A Constructivist Approach Towards Quality Development in Universities: An Issue of Quality in Sri Lankan Universities[1]

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Abstract

The quality of university education in Sri Lanka has been an issue persistently raised by stakeholders. Among the initiatives to address this issue were the Improving Quality of Undergraduate Education, strengthening staff development activities, introduction of more stringent schemes of marking for promotions, establishment of the Quality Assurance and Accreditation Agency, and initiation of the Distance Education Modernization Project to introduce on-line and blended learning.

The analysis of categories of academic staff clearly indicates disparities among more established Universities and newer Universities and among Science-oriented disciplines and others such as Law, Visual & Performing Arts and Management/ Business-related Studies.

The paper argues that system-wide approaches need to be paralleled by multi-faceted Faculty and Departmental action. Staff development should lead to perceptible improvements in teaching, research and dissemination of knowledge. Senior faculty should function as role models and mentors. Definition of role functions of academic staff at different grades can positively contribute to the development of faculty cultures.

Keywords : Accreditation - Education - Higher Education - Quality
            Assurance - University Education

Introduction

The quality of university education has persistently attracted the attention of successive governments and employers who provide employment to the university graduates as well as the recipients of university education. Often the unemployment of university graduates is attributed to the low quality of university education.

While the quality of university education can be determined by several factors such the quality of those selected to pursue university education, funding on which infrastructure facilities and the teaching-learning environment and the styles of management of universities at national and institutional level, what is mostly highlighted is the quality of university academic staff.

The Higher Education Survey (1995) refers to the fact that the large majority of university lecturers have not followed a course in teaching methodology, which could have enhanced their professional competence to function as effective mediators in learning and further comment on the 'Lectures (that) often degenerate into dictation'. The Asian Development Bank (2000) observed that 'university programmes are adversely affected by the shortage of fully qualified staff, many of whom have no postgraduate training or programmed staff upgrading. faculty promotion and tenure are granted without reference to classroom performance, teaching technologies or research outputs'. In sum, the evaluation is that university education uses' rigid and outmoded teaching and learning methodologies, rote learning, lecture notes, traditional curricula and inadequately textbooks'.

Negative evaluations referred to above, cannot be accepted per se or in totality even though to some extent, they appears valid and warranted. On the one hand, these evaluations are not applicable to all universities and within universities to all Faculties. Further, in the wake of criticisms leveled at the quality of university education, the Government and the University Grants Commission (UGC) has initiated several efforts to improve the quality of education.

Initiatives to Address Issues of Quality in University Education

The steps taken to address the above quality issues in recent years include (1) the Project on Improving Relevance and Quality of Undergraduate Education (IRQUE) of the World Bank (2) the initiatives of the UGC in strengthening staff development activities,

(3) revision of the schemes of marking related to confirmation and promotion of academic staff to make them more stringent, (4) establishment of the Quality Assurance and Accreditation Agency, and (5) initiation of the Distance Education Modernization Project (DEMP) to introduce new modes of on-line and blended learning to the post-secondary sector.

The major purpose of the IRQUE Project was the setting up of a system, which will end the chronic problem of unemployed and under-employed graduates. The aim of the Project was stated as providing undergraduates with a complete and balanced tertiary education, to mould them into responsible, educated citizens. It sought to encourage all universities to ensure quality and relevance in all their undergraduate courses. It was hoped that the undergraduates will benefit from the grants provided to universities to improve English Language competency, improve IT skills, and improved student services.

The key institutional reforms supported by the IRQUE project include: (i) improving national planning, monitoring and coordination; (ii) establishing a Board for Quality Assurance; (iii) strengthening management in universities; (iv) establishing formal labor market linkages among universities and businesses; (v) improving curricula; and (vi) improving faculty management, including the introduction of differentiated revenue-generating strategies to ensure the sustainability of the reform program. The project is specifically expected to benefit the academic staff of universities by: (i) providing them with opportunities for staff development through postgraduate degree programs, exchange fellowships and study visits; (ii) improving their working conditions through investments in information and communications technology, equipment and academic literature; and (iii) enhancing professional opportunities through consulting and business linkages with industries.

The UGC through its Circular No. 937 of 10 November, 2010, strengthened the earlier initiative of 2003 to initiate Staff Development activities in all Universities and Higher Educational Institutes (HEIs). It covers four areas: (1) Policy Framework, (2) Institutional arrangement, objectives and functions, (3) Staff development programmes: Types, Design, Delivery, Assessment and Quality Assurance, and (4) General administration and finance relevant to staff development activities in all Universities and Higher Educational Institutes. Among others, the Circular envisaged the establishment of Staff Development Centres (SDCs) in all universities and even in HEIs that come

under a parent University. The SDCs were to be categorized as two Tiers, with Tier I providing in-service education and providing expert services in the specialized areas of Staff Development, Educational Technology and e-learning and Tier II concentrating on staff development. In service training was made compulsory for all categories of staff, and at the time of recruitment, all employees were to be given a list of competencies to be acquired before confirmation and to become eligible for subsequent promotions.

The Schemes of Marking for the recruitment and promotions of academic staff have been changed over the years. Thus the Scheme of Marking for the recruitment of Lecturers (Probationary) (Circular No. 935 of 25 October, 2010) stipulates that all candidates summoned for the interview be required to make a presentation before the Selection Committee in order to prove their ability as a Lecturer, that those whose performance is satisfactory be appointed as Lecturers and those who fail to demonstrate satisfactory performance be appointed as Temporary Lecturers and made permanent after one year, subject to another interview and presentation.

The Quality Assurance Accreditation Council (QAAC) was established with the mandate to conduct 11 specific activities, which include, Evaluation of new curricula and courses, new degree programmes, establishment of new Departments, Faculties, Institutes and Centres of Study, Schools in the Universities and Private Sector Higher Educational Institutes, Conduct Subject and Institutional Reviews in Public and Private Higher Educational Universities/ Institutes, Establishing Benchmark Statements for Subject Disciplines and Establishing Internal QA Units in Universities/Private Institutes. The Institutional Review (IR) analyses and tests the effectiveness of an institution's processes for managing and assuring the quality of academic activities undertaken by the institution. The Subject Review (SR) evaluates the quality of education within specific subject(s) or programmes. It is focused on the quality of the student learning experience and on student achievements. SR is designed to evaluate the quality of both undergraduate and taught postgraduate programmes. QAAC is supported by the IRQUE project.

DEMP attempted to extend higher education opportunities to those who are denied a university education through online programmes. A network of Access Centres (National Online Distance Education Service (NODES) was set up island-wide and it was hoped that DEMP also will produce more employable graduates through quality programmes at a reduced cost. As far as the quality of aca-

demic staff was concerned the Project focused on the development of the e-learning skills and skills of developing and delivering online programmes, an area not given much attention until the initiation of the Project.

While the above initiatives mainly focused on improving quality of university education, improving the quality of university academic staff was the specific focus of SDCs and also an integral element in all the initiatives.

Table 1 shows the apportionment of marks to different areas for selection of academic staff for professorial grades. It is seen that in all three schemes, more priority is given to research and creative work but the required minimum marks are higher in 2005 and 2008. This can be justified as the major function of academic staff is to contribute to knowledge which in turn will enrich teaching. Yet the marks allotted in 2008 for research and creative work is lower than in 2005. What is more important is to consider how these marks are allocated. Thus no marks are allocated for publications based on research for a degree, or for publications non-refereed journals, monographs, unpublished papers, for translation of monographs, and books for supplementary reading in the 2005 and 2008 circulars. Moreover limits (maximum marks) have been imposed on abstracts of papers presented at Conferences, (10 in 2005 and 5 in 2008), and those published as full papers and chapters in books not published by recognized publishers, as well as on editing of collections of essays and editing of classical works. Thus it appears that an effort has been made to make the criteria related to research and creative work more stringent.

With regard to Teaching and academic development, the number of marks allocated for PhD has been increased from 2 to 4 in the two latter circulars. Contribution to institutional development has been increased from 10 to 20 in 2008. Similarly, limits have been imposed on the number of marks that can be earned for publications of textbooks, books for supplementary reading and documentary or special orations in the 2005 and 2008 circulars.

Quality Assurance in Higher Education

By 2012, the QAAC had conducted 17 Institutional Reviews and 303 Subject Reviews. Table 2 presents a summary of the Subject Reviews by Universities and Table 3 by Faculty.

Table 1: University Grants Commission of Sri Lanka Marking Schemes of Professorial Grades 1997- 2008

Area	Year of Circular	Associate Professor			Professor	
		Internal	External	Merit	Cadre (Advertised)	Research
Teaching & Academic Development	1997	20	10	20	-	-
	2005	10	05	20	25	-
	2009	10	05	20	25	-
Research & Creative Work	1997	25	35	45	-	-
	2005	30	40	60	65	115
	2009	25	35	50	55	-
Dissemination of Knowledge & Contribution to University & National Development	1997	10	10	15	-	-
	2005	10	05	10	15	-
	2009	10	05	10	15	-
Total Minimum Marks Required	1997	65	65	90	-	-
	2005	70	70	105	115	115
	2009	70	70	105	115	-

Sources: Commission Circular No. 723 of 1997, No. 869 of 2005, No. 916 of 2009 - University Grants Commission of Sri Lanka

Table 2: Subject Reviews by Universities

University	8As	7As	6As	5As	Total 5-8As	Percentage of Departments with 5-8 As
University of Colombo + Sri Palee Campus (28)	-	1	8	4	13	46
University of Peradeniya (35)	1	5	4	5	15	43
University of Sri Jayawardenapura (35)	1	6	11	7	25	69
University of Kelaniya (22)	1	3	1	3	8	36
University of Moratuwa (15)	4	4	6	1	15	100
University of Jaffna + Vavuniya Campus (33)	-	-	3	5	8	30
University of Ruhuna (25)	-	-	6	9	15	60
Eastern University of Sri Lanka (21)	-	-	-	-	-	00
South-Eastern University of Sri Lanka (07)	-	-	-	-	1	14
Rajarata University of Sri Lanka (10)	-	1	1	-	2	40
Sabaragamuwa University of Sri Lanka (13)	-	-	1	3	4	31
Wayamba University of Sri Lanka (16)	-	1	3	3	7	44
Open University of Sri Lanka (18)	-	-	3	4	7	39
Total 278	7	21	47	44	119	43

*Note: * All departments of Medicine have been reviewed together in some universities.*

Source: Reports of subject reviews, Quality Assurance Council 2012- University Grants Commission of Sri Lanka

Table 3: Subject Reviews by Faculties

Faculties	8As	7As	6As	5As	Total 5-8 As	Percentage of Departments with 5-8 As
Agriculture (26)	1	3	8	1	13	50
Architecture (3)	-	1	2	-	3	100
Arts / HSS (74)	-	2	12	10	24	32
Education (6)	-	-	2	1	3	50
Engineering (27)	4	5	6	7	22	81
Management / Business Studies (43)	-	2	7	10	19	44
Medicine (20)*	-	1	2	4	7	35
Science (63)	2	3	15	7	27	43
IT/Computer Science (1)	1	-	-	-	1	100
Dental Science (5)	-	-	-	-	0	0
Veterinary Science (5)	-	-	-	-	0	0
Livestock, Fisheries & Nutrition (4)	-	-	2	-	2	50
Geomatics (2)	-	-	-	-	0	0
Total 278	8	17	54	47	125	45

*Note: *All departments of Medicine have been reviewed together in some universities*

Source: Reports of Subject Reviews, Quality Assurance Council 2012 - University Grants Commission of Sri Lanka

The Review Teams appointed to review the programmes obviously vary by the subject disciplines and universities and there is no guarantee of all teams strictly conforming to the approved guidelines. In any case, of the 278 reviews which have been confirmed, 119 (41%) have received at least 5As. What is noteworthy is the lower performance of some of the regional and newer universities.

The above table shows the performance of different Faculties as assessed by the QAAC. It indicates that the high performers are from IT, Architecture and Engineering while Dental Science, Veterinary Science, Arts/HSS and Medicine (some Departments of Medicine, had been reviewed together and therefore do not indicate actual performance) show lower performance. It is relevant to note, that consistently Arts/HSS Faculties have been blamed for lower quality. This exercise needs to be monitored by the Faculty Boards and the Senates of universities to find out whether action to redress deficiencies is being taken.

It is pertinent here to examine the distribution of University academic staff by grade, as the quality of academic staff is directly related to the quality of academic programmes shown in Tables 4 and 5. It is seen that the percentage of professor and associate professors add up to 14 per cent of the total academic staff. The table also clearly indicates the disparities among universities with the Universities of Kelaniya, Peradeniya, Moratuwa and Colombo having more than 15 per cent, Sri Jayawardenapura, Ruhuna and Wayamba,having more than 10 per cent of their academic staff in the professorial grades while the Visual and Performing Arts, Sabaragamuwa, Rajarata Universities and Eastern Universities have less than 5 per cent of their academic staff in the professorial grades. South-Eastern and Uva Wellassa Universities do not have a single staff member in professorial grades.

Universities, however, are not homogenous entities. Within Universities disparities in number of total staff, their qualifications and research expertise exist by Faculties. Some Faculties like Education, Law, Dental Science, Veterinary Science, Architecture and Information Technology, Fisheries & Marine Sciences & Technology, Livestock, Fisheries & Nutrition and Geomatics have small numbers. Table 5 illustrates the position with the distribution of academic staff in selected Faculties.

Table 4: Distribution of University Permanent Academic Staff by Grades and Universities - 2011

University	Professor (%)	Associate Professor (%)	Professor & Assoc. Prof. (Combined)	Senior Lecturer (%)	Lecturer /Prob. Lecturer (%)	Total
University Colombo	82 (16.2)	11 (2.2)	93 (18.4)	242 (47.9)	170 (33.7)	505
University Peradeniya	113 (17.5)	21 (3.3)	134 (20.8)	341 (52.8)	171 (26.5)	646
Uni.of Sri Jayawardenapura	69 (14.3)	12 (2.5)	81 (16.8)	270 (56.0)	131 (27.2)	482
University of Kelaniya	103 (20.5)	15 (2.9)	118 (23.4)	215 (42.8)	169 (33.7)	502
University of Moratuwa	45 (16.4)	4 (15)	49 (17.9)	135 (49.3)	90 (32.8)	274
University of Jaffna	20 (6.2)	10 (3.1)	30 (09.3)	165 (51.2)	127 (39.4)	322
University of Ruhuna	56 (13.1)	3 (0.7)	59 (13.8)	204 (47.7)	165 (38.6)	428
Eastern University of SL	2 (1.2)	-	2 (1.2)	87 (52.7)	76 (46.1)	165
South-Eastern Uni. of SL	-	-	-	59 (73.8)	21 (26.2)	80
Rajarata University of SL	6 (3.7)	-	6 (3.7)	49 (29.9)	109 (66.4)	164
Sabaragamuwa Uni. of SL	10 (6.5)	-	10 (06.5)	73 (47.1)	72 (46.5)	155
Wayamba University of SL	12 (10.6)	1 (0.9)	13 (11.5)	40 (35.4)	60 (53.1)	113
Uva Wellassa University SL	-	-		12 (15.6)	65 (84.4)	77
Uni. of Visual & Perform. Arts	5 (4.6)	5(4.6)	10 (9.2)	39 (36.1)	59 (54.6)	108
Open University of SL	17 (6.2)	-	17 (06.2)	123 (44.7)	135 (49.1)	275
Higher Edu. Institutes	9 (4.1)	-	9 (04.1)	102 (47.0)	106 (48.8)	217
Total	549 (12.2)	82 (1.8)	631 (14.0)	2156 (47.8)	1726 (38.2)	4513

Source: Sri Lanka University Statistics 2011- University Grants Commission of Sri Lanka

Table 5: Distribution of University Permanent Academic Staff by Grades for Selected Faculties

Faculty	Professor	Associate Professor	Professor & Associate Professor (Combined)	Senior Lecturer	Lecturer Probationary Lecturer	Total
Arts/Humanities & Social Social Sciences/Arts & Culture/Islamic Studies	143(13.3)	19(1.8)	162(15.1)	518(48.2)	395(36.7)	1075
Education	5(8.6)	1(1.7)	6(10.3)	18(31.0)	34(58.6)	58
Law	1(3.7)		1(3.7)	15(55.6)	11(40.7)	27
Medicine	83(13.5)	14(2.3)	97(15.8)	283(46.1)	234(38.1)	614
Science/Applied Science/Science & Technology	103(15.5)	17(2.6)	120(18.1)	245(36.8)	301(45.2)	666
Management/Business Studies & Finance/Commerce	28(5.3)	5(0.9)	33(6.2)	292(54.9)	206(38.8)	531
Visual & Performing Arts	5(4.6)	5(4.6)	10(9.2)	39(36.1)	59(54.6)	108
Dental Science	14(25.5)		14(25.5)	34(61.8)	7(12.7)	55
Veterinary Science	6(17.6)		6(17.6)	16(47.1)	12(35.3)	34

Engineering	63(13.5)	5(1.1)	68(14.6)	252(53.9)	147(31.5)	467
Agriculture/Animal Science & Export Agriculture	54(16.6)	10(3.1)	64(19.7)	129(39.7)	132(40.6)	325
Architecture	5(9.6)	1(1.9)	06(11.5)	32(61.5)	14(26.9)	52
Information Technology*	1(5.6)		1(5.6)	8(44.4)	9(50.0)	18
Fisheries & Marine Sciences & Technology/ Livestock/ Fisheries & Nutrition	5(13.2)		5(13.2)	18(47.4)	15(39.5)	38
Higher Educational Institutes	9(4.1)		9(4.1)	102(47.0)	106(48.8)	217
Total	**525(12.3)**	**77(1.8)**	**602(14.0)**	**2001(46.7)**	**1682(39.3)**	**4285**

*Note: * University of Colombo School of Computing not included*

Source: Sri Lanka University Statistics 2011- University Grants Commission of Sri Lanka

The above table clearly indicates that Science-oriented disciplines of Dentistry (25.5),Vet. Science (17.6), Agriculture (16.6), Science (15.5), Medicine and Engineering (13.5), and Fisheries and Marine Sciences (13.2) are in the forefront, while Law (3.7), Visual & Performing Arts (4.6), and Management/ Business Studies & Finance/Commerce (5.3) are at the lower end of the scale. The Faculties of Arts/HSS/Arts & Culture/Islamic Studies have 13.3 per cent of their academic staff in professorial grades despite the criticisms leveled at them for being of lower quality.

Improving University Faculty Cultures

This brings to the issue of Faculty Cultures (Gunawardena, 2001). Austin (1998) discusses the four dominant cultures that affect faculty members: the cultures of the disciplines, of the employing university or college, of the national system and of the scholarly profession.

The strength of the disciplinary culture is rooted in the socialization that occurs through the graduate school experience. Faculty research productivity is an important component in determining the status and quality of higher education. In Sri Lanka, however, we find that some of the universities and faculties have virtually become teaching institutions or departments.

The professional role of academics is also affected by the institutional culture. Universities with a strong stress on contribution to knowledge would encourage research productivity. The value of the disciplinary culture frames much of the institutional culture. Faculty tends to be cosmopolitan in orientation, attending conferences, travelling widely and participating in the scholarly organizations of their fields.

At the national level, each higher education system espouses a set of values and creates a culture within which the faculty needs to work. Here beliefs concerning accountability to the system of higher education, beliefs about the extent of specialization, beliefs regarding the relationship between higher education and employment and beliefs pertaining to the centrality of research (Clark, 1983) become important. The availability of economic resources for higher education is a factor that strongly influences the opportunities for innovation, the system's priorities and the climate within which the faculty work.

Over and above theses cultures is the culture of the academic professions. Among the concepts and values that link the professions are,

- That the purpose of higher education is to pursue, discover, create, produce, disseminate and transmit truth

- A commitment to serve society, also through their roles as teachers and transmitters of culture to students

- A commitment to intellectual honesty, integrity and fairness

- The notion of academic freedom in teaching, learning and research

- The notion of community – that the university is a community of scholars

- A subscription to a 'prestige hierarchy' assigning prestige based on evaluations of quality

Defining Role Functions of Academic Staff

The definition of role functions of academic staff at different grades can positively contribute to the development of faculty cultures. I wish to share here an attempt made by the Open University of Sri Lanka to identify and formulate the role functions of academic staff. In this initiative, an attempt was made to identify the responsibilities of academics in each grade level. Among the responsibilities identified with the Open University being an open and distance mode University were,

- Course material development - Writing / revision, translation of study sessions, Multimedia Production

- Assessment and Evaluation - Setting assessments and marking assignments and final examination scripts and improving skills of objective marking on feedback from senior academic staff

- Delivery of Programmes - Academic counselling, Conduct of day schools / Tutor clinics / Practical work, Academic coordination

- Research and Creative Work - Engagement in research and publications

- Engagement in professional and scholarly activities,

For each of the responsibilities, expected contributions and outcomes, required qualifications and evidence and reporting relationships and co-workers were identified. For example, for a Lecturer-(Probationary) the following were among the responsibilities.

- Develops proficiency in both English and the mother tongue to keep pace with developments in academic discipline

- Participates in research methodology courses & develops research skills

- Assists senior staff in conduct of research & analysis of data

For Senior Lecturers, the concomitant responsibilities related to research were,

- Assist senior staff in conduct of research & analysis of data

- Initiate research studies on his own

- Provide direction & guidance to junior staff on research

For Associate Professors / Professors and Senior Professors, the responsibilities were,

- Initiate discipline - based and distance education research studies

- Explore possibilities for collaborative research at university, national and international levels

- Provide direction and guidance to junior staff on research

- Organize research training workshops and seminars

- Initiate research publications and journals

Within reporting relationships and co-workers, working closely with other relevant staff members, working under direction and guidance of senior academics, reviews by Programme Coordinators and Heads of Departments, and working corroboratively with Faculty senior academics, other universities and research institutions were specified.

It was made mandatory for the Staff Development Centre to provide regular training for staff joining the institution, irrespective of their qualifications and designation and that academic staff are released for such training when necessary. Monitoring of the performance was expected to be seriously carried out in accordance with the role functions when rewards are given.

Developing Academic Leadership

In addition, the role of the senior faculty to act as role models and mentors in developing academic leadership cannot be over-emphasized here. PAESEM group (2005) divides academic leadership into the three primary types of research, educational, and administrative, with some positions combining two or all three types. In leadership in research the three important attributes are: the ability to do good research work; having a vision of what could be accomplished through a strong team effort; and having good interpersonal skills to motivate and bring colleagues together. It is also important for the research leader to seek out and promote talent, in addition to facilitating collaboration. The faculty has a responsibility for quality education, and education can be scholarly work. It is important for the faculty to attempt to use non-traditional approaches to teaching such as use of technology, constructivism and open source courseware, even in conventional education. Administrative leadership is critically important because of the impact it has on academic programmes, faculty, staff, and student body.

Becoming a good leader is a slow process. It is acquired from the time a staff member joins a Faculty, observing how seniors perform, by working with senior colleagues, by participating in training programmes, and following role models. The mentor is an adviser, a consultant, a role model and a colleague. In mentoring, rewards come when the mentor's mentee succeeds, and when they take on positions of authority over the mentor.

Concluding Remarks

Examination of relevant information on university education in Sri Lanka helps to identify issues faced as well as initiatives proposed and implemented over the years. While identification of current issues is important, it is clear that such identification should be followed up with purposive action to resolve the issues. System-wide approaches such as those introduced by national and institutional bodies, supported by donor agencies are in place and these need

to be paralleled by Faculty and Departmental action and should be multi-faceted. Initiatives on Quality Assurance and Staff Development may be institutionalized but mechanically implemented. Follow-up strategies need to be instituted to ensure that action is initiated to improve quality. Staff development should lead to perceptible improvements in teaching, research and dissemination of knowledge. Past experience from established universities in the country demonstrated how the senior faculty contributed to development of junior faculty and there is a dire need for their contributions as role models and mentors to help develop junior staff into academic leadership.

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