# WEB BASED MONITORING AND EVALUATION SYSTEM FOR EXTERNAL QUALITY ASSESSMENTS IN UNIVERSITIES

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Theme: Managing Diversity: Sustainable Quality Assurance Processes

Sub-theme: Innovative approaches to external QA in tertiary education: not a single

approach towards excellence

Title: WEB BASED MONITORING AND EVALUATION SYSTEM FOR

**EXTERNAL QUALITY ASSESSMENTS IN UNIVERSITIES** 

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#### **ABSTRACT:**

External Quality Assessment (EQA) is the major component of QA framework in Sri Lanka. The main function of EQA is to review the standard and quality of the HEIs and its programmes of study and to provide the outcome to stakeholders to observe their expectations.

Due to lack of organized mechanism to monitor and evaluate the outcome of the EQA conducted in universities the improvement in quality is not visible. Also the System users are in different geographical locations and therefore, no access to observe the outcome of EQA's.

A web based approach was developed, as a method to achieve the expected outcomes of EQA's. The system provides user friendly, accurate and up-to date information of EQAs and also it provides a feedback mechanism through online forms/questionnaires. The easy access of information would provide the authorities a basis for decision making to improve higher education sector in Sri Lanka.

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# **INTRODUCTION**

The QAA Council (QAAC), Sri Lanka performs activities to improve the quality in education, share good practices and to inculcate quality culture in universities. The main function of the QAAC is to review the standard and quality of the HEIs, its programmes of study and to publicize the outcome to stakeholders to achieve expectations. For this purpose the QAAC conducts EQAs for Institutions (IRs), Subject/Programmes (SR/PRs) and Libraries (LRs).

The QAAC completed the first EQA review cycle in universities but the impact is not visible. Therefore, it is an urgent need to establish a proper mechanism to monitor and evaluate the progress of the EQAs conducted. The System is very much needed as stakeholders of the system are also in different geographical locations. By the system, the deficiencies in programmes can be observed & rectified and a feedback could be obtained through questionnaires. This facilitates authorities to take decisions in relation to QA activities.

#### **OBJECTIVES**

- To provide a user friendly access for information.
- To maintain an accurate and up-to date information
- To monitor and evaluate the impact of EQAs in universities for enabling decision making
- To Provide the authorities a basis for policy options on higher education
- To ensure that quality learning outcomes are responsive to the changing needs and comparable to international standards

## MAJOR FUNCTIONS AND FEATURES

There are nine modules in the system and following information will be available.

- Basic information of department/faculty/university
- Information on Process of EQA's
- Information on Accreditation Process
- Monitor and evaluate the performance of the faculty/university in-relation to EQAs. This is the most important module of the system. Through this module it will be able to achieve the main objective of reviews. Major indicators of the quality assurance will be monitored and evaluated to check the current status of the faculty and the university in relation to the EQAs. User-friendly web forms have been used for this purpose to maintain effectiveness and efficiency.
- The Impact and Outcomes of External Quality Assessment
- Online checklist for eight (8) aspects of evaluation to maintain the status of faculty in-relation to the aspects of evaluation by reviewers during the site visit.
- Cost analysis of the entire faculty for a review
- Maintenance of Expert Database
- User Enquiry System

Home page of the system is illustrated in figure 1.

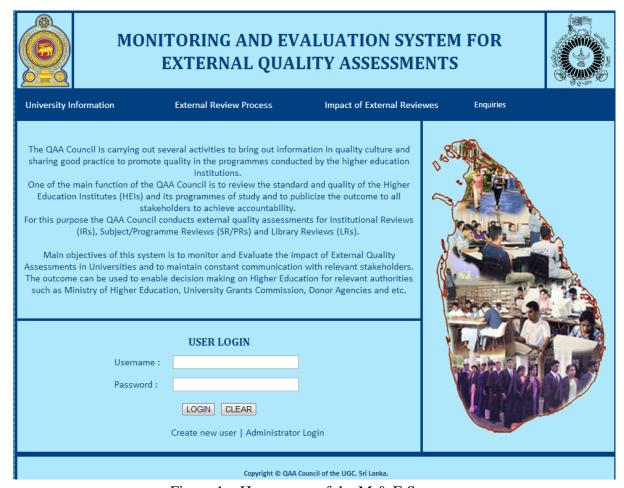


Figure 1 – Home page of the M & E System

During the analysis phase several discussions were held with the stakeholders such as UGC, Reviewers and Donor Agencies (World Bank) etc. and adopted their feedback to improve the system in much meaningful way. Feasibility analysis was conducted in analysis phase and most of the requirements are adopted since the proposed system is feasible economically and technically. Time constraint is a critical factor when implementing their requirements and feedback. Several technologies were adopted and relevant research was conducted during designing phase to make this process a success.

One of the major problems faced during the analysis was the lack of information as this may be the first web based monitoring and evaluation system for external quality assessment in universities. During the literature survey there was no similar system identified and also QAAC did not have a manual system for this process. Since the developer has a domain knowledge and able to manage it without much difficulty.

Recommendations given by the review panel are indicated in the online form for them to fill and send it to the QAAC to check whether the university addressed these recommendations as illustrated in figure 2. These responses will be analyzed and relevant feedback will be send to the University.

150 150 100	nendations given by the panel - Faculty of Geomatics, Sabaragamuwa University
* Required	
Designation	an t
Vice Char	
VICE CHAI	ICERIOI V
Name *	
1. The Fac	culty of Geomatics vigorously pursues the process of Curriculum Revision, which has already been
Yes	
⊚ No	
eminent p	demic Staff of the DSUGEO and DCPRSG, after revising the curriculum, refine it by obtaining views of ersons in the profession, academics from other universities and other related persons, through a series of s; questionnaires sent to alumni and others related to the profession can also be used.
Yes	
No	
terms such	subjects need to be more indicative of their specific contents, rather than being somewhat generic in as, for example, Mathematics I, II, III and IV.
Yes	
⊕ No	
	al training could be arranged for 1-2 months at the end of the Foundation Course, which would help the o select their specialization, and to know the field practices. *
Yes	
⊚ No	
	e the time allocated for survey methods like Theodolite, Total Station and GPS (Global Positioning lerhaps by reducing the time allocated for survey methods like chain, compass and plane-table. *
	aterial on surveying sciences be made available at the Main Library. *
O Yes	
⊚ No	
	ke an effort to get the service of Instructors at the SUSL recognized professionally, as work experience. I limited opportunities for career progress, as their surveying field work practice is not currently d by other organizations, for example, the Survey Department. Under these circumstances, the Faculty
They have recognize has difficu	Ities in retaining/ recruiting Instructors. *
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Figure 2 – Online form with recommendations

Employability, GPA of the degree programmes, research output, implementation of good practices in HE and impact of curriculum revision in major disciplines are the main performance indicators in QA. Sample outputs are illustrated in figures 3, 4, 5 and 6. Hence the system provides the annual comparison of these indicators in each degree programmes in universities. It ensures that quality learning outcomes are responsive to the changing needs and comparable to international standards and make decisions in an effective manner by relevant authorities.

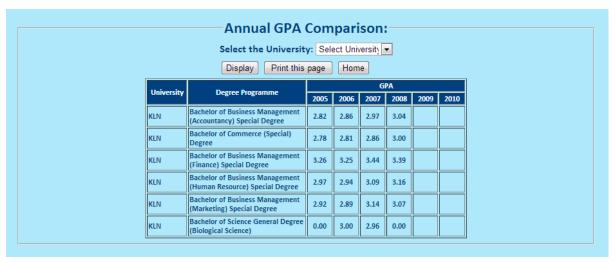


Figure 3 – Annual GPA comparison of degree programmes in respective university



Figure 4 – Annual Employability comparison in respective university

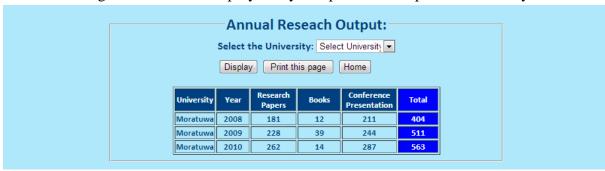


Figure 5 – Annual Research Output in respective university

THE IMPACT OF SUBJECT/PRO REVISIONS II						URRICU	ILUM
Discipline	1996-2005 (%)	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	
Agriculture Related	6	22	6	11	44	11	More Information
Arts, Humanities and Social Sciences	22	5	11	16	37	5	
Commerce and Management	21	5	5	21	37	11	
Education and Law	40	0	0	0	40	0	
Engineering, Architecture and IT	30	10	0	0	30	30	
Medicine, Dental and Allied Health Sciences	23	23	5	14	27	5	
Science related	42	6	6	19	19	6	

Figure 6 – Impact of External Assessments on Curriculum Revisions in Major Disciplines

During the initial stages of the QA in Sri Lanka the QAA Council introduced several good practices in higher education to the university system. Student Feedback and Peer Observation are one of the good practices in higher education adopted by our system. Through the EQAs, implementation of student feedback and peer observation were assessed and given the feedback to the institute and status of the respective university is also available in the system as illustrated in figure 7 and 8.

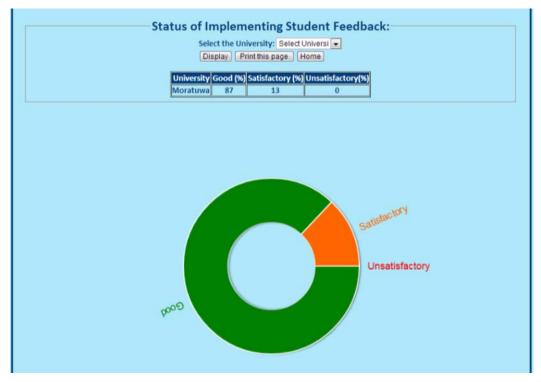


Figure 7 – Status of implementing Student Feedback

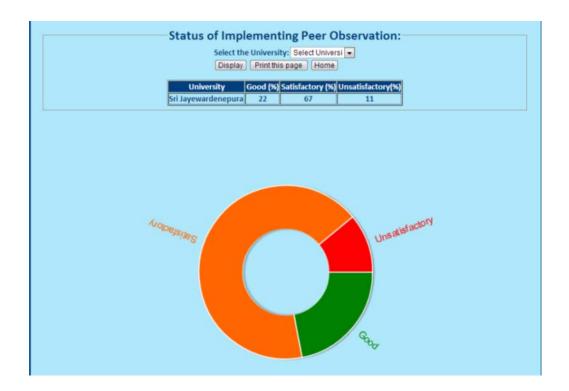


Figure 8 – Status of implementing Peer Observation

More than 600 reviewers were trained under the QAAC for EQAs in Universities. At present, before conducting the review QAAC provides many paper based materials such as guidelines for writing the report, checklists, responsibilities of reviewers and etc. But in future through this system reviewers can login to the system during the site visit and access this information. Checklists for different aspects of respective reviews are available as online forms and they can submit it to the QAAC during the site visit. It will be an efficient mechanism of external reviews in future.

A sample online form of checklist is illustrated in figure 9.

CHECKLIST OF CRITERIA - 1. CURRICULUM DESIGN, CONTENT AND REVIEW
Scope: The effectiveness of the design and the content of the curriculum in enabling students to achieve the intended earning outcomes of the study programme under review.  * Required
University *
University of Colombo
Faculty *
Agriculture
1.1 The progamme objectives are clearly defined in the curriculum.*  Source of Evidence: University or Faculty Handbook for students Curriculum document(s)  Yes
● No
1.2 The programme objectives and intended learning outcomes (ILOs) focus on development of appropriate knowledge among students.*  Source of Evidence: Curriculum document(s)  Yes  No
1.3 The programme objectives and intended learning outcomes (ILOs) focus on development of appropriate skills among students. * Source of Evidence: Curriculum document(s)  Yes
⊚ No
1.15 The curriculum development process incorporates the views of relevant experts in the subject area. * Source of Evidence: Interaction with academic staff and administrators Curriculum development document(s)   Yes
⊚ No
1.16 The curriculum design, content and review takes into consideration the resources available to the institution * Source of Evidence: Interaction with academic staff and administrators Minutes of Faculty Board / Dept meetings / other relevant meetings Curriculum development document(s)
© Yes
⊚ No
Any other comments
Any other comments
Names of the Reviewers (Chair) *

Figure 9 – Online Checklist for Curriculum Design, Content and Review

Home Print this page

### **CONCLUSION**

The implementation of the web based monitoring and evaluation system for external quality assessment would be an important landmark of quality assurance sector in higher education if achieved successfully. The relevant officials can periodically monitor and evaluate the performance of each university and respective faculties. It provides the officials of the UGC/Ministry/other Donor Agencies with bases for policy options in higher education and its decisions for development assistance and incentives to HEIs.

The system is link to the QAAC main web site (<a href="www.qaacouncil.lk">www.qaacouncil.lk</a>) for easy access. Highly strengthen of back-end system to maintain dynamic nature, identified three (3) main levels of users to access the system and the administrator will assign user privileges according to their level to maintain confidentiality. The information will be provided in tabular and graphical format for better understanding and readability of the system.

The information was collected from selected universities and faculties to observe the functioning of the monitoring and evaluation of the external quality assessments. This is system will be expanded to the HE sector including public universities, non-state HEIs, External Degrees and Postgraduate Degree Programmes in Sri Lanka. Therefore, this system would be further enhanced according to meet these requirements.

Also International Quality Assurance Agencies will be able to adopt this programme in their external quality assessment systems.