

Exploring the Determinants of Quality Assurance in University Education as per the Views of Academics and Students of the Faculty of Agriculture, University of Ruhuna: Are these Views Compatible?

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Abstract

Although there are multiple dimensions that help higher education institutions to design appropriate value propositions in determining the quality of education, the determinants that assure the quality based on students and academics' views are relatively unexplored. A clear understanding of how the main stakeholders in teaching and learning process interpret quality of university education and determinates of assuring the quality is important to identify their part in achieving "quality." Therefore, A cross-sectional survey of the samples of students (n = 394) and academics (n = 32) was conducted to explore the compatibility of the selected determinants as viewed by the students and the academics of the Faculty of Agriculture, University of Ruhuna. A pre-tested structured questionnaire contains 29 selected determinants based on past literature were used and measured using a 5-point Likert scale ranging from 1 = most important to 5 = least important. Descriptive and inferential statistics were used in the analysis in SPSS (Ver.22). Mann Whitney U test suggested that engaging in interactive teaching methods, lecturer's knowledge of new developments and research areas, class size and student-to-class ratio, availability of scholarships and financial aids, and alumni network and career placement services had significant differences between these groups (p<0.05). Accordingly, the study suggests the importance of including teaching excellence, learning environment, supportive services, and institutional factors in particular as determinants in developing a user-friendly internal QA framework. Findings are significant for policymakers, university authorities and researchers in particular in making effective policies, regulations and exploring further researches to generalize the present findings.

Keywords: *Academics, Quality Assurance Framework, Students, University Education*

Introduction

Assuring quality in university education is vital in the current competitive context of higher education. Higher education system has become more important and even necessary to improve the quality of teaching and learning (Knight & Yorke, 2003; Chan, 2016). Inclusive and quality education consists of promoting lifelong skills, literacy and social skills and targets effective teaching and learning aspects in particular (Tonegawa, 2022), where effective and efficient communication is vital where sender and receiver become focal points (Burnside-Lawry, 2011). Many countries, including Sri Lanka have understood this very clearly and taken many efforts in developing the higher education sector through effective teaching and learning. For instance, the SLQF (Sri Lanka Quality Assurance Framework) aims in developing the higher education sector in Sri Lanka while offering a transparent and coherent framework in developing teaching and learning in particular. SLQF states, “the establishment of the SLQF will help improve many aspects and processors in the learning and the methods of delivery” (Sri Lanka Qualifications Framework, 2015, p. 3) that reflects the importance of implementing effective teaching and learning in Sri Lankan context. Moreover, at institutional level, quality assurance (QA) can contribute to the improvement of both teaching and administrative processes, which can lead to the improvement of overall systems (Chong & Ho, 2009). Out of two main QA systems, internal and external; pre-specified quality criteria decide external quality assurance in higher education institutes (HEIs) under the Quality Assurance Council (QAC), where the internal quality assurance seeks the efficiency of the internal environment of an organization. Internal QA is a dynamic process that provides the base for external QA. In fact, internal QA provides the credible ground for the external QA. Harvey calls ‘a symbiotic relationship between internal and external procedures, mediated by the institutional quality culture’ (Harvey, 2007).

However, the quality in higher education often remains undefined in operational terms (Westerheijden & Empel, 2010; Harvey & William, 2010) due to its multi-faceted nature (Harvey & William, 2010). Therefore, though it is highly important, the determinants of quality have not yet adequately explored and thereby many define it in different ways. Even though the education expects producing quality graduates while assuring the quality in university education, the determinants of assuring quality of the university education system is quite questionable in particular in developing countries. Though it is practically difficult to come to a consensus accepted by all academics and students in all universities, it is imperative to explore at least important determinants of QA accepted by academics and students in particular for effective functioning of the academic program in any university system. In fact, it values

to education policy-makers and university authorities to formulate regulations (Akareem & Hossain, 2016).

Yet, the literature has not profusely explored the compatibility of the views of main stakeholders in the university education system; the students and the academics on the determinants of QA. According to Green (1994), the best that can be achieved is to define as clearly as possible the criteria that each stakeholder in higher education uses to judge quality. Unfortunately, many QA studies were conducted separately yet to take students' views (Arreieta & Avolio, 2020; Gora et al., 2019; Akareem & Hossain, 2016; Hill et al., 2003) and academic' views (Tamrat, 2022; Nabaho et al., 2017) separately without comparing their views. Therefore, the compatibility of their views as the main stakeholders in the university system who are involving in sending and receiving the education is questionable. In fact, whether the system really assures the quality is also questionable due to failure of introducing important determinants of assuring quality in university education yet. Moreover, as the QA has been introduced to the higher education in Sri Lanka just recently in 2005 and Internal Quality Assurance Units (IQAUs) have been established in all public universities in 2005 (Quality Assurance and Accreditation Council, 2007), the stakeholders in state Universities in Sri Lanka are relatively unaware of the exact process of assuring quality. Only Sri Lanka Qualification Framework (SLQF) has published by the UGC, Sri Lanka for all HEIs with the aim of “creating an integral national framework for learning achievements by recognizing and accrediting qualifications offered by different institutions engaged in higher education and vocational training in Sri Lanka” (SLQF, 2015) where the determinants of assuring quality have hardly discussed. Therefore, the term “quality assurance” is new to the university academics and students of the Sri Lankan context yet. Therefore, it is due responsibility to see whether the higher education gives “quality education” as the name implies. Lack of research exploration in this regard keeps the following questions unanswered yet.

1. How do the main stakeholders in the teaching-learning process define “quality of university education”?
2. What are the determinants of assuring quality in university education as per the students?
3. What are the determinants of assuring quality in university education as per the academics?
4. Are these determinants of the main stakeholders in the teaching and learning process of the university system compatible?
5. Do universities in Sri Lanka have a precise, transparent and acceptable framework for assuring the quality of university education?

Recent literature hardly discussed this. Therefore, present study is an attempt to bridge this gap by exploring the compatibility of the determinants of QA in university education with special reference to the academics and the students of the Faculty of Agriculture, University of Ruhuna, under the following objectives.

Main Objective: To develop effective and efficient user-friendly QA framework that reflects the perception of main stakeholders in the teaching (academic staff) and learning (students) process of the university system

Specific Objectives:

1. To find out the important determinants of assuring quality in university education from students' perspective
2. To find out the important determinants of assuring quality in university education from academics' perspective
3. To check the compatibility of the views of the academics and the students
4. To develop a feasible and effective QA framework that aligns with the perception of main stakeholders in the teaching and learning process of the university system

Methodology

Faculty of Agriculture of the University of Ruhuna was chosen for this study. A survey questionnaire with selected 29 determinants of QA was designed as a google-based questionnaire based on the results of a comprehensive literature review. The respondents were rated the determinants using 5 point Likert scale ranging from 1= most important and 5= least important. The first part of the questionnaire was based on the profile information of the respondents followed by an open-ended question, "How do you define quality education as an academic staff member/university student in higher education?" Then "How satisfied are you with the overall quality of education provided by your institution?" was asked to rank by using 5 point Likert scale ranging from 1= highly satisfied and 5= highly dissatisfied. The questionnaire was distributed to all the students and the academic staff via their official emails. Students were from three different degree programs; namely BSc Agriculture Resource Management and Technology (ARMT), BSc Agribusiness Management (ABM) and BSc Green Technology (GT), and from four different academic years from 1st year to final. It comprises 265 first year students, 261 second year students, 249 third year students, and 230 fourth year students studying in 2023 (N=1005). The same questionnaire was sent to the academics (N= 66) of the 07 departments. Accordingly, the equal chance was given for each participant to participate the survey.

There were 32 responses with 48% respondent rate and 394 responses with 39% respondent rate received from the academics and the students respectively.

Secondary data were collected from refereed journal articles, newspaper articles, books and relevant websites etc. Descriptive and inferential statistics were used to analyze the collected data. Mann-Whitney U test was mainly used to compare the views of these two main independent groups. Kaiser-Meyer-Olkin (KMO) and Bartlett's test in Factor analysis identified the validity and sample adequacy of the samples of students (KMO= 0.958, $p=.000$) and academics (KMO= 0.488, $P=.000$).

Results and Discussion

Profile of the Respondents

The majority of academics and students are female, making up about 81% and 69% of each group, respectively. Additionally, the majority of students in the 60% ARMT degree program. The academic staff's wide age range and the spread of academic levels create a multifaceted composition. (Table 1)

Table 1: Profile of the Respondents

Profile of Students		
Category	Variables	Percentage (%)
Gender	Female	81
	Male	19
Degree program	AB	26
	GT	14
	ARMT	60
Year of study	First year	33
	Second year	46
	Third year	15
	Fourth year	06
Profile of Academic Staff		
Gender	Female	69
	Male	31
Age Range	<30 years	03
	30-40 years	31
	41-50 years	35
	>50 years	31
Academic Rank	Senior Professors	09
	Professors	28
	Senior Lecturers	41
	Lecturer (Probationary)	22

Note: AB: Agribusiness Management; GT: Green Technology; ARMT: Agriculture Resource Management and Technology

Responder's Definition and Satisfaction on Quality of University Education

There was no any consistency of defining “quality of university education” among students or academics. All expressed their definitions by their own. However, as per academics more or less same ideas were stated. It has become “multifaceted,” “floating signifier” reflecting its varied understandings across key stakeholders of higher education; students and academics. This has created a lack of coherence about what is meant by “quality assurance in university education” that embellishes past literature who stated that the quality in higher education often remains undefined in operational terms (Westerheijden & Empel, 2010; Harvey & William, 2010) due to its multi-faceted nature.

Major definitions given by students can be stated as,

“Learn the theoretical aspects, practical things as well as get industrial experience related to degree program that we have been followed”

“Academic standards, relevant and updated curriculum, research and practical opportunities, learning supportive environment”

“Quality education in higher education means engaging, relevant, and practical learning that fosters personal growth, critical thinking, and prepares students for the challenges of the future”

“Quality education for higher students goes beyond the mere transmission of information. It strives to empower students with a well-rounded education, equipping them with knowledge, skills, and attributes necessary for success in their academic pursuits and future careers”

“The type of education which enables people to develop all of their attributes and skills to achieve their potential as human beings and members of society”

“Enhance the self-potentials as well as the knowledge. Should be practical and moving with the technology. As well as update with the world. To get the best result have to finish the education at minimal age”

“Quality education is defined as one that focuses on the learner to prepare them for life, not just for assessment”

Major definitions given by Academic staff can be stated as,

“Enables undergraduates to develop all of their attributes and skills to achieve their potential as graduates,”

“Equitable and standard education for all that will promote lifelong learning and the urge to gather knowledge”

“It should be a system what we able to produce graduates according to the graduate profile under smooth academic environment,”

“Quality in education is difficult to define. But it reflects with qualification of academic staff, students’ attitude, atmosphere, infrastructure and facilities available and government policy and curricula and so many.”

“Enriching students with relevant knowledge, skills/competencies, attitudes and mindset which will aid in their professional and personal development and thrive towards lifelong learning.”

Accordingly, based on both views, the quality of university education can be defined as, “ the universal, life-long education with teaching and learning excellence through student-centered approaches and fair assessment, focusing on continuous improvement, research, and industry partnerships, in order to produce ethical and responsible global citizens with required knowledge, skills and mindset that compatible with the graduate profile.”

That may supports in developing effective strategies to maintain quality of university education.

Students’ and Academics’ Satisfaction on Quality of Present University Education

Based on students’ and academics’ satisfaction on quality of present university education, majority of students (43%) and academics (56%) satisfied with the present system. However, 36% of students and 16% of academics were neutral while 28% of the academics and 21 % of students were dissatisfied.

Determinants of Assuring Quality of University Education as per Students and Staff

The mean values of the selected 29 determinants were considered to see how each groups viewed the importance of these determinants based on their perspective. The results of the additional determinant added only for the academics “accountability and workload model” are indicated only for the academics. Mean values were taken to see the importance of these selected determinants to each group.

Important Determinants as per Students

Interestingly, descending order of the importance of determinants on quality of education as per the students was, well prepared and presented session by lectures (M=1.31), engaging in interactive teaching methods (M=1.32), lecturer’s knowledge of new development and research area (M=1.33),

lecturer's ability to transmit enthusiasm for the subject (M=1.36), well organized and sequence of content evident during the course (M=1.38) and opportunities for internships and industry exposure (M=1.38).

Important Determinants as per Academics

The descending order of the importance of determinants on quality of education as per academics was, engaging in interactive teaching methods (M=1.16), lecturer's knowledge of new developments and research area (M=1.19), well prepared and presented session by lecturers (M=1.28), lecture's ability to transmit enthusiasm for the subject (M=1.28), well organized and sequence of content evident during the course (M=1.34), and the availability of resources and facilities (M=1.41).

Interestingly, the students and academics gave priority to same points with slightly changing sequence. For instance, students gave 1st preference to "well prepared and presented sessions by lecturers" whereas academics gave 3rd preference.

Additionally, students demanded "opportunities for internships and industry exposure" as a determinant, while academics demanded "availability of resources and facilities" as the next important determinant after these main 05 common determinants.

Findings of the present study compatible with the past literature. Koslowski (2006) classified higher education quality as 'transcendent quality' (expertise of academic staff) and 'product-based quality' (increased student learning produced by the curriculum and academic staff), and 'user-based quality' (students' needs, wants, and preferences). Moreover, past scholars suggested that education is the responsibility of the government and should be managed through national resources (Rahman & Uddin, 2009) as higher education is important for social and economic impacts in society (Brennan & Teichler, 2008). Further, academic staff are more likely to define quality of higher education in resource rather than performance terms (Koslowski, 2006). Both groups, students and academics recognized lecturer/academic program attached attributes as main determinants of QA embellishing past literature (Arrieta & Avolio, 2020).

Compatibility of the Determinants of QA

Based on the compatibility of the determinants of QA as viewed by students and academics gave interesting results. Mann-Whitney U test revealed that all determinants selected were compatible except 05 main determinants (Table 2).

Table 2: Incompatible Determinants

Determinants	P value	Students' Mean rank	Academics' Mean rank
Engaging in interactive teaching methods	0.012	216.24	173.2
Lecturer's knowledge of new developments and research area	0.039	215.65	180.41
Class size and student to class ratio	0.001	218.4	146.73
Availability of scholarships and financial aids	0.001	207.85	276.23
Alumni network and career placement services	0.032	209.68	253.83

This indicates that although academics prioritize engaging in interactive teaching methods, the lecturer's knowledge of new developments and research areas, class size, and student-to-class ratio are more important in the quality of education, students view them as less important. Conversely, students view the availability of scholarships and financial aid, the alumni network, and career placement services are more important compared to how academics views them. This implies that students have more focus on scholarships and alumni networks to add to as the determinant of quality of university education, signaling there is a gap in the current higher education system (Table 2). Moreover, they need to ensure more financial security and enhance their employability, as most of them seem currently facing a financial crisis.

These findings embellish the past literature who stated that students' perception of higher education quality is heavily influenced by the university they study at, scholarship status, extra-curricular activities, previous educational success, etc., (Akareem & Hossain, 2016). Past scholars stated the dimensions of quality higher education as quality of students, faculty credentials, academic features, and administrative supports (Akareem & Hossain, 2012). Further, Ehrman (2006) stated that modern universities are experiencing a 'buyers' market' and that students are buying higher education from universities via the curriculum, faculties, library, resources offered, etc. therefore, selecting the appropriate determinant is a critical issue for universities. Moreover, quality of the lecturer and the student support systems are the most influential factors in the provision of quality education (Hill et al., 2003).

Proposed Sender-Rceiver Compatible Framework with Agreed Determinants for Assuring the Quality of University Education

Present study proposes that among the selected determinants, all can be included except above 05 in the QA framework in determining the quality in university education. Accordingly, present study suggests including main categories by categorizing the selected determinants. Figure 1 depicts the proposed QA framework.

The dimensions identified in the proposed framework can be used by higher education managers to measure their performance according to the perspectives of students' and academics.' In addition, these findings can help universities to develop specific strategies that improve university educational quality, as perceived by its main stakeholders; students and academics.

Conclusion

Absence of QA framework with defined determinants compatible with the main stakeholders in the university system motivates this study to see the compatibility of the determinants of QA from the students and academics perspective in order to propose a sender-receiver compatible QA framework as they work towards similar outcomes. Among the All determinants used were compatible except, engaging in interactive teaching methods, the lecturer's knowledge of new developments and research areas, class size and student-to-class ratio, the availability of scholarships and financial aids, and the alumni network and career placement services.

Study categorized important determinants among the selected, in to four (04) main categories as, teaching excellence, learning environment, and supportive services and institutional factors and proposed a QA framework for the university education that aligns with the perceptions of the main stakeholders in the teaching and learning processes of the university system. However, though the findings may differ based on the type of HEIs, graduate profiles and the vision and mission of HEIs, the present study that focuses on one faculty in a single university yields promising avenue for further research explorations to generalize present findings.

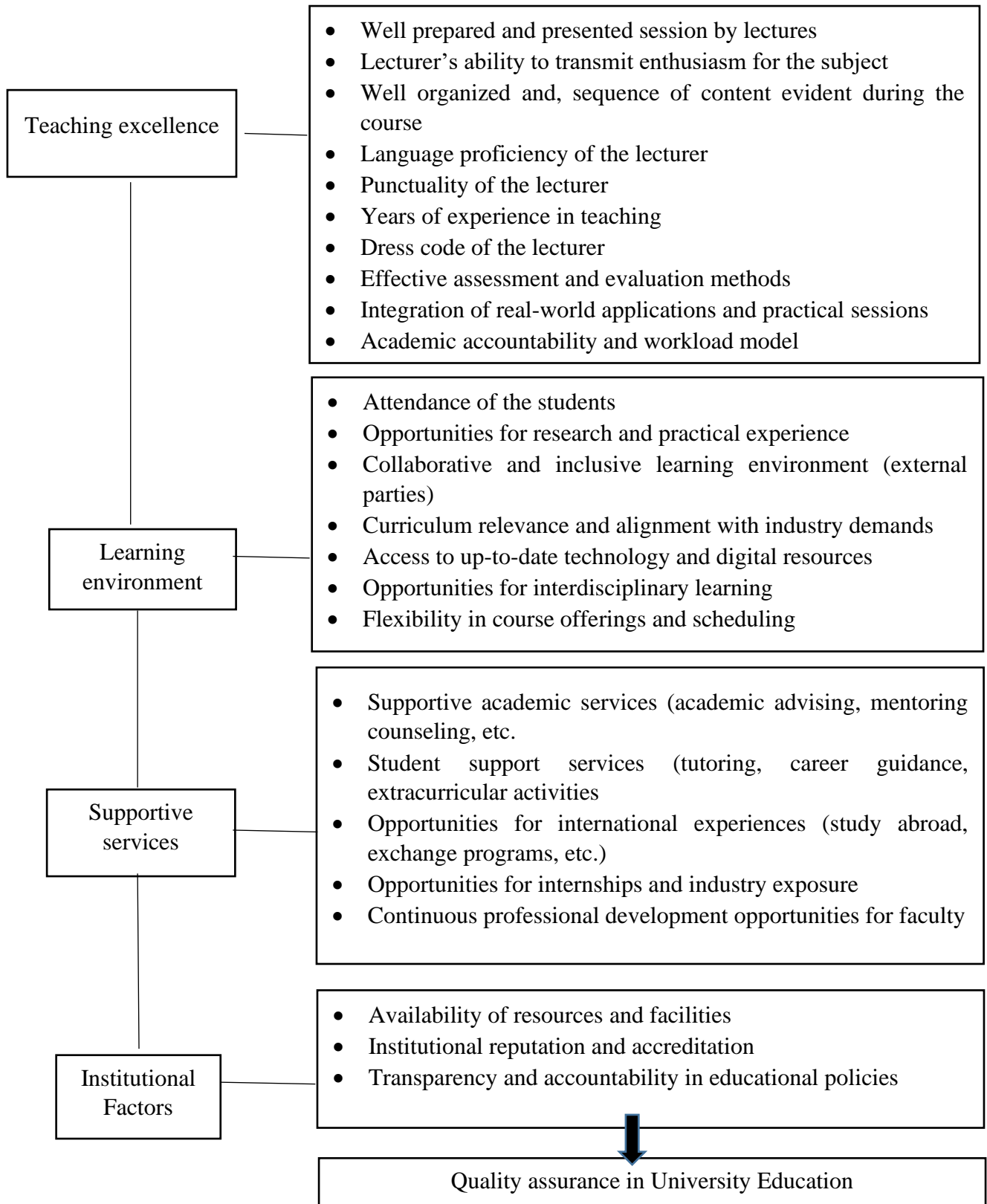


Figure 1: QA Framework for University

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