RP11

Perception of Academics on Quality Assurance Reviews and Information System Support in Sri Lankan Universities

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Abstract

Recently, Sri Lankan higher education institutes aggressively focus on quality assurance. However, many practical difficulties have emerged in implementing information systems and in conducting quality assurance reviews. In this context, quality assurance functions have become an additional burden, and some academics are reluctant to engage in the quality assurance process. Nevertheless, empirical evidence regarding this issue is limited. Therefore, this study explores the academics' perception of the quality assurance reviews and information system support for such reviews in this scenario. The study collected data from a sample of 88 academics from Sri Lankan state universities through an online survey conducted during January and May in 2021. The questionnaire mainly focuses on academics' perception of the quality assurance review process, providing evidence for quality assurance reviews, information systems support for quality assurance functions and expected improvements for information systems. The findings suggest that academics have a positive impression on quality assurance reviews. Further, they believe that information systems can facilitate quality assurance reviews. Nevertheless, given that the contribution of existing information systems towards quality assurance is limited, academics expect further improvements to the existing information systems. Therefore, while highlighting the fact that academics generally have a positive attitude towards quality assurance, this study signals the necessity of more studies to investigate how information systems can be effectively implemented to facilitate the quality assurance process.

Keywords: Quality Assurance, Higher Education, Information Systems, Sri Lanka

Introduction

During the last two decades, Sri Lankan higher education institutions (HEIs) have made substantial improvements in quality assurance (QA) (Bandara, 2018; Imbulgoda, 2019; Peiris et al., 2013; Wickramasinghe, 2013; Wickramasinghe, Peiris and Peiris, 2014). The establishment of the formal QA authority for the higher education system, implementation of the Sri Lanka Quality Assurance

System (QAS), formulating SLQF, conducting external reviews, subject benchmarks, review guidelines are some of the milestones in this process. Internal QA mainly focuses on ensuring quality through internal mechanisms. External QA mainly focuses on evaluating the quality through reviews by independent external experts, *i.e.*, subject review, programme review, institutional review, and library review. Mainly, these external reviews follow an accreditation type evaluation process that grades the respective institute, department, or study programme according to pre-specified quality standards. HEIs are highly dedicated to acquire higher grades in these reviews, competitively.

Nevertheless, QA activities have added various extra works to the universities (Imbulgoda, 2019). Since most of the functions are manually performed and the lack of dedicated staff, QA activities have become an additional burden for the HEIs (Anderson, 2006; Peiris, Wickramasinghe and Peiris, 2014). Moreover, Imbulgoda (2019) has highlighted the resistance of academics in the implementation of QAS resulting from tedious bureaucracy, time-wasting documentation of QA activities, lack of communication, and low involvement of QA data in decision making. Further, the shortage of special funding and lack of human and physical resources have constrained the implementation of the QAS (Imbulgoda, 2019). Nevertheless, the perceptions change rapidly along with the reforms brought into the system. Therefore, this study aims to assess the perception of academics on QA reviews and the extent to which information systems support and expected improvements of information systems in QA activities.

The objectives of the study were to assess the academics' perception of the QA reviews, the academics' perception of the contribution of information systems to the QA reviews by provisioning required evidence. The study also aimed at exploring the current applications of information systems for the QA process and to identify the necessity of the expected improvements and new system developments of information systems to facilitate the QA process.

External QA reviews are conducted by the Quality Assurance Council (QAC) with the support of a team of external experts based on pre-specified quality criteria (Bandara, 2018). This assessment process mainly focuses on examining the past evidence on activities performed by the HEI. Examining the documentary evidence, physical observation, and stakeholder interviews are the primary sources for this assessment. While online electronic resources are examined, manual documents are heavily used as evidence. Even though some of the evidence is documented along with the operational activities, they are not fully compatible with the requirements of QA. Moreover, in some cases, there are lapses in the documentation process. Therefore, HEIs have to re-organize documentary evidence specifically for the QA reviews.

In addition, several implementation issues also have been identified in the QA process. For instance, separation of QAS from the regular activities, lack of interest and engagement of academic staff and students with the QA activities, minimum involvement of stakeholders in the QA activities are the key issues (Imbulgoda, 2019). Further, Peiris et al. (2014) have emphasized that some academics consider the QA process an additional burden and non-value-adding activity within the system. Consequently, they are reluctant to spend time on document preparation and other QA-related activities. However, this academic resistance to the QA is not specific to Sri Lanka, and it is prevalent in the international context (Anderson, 2006). Moreover, most academics do not prefer audit-type quality evaluations that affect their autonomy, freedom, and professional status (Cheng, 2010; Mustaffa, Sharifah Norul Akmar, Rosman and Fatimah, 2007). Therefore, academics' perception of QA reviews is more critical for the success of the external reviews, the validity of the results, and the sustainability of the QA process. Further, as mentioned in the introduction, HEIs employ many information systems to perform different activities. Although these systems provide many benefits, their support for QA is not evident. Therefore, this study explores the academics' perception of QA reviews and the contribution of information systems to the QA process.

Methodology

This study followed a survey-based quantitative research approach. An online Google form was distributed among the academics of the Sri Lankan state universities using the snowball sampling technique. Finally, 88 responses were received from January 2021- May 2021. Responses from some of the universities were not adequate. Exploratory data analysis techniques were mainly used for data analysis.

The questionnaire consisted of main four sections that cover responders' general information, opinions regarding the QA reviews, provision of required evidence for QA reviews, usage of information systems for specified activities concerning the QA. Responders' general information was collected by section one. Section two consists of opinions about the existing quality assurance reviews (subject review, programme review and institutional review). Existing methods and associated issues of provisioning required evidence for QA reviews were concerned in section three. The last section of the questionnaire mainly focused on collecting data on the application of specific information systems, such as students information management system, learning management system, online teaching platforms, and experiences of information system applications on different activities i.e., collecting students feedback, managing student internships, examination information management, etc.

Table 1: Responses from each university

University	Professor	Senior Lecturer	Lecturer	Grand Total
Colombo	1	5	-	6
Jaffna	2	4	-	6
Kelaniya	2	4	2	8
Moratuwa	3	10	1	14
OUSL	1	2	1	4
Peradeniya	2	2	1	5
Rajarata	-	2	-	2
Ruhuna	3	9	6	18
Sabaragamuwa	-	3	1	4
South Eastern	-	2	-	2
Sri Jayewardenepura	2	3	3	8
Uva-Wellassa	-	1	6	7
Wayamba	-	3	1	4
Grand Total	16	50	22	88

Source: Survey data

Results and Discussion

As illustrated in Table 1, 88 academics have responded to the questionnaire representing state universities. The sample represents 18% are professors, and 56% are senior lecturers. Accordingly, the majority of the responded academics are senior staff of the university system. The involvement of the senior staff in the survey has increased the trustworthiness of the result.
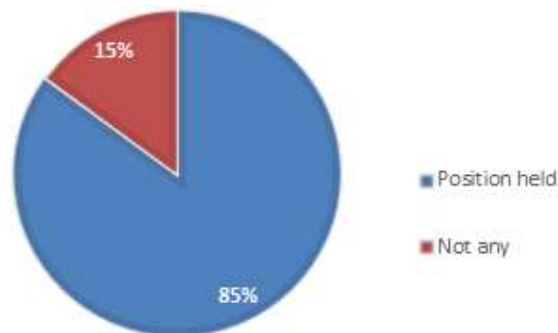

Figure 1: Positions held related to QA activities

According to Figure 1, 85% of the respondents have been involved with QA activities by being a member of CQA, IQAC, Programme Review, Institutional Review, etc. Therefore, all the respondents are supposed to have a good idea of the QA process in Sri Lankan HEIs. Therefore, according to Table

1, and Figure 1, the majority of respondents are senior academics of the university system who have been actively involved with QAS by giving a contribution to the QA activities in different ways.
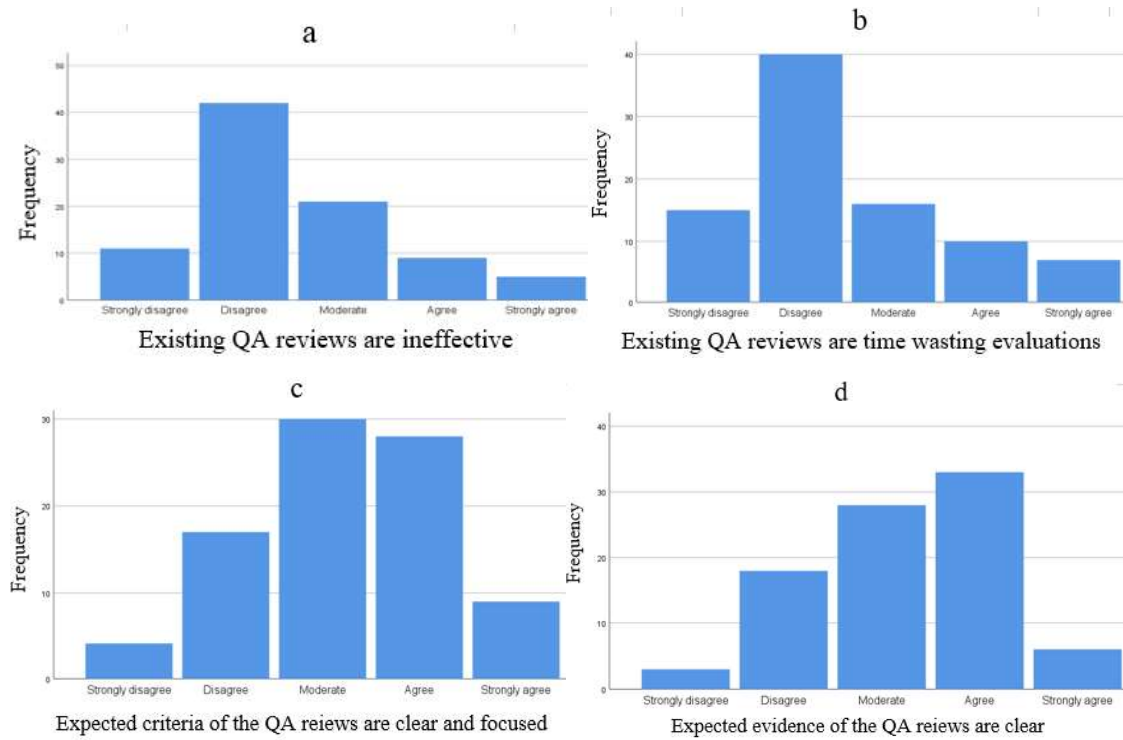

Figure 2: Impression of academics on QA

Figures 2a, 2b, and 2c show that respondents generally have a positive impression about the QA reviews though the evidence is weak. Moreover, as shown in Figure 2d, the respondents believe that the expected evidence of the QA reviews are clear enough. But, several researchers have highlighted reluctance from academic staff for active contribution to the QA process and unwillingness to accept quality audit type evaluations which affected their autonomy, freedom, and professional status (Anderson 2006; Imbulgoda 2019; Peiris et al., 2014). However, these results do not meet too much resistance from academics for the QA process.
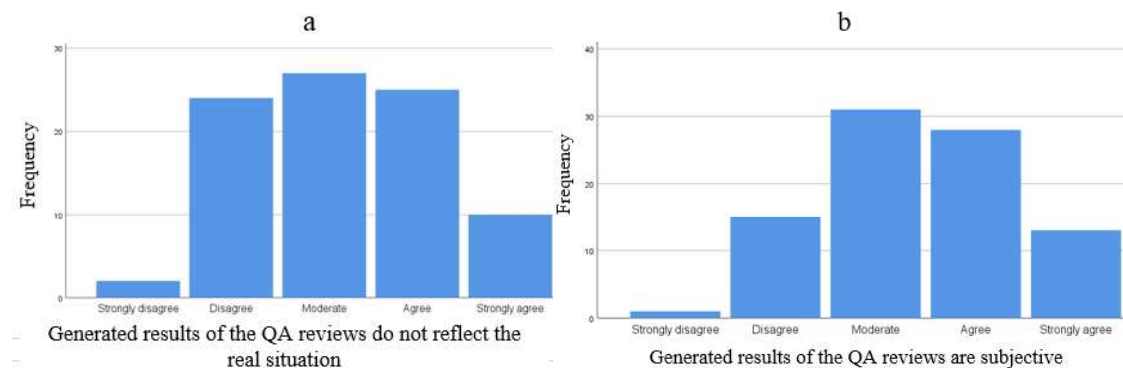

Figure 3: Validity and objectivity of the review results

However, Figures 3a and 3b show the respondents have concerns over the validity and objectivity of the review results. It reflects the trustworthiness of the QA reviews among respondents and impacts on the sustainability of the QA programme. The majority are not confident that the review results reflect the actual situation and the results are objective. Bandara (2018) also has highlighted that review teams have made subjective decisions because some areas are not covered by the standards in review manuals. Therefore, QA authorities have to formalize the QA review process further building trust among the stakeholders.
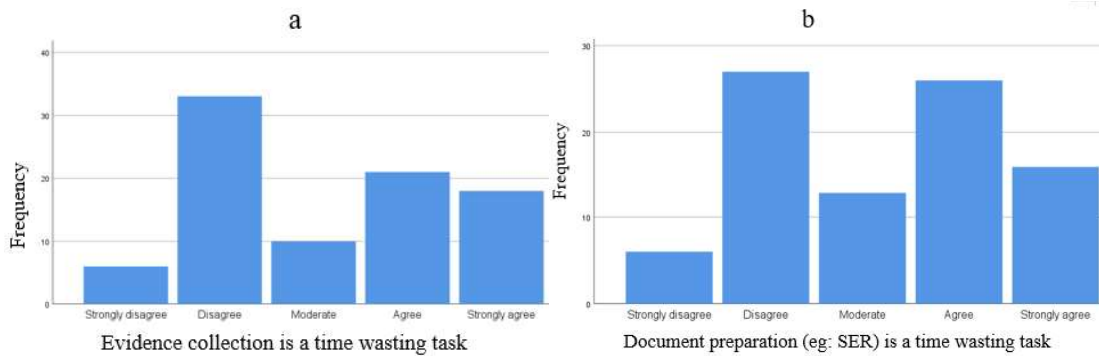

Figure 4: Time consumption of evidence collection and document preparation for QA reviews

Generally, review teams expect a variety of hard and electronic documents as evidence for the external reviews (Jensen, Kohler, Jones, Lindesjöö and Banaszak, 2010). But several scholars have highlighted that this time-consuming documentation and review-based evidence preparation are the main reasons for reluctance from academics for active contribution to the QA process (Anderson, 2006; Imbulgoda, 2019; Peiris et al., 2014). Figures 4a and 4b also show that the opinion is divided on the effectiveness of the time spent on evidence collection and document preparation. Therefore, information systems based evidence accumulation and summary report generation mechanism will formalize the QA process while increasing the transparency of the evaluation process.
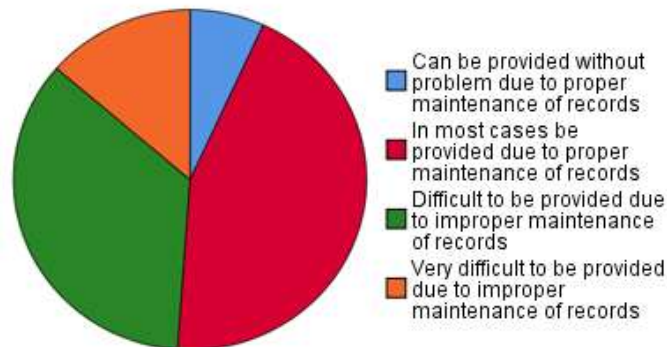

Figure 5: Provision of past evidence required for QA reviews

Figure 5 suggests that there are substantial difficulties in providing required evidence for QA reviews. Nearly half of respondents have expressed their difficulties in providing required evidence for external reviews due to record maintenance issues. These results further confirmed the argument made under Figure 4 that universities face difficulties in the preparation and maintenance of evidence in QA reviews.
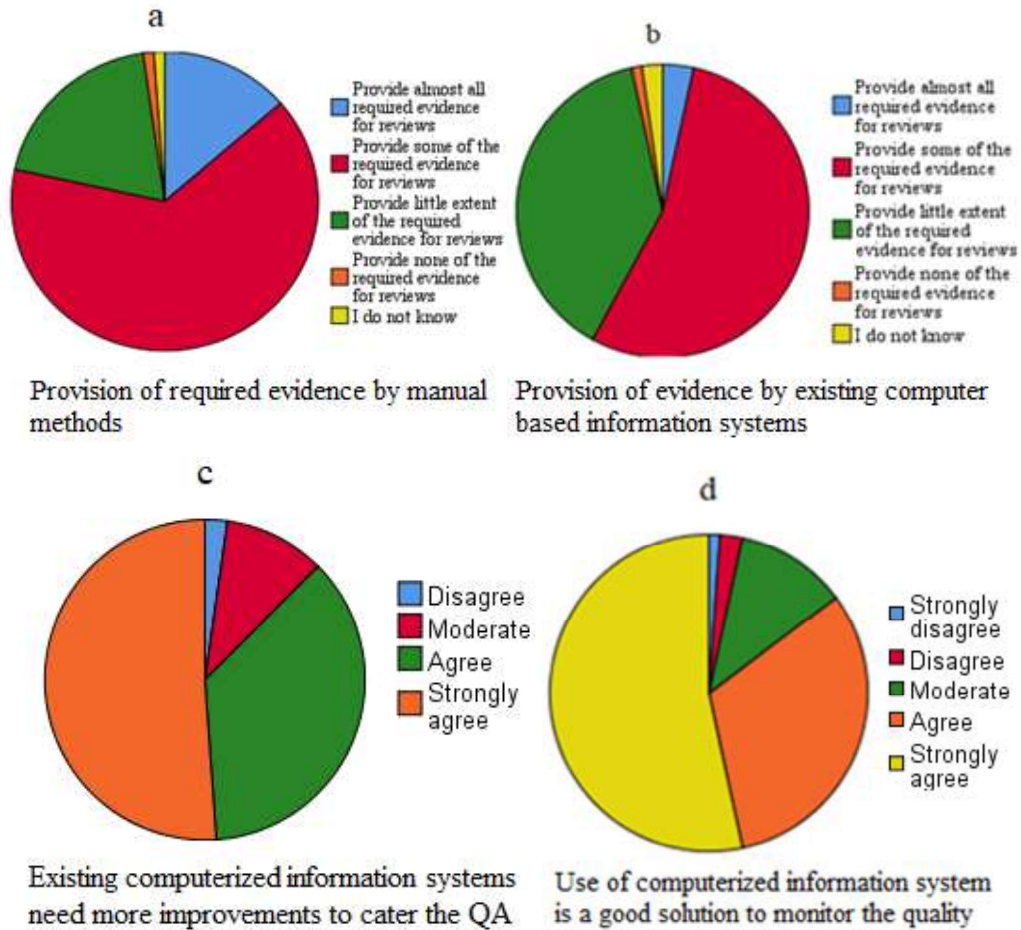

a

Provide almost all required evidence for reviews
Provide some of the required evidence for reviews
Provide little extent of the required evidence for reviews
Provide none of the required evidence for reviews
I do not know

Provision of required evidence by manual methods

b

Provide almost all required evidence for reviews
Provide some of the required evidence for reviews
Provide little extent of the required evidence for reviews
Provide none of the required evidence for reviews
I do not know

Provision of evidence by existing computer based information systems

c

Disagree
Moderate
Agree
Strongly agree

Existing computerized information systems need more improvements to cater the QA

d

Strongly disagree
Disagree
Moderate
Agree
Strongly agree

Use of computerized information system is a good solution to monitor the quality

Figure 6: Manual methods and applications of information systems in QA and expected improvements

Figure 6 (6a, 6b, 6c, and 6d) shows ample space for improving manual procedures and computer-based information systems to cater to the evidence requirements of QA reviews. Figures 6a and 6b show that manual methods are heavily used to prepare the required evidence while information systems provide only some of the evidence in many cases. This minimum usage of information systems to manage QA data has been highlighted by Gamage, Pradeep, Najdanovic-Visak, and Gunawardhana (2020) in the Sri Lankan context. However, as illustrated in figure 6c existing information systems need to be improved to cater to the quality assurance. Further, there is a strong consensus among the respondents that computerized information systems can facilitate the review process significantly. As shown in

Figure 6d more than 50% of respondents have strongly recommended that a computerized information system can be employed to monitor the quality.
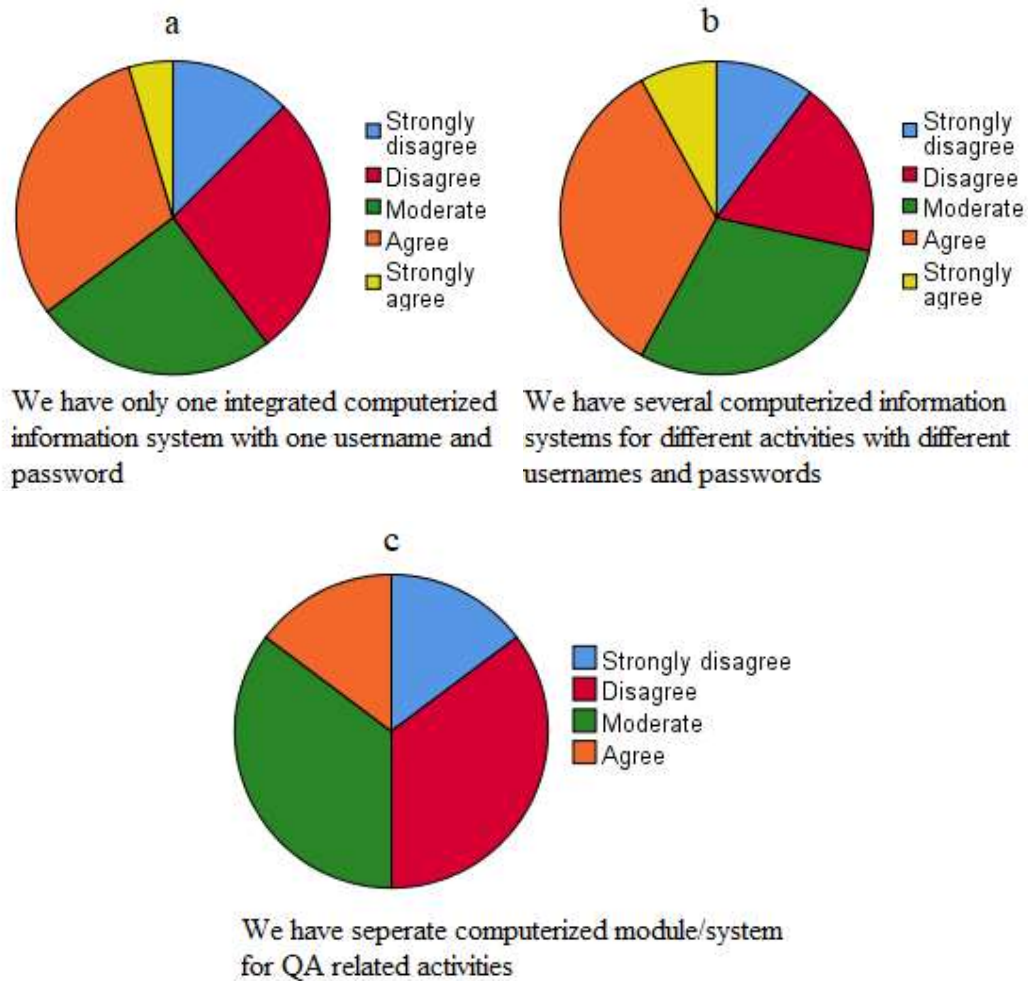

Figure 7: Integration of existing information systems and availability of a separate information system for quality assurance activities

Figures 7a, 7b, and 7c illustrate that information systems are not well integrated, and quality assurance information systems, in most cases, run separately. This is ineffective and creates issues relating to data integrity and redundancy, and results in large-scale inefficiencies. Accordingly, as illustrated in Figure 6, information systems can be employed to facilitate QA-related activities, but existing information systems have not been properly integrated and QA-focused information systems have not been established widely.

Figure 8 shows the usage of three main information systems in HEIs, i.e., Students Information Management System (SIMS), Learning Management System (LMS), and Virtual Teaching Platforms. SIMS is mainly used to manage the students' information while LMS and Virtual Teaching Platforms

are used for content management and delivering online lectures, respectively. These three information systems are highly relevant for the quality of student administration and the teaching and learning process.
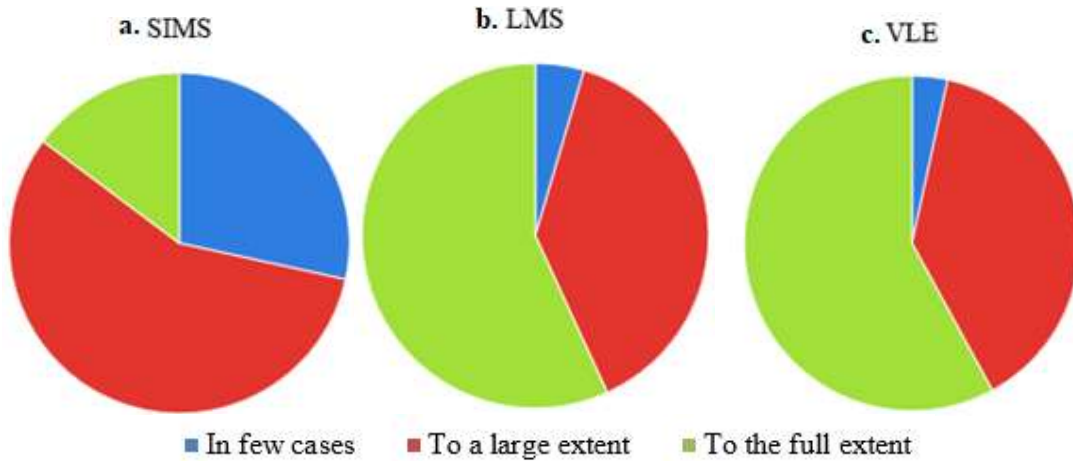

Figure 8: Usage of SIMS, LMS and VLE

According to the figures, LMS and VLE are widely used by academics while SIMS is also used up to some extent. Usage of LMS and VLE has been significantly increased since data was collected in the pandemic period. The next three figures will further evaluate these systems individually.
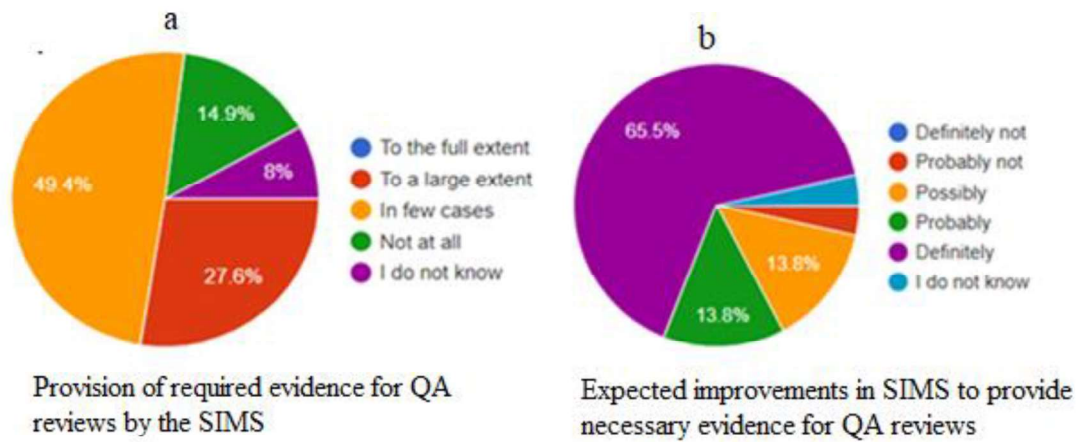

Figure 9: Provision of required evidence by SIMS and expected improvements

SIMS plays a major role in universities by facilitating the required digital platform to manage the students' academic and administrative related activities. Figure 9 (9a and 9b) illustrates the current situation of the SIMS in the provision of required evidence for the QA reviews and required improvements. Figure 9a shows that SIMS significantly contributes to the provision of required evidence for QA reviews. However, according to Figure 9b, the majority of respondents expect

definite improvement in SIMS concerning the provision of required evidence for QA reviews. Therefore, functions of existing SIMS need to be more aligned with the QA requirements of the universities.
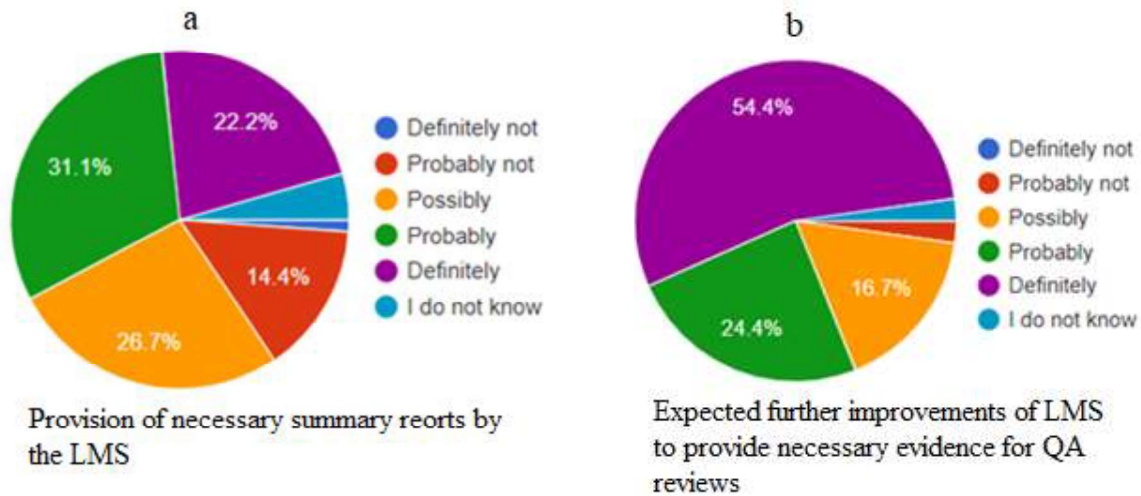

Figure 10: Provision of summary reports by LMS and expected improvements

LMS is a widely used web-based application to plan, implement and assess the learning process. Generally, LMS provides a significant contribution to increasing the quality of the teaching and learning process. Figures 10a and 10b illustrate the existing situation and expected improvements of LMS in providing evidence for the QA reviews. As shown in figure 10a, LMS provides necessary evidence for the QA reviews but not to the expected level. Therefore, respondents expect more improvements in the LMS in respect to providing aggregated summary reports. Because academics use more common LMSs such as "Moodle" that facilitate only limited user activity summary reports.

Figures 11a and 11b illustrate the contribution of VLE to the provision of quality teaching and expected improvements. Due to the current pandemic situation, academics have to deliver lectures over VLEs like ZOOM. As discussed in LMS, ZOOM also provides only limited reports on student participation. And those reports have limited optimization facilities and do not focus on quality aspects of the teaching-learning process. Therefore, the majority of academics expect more improvements in VLE concerning providing summary reports.
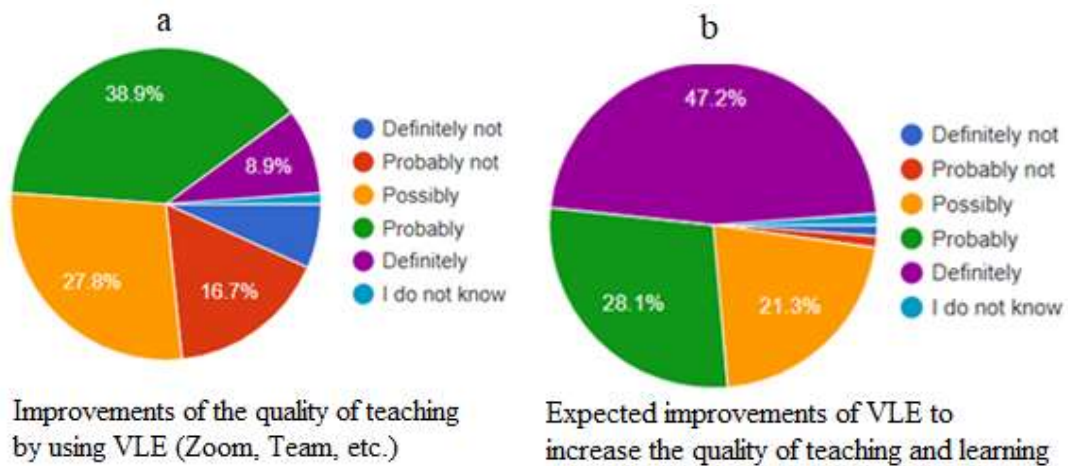
Figure 11: Quality improvements of teaching by VLE and expected improvements

Table 2 illustrates the usage of different information systems, other manual or alternative methods in managing daily activities in universities. Those activities are students' feedback management in teaching and learning, student assessments, internship, extra-curricular activities, general administration, human resource management, financial activities, and physical resources management. These are more critical activities that are directly related to improving the quality of universities. According to the results, many activities are performed through manual methods. In a few cases, universities use standard information systems for these activities.   In addition, results show that Google forms and LMS modules usually apply for feedback collections in several activities.

Table 2: Usage of information systems, manual methods, or any alternative methods for activities

Activity	Not any method	Manual	Excel/ Access	Google forms	LMS module	Standard software system	Do not know
Getting student responses during the class	7	22	0	13	32	8	6
Student feedback on teaching	2	26	1	15	36	5	3
Student feedback on course units	5	23	1	13	36	6	4
Student feedback on university service centres	11	20	2	12	15	3	25
Audience response at online teaching (eg: Mentimeter, Padlet)	24	5	1	9	20	9	18
Student assessment process (examination)	14	23	4	2	33	5	7

Table 2: Usage of information systems, manual methods, or any alternative methods for activities

Activity	Not any method	Manual	Excel/ Access	Google forms	LMS module	Standard software system	Do not know
Student internship	19	25	6	5	10	5	18
Student extra-curricular activities	23	23	4	4	7	3	24
Students grievances/complaints	13	36	1	5	6	8	19
General administrative activities	13	29	1	6	8	12	19
Information of the academic staff performance	11	28	5	7	8	13	16
Information of the non-academic staff performance	15	31	1	4	3	7	27
Information of administrative staff performance	17	26	0	3	4	8	30
Financial activities	8	26	6	3	2	14	29
Utilization of physical resources	8	28	3	4	6	9	30
Total	190	371	36	105	226	115	275

Conclusions

QA reviews evaluate the academic programmes and institutes based on performed internal QA activities. They are evidence-based assessments, and the majority of the evidence is expected in documentary form. According to the results, responders are satisfied with the QA criteria and expected evidence of the QA reviews. However, responders show less confidence in the validity and objectivity of the results of QA reviews. Even though information systems are good sources to maintain evidence, they provide limited QA evidence. The detachedness of QA activities from the ordinary operations of the HEI seems to be the main reason behind the lack of employee commitment to QA. Therefore, existing information systems need more improvements in providing the necessary evidence. Further, many activities where the quality is essential are performed entirely or partially by manual methods. Therefore, these activities do not record necessary QA related evidence.

This study reveals that academics have a positive impression on the QA reviews. In addition, existing information systems do not cater to the QA requirements sufficiently. Therefore, it is recommended to

further improve existing information systems and new information system developments focusing on the QA process.

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