to be productive.

Higher education institutions around the world have become aware of the importance of the quality assurance in the operation and delivery of their academic programs. Similarly teaching and other international institutional links can provide vital access to new ideas. These, in turn, lead to qualitative improvements in curricular, teaching and learning across colleges and universities delivering Education and training internationally.¹

The major beneficiaries of a well run quality assurance system in higher education are the students and graduates who will have experienced many opportunities to provide comment and

feedback on their experiences. Employers and other stakeholders will also have been consulted and included in this process. Academic staff should have gained adequate feedback to positively influence their teaching and learning activities, as well as the course structure and content of academic programs.²

Quality is 'suitability for purpose'. Monitoring means 'keeping track of the performance of a system, largely by the use of performance indicators focused on outcomes.' However, by monitoring mean not only the regular collection of performance indicators, but also their being reported back to the units responsible, i.e. monitoring with feedback.

The measurement of events, processes or actions will generally be more difficult than the measurement of mental states, such as achievements or attitudes.³ (pp.3)

In recent years the assessment of competences has been a central issue in the teacher profession. Whereas traditionally the term teacher competence has often been perceived in terms of behavior or in terms of individual psychological attributes, the recent concern for teacher competence has been expressed as a need for a more integrated concept denoting teachers' knowledge, skills, and attitudes in context while performing professional tasks⁴

Assessment systems must be informed by teachers and accepted by teachers. In plans to redesign assessment, teachers should be regarded as prime 'customers'. (pp.92) Measurements, of whatever kind, are of high quality if they can withstand various challenges, if they can withstand efforts to falsify them. This is Popper's falsifiability philosophy in action and is also standard procedure in the social sciences. (These measurement-testing challenges are less emphasized in the physical sciences, perhaps because the things measured are easier to operationalize and the variables of concern are more easily isolated.). Measurements require a set of procedures. In social science these may include selecting of test items, setting up the conditions for the administration of the tests, and agreeing procedures for assigning for assigning marks. Standardization of the conditions under which data are collected may often be vital. So what are the challenges that any measurement should be able to withstand are reliability and validity, both being sometimes subsumed under the general heading of generalizability.⁵ (pp.113)

Teaching matters. Study after study confirms that students who have high quality teachers make significant and lasting achievement gains. Those with less effective Teachers play a constant game of academic catch-up. Having high Quality Teachers consistently tops parents' list of critical elements of an effective school. As the National Commission on Teaching and America's Future stated, "What teachers know and can do makes the crucial difference in what students learn." But what's a "good" teacher? And how do we measure effective teaching? It turns out that assessing teaching quality is a very complex task.⁶

The main theme of this research is "credibility and reliability of quality performance measures" in which performance measure refers to teacher evaluation by students through QEC performa, and it is conducted with three different ways included test-retest method, interview From Quality Enhancement Cell and, questionnaire which is filled by lecturers of three different universities namely; Fatima Jinnah Women University, Allama Iqbal Open University and International Islamic University. According to QEC "Quality refers to the attainment of standards of resourcing and provision in the higher education sector, and the achievements or outputs of an institution or system. Quality is a multidimensional concept, and it is not possible to arrive at one set of global quality standards against which local institutions can be assessed.

Quality embraces all the major functions of higher education: teaching and academic programs, research and scholarship, staffing, students, infrastructure and the academic environment.” And when it is considered in higher education the means through which an institution can guarantee with confidence and certainty that the standards of its educational provision are being maintained and enhanced (Quality Assurance Agency UK); Quality has become an indispensable part of augmentation plan of Higher Education espoused by the Higher Education Commission. Reliability means a measure consistently produces the same result when repeated within the same population and setting. Validity addresses the question of whether a measure reflects what it is intended to measure.

Measurements are more or less reliable and more or less valid, not absolutely reliable or absolutely valid. Furthermore, measurements in social science can not be certified like a voltmeter. The conditions of use and the purposes enter into the of reliability and validity. For measurements to be considered to have ‘quality’ they must be adequate in terms of reliability and validity. Otherwise they are uninterpretable or misleading.⁷(Pp. 113)

Rationale of the study

In any quality improvement programme, measurement plays a vital role as it provides information for decision making..So underlying principle of this study is to investigate the importance of measurement tools, are these performance measures adequate to check teacher’s performance or there is need of other methods and it is obvious that nothing can be perfect, there is chances to improve everything. Certainly, to measure teacher performance, we need better ways to measure student performance. This obviously means better testing which seems objective to satisfying not to let down any one.

Objective of the study

The basic aim of this research is to find out the better way to judge the competitiveness of teachers performance as it is fact that the future of the nation is in the hands of teachers since they play fundamental role to build up the personality of students. So it is essential to use the credible and reliable measurement sources, and to express affluence, the set of measure must address the way the care is delivered and the nature of the quality problem involved—under use, misuse, or overuse.

Problem statement

Whether performance measure of QEC is reliable and credible enough to measure the quality of teacher’s performance.

Hypothesis

Measurement instrument (Teacher evaluation performa by students) of QEC credible and reliable to measure teacher’s performance.

LITERATURE REVIEW

Quality in higher education is a dynamic entity which is the outcome of interaction among many factors including inter-alia, leadership, quality of faculty and students, infrastructure facilities,

research and learning environment, governance, strategic planning, assessment procedures, and market force.⁸ The contemporary concern about quality assurance in higher education would appear to be more about ensuring that academic programs meet a common standard rather than seeking to continuously improve. Quality assurance often appears to promote conformity to external requirements and may appear to be more about maintaining control rather than seeking excellence⁹

The strategy for quality monitoring and enhancement includes the collection and systematic use of performance indicators.

An institutional student feedback system is described which produces a rank order of all teachers in the institution. Presumably it would be difficult to get promoted with such a ranking. Student feedback does not have to be used in this way: there are more humane (and sensible) systems which provide confidential comparative data for development purposes. The meaning, reliability, validity and interpretation of such ratings is so fraught with difficulties that they should not be used in this way.¹⁰ (p.46)

Given the possibility of bias, the only way to remove it is by adopting procedures which make it impossible. Quality must be built into the system.¹¹ (pp#76)

There are research –based reasons for making the distinction between methods of assessment. There is fairly extensive ‘multi-trait, multi-method’ literature initiated by an article by Cambell and Fiske (1959) and showing that how one assesses has a very large impact on the results obtained. Indeed- and this is some-what embarrassing for social science-there are many situations in which how the assessment is made-the method- has a greater impact on the outcome than what is assessed-the trait that is measured.¹²

Higher education supplement conference in 1993 suggested that institutions should devise their own appropriate quality procedures and mechanisms, without branding them as managerialist, and accept that outside agencies can judge outputs. Responsibility for devising these procedures and mechanisms rests, then, with individual institutions; but in such a situation there is a danger that every institution is forced to reinvent the same wheel. In this context, considerable benefit could be derived from identifying model procedures which may emanate from one institution but which can be transferred and used as a basis for developing procedures in other institutions.¹³ (p.2)

Loder (1993), after undertaking a university of London, institute of education study to define and assess the quality of education, concluded that the only effective way to assess the quality of teaching was to ask the people being taught, possibly implying that there would be no need for other information to be presented as part of the teaching profile for an individual member of staff. Given, however, that students are able to comment in an informed way only upon certain aspects of the teaching and learning process, there does remain a for further information to be provided in order to build up a profile. The goal of establishing a means of expressing teacher effectiveness in relation to quality and standards remains elusive¹⁴ (p.6)
The student questionnaire form, if carefully devised, does provide useful feedback to the teacher.¹⁵ (p.17)

A recent international survey concerning what academics themselves believe would have most impact on improving the quality of teaching in universities found that in every country

surveyed (including the UK) the method ranked first was not course review, or quality assessment, or the use of student feedback, or training in teaching methods, or conferences.¹⁶ (Wright et al.,1994).(p.42)

Propper and Wilson (2003) provide many examples of research that show “both distorted Measures and altered behavior to improve the PM [performance measures] at the expense of unmeasured actions” (p. 252). As one recommendation, they suggest the development of “targets based on alternative, independent information sources” that “would be ‘non-corruptible’ indicators of performance that are not subject to manipulation by the individuals whose actions are being measured”¹⁷ (p. 265)

It turns out that assessing teaching quality is a very complex task. Research suggests that good teachers know the subjects they teach and are skilled at communicating these subjects to students. But even this description is rather vague.¹⁸

METHODOLOGY

Hypothesis:

H1: Measurement Instrument (Teacher Evaluation Performa by Students) Of QEC Credible and Reliable to Measure Teacher’s Performance.

H2: Measurement instrument (Teacher evaluation performa by students) of QEC does not credible and reliable to measure teacher’s performance.

Variables:

Independent variable:

Performance Measurement instrument

Dependent variable:

Teacher’s performance

Operational definitions

Performance Measurement instrument

Measurement instrument is Teacher evaluation performa of QEC which is filled by students and on the basis of this performa teacher’s performance is assessed. Measurement tool is challenged on the grounds of credibility and reliability.

Teacher’s performance

The word teaching performance is refer to the behavior of instruction posing questions, providing explanations giving directions showing approval, engaging in the countless teaching acts that a teacher performs in the classroom.

Sample

Fifty (50) numbers of lecturers from each university namely; Islamic international university, Allama Iqbal Open University and Fatima Jinnah Women University are taken to fill questionnaire and test-retest method is applied on a class of masters. Interview is conducted from QEC (Quality Enhancement Cell).

Instrument

For lecturer's survey questionnaire is used based on dichotomous scale has nineteen (19) items. Test-retest method is applied on students to check the reliability of performance measure and interview is taken from QEC.

Procedure

Purposive and convenient sampling is used for collecting data and primary source is used to collect data, then analyzes and interprets the results by graphs, and conclusion is found on the basis of these interpretations.

Limitations of the study

As an enormous research it is hard to use all the techniques because time is also limited. The lack of a quantitative depiction restrict from the difficulty of collecting some information.

RESULTS AND DISCUSSION

The aim of this research is to observe whether performance measure of QEC is enough to assess the quality performance of teachers at higher education level. Teacher evaluations can be effective mechanisms for increasing student achievement and improving instructional practices, if the evaluations are connected with academic standards for students and professional standards for educators, according to the report. Developing state evaluations ensures consistency throughout a state and shows if teachers are meeting state academic goals (Delisio, 2005)¹⁹. As research is conducted and find out the subsequent results.

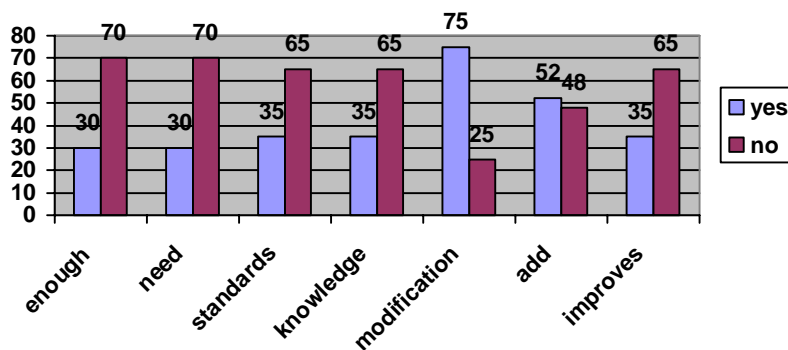
Interview by QEC

In accordance with QEC the key factors influencing the quality of higher education is the quality of faculty, curriculum standards, technological infrastructure available, research environment, accreditation regime and the administrative policies and procedures implemented in institutions of higher learning. It is absolutely critical to monitor and regulate growth of sub-standard institutions of higher learning. A comprehensive multi-level mechanism of accreditation is to be developed to ensure provision of quality education. Accreditation needs to occur at the department or program level, as well as the Institutional level.²⁰ Further they said quality enhancement cell in all the universities is like an advisory body which aims to enhance teacher's quality of teaching in all the ways. For that purpose they are developed different performas, on the basis of these performas assessment team maintain self assessment report. They observe, arrange meetings with all the departments and create awareness about the quality enhancement. They handover performas to the departments and they submit these performas after getting results.

According to QEC each cell in university work like a consultative, they only collect results from each department and after compiling these result an average ranking send to the HEC. On the basis of these findings university ranks their teachers good or bad or HEC categorize universities how much they perpetuate quality education. QEC is satisfied to have measurements (questionnaires) because they take it as standardize instrument and said it is used internationally, they are consistent with their views that there is no another measurement to check or measure teacher's performance. They properly observe all the processes during evaluation but also admit that they don't entail teachers while making this questionnaire. There is point of discussion that is it possible there is only one way to measure quality of teachers globally or there is need to search further? It is universally factual nothing can be perfect and there is a possibility to get better everything. QEC also disclose that they aware students to be serious to fill these performas but pay no heed to the lecturers. Teachers are the target populations, they did not discuss about it. Is it not necessary for lecturers to have information on which basis they are going to evaluate? It all about the interview taken from QEC but it was essential to have lecturer's own views, are they satisfied with their evaluation process or not?

ANALYSIS OF QUESTIONNAIRES

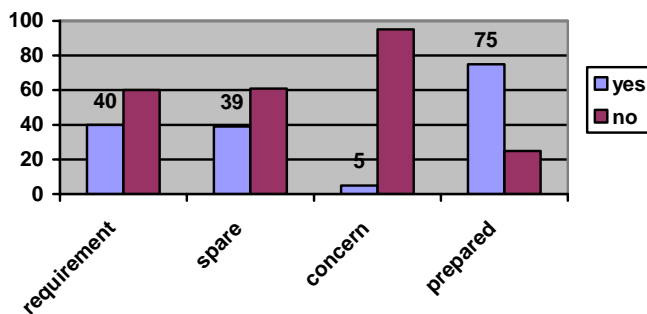
After analysis of questionnaires which are filled by lecturers it divulges lecturers have ambiguity in their minds regarding evaluation system of QEC. Because they don't know more about this measurement of QEC accept that they are being evaluated by a questionnaire (performa). Even some of them still have not seen this performa, surprising!



Enough = measurement of QEC enough to assess teacher quality.
 Need = is there need of any other measurement
 Standards = are there standard of teacher quality
 Knowledge = teachers know about standards
 Modification = modification is required in QEC performa
 Add = do you want to add more indicators in QEC performa.
 Improves= after evaluation is it create any improvement.

It is prolonged and superfluous to discuss each and every answer of teacher's questionnaire. Most of teachers did not know about QEC questionnaire (performa) or about its indicators. Only 40% shows satisfaction, and in keeping with observation they are less aware than satisfied. But mainstream of teachers are not accepted it is enough measurement tool and there should have other measurements to determine teacher's performance. Generally speaking majority of teachers have the opinion the questionnaire is not very elaborated to assess the performance of teachers and it is lacking in such sections. Greater part of Teachers (63%) doesn't know any quality standards so how can they fulfill the criteria of quality, because set standards push the persons to act accordingly. as Judyth, S. (2003) said "we need to ask whose

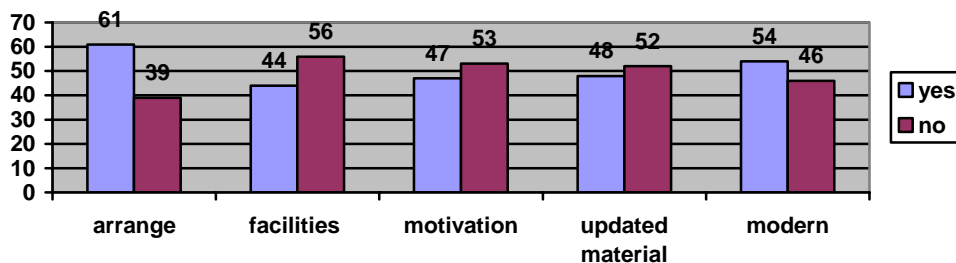
interests are served by these standards and what are the effects of the imposition of these standards on teachers individually and collectively. Finally, we need to ask whether the standards judged as appropriate for today's teaching conditions and teachers will be equally appropriate in the future. Standards cannot and should not be frozen in time; they must be flexible to the changing conditions of teaching and learning as they occur inside and outside of schools."²¹ 75% respondents said modification is required because nothing can be perfect. When we talk about the addition of indicators, there are a lot of suggestions from the lecturers e.g. communication skills, innovativeness/ creativity, commitment, formal discussions, conduct, punctuality etc. it demonstrate that teachers are interested to modify or improves the questionnaire if their help was taken they make it more authentic to check their performance. Only 35% results in the favor of after effects of evaluation is illustrate that after evaluation this will not affect teacher's performance as much as it should be. May be the reason is that after conducting assessment it is not utilized properly,



Requirement = QEC fulfill all quality requirement of teachers
 Spare = teachers have spare time
 Concern = teachers concern is taken while making this questionnaire
 Prepared = syllabus is prepared with the help of teachers

Sixty percent lecturers opposed this questionnaire (performa) cover up all the dimensions of teacher's quality and they strongly disagree to accept this measurement as basis of their performance evaluation. It should be considered seriously whether teachers have spare time or not to support their students or to solve their problems because most of lecturers express that they don't have extra time to resolve the problems of students because of administrative responsibilities which they have to fulfill as well. Visiting faculty in any university is not bound to do administrative tasks but permanent lecturers have to perform this double job for the reason that they are failed to concentrate or deliver quality lecture as they can. As Foss, H.K. (1999) discloses in his study, "Educators do not have the time they need to do their jobs properly. One of the major recommendations to emerge from this report was to provide teachers with the professional time and development opportunities they need. It recommends districts provide time in several ways: extending the contract year to pay teachers for professional development; scheduling longer days; and, using well-prepared, full-time substitute teachers to provide regular teachers with more time for preparation, planning, cooperation, and professional growth"²². It was too shocking that teacher's concern was not taken while making this performa even though they don't familiar with indicators on the basis of which they are going to assess. 95% lecturers never ever see the questionnaire of QEC and obviously it means HEC don't concern with teachers whereas constructing questionnaire. Teachers are not only to blame to unacquainted about it; QEC is responsible to neglect them during preparation of assessment tool. 75% responses are exposed course outline or syllabus prepare totally by lecturers. It is good because teachers discern well what to teach and how to teach. A teacher can have as much influence on a student as enormous personal and social factors have. Teaching that works. Teaching that meets

the needs of both reformers and traditionalists. Teaching that makes a difference in the lives of children and the life of the nation. (Lofy, 2008)²³



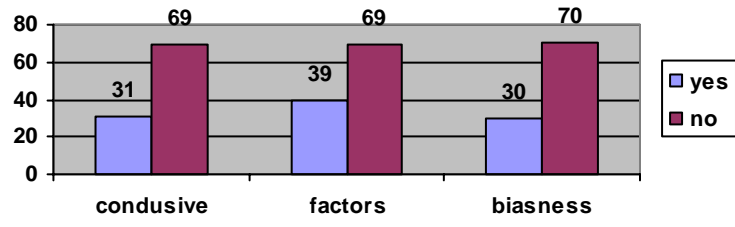
Arrange = university arranges workshops or training programs
 Facilities = are teachers provided with sufficient facilities
 Motivation = are there recreation measures to motivate teachers
 Updated material = do libraries have updated material
 Modern = university equipped with modern equipment

Most of teachers disagree there are not enough training programs and universities don't organize adequate workshops to prepare teachers. 60% responses shows teachers are not satisfied with the arrangements of workshops. According to them workshops and training programs arrange but they are not properly informed. Useful training programs are essential for teacher's growth and we can't neglect it. According to Deborah (1991) Critics of teacher training programs cite an over-emphasis on methods and psychological studies, the neglect of academic subjects, the need for accountability to ensure that training and certification are based less on academic credits and more on ability to function in the classroom, and the lack of uniform requirements among states. *A Nation at Risk*, the 1983 report of the National Committee on Excellence in Education, appointed by President Ronald Reagan, alerted the American public to the need to attract high-quality teaching candidates and to improve their training.²⁴

Fifty-six percent of teachers stated facilities are limited and inadequate. They also added facilities are there but not available or provided when (needed) or requested by a teacher.

53% diverge from the facility of recreation measures because they are dissatisfied with the rewards and awards systems and complained there is not much time to spend for enjoyment.

Half of the population refused to have libraries with updated material. This is the big factor to demotivate the lecturers, so how they can renovate their lectures according to changing environment. As it is reality which can't be abandoned, the world is changing rapidly and now it is tough to cope with the challenges of the human race. Libraries should be more updated to have all related and latest material. Fifty-four percent (54%) support shows teachers agree to have modern equipment but they complain we don't get equipment and when acquire it, doesn't work. This irritating situation decreases the enthusiasm of hard work and teachers only try to complete their tasks not effectively but as an obligation.



Conducive = environment is conducive to deliver quality lecture
 Factors = factors (anxiety, pressure etc.) effects the results
 Biasness = students behavioral biasness (likeness, dislikeness etc.)

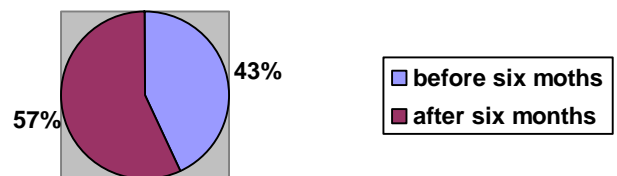
General view about environment, it is not conducive in terms of competitiveness, fairness, positive reinforcement; also, there is no remarkable difference between right and wrong. That’s why there is only 35% positive response. Class strength is too high in most of the universities it creates hurdle for quality education. It shouldn’t be more than 30 students (in many universities normally there are 50 or 60 students in a class).Environment needs more encouraging and favorable for the best outcome.

Human can’t be constant all the time or can be said there is no guarantee of human nature it can be change within seconds, consequently 69% results sustain this axiom. Sometimes students have personal problems that are why they can’t concentrate on studies so when this situation comes during evaluation process how they can contribute with devotion on that time.

The most debatable situation during evaluation process is student’s behavioral biasness. Tremendously seventy percent (70%) agree this factor influence the results badly. Teacher’s belief is that weak students always blame teachers Teachers have three types of relationship times with their students: Teaching/Learning time, when teacher and students are on task, attentive, and participating; Student-Owned Problem time, when students experience upsets or problems that distract their attention from learning tasks; and Teacher-Owned Problem time, when the teacher experiences problems with unacceptable student behavior and is distracted from teaching tasks. (Gordon, T. 1974)²⁵. Likeness and dislikeness also matters, students typically evaluate on the basis of their personal choice. Behavior of teachers in class should also be considered like politeness, controlling temperament, unbiased assessment of students during marking papers, assignments, projects etc.

RESULTS OF TEST-RETEST METHOD

Student's Feedback



Test retest method is a technique used to estimate the reliability or consistency of some measurement by correlating the results of multiple measurements, spread over time.²⁶

For evaluating the reliability of the questionnaire of QEC test-retest method is used through which it can be said to some extent this questionnaire is reliable to measure teacher's quality. After conducting the test it is disclose there is difference between the results of before and after six months. 43% students gave positive response about lecturers before six months but after six months on the same situation response had been increase from 43% to 57%. It will have many reasons but the main thing which can be observe (observed by auther) is non-serious attitude of students towards filling every type of questionnaire, they treat it as an extra activity or in reality they take it as an burden. So they are only filing these questionnaire but not evaluating. This is very pathetic but the reality. Although according to QEC they create awareness to students randomly(to take sample of students from one department) but to change the behavior of all the students this is not enough, for overall change they should involves all the departments and departments should enhance the importance of evaluation infront of students. Another reason can be the change in the relations of teacher and student, mental state, the difference in the envirnment on that time or on this time and many other reasons can be behind the this difference of results. But simply it shows we can't trust only on questionnaire to measure teacher's performance because it is not reliable enough to give consistant results.

Standardizing teacher evaluations in a state can provide consistency and tie evaluations to performance goals, according to a report. Evaluations that define quality and strive to improve student and teacher performance can be strong reform tools (Delisio, 2005).When we compile all the results which are obtained from three different ways and correlate them it expose more or less identical results. As teachers as a target group of QEC is refused to accept this measurement as a credible and reliable measure to evaluate quality of their teaching, they think there should be more than one method to check their ability or quality and students test also support it. But as said by QEC this measurement is credible and reliable and used globally, there are no other method to evaluate teacher's performance.

CONCLUSION

At the end it can be concluded that nothing can be faultless in this world everything needs to recover, when the process of progress get stopped it leg behind all the things. Scientific advances and the submerge of new information make it hard to maintain with what's contemporary. Constant erudition is the only mode to stay spirited in the job market and be competent to steer the information freeway. Measurements, of whatever kind, are of high quality if they can withstand various challenges, if they can withstand efforts to falsify them. Assessment as a human cognitive process of capturing teaching performances and products to produce data that can be used to make inferences about teacher competences (what teachers know and do) (Mislevy, Steinberg & Almond, 1999; Brookhart, 1999). Assessment systems must be informed by teachers and accepted by teachers. But to assess near to perfect it is necessary to have credible and reliable measurements, and it is also discussed above nothing can be ideal, so by using different techniques it can be easy to express near to real results.

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