

Assessing the effectiveness of tools used for lecturer and course evaluation in institutions of higher learning: a case study from Ugandan universities

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ABSTRACT

Blended learning, a pedagogical method integrating face-to-face and online instructions methodologies, has been identified as a strategic educational approach since its inception in the late 1990s. Moreover, its adoption especially in developing countries such as Uganda was widely recognized during the COVID-19 pandemic's acceleration of digital learning adoption. However, this adoption has posed many challenges in evaluating learning content, teaching methodologies, and their impact on student progress. This study therefore, explores the critical role of quality assurance in higher education, focusing on the assessment of lecturer performance and course content. Apparently, paper-based mode of evaluation is the commonly used method in Ugandan universities, posing issues of privacy, delayed analytics, and ever-increasing operational costs. To address these challenges, this research proposes the development of an automated assessment system, informed by a benchmarking study across four universities. By adopting insights from existing evaluation practices, the proposed system aims to enhance the efficiency, accuracy, and students' privacy during lecturer and course assessment. The implementation of this automated system at Kabale University promises to streamline evaluation process, ultimately enhancing teaching quality and academic outcomes.

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Introduction

The term blended learning was coined in the late 1990s. Overtime, both researcher and practitioners have defined differently. However, there are two blended learning definitions widely cited in literature. These were suggested by Bonk and Graham (2012) and Garrison and Kanuka (2004). According to Bonk and Graham blended learning combines face-to-face instruction with computer-mediated instruction (Dziuban et al., 2018; Hrastinski, 2019). On the other hand (Garrison & Kanuka, 2004) defines blended learning as the thoughtful integration of classroom face-to-face learning experiences with online learning experience. Thus, from the two definitions, there is general covenant about the key components that constitute blended learning and these are face-to-face and online instruction learning.

The outbreak of COVID-19 in 2019 paved way for blended learning to gain momentum especially in developing countries where the education system had not given it more attention (Africa, 2021). However, this adoption came along with limitations such as evaluation criteria to assess the quality of learning content, teaching approaches and its impact towards learner's academic progress (Mushtaha *et al.*, 2022). Good practices of online learning looks at three aspects i.e. the learning objective(s), delivery approach, and the assessment to ascertain whether the learning objectives are achieved (Leary, 2018; Sun & Chen, 2016). To achieve this, the institution's quality assurance must establish evaluation techniques and tools to use to ensure meaningful evaluation results (Javed & Alenezi, 2023).

The term quality assurance is a system of activities jointly focused on maintaining the quality level of education and, where necessary, improving it (Ossiannilsson, 2019). In education system, quality assurance looks at the learning outcome of a course or program, the educational program and learning paths and examination (Anderson & Dron, 2011). In institutions of higher learning, quality assurance regarding academics is supported by the quality assurance department who collect feedback from students that evaluate courses and lecturers attended to them (Alzafari & Ursin, 2019). In this case, students are tasked with evaluating the lecturer's method of course delivery, identifying aspects to uphold and areas for enhancement. This feedback serves as the foundation for the quality assurance department's reports on university performance. These reports, processed by the quality assurance department, are then disseminated to the lecturer for self-assessment and to administrators for informed decision-making.

Currently, in Uganda, the predominant approach to lecturer and course evaluation in higher education institutions involves a paper-based method (Adam *et al.*, 2016). Here, the quality assurance department distributes evaluation forms to students for completion and return (Adam *et al.*, 2016). Although these methods have been used, they have a number of challenges including; Lack of privacy i.e. these methods do not hide a student's identity hence a student may not express their feeling due to fear to disclose their identity since it may result into miss understandings between the student and the lecture being evaluated (Goodman *et al.*, 2015). Inability to perform analytics in real time, the paper-based method lacks automated data analysis hence, the quality assurance department incur expenses to hire expertise with the data analysis to interpret and create analytics reports. This increases the operation costs by the department (Heath *et al.*, 2007; Stowell *et al.*, 2012).

Recurrent costs on stationary for printing evaluation forms, and requires much staffing with expertise to handle data collection, analysis and interpretation hence leaving the analytics burden to the quality assurance team thus, reducing the productivity and accuracy in decisions undertaken (Khairil & Mokshein, 2018; Stowell *et al.*, 2012). To address these challenges, this research proposed a system for automating the process of lecturer and course assessment in higher institutions of learning. To accomplish this, we benchmarked against four universities –Mbarara University of Science and Technology, Kyambogo University, University of Kisubi, and Uganda Martyrs University—to analyze their existing systems for lecturer and course assessment. This investigation helped identify best practices and current limitations. Insights gained from this analysis were crucial in designing and developing the proposed system. The newly developed system will subsequently be implemented at Kabale University to enhance the process of conducting lecturer and course assessments, thereby improving teaching outcomes.

Related literature

Blended learning

Blended learning, which is an integration of digital media with traditional classroom methods (Cronje, 2020), has increasingly become a significant education strategy in higher education (Cronje, 2020). This mode of learning necessitates physical presence of both the teacher and learners, with some element of student control over time, place and pace. As education technologies continue to evolve, institutions of higher learning including those in developing countries, progressively adopting blended mode of learning. This mode of learning goes beyond improving teaching methods to enriching the learning outcomes through the integration of best aspects of face-to-face and online education. As a result, several emerging trends have evolved including;

Increased use of learning management systems (LMS): Over the world, institutions of higher learning have continuously adopted LMS such as Moodle, Canvas and Blackboard to facilitate both in-class and aspects of courses. These systems aid in sharing of learning materials, issuing and collection assignments, administrations of tests, quizzes and examinations.

Adaptive learning technologies: These technologies use computerized algorithms to offer personalized learning experiences by analyzing student behavior and optimize the learning path accordingly. Thus, learning has taken a real-time path to individual student demands hence improving learning outcomes. Thus, making education inclusive to even students with disabilities.

Flipped classrooms: Blended mode of learning upsets traditional learning environment by delivering learning content, often online, outside classroom i.e. formally traditional class activities such as those previously considered homework, into the classroom making learning more interactive and fostering hands-on learning experience.

Integration of Augmented and Virtual Reality: Augmented and virtual reality are increasingly being adopted in learning to create immersive learning experience especially in subjects where real-world simulation is vital such as engineering, science and medicine. The realism of virtual reality has made learning more affordable and possible especially where expensive equipment and apparatus are mandatory for physical classroom.

In higher education, especially in developed countries, the increasing adoption of blended learning has been geared by the need to make learning more affordable, flexible, and accessible. However, the situation is mixed in developing countries due to limitations like poor technology infrastructure, which makes blended learning inaccessible in parts of the community, inadequate digital literacy, and unreliable Internet infrastructure. Much of these obstacles to effective adoption of blended learning in developing countries, the future is promising with noticeable strategies like infrastructure development, policy frameworks, content localization, collaborations and community engagement.

Staff and course evaluation

Staff and course evaluation in higher learning is a crucial aspect of administration in an academic institution and quality assurance (Mensah, 2022). These evaluations are primarily designed to assess the effectiveness of teaching methods, course content, teaching facilities and services (Sunder M, 2016). The

main objective is to foster a culture of continuous improvement, ensuring the institution meets students' demands and align with the international standards (Mensah, 2022).

Globally, the attitude towards staff and course evaluation among education stakeholders is generally positive; as these assessments are perceived as essential for enhancing educational quality and student satisfaction (Spooren *et al.*, 2013). However, the perception and reception of this evaluation vary significantly between regions and even between institutions within the same country. In Africa, particularly Uganda, the idea of carrying out periodic evaluation is gaining momentum across universities, although with mixed feeling and attitudes by both staff and students (Spooren *et al.*, 2013).

For some institution at faculty level, staff and course evaluation can sometimes be perceived as a threat, more especially when the results are linked directly to promotions, tenure decisions, or even salary adjustments (Rollett *et al.*, 2021). As a result, there is a concern among staff on negative evaluation, which may not fully reflect their teaching effectiveness due to biases or imperfect evaluation process since it could affect their career and professional growth (Heffernan, 2022). On the other hand, students perceive evaluation as a platform to raise their experiences and influence course delivery, which they see as a direct benefit to their learning environment (Spooren *et al.*, 2013).

Although there are varying perception and reception between staff and students, there are many benefits of staff and course evaluation systems. For institutions, they provide feedback for improving teaching strategies, course structure and content, and learning outcomes. Besides, evaluation can also aid in curriculum development, helping align course with both local and international standards. More so the evaluation drive a student centered learning environment by actively considering students feedback in course adjustments (Berk, 2013).

Despite the above-mentioned benefits, there still several challenges hindering the implementation and adoption of evaluation systems. In African, particularly Uganda challenges like resource constraints hinders the development, adoption and maintenance of evaluation systems (Tarus *et al.*, 2015). Factors like lack of a supportive culture for continuous improvement, limited access to technology, and insufficient training for staff on utilization of these systems can weaken effectiveness of evaluations (Fathema *et al.*, 2015).

Besides, cultural attitude towards evaluation has also affected adoption of evaluation systems, for example in Uganda, some institutions there exist a hierarchical and respect-based culture that hinders students from openly evaluate their teachers, which can lead to false feedback (Oketch Tristan McCowan Rebecca Schendel With Mukdarut Bangpan *et al.*, 2014). Therefore, anonymity and sensitization of students about the importance of confidentiality during evaluation is vital towards obtaining accurate and genuine feedback.

The opportunities for improving staff and course evaluation management systems lies in technology advancement, improving the infrastructure and mindset change among staff and students. Adoption of digital evaluation tools will streamline the evaluation process, making it more efficient, reliable and less prone to bias (Stanny & Arruda, 2017).

In conclusion, whereas staff and course evaluation are essential aspects of improving quality and accountability in institutions of higher learning, institution-based challenges and opportunities must be given a priority in order to achieve desired outcomes. Sensitization of staff and students about the benefits of online evaluation, technology support and emphasizing transparent evaluation systems can lead to significant improvements and institution reputation.

Methodology

This section describes how the research was carried out. It provides an overview of the research design, the population where the study was carried out, sampling procedure, data collection tools, pre-testing of the instruments, data collection procedures, analysis and ethical considerations.

Study design

In this study descriptive survey design (Aafaq *et al.*, 2019) was adopted and used to collect both qualitative and quantitative data from study participants. Descriptive survey design was preferred since it allowed collection of data from a large pool of subjects which represents a broader picture of the situation hence allowing generation of results (Muhoza *et al.*, 2022).

Population of the study

The study population was staff from the quality assurance department, teaching staff and students from four selected universities including; Mbarara University of Science and Technology, Uganda Martyrs University – Nkozi, Kyambogo University and University of Kisubi. Purposive sampling (Lewis, 2015) was used to select 8 staff from quality assurance, whereas a systematic random sampling technique was employed to randomly select 32 teaching staff members and 60 students. The distribution of participant per institution was 2 staff members from quality assurance department, 8 teaching staff members and 15 students. The selection of these categories of participant based on the idea of giving stakeholders an equal opportunity for being involved in the research.

Research instruments

Three different questionnaires, one for students, one for quality assurance staff and another one for teaching staff members designed and used to collect data form the three categories of participants. The questionnaire contained both close-ended and open ended questions. To ensure easy access to participants, the questions were distributed in to different versions; hard copies for participants who were physically available and electronic copy for participants who were not physically available. The questionnaires included items about the procedures and practices of conducting quality assurance, systems used, and perception towards adoption of electronic systems. Before put to use, the questionnaires were pre-tested by study experts to ensure face validity and reliability of the instruments (Richard P. Bagozzi, 2017). Additionally, participants from the staff category were contacted to review the questions before they were put to use. This was to ensure a high degree of validity. Statistical package for Social Science (SPSS) software was applied to estimate the instrument's reliability based on scale items. The reliability coefficient was estimated at $r = 0.73$ (Richard P. Bagozzi, 2017).

Data analysis

Data collected from the participants were coded, clustered and summarized. The resulting data was fed into statistical software (SPSS 25.0.0.0) for further organized and summarized in such a way that enabled visualization of relationships between participants' perception on staff and course evaluation, performance of quality assurance in the selected academic institution.

Ethical considerations

Before proceeding with data collection, the researchers obtained clearance from Kabale University research ethics committee (KAB-REC) and Uganda National Council of Science and Technology (UNCST). Also, participants were briefed about the objectives of the study and their role as participants and were asked to sign a consent form approving their voluntary participation. They also ensured necessary efforts to adhere to the principles of voluntary participation and harmlessness throughout the study period.

Findings and discussion

Participant characteristics

A total of 8, 32 and 60 participants were selected from quality assurance departments, teaching staff and student categories respectively. Their characteristics are summaries in Table 1. In brief, the population consists predominantly of young adults with between 18 –25 (43%), with a significant male majority at 63.5%. There is significant variation of education levels, however, two-thirds (66%) either have a bachelors or still pursuing their degree/diploma. The remaining one-third possess higher qualifications (Masters and PhD).

Table 1: Demographic characteristics of participants.

Characteristic	Study population (n = 100)
Female gender, n (%)	37(36.5)
Male gender, n (%)	63(63.5)
Education level, n (%)	
<i>PhD</i>	11(11)
<i>Masters</i>	23(23)
≤ <i>Bachelors</i>	66(66)
Age bracket, n (%)	
18 – 25	43(43)
26 – 33	39(39)
40 – 45	11(11)
>45	07(7)

Evaluation frequency and methods used

The researchers aimed to assess the effectiveness of lecturer and course evaluations, as well as the methods used to conduct these evaluations. They sought to determine how the evaluation methods influenced the frequency of evaluation during an academic year. Figure 1 visualizes participant response about evaluation frequency. From result, 88.33% reported lecturer and course evaluation is carried out once in an academic year, where 50% do it in the first semester, 8.33% in second semester. Whereas 25% reported that evaluation is not restricted to a specific semester. On the other hand, only 16.67% participants said that the evaluation is done every semester, twice in an academic.

The predominant approach for collecting evaluation feedback is paper-based (printed evaluation forms), closely followed customized comprised system. Whereas other online tool like Google forms are less popular and other methods are barely mentioned. Printed evaluation forms are preferred since are easily accessible and ease to use. However, reliance of printed forms pauses serious limitations such as delayed processing time, high costs associated with printing, binding, distribution and collection of students' feedback.

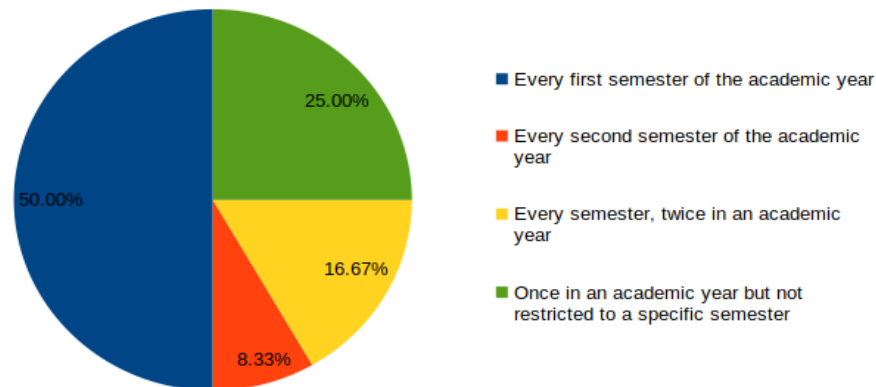


Figure 1: Participant response on frequency of evaluation in an academic year

The increasing popularity of printed evaluation forms reflected either a demographic that is more comfortable with traditional methods or limited accessibility to technology infrastructure and digital literacy among the participants. Figure 2 illustrates participants response on the types of evaluation methods used.

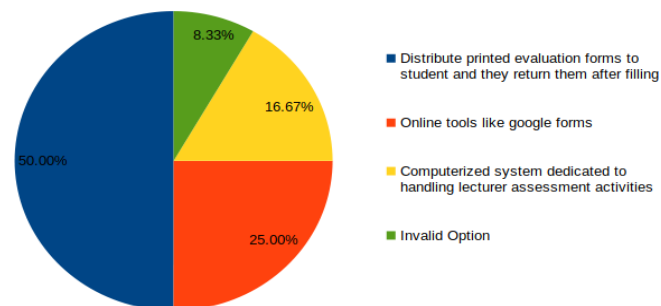


Figure 2: Participant response on the types of evaluation methods used

Sharing evaluation feedback

Much as feedback vital for every stakeholder including students, majority of participants revealed that, in some institution feedback is only shared with faculty deans and heads of department who convene faculty/department meetings and discuss evaluation feedback and suggest way forwards to address the issues raised by students. On a rare case, in some institution, the quality assurance department provide lecturer with direct access to real-time student feedback submission to enable proactive monitoring. Feedback to students is always given at an abstract level in form of decision taken to address the raised. The common types of reports generated including individual lecturer performance, statistical data reports to support comprehensive assessment and enhancement of educational practices.

Accelerating student participation

Although respondents revealed that there limited turn-up of student involvement in lecturer and course evaluation, combined efforts are underway to improve participation through enough procedures. Firstly, it revealed that majority of the respondents acknowledge the zeal by students to appreciate the benefits of raising their concerns about the quality of teaching content, and delivery methods through these evaluations thus, the culture of willingness to participate is rapidly increasing. Secondly, some institutions have enforced this process by integrating the evaluation system with student academic information management system, making it compulsory for every student to submit evaluation feedback before accessing essential services like examination card. Additionally, some institutions are carrying out routine sessions and workshops to familiarize students with evaluation tools and processing, aiming at increasing awareness hence increasing student engagement in evaluation activities.

Students participation in previous evaluation

According to data provided, there is a small proportion of students particularly 5% who have never participated in lecturer and course evaluation. This figure, much as is a small percentage, it raises concerns about student engagement and awareness of the importance of lecturer evaluation. Majority of the students (37%), revealed that they have participate between 1 and 2 times. Moving to a more frequent participation, 32% of the students have participated in the evaluation process between three and five times and the most encouraging statistics arise from the 27% of the cohort who participated in the evaluation process for more than five times since their enrollments at the university.

Access to evaluation feedback

Participants' response on whether they receive evaluation feedback at the end of the evaluation process are presented in Figure 3. From the results, it evident that only half of the respondents (51%) are receiving feedback, this implies that the existing systems and mechanisms are effective for a majority but not for a significant majority. The fact that almost half of the respondents (46) do not get feedback from the quality assurance at the end the evaluation process implies that there is a substantial gap in the existing systems which call for an improvement. The invalid response, although it is minimal (2%) reveals that either there was a misinterpretation of the question by the respondents or an issue with how data was collected. Among the challenges that come along with failure to share evaluation feedback with staff and students include; i) decreased motivation and engagement among students and staff – where staff and students are excluded in the communication of evaluation feedback, their engagement and motivation decline. Feedback is very crucial for understanding one's performance and identify areas for improvement, ii) lack of improvement and development, where feedback is not prioritized, staff and students may repeat the same mistake over and again which cripples' development, iii) reduced accountability, one of the core mandates of quality assurance is ensuring accountability and continuous improvement. Failure to disseminate feedback to stakeholders undermines the purpose of quality assurance and iv) erosion of trust and transparence, absence of feedback creates room for perception of lack of transparence and accountability, which can lead to conflicts and lack of cooperation between students, staff and administrators.

In conclusion, the survey highlighted a significant issue within the quality assurance framework in some of the academic institutions with nearly half of the respondents receiving no feedback. Addressing these gaps is very crucial towards improvement learning environment for continuous improvement and learning outcomes.

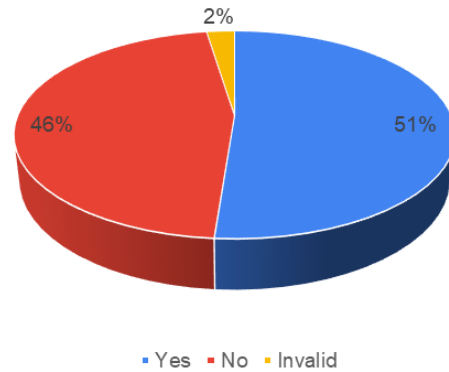


Figure 2: Access to evaluation feedback by both staff and students

Feedback communication methods

Communication channels are crucial for determining the penetration rate, security, and reach of information to the target audience. Consequently, we surveyed the 51% of participants who reported having received evaluation feedback to identify the channels used by the quality assurance department for dissemination. According to the responses, 19% received feedback via email, 24% through class coordinators, and 10% through other means such as noticeboards. Notably, 47% of the respondents did not provide an answer to this question.

Potentially, these communication channel have shortcomings which may hinder the communication process. One significant challenge with emails is the potential for information overload. Often staff and students receive large volumes of emails on a daily basis thus, important feedback emails can easily be overlooked. This reduces the likelihood that recipients will engage with the feedback. The effectiveness of relying on class coordinators depends on the individuals' communication skills and dedication. Inconsistent or unclear communication from class representatives can lead to misunderstanding and ineffective dissemination of feedback whereas noticeboards are traditional methods of communications associated with limited accessibility, limited reach and lack of engagement and accessibility. To overcome these limitations, educational institutions should consider integrating multiple communication channels and leveraging technology to ensure timely, clear, and accessible feedback dissemination.

Evaluation of the current tools used for lecturer and course assessment

In this section we present the results of an evaluation conducted on the tools used by students to assess staff performance and course content. A Likert scale method of 5 ratings was utilized, where responses were categorized as Strongly Disagree (SD), Disagree (D), Undecided (U), Agree (A), and Strongly Agree (SA). The parameters assessed included the confidentiality of the tool, timely feedback, remote assessment capability, complexity of use, ease of use, and presence of irregularities. The results are summarized in the Table 2.

Parameters	SD (%)	D (%)	U (%)	A (%)	SA (%)
The tool is confidential and hide my identity	22	27	10	20	21
The tool give timely feedback	17	19	13	34	17
The offer remote assessment capability	15	20	7	27	32
The tool is complicated to use	20	44	12	12	12
The tool is simple and easy to use	7	17	2	39	35
The tool has some irregularities	15	51	17	15	2

The evaluation results indicate mixed perceptions regarding the tools used for assessing staff performance and course content. Key findings include:

- **Confidentiality and Identity Protection:** Approximately 49% of students disagreed or strongly disagreed that the tool is confidential and hides their identity, indicating a significant concern about anonymity.
- **Timely Feedback:** A majority of students (51%) agreed or strongly agreed that the tool provides timely feedback, suggesting that this aspect is well-received.
- **Remote Assessment Capability:** The ability to conduct assessments remotely is viewed positively, with 59% of students agreeing or strongly agreeing that the tool offers this capability.
- **Complexity of Use:** A substantial proportion of students (64%) found the tool complicated to use, highlighting a critical area for improvement.
- **Ease of Use:** Conversely, a majority (74%) agreed or strongly agreed that the tool is simple and easy to use, indicating a contradiction in student perceptions regarding the tool's usability.
- **Irregularities:** Over half of the students (66%) indicated that the tool has some irregularities, suggesting issues with consistency or reliability.

The evaluation of the current tools used by students to assess staff performance and course content reveals several areas of concern and strengths. While the tool is appreciated for its timely feedback and remote assessment capabilities, issues related to confidentiality, complexity, and irregularities need to be addressed. Enhancing user experience by simplifying the tool and ensuring confidentiality can significantly improve student satisfaction and the overall effectiveness of the assessment process.

Conclusion and future work

This study focused on lecturer and course evaluation methods in Uganda while examining the integration of blended learning and quality assurance procedures in higher education institutions. The integration of in-person and virtual learning approaches, known as blended learning, has gained significant traction, particularly in the wake of the COVID-19 pandemic. The results highlighted the key elements of blended learning; online education and in-person interaction as emphasized by Garrison and Kanuka (2004) and Bonk and Graham (2012).

Considering the aspect of quality assurance, the study emphasized how crucial lecturer and course evaluation systems are to continuation and improving academic standards. Although these evaluations have many advantages like improving instruction and bringing courses into compliance with global standards the research also uncovered several drawbacks. These consist of a lack of resources, restricted access to technology, and cultural perspectives on assessment.

Significant drawbacks were discovered with the prevalent paper-based evaluation techniques employed in Ugandan higher education institutions, including delays in processing comments, high operating expenses, and privacy problems. In order to tackle these problems, the research suggested creating an automated approach for evaluating lecturers and courses that is compared to the best practices of four universities.

The study employed descriptive survey approach to collect data from three categories of respondents including teaching staff, students, and quality assurance personnel. According to the report, lecturer and course evaluations are typically done once a year using printed forms, with a low frequency of evaluations overall. There is an obvious discrepancy in the circulation of evaluation feedback; almost half of the respondents did not receive evaluation feedback from the previous evaluation surveys in their respective institutions, which affects motivation and engagement.

The study recommended adoption of digital evaluation tools, improving technology infrastructure, and promoting a continuous improvement culture as ways to improve the current evaluation methods. Establishing efficient communication channels is crucial for the dissemination of feedback in a timely, comprehensible, and easily accessible manner.

In conclusion, while the adoption of blended learning and effective evaluation systems presents numerous benefits for higher education institutions, addressing the identified challenges is crucial for achieving desired outcomes. By leveraging technology and promoting transparent evaluation processes, institutions can enhance teaching quality, student satisfaction, and overall educational standard.

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References

- Aafaq, N., Mian, A., Liu, W., Gilani, S. Z., & Shah, M. (2019). Video description: A survey of methods, datasets, and evaluation metrics. *ACM Computing Surveys (CSUR)*, 52(6), 1-37.
- Adam, I. O., Effah, J., & Boateng, R. (2016). Migrating from Paper-Based to Online Lecturer Evaluation in Developing Country Higher Education Institutions: An Activity Theory Perspective. *UK Academy for Information Systems*, 27.
- Alzafari, K., & Ursin, J. (2019). Implementation of quality assurance standards in European higher education: does context matter? *Quality in Higher Education*, 25(1), 58–75. <https://doi.org/10.1080/13538322.2019.1578069>
- Anderson, T., & Dron, J. (2011). International review of research in open and distributed learning. *International Review of Research in Open and Distributed Learning*, 12(3), 80–97. <https://id.erudit.org/iderudit/1067616ar>
- Berk, R. a. (2013). Face-to-face versus online course evaluations: A “consumer” s guide" to seven strategies." *Journal of Online Learning and Teaching*, 9(1), 140–148.
- Cronje, J. C. (2020). Towards a new definition of blended learning. *Electronic Journal of E-Learning*, 18(2), 114–135. <https://doi.org/10.34190/EJEL.20.18.2.001>
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15(1), 1–16. <https://doi.org/10.1186/s41239-017-0087-5>

- Fathema, N., Shannon, D., & Ross, M. (2015). Expanding The Technology Acceptance Model (TAM) to Examine Faculty Use of Learning Management Systems (LMSs) In Higher Education Institutions. *Journal of Online Learning and Teaching*, 11(2), 210–233.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, 7(2), 95–105. <https://doi.org/10.1016/j.iheduc.2004.02.001>
- Goodman, J., Anson, R., & Belcheir, M. (2015). The effect of incentives and other instructor-driven strategies to increase online student evaluation response rates. *Assessment and Evaluation in Higher Education*, 40(7), 958–970. <https://doi.org/10.1080/02602938.2014.960364>
- Heath, N. M., Lawyer, S. R., & Rasmussen, E. B. (2007). Web-Based versus Paper-and-Pencil Course Evaluations. *Teaching of Psychology*, 34(4), 259–261. <https://doi.org/10.1080/00986280701700433>
- Heffernan, T. (2022). Sexism, racism, prejudice, and bias: a literature review and synthesis of research surrounding student evaluations of courses and teaching. *Assessment and Evaluation in Higher Education*, 47(1), 144–154. <https://doi.org/10.1080/02602938.2021.1888075>
- Hrastinski, S. (2019). What Do We Mean by Blended Learning? *TechTrends*, 63(5), 564–569. <https://doi.org/10.1007/s11528-019-00375-5>
- Javed, Y., & Alenezi, M. (2023). A Case Study on Sustainable Quality Assurance in Higher Education. *Sustainability* (Switzerland), 15(10). <https://doi.org/10.3390/su15108136>
- Khairil, L. F., & Mokshein, S. E. (2018). 21st Century Assessment: Online Assessment. *International Journal of Academic Research in Business and Social Sciences*, 8(1), 659–672. <https://doi.org/10.6007/ijarbss/v8-i1/3838>
- Leary, T. (2018). Book review of “Assessment Strategies for Online Learning: Engagement and Authenticity.” In *Canadian Journal of Higher Education* (Vol. 48, Issue 3). <https://doi.org/10.47678/cjhe.v48i3.188501>
- Lewis, S. (2015). Qualitative Inquiry and Research Design: Choosing Among Five Approaches. *Health Promotion Practice*, 16(4), 473–475. <https://doi.org/10.1177/1524839915580941>
- Mensah, M. A. (2022). Internal Quality Assurance Practices in Higher Education: Evidence From a Ghanaian University. *European Journal of Education Studies*, 9(7), 301–325. <https://doi.org/10.46827/ejes.v9i7.4388>
- Mtebe, J. S., Fulgence, K., & Gallagher, M. (2021). COVID-19 and technology enhanced teaching in higher education in Sub-Saharan Africa: A case of the University of Dar es Salaam, Tanzania. *Journal of Learning for Development*, 8(2), 383–397.
- Muhoza, G. B., Ssemaluulu, P. M., & Mabirizi, V. (2022). A mobile based technology to improve male involvement in antenatal care. *Kabale University Interdisciplinary Research Journal*, 1(4), 79–86.
- Mushtaha, E., Abu Dabous, S., Alsyouf, I., Ahmed, A., & Raafat Abdraboh, N. (2022). The challenges and opportunities of online learning and teaching at engineering and theoretical colleges during the pandemic. *Ain Shams Engineering Journal*, 13(6), 101770. <https://doi.org/10.1016/j.asej.2022.101770>
- Oketch Tristan McCowan Rebecca Schendel With Mukdarut Bangpan, M., Terano, M., Marston, A., Rawal, S., Carpentier, V., Furniss, G., Huttly, S., McMahan, W., Oliver, S., Prasad-Halls, B., Temple, P., & Unterhalter, E. (2014). *The Impact of Tertiary Education on Development: A Rigorous Literature Review*. Department for International Development. <http://r4d.dfid.gov.uk/%5Cnhttp://eppi.ioe.ac.uk/>
- Ossiannilsson, E. (2019). Considerations for Quality Assurance of E-Learning Provision. *EDEN Conference Proceedings*, 1, 222–230. <https://doi.org/10.38069/edenconf-2019-ac-0025>
- Richard P. Bagozzi, Y. Y. and L. W. P. (2017). Bogazzi_Assesing Construct Validity in Organizational Research. *Administrative Science Quarterly*, 36(3), 421–458. <http://www.jstor.org/stable/2393203>
- Rollett, W., Bijlsma, H., & Röhl, S. (2021). *Student feedback on teaching in Schools; Using student perception for the development of teaching and teachers*. Springer.
- Spooren, P., Brocx, B., & Mortelmans, D. (2013). On the Validity of Student Evaluation of Teaching: The State of the Art. In *Review of Educational Research* (Vol. 83, Issue 4). <https://doi.org/10.3102/0034654313496870>
- Stanny, C. J., & Arruda, J. E. (2017). A comparison of student evaluations of teaching with online and paper-based administration. *Scholarship of Teaching and Learning in Psychology*, 3(3), 198–207. <https://doi.org/10.1037/stl0000087>
- Stowell, J. R., Addison, W. E., & Smith, J. L. (2012). Comparison of online and classroom-based student evaluations of instruction. *Assessment and Evaluation in Higher Education*, 37(4), 465–473. <https://doi.org/10.1080/02602938.2010.545869>
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education: Research*, 15(2016), 157–190. <https://doi.org/10.28945/3502>

- Sunder M, V. (2016). Constructs of quality in higher education services. *International Journal of Productivity and Performance Management*, 65(8), 1091–1111. <https://doi.org/10.1108/IJPPM-05-2015-0079>
- Tarus, J. K., Gichoya, D., & Muumbo, A. (2015). Challenges of implementing E-learning in Kenya: A case of Kenyan public universities. *International Review of Research in Open and Distributed Learning*, 16(1), 120–141. <https://doi.org/10.19173/irrodl.v16i1.1816>