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Teaching-learning quality indicators in higher education: Comparative perspectives of post graduate students

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KEY WORDS

Quality indicators, learning environment, learning resources, content delivery, assessment, tutorial, practical

ABSTRACT

Higher education institutions have undergone extensive changes and drastic reforms with a dynamic agenda to improve quality in teaching-learning environment. These institutions are now implementing more systematic and formalized systems for enhancing quality. This study aims at exploring and comparing the teaching-learning quality indicators from the perspectives of graduating students through descriptive survey approach. Sample was selected through random sampling technique and data collection instrument was a five point Likert-type scale questionnaire. Quality indicators are specified as organization of course content, students' contribution towards learning, learning environment, learning resources, quality of content delivery, assessment, tutorial and practical. The results revealed that a major difference exist present between the responses of post-graduate students across three faculties. Management Sciences students scored higher on subscales of content organization, students' contribution and tutorial whereas Social Sciences students had more emphasis on learning environment, learning resources and quality of content delivery. Languages students perceived practical as most important quality indicator. It was concluded that students may be sensitized to give authentic feedback for improvement of learning environment. In addition to this, students' participation may be enhanced in external reviews of programs. Lastly, teachers may be given training to improve teaching competence.

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Introduction

Higher education institutions and systems worldwide have undergone drastic reforms and extensive change over past twenty years with the agenda to improve quality in teaching and learning. Higher education institutions are progressively implementing more formalized, systematic and authentic quality assurance procedures, paving the way towards greater efficiency and effectiveness. The establishment of quality assurance offices in higher education institutions has facilitated in achieving the quality targets (Balesh et al, 2015).

The peculiarity of interconnection between graduated products (students) and universities' academic activities has provided a food for thought to university administrative units as their alumina becomes a direct part of labour market. For providing good product in labour market, it becomes inevitable for universities to create a quality teaching-learning environment. Quality of education is generally understood as the strictly balanced compliance of educational processes, environment and its outcomes. Teaching-learning quality indicators may be identified through needs, requirements, goals, standards or norms of education. Researchers such as Fatima (2014); Haris (2013), and Lidice & Saglam, (2013) have mentioned several approaches and strategies for assessing quality of education.

Higher education institutions are progressively adopting more organized and systematic quality assurance processes as a tool to achieve greater efficiency, effectiveness and accountability within their organizational frameworks (Eid, 2014). Quality indicators defined by higher education institutions are considered as vital components for raising the standard of education at higher level. The rationale behind defining the quality indicators in universities is to ensure that the education provided to students enables and equips them for employment criteria and enhances the economic growth of country. Furthermore, not only economic value of education is focused at higher level but social, political and educational values are also kept under scrutiny (Harris & James, 2006). An outcome based quality system at higher education level focuses on the 'value-added' curriculum delivered to students comprising of rich educational experiences, in terms of quality of skills and competence produced through quality education. This approach is described as student being the customer as well as product of the quality process. Collecting information on student satisfaction about prescribed quality indicators can help in their improvement. In addition to this, student feedback on teaching-learning quality indicators can improve retention rate which goes a long way in prosperity of higher education institutions (Guthrie & Neumann, 2006). Defining quality indicators in teaching-learning environment is a cumbersome task as it may vary according to geographic and cultural contexts. However, it has been a proven fact that "learning environments are positively correlated with learning outcomes", rather than direct evaluation of the outcomes (Pascarella &Terenzini, 2005).

Strength of universities depends upon fostering a teaching learning environment fully laden with various activities at a time. Although teaching is recognized as the core task to assess the quality, still it is a fact that multiple activities enrich the whole teaching ecology (Azam, 2007). These teaching-learning activities become quality indicators and they vary world-wide according to the geographic context. Researchers have reflected that teaching-learning quality indicators are valuable contributors to enrichment of education at higher level (Cheng, 2010). Similarly, it is also advisable to recognize that not only some specific indicators are able to capture quality in education objectively. Researchers have concluded that a wide range of indicators must be used to assess the dimensions of quality in universities (Stella & Woodhouse, 2006; Tam, 2007; Ward, 2007). Keeping this in mind, the paper provides insights into teaching and learning at higher education level by exploring and comparing nine quality indicators namely course content and organization, students' contribution, learning environment, learning resources, quality of content delivery, assessment, instructor's evaluation, tutorial and practical from students' perspectives.

Literature Review

An important aspect of quality education at higher level is identified through course content selection and its organization (Guthrie & Neumann,2006). Student perceptions about quality education can be measured through their responses about satisfaction/dissatisfaction about their respective courses. Ginns, et al. (2007) and Walker (2008) have also reflected that university students sometime suggest that their learning outcomes are not correlated with the course design and its delivery. Contradictory to this, Buchanan (2011) stated that students' evaluation is not the only method to judge the quality of course content, its selection and delivery. He further debated that this aspect of assessing quality of teaching-learning can be considered for internal use of an institution and may not be suited to disclosure for a broader audience.

Learner-friendly inclusive curriculum projects the second aspect of quality indicator in teaching-learning environment of universities. Students contribute and participate in classroom if their course content incorporates the activities related to daily life experiences. Learners get engaged in those learning experiences which do not feel alien to them. Researchers have operationalized student contribution and participation as a multi-dimensional construct in terms of cognitive, behavioural and motivational aspects (Linnenbrink & Pintrich, 2003). Given that, many researches have supported that academic achievement, participation, contribution and attendance increases if the students get an engaging learning environment (Marks, 2000; Perry et al 2002; Pianta & Hamre,2009).

Learning environment encompasses every activity that is taking place inside the classroom, university or the campus. It refers to the diverse physical

contexts, location, cultures and climate in which student learning takes place. Learning environment is facilitated by the learning resources to obtain optimum targets (Higgins et al, 2014). Students' perceptions about their learning environment can provide a basis for implementation of modifications required to optimize the whole of educational environment. Meaningful use of learning resources within a learning environment positively correlates with academic success of student at higher education level. Similarly, it also impacts on student learning outcomes and provides justification for how, when, why and what of learning (Arzuman, Yusoff & Chit 2010).

Effective teaching is one of the key indicators of quality education at higher level. This indicator is based on teachers' qualification, experience, motivation and job satisfaction. As the major functions of universities is knowledge creation and research, teacher and his pedagogy is the principle agency in affecting the quality of education. Competence, character and quality of teacher are directly related to quality of teaching learning environment. It is rightly said that better performance of students depends on effective pedagogy of teachers. One of the most researchable areas in educational research is that of recognizing the teacher efficiency and effectiveness i.e., differentiating between more effective and less effective teachers (Anderson, 2004; Isani, 2005).

Assessment in higher education learning has a greater impact on students' academic success in several ways. The ways in which assessment of a specific course is carried out help in improvement of the learning trajectory (Segers, Gijbels & Thurlings, 2008). It also helps to influence the assessment practices of teachers and they become enabled to devise assessments more scientifically based on students' learning outcomes (Fletcher et al, 2012). Quality in learning is also dependent on assessment methods adopted by teachers at university level. Several factors are involved in selecting assessment methods by university teachers and these factors have either a positive or a negative influence on whole of the teaching learning process. It has been reflected by many researches that assessment methods may be aligned with teaching methods for more effective learning outcomes (Dochy et al, 2007; Flores et al, 2015; McMillan, 2003).

Recent studies have shown a strong connection between students' academic success and the tutorials provided to them. Tutorials are considered additional learning aid to help the students understand difficult concepts which they are unable to comprehend during normal classroom lectures. Tutorials, if provided facilitate students' capacity to think about a specific area in depth and to operate with full confidence. So tutorials become helping aids for the students if provided at right time, with right material (Hutchings, 2006).

Today's experts are required to have practical skills about the discipline they belong to. The development of expertise is a long process, during which theoretical, practical and metacognitive elements of expert

knowledge are integrated into a coherent whole. It is important to foster student's learning and integration of theoretical knowledge in practice during tertiary education (Katajavuori, 2016).

Objectives of the Study

1. Analyze teaching and learning quality indicators from perspectives of post graduate students of Management Sciences, Social Sciences and Languages at higher education level.
2. Compare teaching and learning quality indicators from perspectives of post graduate students of Management Sciences, Social Sciences and Languages at higher education level.
3. Recommend a viable model for improvement in attaining teaching-learning quality indicators.

Research Question

1. What are the preferred teaching learning quality indicators across the faculties of Management Sciences, Social Sciences and Languages at higher education level?

Methodology

Descriptive quantitative survey design was used to obtain and analyse the data for fulfillment of research objectives. Further details of methodology are as under:

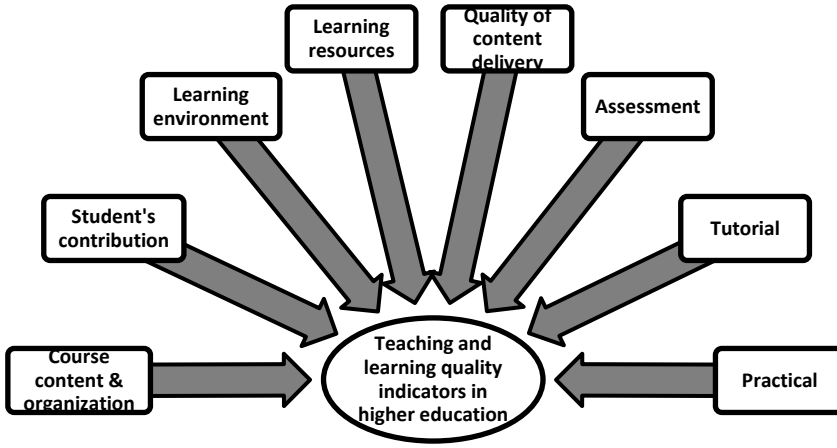

Figure 1: Conceptual framework of teaching-learning quality indicators

Conceptual framework of the study is based on extensive review of previous literature in the field. Teaching-learning quality indicators were specified as course content, student contribution in learning, learning environment, learning resources, quality of content delivery, assessment, tutorial and practical. These indicators are already being scored in higher education institutions of Pakistan through a questionnaire given by Higher Education Commission, Pakistan.

Population, sampling technique and sample

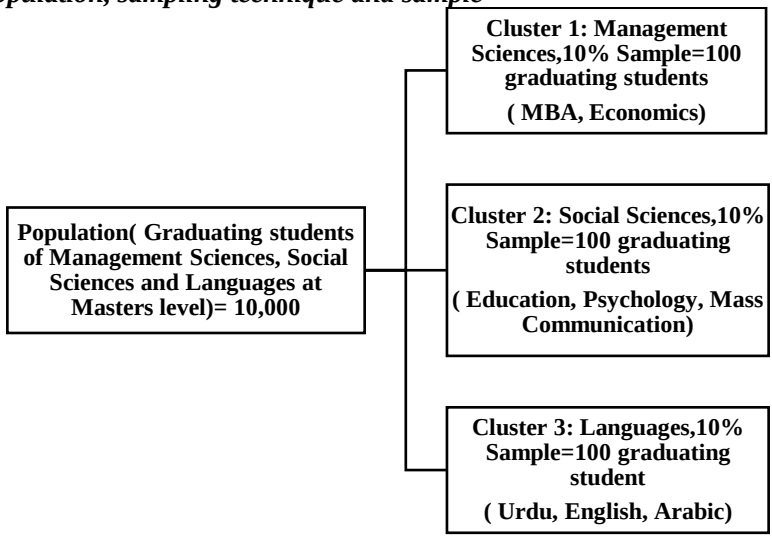

Figure 2: Population of the research study

Population included 10,000 students enrolled in graduating semesters from the Faculty of Management Science (Master in Business Administration and Economics), Faculty of Social Science (Education, Psychology and Mass Communication) and Faculty of Language (Urdu, English and Arabic) from a public sector university. 10% of the sample was extracted from all three clusters randomly. Thus, 100 post graduate students from each cluster were taken as sample of this study. A total of 300 students were given the research instrument and the response rate was 97.33%.

Research Instrument

A five-point Likert type scale questionnaire containing 30 statements was used for obtaining data. This instrument was extracted from a standardized questionnaire given to universities all over Pakistan by Higher Education Commission (governing body of universities) for obtaining feedback about teaching-learning environment from students. This instrument contained all eight factors mentioned in the conceptual framework as subscales. These subscales contain several statements which can be responded on a 5-point Likert type scale ranging from strongly agree to strongly disagree. (This questionnaire is placed on website of all universities and is accessible to all).

Delimitations

Data was collected from the post graduate students of final semester enrolled in three faculties namely, Management Sciences, Social Sciences, and Languages of one Public Sector University through close ended questionnaire only.

Results

Table 1: Demographics of the Participants (N=292)

Faculty	Department	Frequency
Management Sciences	Management Science (MBA)	50
	Economics	50
Social Sciences	Education	30
	Psychology	40
	Mass Communication	30
Languages	Urdu	30
	English	40
	Arabic	30
Total		**300**

Table 1 shows the demographics of research participants and their frequency across the faculties and randomly selected departments. A total of 300 participants were selected from the three clusters.

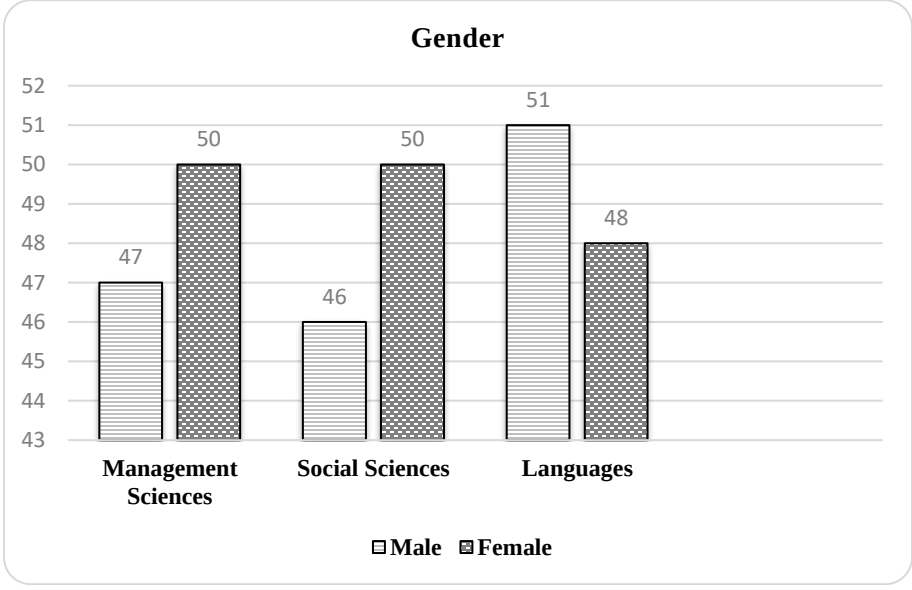

Figure 3: Graph of demographic variable gender (n-292)

This graph displays the gender wise distribution of participants. 47 male students and 50 female students comprised as sample from Management Sciences, 46 male and 50 female students from Social Sciences and lastly, 51 male and 48 female students represented sample from Languages.

Table 2: *Descriptive Statistics of Teaching-Learning Quality Indicators at University Level* (n=292)

Quality indicators	**Cluster 1 (n=97)**	**Cluster 2(n=96)**	**Cluster 3 (n=99)**
Course Organization (%)	3.29(1.50)	3.02(1.10)	3.19(1.30)
Strongly agree	34	39	38
Agree	36	30	38
Neutral	03	05	06
Disagree	20	18	10
Strongly disagree	07	08	08
Students' contribution (%)	3.08(.93)	3.01(.91)	3.00(.90)
Strongly agree	30	29	24
Agree	35	32	42
Neutral	09	11	07
Disagree	07	17	23
Strongly disagree	19	11	04
Learning environment (%)	3.50(1.74)	4.02(1.90)	3.39(1.68)
Strongly agree	39	34	30
Agree	34	36	35
Neutral	05	03	09
Disagree	15	20	07
Strongly disagree	07	07	19
Learning resources (%)	3.55(1.78)	4.00(1.89)	3.49(1.78)
Strongly agree	32	40	42
Agree	38	31	24
Neutral	12	10	07
Disagree	16	10	23
Strongly disagree	02	09	04
Quality of content delivery (%)	3.45(1.58)	3.94(1.79)	3.36(1.68)
Strongly agree	38	39	40
Agree	38	29	30
Neutral	06	11	10
Disagree	10	10	10
Strongly disagree	08	11	10
Assessment (%)	3.55(1.78)	4.01(1.69)	3.29(1.78)
Strongly agree	24	30	34
Agree	42	35	36
Neutral	07	09	03
Disagree	23	07	20

Strongly disagree	04	19	07
Tutorial (%)	3.02(1.03)	3.01(1.02)	3.00(.98)
Strongly agree	39	30	34
Agree	34	35	36
Neutral	05	09	03
Disagree	15	07	20
Strongly disagree	07	19	07
Practical (%)	3.09(1.30)	3.02(1.10)	3.19(1.30)
Strongly agree	24	36	39
Agree	42	34	34
Neutral	07	20	05
Disagree	23	03	15
Strongly disagree	04	07	07

In Table 1, cluster 1 (n= 97) is a group of post graduate students from the graduating semester of Management Sciences discipline. Descriptive statistics display that this cluster scored higher on the sub scales of course content and organization (m=3.29, sd=1.50), student contribution (m= 3.08, sd=.93)and tutorial (m=3.14, sd=1.33) as compared to others. Cluster 2 (n= 96) comprised of group of students from Social Sciences graduating semester. This cluster scored higher on the subscales of learning environment(m=4.02, sd=1.90), learning resources(m=4.00, sd=1.89), quality of content delivery(m=3.94, sd=1.79) and assessment (m=4.01, sd=1.69) in comparison with others. Cluster 3 (n= 99) consisted of post graduate students of Languages and their highest score as compared to other was on the subscale of practical (m= 3.19, sd= 1.30). Results revealed that students of Management Sciences focused more on learning resources (m= 3.55) as compared to all other quality indicators, whereas students of Social Sciences scored highest on learning environment indicator (m=4.02) and Languages students considered learning resources as the most important quality indicator.

Table 3: Comparison of Teaching-Learning Quality Indicators at University Level Using Mean Score (N=292)

Strata	N	$\bar{x}$	S
Management Science	97	132.76	22.79
Social Science	96	131.59	21.31
Languages	99	118.45	19.67
Total	292	127.60	22.20

Table 2 shows that the total average mean of the three disciplines on the research scale is above the expected mean ($\bar{x}$= 127.60, SD= 22.20) although the results are based on the scores obtained on the scale from graduating students of all three disciplines. As the results show, Management

sciences students have the highest mean score ($\bar{x}$= 132.76, SD= 22.79) and Languages students scored the lowest mean ($\bar{x}$= 118.45, SD= 19.67). The mean of the three disciplines on the teaching-learning instrument was further compared using ANOVA.

Table 4: Comparison of Teaching-Learning Quality Indicators at University Level Using One-Way ANOVA (N=292)

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	128.407	2	42.802	59.644	.000
Within Groups	427.711	290	.718		
Total	556.118	292			

Table 3 shows the results of one-way ANOVA. There is a significant difference among the responses of the post graduate students on the scores of teaching and learning quality indicators scale where F (2, 290) = 59.644, p= .000.

Discussion

The implication of quality assurance processes in higher education cannot be denied, yet skepticism prevails on the effectiveness of these processes. One of the major reason of this could be that higher education institutions are using multiple modes and methods to check and upgrade the quality of teaching learning situation. It can be deduced that only one model or certain specific indicators are not enough to evaluate quality (Asif & Raouf, 2012). This study has attempted to explore teaching and learning quality indicators through involving postgraduate students from three disciplines in quality assurance process at higher education level. Elassy (2013) has also suggested that involving students in getting feedback for improvement in quality of education is an important research area and these days, educational leaders are considering on best practices to include students' feedback in their quality assurance systems. Allowing post graduate students to provide feedback about teaching learning environment provides an authentic data as they are able to see the whole scenario from a learner's perceptiveness. Furthermore, students have invested their time and money in higher education and are most important stakeholders of education. As such, they may have a special interest in quality of educational programs. So it is high time to involve students in quality assurance process for quality enhancement of academic programs (Cheng, 2010).

Comparison in student perspectives about course content and its organization clearly showed that multiple feedback was obtained. Students of Management Sciences were more focused as compared to their counterparts. Whereas students of Social Sciences had a clear view about learning

environment, learning resources and quality of teaching. Thus, they affirmed that the conducive learning environment of university provided a positive opportunity to achieve learning outcomes (Colford, 2015; Vermunt, 2007). But in case of indicators of assessment, instructor's evaluation and practical, all the post graduate students of the three disciplines had positive and correlated views. They affirmed that instructors are helpful, and responsive to students' needs. Similarly, they viewed the methods of assessment as reasonable, timely and helpful (Bakhshialiabad, Bakhshi, & Hassanshahi, 2015).Students across three disciplines had different perspectives about practical work as a tool for assessing the quality indicator of teaching. Students of languages scored more on this variable thus indicating that practical work is a useful domain of quality teaching (Peng, 2015; Roby, 2004).

Conclusion

The results of this study clearly indicate that there is a strong and directional relationship between the perspectives of post graduate students about teaching and learning quality indicators at higher education level. The minute difference emerging through comparison is merely due to the contextual difference across the three disciplines. Concerns about quality indicators in teaching-learning environment propone that all stake holders and not only students share their perspectives. Academia and leadership need to share a vision of quality so that the teachers also feel the importance of quality assurance practices.

A viable model for improvement in attaining teaching-learning quality indicators may be as:

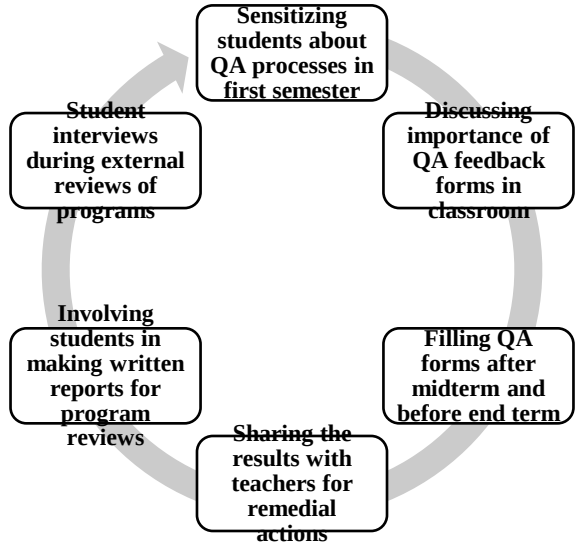

Figure 4: Viable model for improvement in teaching-learning process

The above-mentioned model is a result of the findings of this study. It indicates that the given quality indicators in prescribed proformas can be fully addressed if the steps of this viable model are followed strictly. For example, quality assurance is a comprehensive procedure and students must be sensitized about the content of these proformas. In addition to this, measurement of quality indicators demands that these proformas be filled before midterm and end term exams so as to get 360degree feedback. Lastly, involvement of students as reporters will help in improving their feedback about quality enhancement.

Recommendations

1. Academic leaders may consider student feedback on the respective courses as a guideline to make structural changes in teaching learning environment for improvement of quality.
2. Quality assurance forms related to course evaluation and teacher evaluation may be filled twice per semester i.e. after mid-term and before end- term so that formative assessment can be made for remedial/formative assessment purposes, thus enhancing the academic quality.
3. Pedagogical points can be taken from mentors by the new teachers/mentees in order to improve teaching quality and obtain student satisfaction.
4. Locally recognized professors of social sciences, management sciences and languages may be invited to deliver motivational speeches about their academic experiences which may help in better organizing course content and improving quality of content delivery.
5. National and international linkages may be established for awareness and implementation of QA practices among students, teachers and educational leaders.

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