Performance Management and Quality Assurance in Higher Education: A Conceptual Framework for a Blended Approach

Elias Rashidi and Raphael M. Jingura

Abstract

This article proposes a framework to promote continuous quality improvement in higher education by bringing performance management and quality assurance together in a single approach. Blending the two systems eliminates the challenges of a two system approach. The study employed a quantitative methodology, with data collected by means of a closed-ended questionnaire administered to academic and administrative staff at four purposely selected public higher education institutions in Zimbabwe's four major ethnic regions. The questionnaire drew insights from a framework developed by Silimperi et al. (2002) on essential elements for developing quality assurance systems. Fourteen elements were used to determine the possibility of blending the two systems. Of these, nine had a mean score of 4.0, three above 3.5 and two had a mean score of less than 3.5. These results indicate a high likelihood that the systems can be blended.

Key Words: performance management, quality assurance, higher education institutions, blended approach

Sommaire

Cet article propose un cadre pour promouvoir l'amélioration continue de la qualité dans l'enseignement supérieur en réunissant la gestion des performances et l'assurance qualité dans une approche unique. L'association des deux systèmes élimine les difficultés d'une approche à deux systèmes. L'étude a utilisé une méthodologie quantitative, les données étant collectées au moyen d'un questionnaire fermé administré au personnel académique et administratif de quatre établissements publics d'enseignement supérieur sélectionnés à dessein dans les quatre

ABOUT THE AUTHORS: ELIAS RASHIDI AND RAPHAEL M. JINGURA, Chinhoyi University of Technology, Zimbabwe, email: elias.rashidi@gmail.com, rjingura@gmail.com

principales régions ethniques du Zimbabwe. Le questionnaire s'inspirait d'un cadre élaboré par Silimperi et al. (2002) sur les éléments essentiels au développement des systèmes d'assurance qualité. Quatorze éléments ont été utilisés pour déterminer la possibilité de combiner les deux systèmes. Parmi ces éléments, neuf ont obtenu une note moyenne de 4,0, trois une note supérieure à 3,5 et deux une note moyenne inférieure à 3,5. Ces résultats indiquent qu'il est très probable que les systèmes puissent être combinés.

Mots clés: gestion des performances, assurance qualité, établissements d'enseignement supérieur, approche mixte

Introduction

Neoliberalism and the concept of new public management (NPM) have changed higher education (HE) governance, leadership and management models, with governments the world over demanding accountability and transparency from higher education institutions (HEIs) (Marginson and Considine, 2000; Rowlands, 2012). Performance management (PM) and quality assurance (QA) have become endemic in HE management, resulting in the adoption of industry PM practices (Morley, 2003; Rowlands, 2012; Morrissey, 2015).

Armstrong (2014) defines PM as a systematic process to improve organisational performance through individuals and teams' development. It is an on-going process of identifying, measuring, and developing performance and aligning it with the organisation's strategic goals (Aguinis, 2013). It thus emphasises performance targets, measurement, indicators and reporting (Lægreid et al., 2006; Pulakos, 2014).

Quality assurance has also taken root in the global HE sector since the 1990s (Morriesey, 2015; Blackmore, 2009), and quality has become a marker of distinction in international HE markets (Blackmore 2009). Indeed, it is the primary tool used by states to govern HEIs (Morley, 2003; Filippakou and Tapper, 2008). Various quality management systems (QMS), most of which are adopted from industry, have been implemented by HEIs (Rosa, Sarrico and Amaral, 2012; Becket and Brookes, 2008; Niedermeier, 2017).

Problem statement

While QA and PM are key practices in modern HE, they are generally regarded as different constructs, with separate frameworks commonly in place. This raises the question of whether this is a useful dichotomy in institutional management. While the main purpose of a PM system is to improve organisational performance (Kiriri, 2018; Tanveer and Karim, 2019; Ghosh and Das, 2013; Rodica and Florin, 2009), Wells (2018) identified seven broad purposes of QA in HEIs. These include improved academic performance, institutional performance assessments, compliance with external standards, accountability to government and society, improved management, institutional learning and equitable resource allocation. The overlap between PM and QA is thus clear.

There is need to consider alignment of PM and QA in order to streamline institutional management. This article proposes that they be brought together in a blended approach that leverages their individual strengths, thereby optimising institutional performance and resource use and minimising duplication and redundancy. The Zimbabwean study on which it is based addressed two research questions: 'How does QA relate to PM?' and 'How can the two processes be blended?' The findings will be of interest to institutional managers and QA practitioners.

Methodology

Zimbabwe has four major regions, Mashonaland, Matebeleland, Midlands and Masvingo provinces. Data were collected in four public HEIs, one from each of these regions. The study thus employed site triangulation and, as expounded by the institutional isomorphism theory (Powell, 1983), its findings can thus be generalised to institutions that were not part of the sample.

The population comprised the 900 academic and administrative employees in the selected institutions. Lower level staff were not included because of their perceived inability to provide useful information on PM and QA in HEIs. Sekaran's sample size determination table (Sekaran, 2003) was used to calculate a sample size of 269.

A probability sampling technique, systematic sampling, was used to obtain a representative sample from the population (Ghodeswar, 2020), with every nth member selected (Rahman, 2022). This technique is used when data is classified into multiple subgroups (strata) based on

common characteristics such as age, gender, race, income, education, and ethnic origin (Rahman, 2022). The two major strata in a HE setting are academic and administrative staff. This technique ensures representation of all parts of the population (Pace, 2021) and offers improved population coverage since researchers have more control over the subgroups and ensure that they are included (Rahman, 2022).

Data were collected through closed-ended questionnaire items that were developed based on insights from Silimperi et al.'s (2002) framework on essential elements for developing QA systems. The framework has eight essential elements to implement and sustain QA activities, which are grouped under three categories: the internal enabling environment whose essential elements are leadership, policy, core values and resources; organising for quality with one essential element, structure; and the support function whose essential elements are capacity building, communication and information and reward (Silimperi et al., 2002). It has been successfully employed in a number Latin American and African countries to support strategic planning and direct work plans and used as a resource to determine the elements necessary to strengthen and sustain QA (Silimperi et al., 2002). While the framework was developed for health care systems, it is appropriate for HE. Furthermore, its essential elements work for both PM and QA. These elements as well as a review of related literature formed the basis to establish the similarity between PM and QA.

Several steps were taken to ensure the questionnaire's validity and reliability. The research instrument was reviewed by human resources management and QA experts and a pilot test was conducted. Cronbach's Alpha was used to measure reliability (Taber, 2018). It provides a measure of the internal consistency of a test or scale and is expressed as a number between 0 and 1 (Tavakol and Dennick, 2011). A score equal to or greater than 0.7 is accepted as a good measure of internal reliability. In the current study the variables' scores were all above 0.7, meaning that the instrument passed the reliability test.

Findings and discussion

According to Babbie and Mouton (2001), the response rate is the extent of the representation of the sample respondents. A higher response rate reduces the possibility of significant response bias. Two hundred and sixty-nine questionnaires were initially delivered to the respondents identified by means of stratified sampling. A hundred and thirty-five usable questionnaires were collected, representing a 50% response rate. A response rate of 50% and above is considered adequate for analysis and reporting (Babbie, 2011). The low response rate can be attributed to the sensitivity of PM and QA issues in HE This challenge was also confronted in a South African study on PM in HEIs (Mosage and Pilane, 2014).

The data were analysed using SPSS to find the means ($\bar{x}$) and standard deviations (σ) and derive meaning from the data. Fourteen parameters were considered in the questionnaire to compare PM and QA in HEIs (see Table 1). Nine elements had responses above a mean score of 4.0, three had responses above 3.5, and two had responses below 3.5. These results indicate strong convergence between the two management systems in HEIs.

Table 1: Elements used to compare PM and QA in HEIs (n=135)

Focal issue	Mean Score	Standard Deviation
The university uses performance indicators	3.70	0.89
PM in HEIs serves the same purpose as QA	4.09	0.46
Staff and supervisors in departments determine targets and metrics in an inclusive manner	3.96	0.51
PM activities are infused with QA dimensions at the beginning of the performance cycle	4.03	0.79
Similar tools can be used for PM and QA	4.07	0.39
Performance management should be ICT-based	4.37	0.81
Performance management involves open and effective communication	3.58	0.70
The university must embrace performance-based marketing	3.27	0.50
Supervisors act as coaches and mentors	4.00	0.38
Management interaction with staff is a powerful PM tool at the institution	4.13	0.51
Rewarding good performance is more important than penalising poor performance	4.08	0.45
PM and QA are grounded in a common set of core values	4.03	0.52
The performance agreement includes a personal development plan	3.48	0.67
The university must build a culture of performance	4.51	0.63

Universities' Use of Performance Indicators

Performance indicators are a key element used to indicate performance in a performance management system (PMS). The results ($\bar{x}$ = 3.70 and σ = 0.89) show that the respondents agreed that performance indicators are used in HEIs.

Leiber (2019) asserts that performance indicators are necessary because they reflect the quality requirements of the institution, unit and programme. They also promote objective communication and operationalisation of relevant quality features (Leiber, 2019). In contrast, Kairuz et al. (2016)reflective and critical thinking are negatively affected by unrealistic demands and stress. The purpose of this paper is to argue that key performance indicators (KPIs argue that performance indicators and PM cause undue stress and competition among academics and are therefore not suited to the HE sector. Enserink (2009) also notes that increasing use of such metrics has meant that academics are regarded as a number rather than a person. Seung (2012, p. 7) describes this as a "reductionist and dehumanising" phenomenon.

Nonetheless, PM and QA have become features of HEIs. Some form of measurement will always be necessary to determine success and failure. Despite the critiques levelled at them, performance indicators should be a component of a PMS in HE as they reveal the qualitative and quantitative dimensions of performance and facilitate the design of a blended PM framework. Furthermore, they facilitate monitoring, assessment and evaluation of performance. Without performance indicators it would be difficult if not impossible to measure the performance of individuals, teams and the institution at large. Performance data in the form of performance indicators is required for the purposes of internal and external QA that is used for institutional audits, evaluations and accreditations.

Performance Management in HEIs Serves the Same Purpose as QA

Purpose was one of the key elements used in this study to measure the convergence of PM and QA. The results ($\bar{x}$ = 4.09 and σ =0.46) suggest agreement with the statement that they serve the same purpose.

The results are in line with Silimperi (2002) for whom a policy framework is essential in developing a QA system as it outlines the purpose of a management system. Five-year strategic plans acted as

policy documents for PM while the QA policy was used as a reference for QA. Therefore, they provide a policy framework that guides performance in HEIs. The QA policies clearly stated that the purpose of QA in HEIs was to promote performance improvement, while the five-year strategic plans noted that PM's main goal is continuous performance improvement. The existence of these documents demonstrates that leadership is committed to continuous performance improvement. They are the tools used by leadership to set out the organisation's vision and outline strategies for the transition from "the way we work now" to "the way we want to work in the future" as well as "to model the desired core values that should characterize the organisational culture" (Silimperi et al., 2002).

Kettunen (2015) notes that Finland's funding system requires that HEIs adopt strategic plans that cascade from central government to university level (Kettunen, 2015). Numerous studies have concluded that the main purpose of a PM system is to improve the quality of organisational performance (Kiriri, 2018; Tanveer and Karim, 2019; Ghosh and Das, 2012; Rodica and Florin, 2009). Wells (2018) states the purpose of QA in HEIs is to improve academic performance, promote institutional performance assessment, compliance with external standards and accountability to government and society, improve management, and enhance institutional learning and equitable resource allocation.

An institution's PM and QA systems should be well documented so that all stakeholders are aware of what is expected of them. It is through such documentation that the two management systems communicate. As such, HEIs should strive to formulate strong policy documents that guide implementation of the two systems with the common purpose of continuous improvement.

Staff and Supervisors in Departments Determine Targets and Metrics in an Inclusive Manner

Inclusivity in determining and setting performance targets and metrics in HEIs' PM and QA systems is a sign of participation which is healthy for the organisation. The result ($\bar{x}$ = 3.96 and σ = 0.51) suggests agreement with the statement that staff and supervisors should determine the targets in an inclusive manner.

Employee participation and engagement are one of the elements of a total quality management (TQM) system and other quality management systems. Employees need to have the necessary skills to participate and engage meaningfully in target setting. Silimperi et al. (2002) thus note the need for capacity building programmes, a strong policy framework and well-developed values and value systems in developing institutional QA systems. Without proper training, employees cannot participate meaningfully in institutional management systems. They also need to understand the organisation's values and value system.

Hanaysha (2016) noted that in rapidly changing markets, business leaders recognise that highly engaged employees can increase their productivity and firm performance. Lunenburg (2011) observed that employee participation is an effective method of gaining acceptance. A lack of inclusivity might result in some rejecting imposed goals, leading to institutional failure. Furthermore, when goals are set collectively, they tend to be more reasonable and achievable. Wegge and Haslam (2005) concur and observe that group goals promote the achievement of institutional goals. These views are in line with the Stewardship Theory which asserts that practices such as employee involvement and participation enhance productivity (Hernandez, 2012; Segal and Lehrer, 2012).

Managers in HEIs should thus develop their employees on an ongoing basis so that they are able to participate effectively in institutional management. Engaged employees feel empowered and are passionate about their work, making them creative and innovative as they contribute to the attainment of the institution's vision and mission. Participation in target setting ensures that they aim to achieve the set goals.

PM Activities are Infused with QA Dimensions at the Beginning of the Performance Cycle

Excellent performance is synonymous with quality performance. Performance in HE is infused with qualitative performance dimensions. The results ($\bar{x} = 3.87$ and $\sigma = 0.79$) suggest agreement with the statement that PM activities can be infused with QA dimensions.

These results are in line with Divjak and Rečep's (2015) study on strategic decision making in HE. The Deming quality improvement cycle (Plan-Do-Check-Act (PDCA)) starts with a plan which involves determination of the mission, vision and strategy, as well as establishing objectives (Divjak and Rečep, 2015). This is an indication that, even at this stage, QA elements are infused in the performance cycle.

Armstrong (2006) noted that key activities in the planning stage of the PM cycle should be in line with set objectives and targets (both quantitative and qualitative). Similarly, Noh (2021) advises that the planning stage of the performance cycle should ensure that activities have a defined quality standard. Given that the two management systems commence with similar activities at the beginning of the performance year, the same should occur throughout the year as employees endeavour to accomplish both quantitative and qualitative targets (Noh, 2021). A number of studies have demonstrated a positive relationship between PM and QA (Leiber, 2019; Prisacaru and Litvin, 2017; Nadeau, 2017; Igbojekwe et al., 2015; Kettunen, 2015; Adina-Petruţa and Roxana, 2014; Morris et al., 2007). Pricacaru and Litvin's (2017, p. 443) study on quality management in HEIs in the Republic of Moldova noted that the "Performance management system of a higher education institution is created and operates on the basis of quality management system by extending the area of quality objectives to the level at which they will express performance." Kettunen (2015) is of the view that various management approaches can be integrated in HEIs to improve institutional performance. A review of documented experiences from 2000 to 2016 found that institutions that based their PMS on the Lean Six Sigma improved their administrative efficiency and the quality of education received by their students (Nadeau, 2017).

However, Decramer et al.'s (2008) study at a Flemish HEI observed that objectives or targets were not formally captured by the PMS. This meant that neither qualitative nor quantitative dimensions of performance targets were set. It renders it difficult to objectively measure performance at the end of the performance cycle.

It is good practice in PM to set both qualitative and quantitative targets at the beginning of the performance cycle as this enables objective periodic performance reviews and performance evaluation at the end of the cycle. It encourages employees to perform to the best of their ability and to come up with the necessary strategies and resources to achieve the set targets. In turn, this enables the purpose of both PM and QA to be fulfilled. It is thus feasible to blend the two management systems

because they can work in their different management structures without short changing each other with the overall aim of improving individual and organisational performance.

Similar Tools Can be Used for PM and QA in HEIs

The study's results ($\bar{x}$ = 4.07 and σ = 0.39) point to agreement that similar tools can be used for PM and QA systems.

The results are similar to those reported in extant literature. Spangenberg (1994) noted that PMS consists of four stages (planning, managing, reviewing, rewarding). On the other hand, QA is largely based on the Deming quality cycle (PDCA) (Alauddin and Yamada, 2019). It is possible that the PM cycle and the QA cycle can be superimposed and work as one cycle for continuous performance and quality improvement. A number of scholars have supported the use of the Balanced Score Card (BSC) (Wahid, 2019), Lean Six Sigma (LSS) (Lu et al., 2017; Montgomery, 2017; Svenson et al., 2015), and 360-degree appraisal (Banda, 2012) for both management systems. Furthermore, Cappeli and Tavis (2016), Desmet and Gagnon (2018) Qureshi and Abro (2016) and Krenkel (2012) note that both PM and QA systems can be implemented using bespoke Information and Communications Technology (ICT) tools.

The continuous improvement cycle (PDCA) proposed by Deming and the PM cycle supported by Armstrong (2014) and Spangenberg (1994) can be superimposed and work as one. The use of ICT facilitates the blending of the two systems, at the same time benefiting the organisation in terms of agility through instant feedback for continuous improvement. It further strengthens the nexus between the two systems. As the tools work to fulfil the needs of one system, the needs of the other can also be fulfilled. The use of similar tools thus leverages the development of a framework to blend PM and QA in HEIs.

Performance Management and Quality Assurance Should be ICT-Based

ICT is an essential element in the design of a PMS in HE. The results show a strong need for ICT in the design of PMSs in HEIs ($\bar{x}$ = 4.37 and σ = 0.81).

This is in line with Silimperi et al. (2002), who noted that resources are an essential element in building a QA system. Availability and readiness for the use of ICT are dependent on the availability of other resources

like funding, knowledgeable personnel, and supportive leadership, among others. A management system cannot be sustained if it lacks adequate resources such as capacity building, communication, and other key support functions (Silimperi et al., 2002). These observations are in line with modern organisational trends and extant literature. Kairuz et al. (2016) also observed that usage of ICT for administrative purposes improves HEIs' efficiency and effectiveness. Bazigos et al. (2014) note that ICT is a strong predictor of organisational health and performance as it offers speed and stability, thereby providing organisational agility. Adina-Petruța and Roxana (2014) state that ICT can be used to improve policy formulation and execution and that it is a catalyst for innovation, quality and excellence. Cappelli and Tavis (2016) highlighted that ICT in HE provides an effective way of managing performance and reinforcing desired behaviours through giving employees instant feedback (Cappelli and Tavis, 2016). It also assists in determining the nature of the adjustments required to enhance performance (Lunnenburg, 2011). Rasappan (2010) and Madhekeni (2012) observe that a management information system provides data for monitoring and evaluation at all levels to assist managers in making effective, timely decisions. Ali and Mahfod's (2015) research on PMS in HEIs in Bahrain found that regular informal feedback via ICT was more effective than that provided annually in a more formal manner.

However, the use of ICT in HE PM has been associated with stress and burnout among academics, particularly those of mature age (Voakes et al., 2003). Nonetheless, it is crucial for HEIs to use it to reap the maximum benefits. Among other things, it can be used for self-assessment, programme assessment, online evaluation of teaching and learning, rating, and obtaining feedback from students and peers.

Performance Management Requires Open and Effective Communication

The results ($\bar{x}$ = 3.58 and σ = 0.70) point to general agreement with the statement that PM requires open and effective communication.

Silimperi et al. (2002) argue that communication is an essential element in building a QA system. Prisacaru and Litivin (2017) also noted that open and effective lines of communication are a common building block for PM and QA systems. Allui and Sahni (2016) found that strategic human resources management practices such as communication

significantly improved teaching and learning processes at Chicago Universities. The organisational culture improved as management communicated more effectively with employees (Allui and Sahni, 2016).

According to the Goal Setting Theory, effective teams share knowledge and information (Locke and Latham, 2007, 2019). Franco-Santos and Doherty (2017) posit that two-way communication enhances motivation and facilitates achievement of an organisation's mission. Similar observations were made by Kok and McDonald (2017) in a study of five HEIs in the UK. They found that the top-ranked departments reported more frequent communication with their management as formal, structured channels of communication were in place (Kok and McDonald, 2017). In those that were ranked low, communication was less frequent and more informal, and the communication channels were not transparent (Kok and McDonald, 2017). Adherence to old-fashioned top-down communication not only undermined professional autonomy, but also led to "over-managed institutionalised mistrust" (Deem et al., 2007, p. 190).

Information is the life blood of an organisation and communication channels are the veins that ensure that no part of it is starved of information. Therefore, HEIs should establish open, effective channels of communication with two-way interaction between organisational staff, target communities and other stakeholders. This enables achievements and successful strategies to be shared, boosting organisational performance.

The University Must Embrace Performance-Based Marketing

In the highly competitive HE landscape, performance is one way for HEIs to market themselves. The results ($\bar{x} = 3.27$ and $\sigma = 0.50$) suggest a neutral position on the statement that universities must embrace performance-based marketing.

Judson and Taylor (2014) observed that, in the face of increasing competition for students, more HEIs are adopting aggressive marketing strategies. However, Helgesen and Helgesen (2008) noted that this requires that managers are familiar with the processes that deliver value to students. This implies that HEIs should embrace performance-based marketing strategies. Hattie (1990) and Soutar and McNeil (1996) cited by Abdullah (2006) observed that the performance indicators used

in such institutions tend to be measures of activity, rather than true measures of the quality of educational services. As such, they do not comprehensively measure the quality of education (Abdullah, 2006). A survey conducted by Owlia and Aspinwall (1997) found that students were ranked as the most important HE customers; thus, student experiences should inform performance based marketing strategies (Owlia and Aspinwall, 1997). This is logical as quality is sometimes described as meeting customer expectations. In the quest to develop performance-based marketing, HEIs should put customers at the centre and thus prioritise performance indicators to do with students. Furthermore, this is a sound way to blend PM and QA.

Supervisors Act as Coaches and Mentors

Both PM and QA systems are based on the principle of continuous improvement that entails that staff members learn whenever an opportunity arises. As such, supervisors have a responsibility to coach and mentor their staff. The study's results ($\bar{x} = 4.00$ and $\sigma = 0.38$) reveal agreement with the statement that supervisors act as coaches and mentors.

Silimperi et al. (2002) recommended an on-going process to ensure that staff have the necessary technical skills to carry out PM responsibilities. Supervisors should consciously build employees' capacity so that they keep up with the demands and expansion of PM and QA (Silimperi et al., 2002). Vandenberghe (2016) posits that supervisors as mentors can shape employees' tasks and job conditions, enhance commitment and encourage perceptions of job enrichment among employees, all of which foster employee retention. This is a theme in the Social Exchange Theory. Mentoring and coaching make employees feel supported (Cook and Rice, 2006) and they are likely to reciprocate through commitment to the organisation. In support of the Social Exchange Theory, Dawley et al. (2007) point out that supervisors act as agents of the organisation and have direct responsibility for directing, evaluating and supporting their subordinates. Though daily interactions with subordinates and direct control over work assignments, they are well-placed to act as mentors (Scandura and Williams, 2004). The Organisational Support Theory suggests that agents' (supervisors) actions are indicators of the organisation's intent (Levinson, 1965). They should intentionally drive

the organisation to where it is supposed to go in terms of performance; that is, meeting qualitative and quantitative targets. They also have the task of imparting PM and QA skills to employees.

Management Interaction with Staff is a Powerful Performance Management Tool

It is crucial for management to interact with staff on a regular basis in order for the system to remain healthy and organisations should establish mechanisms to facilitate such. The results show that the respondents held strong views in this regard ($\bar{x}$ = 4.13 and σ = 0.51).

The results are similar to those of Cappelli and Tavis (2016) who noted that firms across the world are replacing annual reviews with frequent, informal check-ins between managers and employees. Such interaction has become important in successfully running organisations. Regular conversations between supervisors and subordinates to discuss performance and development enable an organisation to remain competitive; indeed, 70% of multinational companies are moving towards this model (Cappelli and Tavis, 2016). De Smet and Gagnon (2018) concur and state that, as organisations become more agile, they are using ICT to improve management and staff interaction. Alonderiene and Majauskaite (2016) asserted that effective leadership in HEIs sets the future direction, communicates it to staff, and creates a positive organisational climate by involving staff in key decision making and providing feedback on performance. Lu et al. (2017) described management interaction with staff as one of the most important characteristics of Lean Six Sigma leadership in HEIs.

Organisations have traditionally held periodic performance reviews with subordinates to discuss their work. The drawback is that performance deficiencies take time to be rectified. Technology can be harnessed to revolutionise PM by enabling frequent interaction between management and staff so that they learn from each other on a daily basis, facilitating continuous improvement.

Rewarding Good Performance is More Important than Penalising Poor Performance

Rewarding staff for good performance is more beneficial than penalising them for poor performance because rewards are a powerful motivating

factor. The results show that the respondents agreed with this statement ($\bar{x}$ = 4.08 and σ = 0.45).

Silimperi et al. (2002) noted that reward is one of the building blocks of a QA system. Rewarding performance and efforts made to improve quality foster both commitment to improve performance and motivation to strive for excellence (Silimperi et al., 2002). Recognition or rewards reinforce interest in performance improvement endeavours and encourage staff to support organisational values (Silimperi et al., 2002). Turk (2008) contends that linking rewards to the accomplishment of strategic goals makes for an effective compensation system. These observations are in line with the Reinforcement Theory which postulates that behaviour is shaped by controlling the consequences of employee behaviour (Skinner, 1938; Krishnan and Amuthan, n.d.). Rewards are used to reinforce desired behaviour, with penalties preventing undesired behaviour (Skinner, 1938; Krishnan and Amuthan, n.d.). However, Morrish and Sauntson (2016) observed that the penalties used at Imperial College and the University of Birmingham disempowered and humiliated academics. They can be regarded as crude PM, particularly with regard to the threat they pose to academic freedom, genuine academic productivity and knowledge advancement (Morrish and Sauntson, 2016). The notion that rewarding performance is more effective that penalising poor performance is also aligned with the Stewardship Theory that posits that when employees are considered as stewards, there is no misalignment between their interests and those of the organisation (Franco-Santos and Doherty, 2017). Stewardship research advocates for practices such as high levels of employee involvement and participation, provision of the necessary resources for performance enhancement, two-way communication, opportunities for learning and development and most importantly, fair and valuable rewards to enhance motivation and facilitate fulfilment of the organisational mission.

PM and QA are Grounded in a Common Set of Core Values

Core values were one of the key elements used in this study to measure the convergence of PM and QA. The findings demonstrate strong staff perceptions on the convergence of these management systems ($\bar{x}$ = 4.03 and σ = 0.57).

Numerous scholars agree that the two management systems are

based on the same core values which are management commitment, continuous improvement, a customer focus, employee involvement and participation, training and learning, rewards and recognition, and management by facts (Niyivuga et al., 2019, Zwain et al., 2017; Psomas and Antony, 2017; Prisacaru and Litvin, 2017; Igbojekwe et al., 2015).

Examples of QA and PM systems that have the same core values include the BSC, Total Quality Management, ISO standards and LSS (Lu et al., 2017; Kim-soon et al., 2014). Higher education institutions should therefore strive to develop similar sets of core values for PM and QA so as to facilitate the nexus between the two.

Performance Management Includes a Personal Development Plan

A PMS seeks to develop individual employees through training and development in skills identified by performance deficiencies during the cycle. Personal development plans are thus a feature of a PMS. The results ($\bar{x}$ = 3.48 and σ = 0.67) suggest agreement with this assertion.

This finding is in line with Silimperi et al.'s (2002) assertion that capacity building is one of the essential elements of a QA system. It encompasses formal training, coaching, mentoring, self and peer appraisal, performance improvement, and QA, among other performance and quality improvement activities (Silimperi et al., 2002). Otoo and Mishra's (2018) study on the impact of human resource development practices on employee performance in small and medium scale enterprises observed that career development involves an organised, formalised, planned effort to train employees so as to achieve a balance between the individual's career needs and the organisation's workforce requirements (Otoo and Mishra, 2018). The study indicates that comprehensive PM should include both personal and organisational development (Otoo and Mishra, 2018). Decramer et al. (2008) found that Flemish HEIs' PMS was not very effective in improving individual and institutional performance because personal development plans were not formally captured. Harvey and Green (1983) cited by Allui and Sahni (2016) defined strategic human resources development as identifying and developing employees in conjunction with the development of corporate and business strategies for the future. Such initiatives can be used to facilitate the development of a blended PM framework in HE.

The University Must Build a Culture of Performance

The respondents showed strong agreement ($\bar{x}$ = 4.51 and σ = 0.63) with the statement that universities need to build a strong culture of performance.

This result is in line with Bititci et al. (2004) who argue that the introduction of a PMS in HEIs can transform employee values, attitudes and behaviours, thus leading to eventual change in the organisational culture. Shields (2008) also contends that PM can be used as a tool to transform people's values and form a new culture. Allui and Sahni (2016) found that strategic human resources management practices like PM play a crucial role in building a culture of performance in HEIs in Saudi Arabia. In seeking to change the organisational culture, it is important to involve employees. Bontis (1996) highlighted that human capital may be an organisation's only sustainable competitive advantage in the ever changing world. Indeed, Sarwar et al. (2021) concluded that it has become more important than new technologies or financial and/or material resources. The Resource Based View theory (Wernerfelt, 1994; Barney et al., 2001) holds that sustainable competitive advantage is based on the competitiveness of firm-specific resources that have the following attributes: valuable, rare, inimitable and non-substitutable (VRIN) (Lockett and Thompson, 2009). If properly trained, human resources can drive the organisation towards excellence.

A PMS backed by strong QA elements starts from the individual and build upwards to inculcate a performance culture. A culture of excellence is thus a way of blending PM and QA through the VRIN attributes in employees.

The study's results and the literature review highlight the PM-QA nexus. This suggests the need for a framework to systemically blend these systems. The thesis is that PM should mainstream QA dimensions, and the two functions can be implemented in conjunction.

Partelow (2023) describes a framework as a supporting structure around which something can be built; a system of rules, ideas or beliefs that is used to plan or decide something. Binder et al. (2013) note that a framework provides a set of assumptions, concepts, ideas and practices. The main issue is plurality and connectivity. McGinnis and Osrom (2014) define a framework as the basic vocabulary of concepts and terms that can be used to construct the kind of causal explanations expected of a theory.

A system generally has inputs, processes, outputs and feedback and these are features of PM and QA. The study's results revealed elements that can be used to blend PM and QA in HEIs. These are modelled around Silimperi et al.'s (2002) framework which uses eight elements. The elements in Table 2 constitute a systematic framework to blend PM and QA.

Table 2: Elements to be considered in blending PM and QA

Elements in Silimperi et al.'s (2002) framework	Elements considered in this study	Significance*
Policy	Use of performance indicators	Moderate
	Inclusive determination of targets	Moderate
	Purpose of QA and PM	High
	Strategic plans and QA/PM policies	High
Structure and leadership	Supervisors as coaches and mentors	High
	Management involvement	High
Core values	Common set of core values	High
Resources	Use of ICT tools	High
	Similar tools for PM and QA	High
Capacity building	Personal development plan	Moderate
	Culture of performance	High
Communication pathways	Open and effective communication	Moderate
	Performance-based marketing	Low
Reward	Rewarding good performance	High

*is based on the study's results. $\bar{x}$ scores greater than 4 were considered of high significance, above 3.5 but less than 4, moderate and below 3.5, low.

Proposed framework

The elements constitute building blocks upon which QA and PM can find convergence. Systemic blending refers to separate structures but one system. The framework is based on the 14 elements arising from the results. The statements in the third column in Table 3 below start with an action verb to direct action toward the intended result. This renders the framework action and results-oriented. The elements are grouped into eight parameters derived from Silimperi et al.'s (2002) framework. It should be noted that structure and leadership are combined due to their overlapping functions.

Table 3: Proposed framework for systemic blending of PM and QA

Parameter	Element	Strategy
Policy	Use of performance indicators	Ensure each policy embraces the affordances of the other
	Inclusive determination of targets	Implement policies through an ICT platform
	Purpose of QA and PM	Have separate PM and QA policies
	Strategic plans and QA/PM policies	Implement policies conjunctively via Deming's PDCA continuous improvement cycle
Structure and leadership	Supervisors as coaches and mentors	Have separate PM and QA structure
	Management involvement	Provide leadership support for both PM and QA Provide a Vision and Mission that support PM and QA
Core values	Common set of core values	Provide a common set of core values for PM and QA Promote core values that emphasise quality performance Provide common KPIs for PM and QA
Resources	Use of ICT resources	Implement both policies using similar resources i.e., human, financial, equipment, etc.
	Similar tools for PM and QA	Implement both polices employing similar tools
Capacity building	Personal development plan	Develop both PM and QA competencies
	Culture of performance	Develop a culture of performance for both PM and QA
Communication pathways	Open and effective communication	Develop common functional communication pathways for PM and QA Develop a feedback mechanism for both systems
	Performance-based marketing	Emphasise performance-based marketing
Reward	Rewarding good performance	Provide incentives for the attainment of desired performance and quality standards

Conclusion

The study's findings suggest that PM and QA can be blended in HEIs to come up with an integrated PM approach. This can be achieved by infusing QA activities into PM activities, particularly at the beginning of the performance cycle. Performance management and QA systems can be built using similar elements which are policy, structure and leadership, core values, resources, capacity building, communication pathways and the reward system. The major benefit is synergy which will come about as a result of combined resources in the form of person power, finance, ICT and several others. The use of ICT is crucial to provide the much needed agility and make it possible to tailor make the system for a particular institution. Performance management and QA activities can be carried out on a single ICT platform in an HEI. Therefore, simultaneous implementation of PM and QA is eminently possible. It is made possible by formulating annual performance plans with measurable key performance indicators related to quality and targets. These indicators have elements of both PM and QA, creating a framework that promotes continuous performance improvement.

References

Abdullah, F. (2006). Measuring service quality in higher education: HEdPERF versus SERVPERF. *Marketing Intelligence & Planning 24*(1), 31-47. https://doi.org/10.1108/02634500610641543

Adina-Petruța, P., and Roxana, S. (2014). Integrating Six Sigma with quality management systems for the development and continuous improvement of Higher Education institutions. *Procedia - Social and Behavioral Sciences 143*, 643-648. https://doi.org/10.1016/j.sbspro.2014.07.456

Aguinis, H. (2013). *Performance Management* (3rd edition). Pearson.

Alauddin, N., and Yamada, S. (2019). Overview of deming criteria for total quality management conceptual framework design in education services. *Journal of Engineering and Science Research 3(5)*, 12-20. https://doi.org/10.26666/rmp.jesr.2019.5.3

Ali, M. A., and Mahfod, J. (2015). Overview of performance management system with reference to Higher Education in Bahrain. *International Journal of Human Resource Studies 5*(2), 104. https://doi.org/10.5296/ijhrs.v5i2.7517

Alonderiene, R., and Majauskaite, M. (2016). Leadership style and job satisfaction in Higher Education institutions. *International Journal of Educational Management 30*, 140-164. https://doi.org/10.1108/IJEM-08-2014-0106

Allui, A., and Sahni, J. (2016). Strategic human resource management in Higher Education institutions: Empirical evidence from Saudi. *Procedia - Social and Behavioral Sciences 235*(October), 361-371. https://doi.org/10.1016/j.sbspro.2016.11.044

Antony, J., and Gupta, S. (2018). Ten commandments of Lean Six Sigma: a practitioners' perspective. *International Journal of Productivity and Performance Management 67*(6), 1033-1044. https://doi.org/10.1108/IJPPM-07-2017-0170

Armstrong, M., and Taylor, S. (2014). *Armstrong's Handbook of Human Resources Management Practice*, USA: Kogan Page.

Armstrong, M. (2009). *Armstrong's Handbook of Strategic Human Resource Management*. USA: Kogan Page.

Babbie, E. R. (2011). *The Practice of Social Research* (12th edition). Cengage.

Babbie, E., and Mouton, J. (2001). *The Practice of Social Research*. South Africa: Oxford.

Banda, S. S. (2012). Student evaluation of teaching: A Case study from School of Medicine (UNZA). *Medical Journal of Zambia 35*(3), 94-99.

Barney, J., Wright, M., and Ketchen, D. (2001). The resource-based view of the firm. *Journal of Management 27*. 10.1177/014920630102700601.

Bazigos, M., Smet, A. De, and Gagnon, C. (2015). *Why agility pays*. *Mckinsey Quarterly* (Dec), 1-8.

Becket, N., & Brookes, M. (2008). Quality management practice in Higher Education: What quality are we actually enhancing? *Journal of Hospitality, Leisure, Sports and Tourism Education 7*. 10.3794/johlste.71.174.

Binder, C., Hinkel, J., Bots, P., and Pahl-Wostl, C. (2013). Comparison of frameworks for analyzing social-ecological systems. *Ecology and Society 18*(4), 16-44. 10.5751/ES-05551-180426.

Bititci, U., Mendibil, K. N. S., Garengo, P., and Turner, T. (2004). Performance measurement, organisational culture and management styles. *Measuring Business Excellence 8*(3), 28-41.

Blackmore, J. (2009). Academic pedagogies, quality logics and performative universities: evaluating teaching and what students want. *Studies in Higher Education 34*(8), 857-872.

Bontis, N. (1996). 'There's a price on your head': Managing intellectual capital strategically.
Business Journal, formerly *Business Quarterly 60*(4), 40-47.

Cappelli, P., and Tavis, A. (2016). The performance management revolution. *Harvard Business Review* (October). https://doi.org/10.1002/9781119198192

Cook, K. S., and Rice, E. (2006). Handbook of Social Psychology. *Handbook of Social Psychology, May*. https://doi.org/10.1007/0-387-36921-x

Creswell, J. W. (2010). Mapping the developing landscape of mixed methods research. In A. Tashakkori and C. Teddlie (Eds.) *SAGE handbook of mixed methods in social and behavioural research* (2nd edition, pp. 45-68). Thousand Oaks, CA: Sage.

Dawley, D. D., Virginia, W., Andrews, M. C., Carolina, N., Bucklew, N. S., and Virginia, W. (2007). Mentoring, supervisor support, and perceived organizational support: What matters most? *Leadership & Organization Development Journal 29*(3), 235-247. https://doi.org/10.1108/01437730810861290

Deem, R., Hillyard, S., and Reed, M. (2007). *Knowledge, higher education and the new managerialism. The changing management of UK universities*. Oxford: Oxford University Press.

De Smet, A., and Gagnon, C. (2018). Organizing for the age of urgency. *McKinsey Quarterly 2018*(1), 43-54.

Decramer, A., Christiaens, J., and Vanderstraeten, A. (2008). *Implementation dynamics of performance management in higher education*. Gent: Universiteit Gent. Faculteit Economie en Bedrijfskunde.

Divjak, B., and Redep, N.B. (2015). Strategic Decision Making Cycle in Higher Education: Case Study of E-Learning. International Association for Development of the Information Society.

Enserink, M. (2009). Scientific publishing. Are you ready to become a number? *Science 323*(5922), 1662-1664. https://doi.org/10.1126/science.323.5922.1662

Franco-Santos, M., and Doherty, N. (2017). Performance management and well-being: A close look at the changing nature of the UK higher education workplace. *The International Journal of Human Resource Management 5192*, 0. https://doi.org/10.1080/09585192.2017.1334148

Filippakou, O., and Tapper, T. (2008). Quality assessment and quality enhancement in Higher Education: Contested territories? *Higher Education Quartelly. 62*(1-2), 84-100.

Ghodeswar, U. (2020). Sampling Techniques in Research. 10.13140/RG.2.2.23698.61128.

Ghosh, S., and Das, N. (2012). New model of performance management and measurement in Higher Education sector. *International Journal of Scientific Research 2*, 267-274.

Hanaysha, J. (2016). Improving employee productivity through work engagement: Evidence from higher education sector. *Management Science Letters 6*, 61-70. https://doi.org/10.5267/j.msl.2015.11.006

Harvey, L., and Green, D. (1993). Defining quality for assessment and evaluation in Higher Education. *Assessment and Evaluation in Higher Education 18*(1), 9-34.

Helgesen, Ø., and Helgesen, Ø. (2008). *Marketing for Higher Education : A Relationship Marketing Approach.,* 1241. https://doi.org/10.1080/08841240802100188

Hernandez, M. (2012). Toward an understanding of the psychology of stewardship. *Academy of Management Review 37*(2), 172-193. http://dx.doi.org/10.5465/amr.2010.0363

Igbojekwe, Polycarp, A., and Ugo-Okoro, C. P. (2015). Performance evaluation of academic staff in universities and colleges in Nigeria: The missing criteria. *International Journal of Education and Research 3*(3), 627-640.

Judson, K. M., and Taylor, S. A. (2014). Moving from marketization to marketing of Higher Education: The co-creation of value in Higher Education. *Higher Education Studies 4*(1), 51-67. https://doi.org/10.5539/hes.v4n1p51

Kairuz, T., Andriés, L., Nickloes, T., and Truter, I. (2016). Consequences of KPIs and performance management in higher education. *International Journal of Educational Management 30*(6), 881-893. https://doi.org/10.1108/IJEM-05-2015-0067

Kettunen, J. (2015). Stakeholder relationships in higher education. *Tertiary Education and Management 21,* 1-10. 10.1080/13583883.2014.997277.

Kettunen, J. (2008). Integration of strategic management and quality assurance. Proceedings, 11th Annual Convention of the Strategic Management Forum, May 2008.

Kim-Soon, N., Ahmad, A.R., and Ibrahim, N.N. (2014). Entrepreneurial Motivation and Entrepreneurship Career Intention: Case at a Malaysian Public University. Proceedings of the 24th International Business Information Management Association Conference, November 6-7, 2014, Milan, Italy, ISBN: 978-0-9860419-3-8, Crafting Global Competitive Economies: 2020 Vision Strategic Planning and Smart Implementation, pp. 1001-1011.

Kiriri, P. N. (2022). Management of performance in Higher Education institutions: The application of the balanced scorecard (BSC). *European Journal of Education 1*(3), 144-158.

Kok, S. K., and McDonald, C. (2017). Underpinning excellence in higher education – an investigation into the leadership, governance and management behaviours of high-performing academic departments. *Studies in Higher Education 42*(2), 210-231. https://doi.org/10.1080/03075079.2015.1036849

Krenkel, A. (2012). *Performance Management for Faculty and Staff*. September.

Krishnan, I. A., and Amuthan, K. I. (n.d.). *A Review of B. F. Skinner's Reinforcement Theory of Motivation*. Council for Innovative Research.

Laegreid, P., Roness, P.G., and Rubecksen, K. (2006). Performance management in practice: The Norwegian way. *Financial Accounting and Management in Governments, Public Services and Charities 22*(3), 251-270. http://doi.org/10.1111ij.0267-4424.2006.00402.x

Latham, G. P., and Locke, E.A. (2007). *New Developments in and Directions for Goal-Setting Research*. https://doi.org/10.1027/1016-9040.12.4.290

Leiber, T. (2019). A general theory of learning and teaching and a related comprehensive set of performance indicators for higher education institutions. *Quality in Higher Education 25*(1), 76-97. https://doi.org/10.1080/13538322.2019.1594030

Levinson, H. (1965) Reciprocation: The relation between man and organization. *Administrative Science Quarterly 9*, 400-415. http://dx.doi.org/10.2307/2391032

Lockett, A., and Thompson, S. (2009). The development of the resource-based view of the firm: A critical appraisal. *International Journal of Management Reviews 11*(1), 9-28. https://doi.org/10.1111/j.1468-2370.2008.00252.x

Lu, J., Laux, C., and Antony, J. (2017). *Lean Six Sigma leadership in higher education institutions*. https://doi.org/10.1108/IJPPM-09-2016-0195

Lunenburg, F.C. (2011a). Expectancy theory of motivation: Motivating by altering expectations. *International Journal of Business Administration 15*(1), 1-6.

Lunenburg, F.C. (2011b). Goal-setting theory of motivation. *International Journal of Management, Business, and Administration 15*(1), 1-6.

Madhekeni, A. (2012). Implementing results-based management systems in Zimbabwe: Context and implications for the public sector. *International Journal of Humanities and Social Science 2*(8), 122-129.

Marginson, S., and Considine, M. (2000). *The Enterprise University: Power, Governance and Reinvention in Australia*. Cambridge: Cambridge University Press.

McGinnis, M.D., and Ostrom, E. (2014). Social-ecological system framework: Initial changes and continuing challenges. *Ecology and Society 19*(2). http://www.jstor.org/stable/26269580

Montgomery, D. (2017). Lean Six Sigma in Higher Education. *Quality and Reliability Engineering International 33*, 935-936.

Morris, L., Stanton, P., and Young, S. (2007). Performance Management in Higher Education - The Great divide. Association of Industrial Relations Academics of Australia and New Zealand (pp. 18-32). Auckland: University of Auckland.

Morley, L. (2003). *Quality and Power in Higher Education*. Maidenhead: Open University Press.

Morrissey, J. (2015). Regimes of performance: Practices of the normalised self in the neoliberal university. *British Journal of Sociology of Education 36*(4), 614-634. https://doi.org/10.1080/01425692.2013.838515

Morrish, L., and Sauntson, H. (2016). Performance management and the stifling of academic freedom and knowledge production. *Journal of Historical Sociology 29*(1), 42-64. https://doi.org/10.1111/johs.12122

Mosoge, M.J., and Pilane, M.W. (2014). Performance management:

The neglected imperative of accountability systems in education. *South African Journal of Education 34*(1), 1-18. https://doi.org/10.15700/201412120947

Nadeau, S. (2017). Lean, Six Sigma and Lean Six Sigma in Higher Education: A review of experiences around the world. *American Journal of Industrial and Business Management 07*(05), 591-603. https://doi.org/10.4236/ajibm.2017.75044

Niyivuga, B., Otara, A., and Tuyishime, D. (2019). Monitoring and evaluation practices and academic staff motivation: Implications in Higher Education within Rwandan context. *SAGE Open 9*(1). https://doi.org/10.1177/2158244019829564

Niedermeier, F. (2017). Designing Effective Quality Management Systems in Higher Education Institutions. Frank Niedermeier Training on Internal Quality Assurance Series Module 1, Solveig Randhahn and Frank Niedermeier (Eds.), DuEPublico, Duisburg/Essen, Germany, DOI: 10.17185/duepublico/43222

Noh, A.M. (2021). The application of quality cycle in teaching and learning. *Proceedings of New Academia Learning Innovation (Nali,) February 2020 Symposium.*

Oribhabor, C., and Anyanwu, C. (2019). Research sampling and sample size determination: A practical application. *Journal of Educational Research (Fudjer) 2*(1), 47-56.

Otoo, F.N.K., and Mishra, M. (2018). Measuring the impact of human resource development (HRD) practices on employee performance in small and medium scale enterprises. *European Journal of Training and Development 42*(7-8), 517-534. https://doi.org/10.1108/EJTD-07-2017-0061

Owlia, M.S., and Aspinwall, E.M. (1997). TQM in higher education – a review. *International Journal of Quality and Reliability Management 14*(5), 527-543.

Pace, D.S. (2021). Probability and non-probability sampling - an entry point for underground researchers. *International Journal of Quantitative and Qualitative Research Methods 9*(2), 1-5.

Partelow, S. (2023). What is a framework? Understanding their purpose, value, development and use. *Journal of Environmental Studies and Sciences*, 510-519. https://doi.org/10.1007/s13412-023-00833-w

Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism

and collective rationality in organizational fields. *American Sociological Review 48*(2), 147-160.

Prisacariu, A. (2015). New perspectives of quality assurance in European Higher Education. *Procedia - Social and Behavioral Sciences 180*(November), 119-126. https://doi.org/10.1016/j.sbspro.2015.02.094

Prisacaru, V., & Litvin, A. (2017). Quality management in the Higher Education of the Republic of Moldova as a framework for university performance. *Scientific Annals of Economics and Business 64*, 431-446. 10.1515/saeb-2017-0027.

Psomas, E., and Antony, J. (2017). Total quality management elements and results in higher education institutions: The Greek case. *Quality Assurance in Education 25*(2), 206-223. https://doi.org/10.1108/QAE-08-2015-0033

Pulakos, E.D. (2004). Performance Management: A Roadmap for Developing, Implementing and Evaluating Performance Management Systems. The SHRM Foundation, USA.

Qureshi, Z.H., and Abro, Q.M. (2016). Efficient use of ICT in administration: A case from Mehran University of Engineering and Technology, Jamshoro. *International Journal of Economics, Commerce and Management 4*(10).

Rahman M.M, Tabash, M.I, Salamzadeh A., Adduli S., and Rahman, M.S. (2022). Sampling techniques (probability) for quantitative social science researchers: A conceptual guideline with examples. *Seeu Review 17*(1), 42-51.

Rasappan, A. (2010). From Vision to Reality: Managing for Development Results using the Integrated Results-based Management System. Ankara. [Online] Available: https://www.google.co.za/#q=-From+Vision+to+Reality%3A+Managing+for+Development +Results+using+the+Integrated+Results-based+Management+(IRBM)+System.

Rosa M.J., Sarrico, C.S., and Amaral, A. (2012). Academics' perceptions on the purposes of quality assessment. *Quality in Higher Education 18*(3), 349-366. https://doi.org/10.1080/13538322.2012.733550

Rodica, G., VÄ*f*duva, F., and Postole, M.A. (2009). The performance management in public institutions of Higher Education and the economic crisis. *Annales Universitatis Apulensis Series Oeconomica*

2(11), 1-3.

Rodica, G., and Florin, V. (2009). The performance management in public institutions of Higher Education and the economic crisis. *Annales Universitatis Apulensis Series Oeconomica 2*(11), 639-645. https://doi.org/10.29302/oeconomica.2009.11.2.3

Rosa, M.J., Sarrico, C.S., and Maral, A. (2012). Academics' perceptions on the purpose of quality, assesment. *Quality in Higher Education 18*, 349-366.

Rowland, S. (2012). Management learning, perfomance and reward: theory and practice revisited. *Journal of Management Development 33*(4), 342-356. DOI: 10.1108/LMD-08-2012-0110

Sarwar, A., Khan, M.A., Sarwar, Z., and Khan, W. (2021). Financial development, human capital and its impact on economic growth of emerging countries. *Asian Journal of Economics and Banking* 5(1), 86-100. https://doi.org/10.1108/AJEB-06-2020-0015

Saunders, M., Lewis, P., and Thornhill, A. (2012). *Research Methods for Business Students* (8th edition). Harlow: Pearson.

Scandura, T.A., and Williams, E.A. (2004). Mentoring and transformational leadership: The role of supervisory career mentoring. *Journal of Vocational Behavior 65*, 448-468.

Segal, L., and Lehrer, M. (2012). The institutionalization of stewardship: Theory, propositions, and insights from change in the Edmonton public schools. *Organization Studies 33*, 169-201.

Sekaran, U. (2003). *Research methods for business: A skill building approach* (4th edition). United States of America: John Willey and Sons, Inc.

Seung, S. (2012). *Connectome. How the Brain's Wiring Makes us who we are*. London: Penguin Group.

Shields, J. (2007). *Managing Employee Performance and Reward: Concepts, Practices, Strategies*. Cambridge University Press.

Silimperi, D.R., Miller, Franco, L., Veldhuyzen Van Zanten, T., and Macaulay, C. (2002). A framework for institutionalizing quality assurance. *International Journal for Quality in Health Care 14*(SUPPL. 1), 67-73. https://doi.org/10.1093/intqhc/14.suppl_1.67 Sixth Edition. Pearson, New York.

Skinner, B.F. (1938). *The behavior of organisms: an experimental analysis*. Appleton-Century.

Spangenberg, H.H. (1994). Performance management - problems and possible solutions. *Journal of Industrial Psychology 20*(4), 1-6.

Svensson, C., Antony, J., Mohamed, B., Majed, B., and Saja, A. (2015). A Lean Six Sigma program in higher education. *International Journal of Quality & Reliability Management 32*, 951-969. 10.1108/IJQRM-09-2014-0141.

Stevenson, H., and Wood, P. (2013). Markets, managerialism and teachers' work: The invisible hand of high stakes testing in England. *The International Education Journal: Comparative Perspectives 12*(2), 42-61.

Stonich, P.J. (1981). Using rewards in implimenting strategy. *Strategic Management Journal 2*(4), 345-352.

Taber, K. (2018). The use of Cronbach's Alpha when developing and reporting research instruments in science education. *Research in Science Education 48*, 1-24. 10.1007/s11165-016-9602-2.

Tanveer, M., and Karim, A.M. (2018). Higher education institutions and the performance management. *Library Philosophy and Practice 2018*(1), 1-22.

Tanveer, M., and Karim, D.A.M. (2019). Higher education institutions and the performance management. *Library Philosophy and Practice (e-Journal)* August.

Tashakkori, A., and Teddlie, C. (2002) (Eds.) *SAGE handbook of mixed methods in social and behavioural research* (2nd edition, pp. 45-68). Thousand Oaks, CA: Sage.

Tavakol, M., and Dennick, R. (2011). Making sense of Cronbach's Alpha. *International Journal of Medical Education 2*, 53-55. http://dx.doi.org/10.5116/ijme.4dfb.8dfd

Türk, K. (2008). Performance appraisal and the compensation of academic staff in the University of Tartu. *Baltic Journal of Management 3*(1), 40-54. https://doi.org/10.1108/17465260810844257

Vandenberghe, C. (2016). PT NU SC. *Journal of Vocational Behavior*. https://doi.org/10.1016/j.jvb.2016.10.004

Voakes, P.S., Beam, R.A., and Ogan, C. (2003). The impact of technological change on journalism education: A survey of faculty and administrators. *Journalism and Mass Communication Educator 57*(4), 318-334.

Wahid, R.A. (2019). Sustaining ISO 9001-based QMS in higher education: A reality? *The TQM Journal 31*(4), 563-577. https://doi.

org/10.1108/TQM-12-2018-0185

Wegge, J., and Haslam, A. (2005). Improving work motivation and performance in brainstorming groups: The effects of three group goal-setting strategies. *European Journal of Work and Organizational Psychology 14*, 400-430.

Wells, J.W. (2018). The Role of Quality Assurance in Higher Education: Challenges , Developments and Trends Speakers and Moderators. Unesco, February 15-16. https://iite.unesco.org/wp-content/uploads/2018/06/Piter-Uells_-UNESCO_angl.pdf

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal* 5(2), 171-180. http://www.jstor.org/stable/2486175

Zamorski, B., Margison, S., and Considne, M. (2000). The enterprise university: Power, governance and reinvention in Australia. *Higher Education 46*, 543-554 https://doi.org/10.1023/A:102 738763113O

Zwain, A.A.A., Lim, K.T., and Othman, S.N. (2017). TQM and academic performance in Iraqi HEIs: Associations and mediating effect of KM. *TQM Journal 29*(2), 357-368. https://doi.org/10.1108/TQM-08-2013-0096