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Quality assurance driving factors as antecedents of knowledge management: A stakeholder-focussed perspective in higher education

S. M. Riad Shams and Zhanna Belyaeva

Abstract

Similar to many other types of organisations, the successful development of higher education institutions **generally depends** on proactive multi-stakeholder management strategy. As a social responsibility of universities, quality assurance (QA) of higher education is already an established research domain. However, the issues that serve as driving factors in higher education's quality are acknowledged in this vast knowledge stream in a dispersed way. An objective of this paper is to provide a quick snapshot of the major QA driving factors in higher education. Another objective here is to discuss the significance of these existing QA driving factors in higher education as prospective antecedents **of** knowledge management among the key stakeholders in the higher education sector and beyond. An inductive constructivist approach is followed to review the relevant QA driving factors from the extant scholarly views. A number of relevant factors are précised from the literature that would be instrumental to uphold quality in higher education. The discussion demonstrates that these factors are also significant to transfer and share knowledge between the key stakeholders not only for universities, but also for businesses, governments and other organisational stakeholders. The paper **proposes** a framework of the QA drivers' application for meaningful knowledge transfer between diverse stakeholders and clarifies the framework's managerial implications. **This conceptual framework specifies different scenarios and perspectives of QA drivers' application in the global education sector.** The academic novelty is based on the inductive approach applied in the paper. QA practitioners will be able to follow these factors as steering phenomena to effectively assure quality, in relation to their multi-stakeholder relationships in higher education and beyond.

Keywords: quality assurance, higher education management, intrinsic and extrinsic qualities, stakeholder knowledge management.

Introduction

Quality assurance in a service delivery process is usually an important factor for innovation and development in overall management processes of an organisation (Campanella et al., 2013; Izzrech et al., 2013). In general, higher education is a service. Service is defined as “the application of specialized competences (e.g. knowledge and skills), through deeds, processes, and performances for the benefit of another entity or the entity itself” (Lusch and Vargo, 2006, p. 283). This definition of service closely relates with the provisions of higher education. Since, in general, in higher education, based on an offer letter from education providers, as a deed between the providers and students, students receive benefits to become skilled human capital through the application of the providers' specialised knowledge and skills, based on the

delivery processes of higher education. In such provisions of higher education service, quality of the service is one of the major concerns, in terms of delivery, assessment, and overall management of the education service. In the contemporary higher education service management, educators encounter challenges from diverse perspectives to uphold quality in their service provisions. Such perspectives would include the multidimensional external influences of various stakeholders from government and market (e.g. the geographical location where an education provider offers their services) agencies, as well as the internal influence of academic profession on quality assurance of higher education (Dill and Beerkens, 2013).

Considering such importance of quality assurance in this sector, this study attempts to summarise the key driving factors that act as antecedents of knowledge management to achieve and maintain higher quality in education service. A key objective of this attempt is to discuss the significance of the existing quality assurance driving factors in higher education as prospective antecedents for knowledge management among the key stakeholders in the higher education sector and beyond. Here the knowledge management denotes to effectively sharing and transferring knowledge within a network of stakeholders. A secondary objective here is to reduce the time and efforts of current and future academic researchers and research students in this research stream by providing a quick snapshot of the major stakeholder-centred quality assurance driving factors to share, transfer and manage knowledge in the higher education sector. However, this is an initial attempt to summarise such quality assurance driving factors; this summary will be useful for future researchers to recognise the key quality assurance driving factors in the contemporary higher education at once. Since, the future researchers will straightaway be able to recognise some of the key factors from the extant higher education quality assurance literature, where such factors are currently acknowledged in a dispersed way in this vast knowledge stream.

To achieve these objectives, this study reviews the extant scholarly views from this knowledge stream and summarises the relevant information, along the progress of the discussion, so that the summary could be evolved, as an inductive synthesis approach, (Glaser and Strauss, 1967; Hallier and Forbes, 2004; Randall and Mello, 2012; Naidoo and Wu, 2014; Shams and Lombardi, 2016; Shams; 2016a; 2016b). In this analysis approach, the findings are justified based on the mutual influence of all reviewed information from the extant literature on the aim of the study (Eisenhardt, 1989; Yin, 1994; Smart et al., 2012; Osman et al., 2014).

Quality assurance in higher education

In higher education, quality is defined from various perspectives. These perspectives include ‘excellence’ in knowledge development (Harvey and Green, 1993), meeting specific ‘goals’ (Green, 1994; Woodhouse, 1999; Fallshaw, 2003; Gibbs, 2011), and standards (Cheng, 2011), generating ‘value’ (Nightingale and O’Neil, 1994; Lagrosen et al., 2004) and stakeholder ‘satisfaction’ (Green, 1994; Cheng, 2003; Morley, 2003; Shams, 2011; 2013). Historically, there are two dominant streams of thought around quality assurance (QA) in the higher education context. Quality audit through external agency; this was introduced in the early thirteenth century in France, and self-governance centred QA, which has its origin in medieval England (Van Vught and Westerheijden, 1994). The intrinsic and extrinsic contexts of quality are considered in both these streams. “Intrinsic qualities refer to the ideals of the search for truth and the pursuit of knowledge. The extrinsic qualities are related to the services higher education institutions provide to society” (Van Vught and Westerheijden, 1994, p. 356).

In between the medieval eras and the 19th century, universities as higher education institutions were mainly focussed on offering solutions for concurrent social needs. For example, as professional schools, universities in that period primarily concentrated on training doctors, theologians, lawyers and other professionals (Maassen, 1997). Prior to the modern universities of the 19th century, universities accentuated the dialectical process (Cowley and Williams, 1991) for professional training and all other activities (Maassen, 1997), including ensuring the quality of such training. The changes in thinking and ways of seeing life in modern societies during the 19th century influenced academic practice and introduced more focussed procedure in higher education’s QA. Such changes propelled individual scientific findings, knowledge production and knowledge assurance (Graham, 2003). Focusing on knowledge maximisation (Graham, 2003), modern universities’ quality control or evaluation processes were mostly centred on system level, e.g. the overall governance of a university, and less on unit, i.e. faculty or department level, where the evaluation activities were less institutional, and centred on forecasts rather than actual outcomes, and typically as routine evaluation instead of strategic evaluation (Maassen, 1997).

Instead of the emphasis on individual scientific findings of the modern ages, the postmodern society focuses on meaning beyond scientific fact and truth, which is entrenched in an extensive context - a profound focus on the entirety of a situation (Graham, 2003, Berner and Tonder, 2003). Since, absolute truth is discarded in the postmodern society, where meaning is recurrently changing (Berner and Tonder, 2003). For example, continuous scientific and technological advancements change the meaning of something that we used to know about that object before. A general example could be discussed here, based on the planet Pluto, which was discovered as the smallest planet in 1930. Following the progress of astronomical science in 2003, Pluto had lost its status as a planet, and reconsidered as a dwarf planet (NASA, 2012). In 2015, following further progress in investigation, scientists are now arguing again to return the planetary status to Pluto (Dickerson, 2015). Here, the Pluto's example is however not much related to higher education's QA; it is discussed here to highlight the significance of how continuous investigation against a particular issue and such a nature of recurrent changes of meaning in postmodern society generally influences the contemporary managerial decision making processes differently, compared to the modern society.

Therefore, despite modern society's knowledge control, the postmodern society focusses on knowledge creativity, emergence management based on the changes and optimisation of global knowledge democracy (Graham, 2003). Such changes in between the modern and postmodern societies also impact on academic practice, including QA in higher education. Postmodern universities recognise institutional inputs and outputs, where performance management (e.g. through key performance indicators) appears as a key issue for QA (Cave et al., 1988; Johnes and Taylor, 1990). Following changes in the postmodern society, it can be argued that the focus on emergence management to adapt with the rapid scientific, technological and environmental changes drives a performance and outcomes focussed QA in higher education. Since, superior performance and outcomes generally have higher influence on emergence management to cope up with the changes, compared to inferior performances and outcomes.

Communication among various stakeholders is recognised as a key concern of QA in postmodern universities (Caroll, 1997; Dill, 2000; Anderson et al., 2000). Various studies acknowledge different factors as the means of QA in postmodern higher education. For example, Hénard and Roseveare, (2012) describe that universities “engage in national, regional and international networks to share best practices in quality teaching” (p. 14) among “higher education institutions, governments and

other stakeholders” (p. 52). Again, “student engagement includes both the academic and non-academic activities (Krause and Coates, 2008; Tinto, 2010), (which) is...an important indicator of quality of higher education” (Clarke et al., 2013, p. 3). Students participate in various institutional committees to uphold internal QA (Stalmeijer et al., 2014). Similar to students, the cooperation of other stakeholders and their enhanced communication and engagement (Gide and Shams, 2011) in higher education QA processes are also important. Since, stakeholders bring specific knowledge and power (Shams, 2012; 2015; 2016c), which are useful to the design and implementation of QA in higher education (Houston and Paewai, 2013).

Research on higher education reform demonstrates that there is a positive link between organisational autonomy and performance (Enders et al., 2013). “Internal self-reviews serve to increase faculty autonomy, as well as helping to improve educational quality” (Weusthof 1995; as cited in Shah, 2012, p. 763). Therefore, a performance focussed QA would encourage faculty to introduce innovative teaching and learning methods, which could be considered as faculty autonomy to contribute to the education quality, and be validated and rewarded through internal quality reviews. Another factor to assure quality in postmodern higher education is capacity building. Since, it is recognised that capacity building, and higher capacity in comparison to the competitors is a precondition for attracting quality faculties, and administrators and keeping good relationships with various stakeholders in higher education (Fullan, 2009). “Capacity building is an iterative process that incorporates the building of frameworks, work cultures, policies, processes and systems enabling an organisation or individual to improve performance” (O’Rafferty et al., 2014, p. 170), which should be valuable at personal, interpersonal and organisational levels (Dinham and Crowther, 2011; Shams and Kaufmann, 2016; Shams, 2016c). Consequently, once the capacity will be enhanced at personal, interpersonal and organisational levels, the enhanced capacity could contribute to the quality through improved performance.

In the contemporary practice of delivering education service, higher education institutions need to comply with the issues of external quality agencies (Marginson, 2013). “Overall, there is a broad agreement that external quality audits, together with internal university processes, have been a driver in improving quality assurance processes in universities” (Shah, 2012, p. 764). For transnational education, alongside meeting the issues of the external agency of the education exporting country, the offshore education provider also needs to comply with the

issues of various agencies of the importing countries (Healey, 2008; Lim, 2009). Therefore, such compliances automatically ensure a minimum quality in higher education. A participant of a study on a British transnational higher education describes:

[We made] excellent use of BLOGS which allow for supervision records to be viewed and added to by staff from Oman and the UK. This allows for greater communication between all and adds to consistency in advice and feedback provided to students. (Keay et al., 2014, p. 260)

Therefore, ‘online-centred quality management’ is already recognised as a ‘QA driving factor’ in higher education. Another key step to assure quality education is the formation of an institutional team of internal assessors for comprehensive quality assessment. Such a team is responsible for internal reviews, and liaise with various internal and external stakeholders for quality management (Nenadál, 2015). Again, cross-cultural understanding and management is useful for recognising cultural gaps and ensuring zero errors in quality management through the culturally accepted quality standard in higher education (O’Mahony and Garavan; 2012).

Another stream of quality driven management factors are rather intangible and depend on level of trust and social responsibility of organisations (Bengoa and Kaufmann, 2016); thus knowledge creation, transfer and overall knowledge management are integrated parts or guidance for introducing internationally approved QA processes, based on stakeholder interaction. The literature review suggests us highlighting a normative and a soft approach to QA and KM, while it is becoming clear that soft approach in service industry like higher education becomes a real platform for further stakeholder management and value co-creation (Belyaeva, 2016).

The stakeholder-centred quality assurance driving factors as antecedents of knowledge management in higher education

Table 1: The quality assurance driving factors in higher education service management.

The recognised QA driving factors in higher education	Source	Approach type
Internal evaluations/self-assessments and follow-ups	Wahlen, 2004; Kristensen 2010; Chase and Evert, 2011; Kettunen, 2012; Pettersen, 2015	Normative/Formal Stakeholder management
External quality audits	Gynnild 2007; Stensaker et al., 2011; Kettunen, 2012; Liu, 2015	
Faculty autonomy	Weusthof 1995; Enders et al., 2013	
Compliance-driven QA	Marginson, 2013; Cardoso et al., 2015	
Institutional structure of a QA team	O'Mahony and Garavan; 2012; Mårtensson et al., 2014; Nenadál, 2015	
Online-centred quality management	Keay et al., 2014	
Sharing best practices among the institutions	Dill, 2000; Newton, 2002; Hénard and Roseveare, 2012	Soft/Knowledge dissemination
Students' influence and engagement	Wahlen, 2004; Clarke et al., 2013; Stalmeijer et al., 2014	
Other stakeholder communication, cooperation and engagement	Anderson et al., 2000; Wahlen, 2004; O'Mahony and Garavan; 2012; Houston and Paewai, 2013	
Capacity building	Stephenson and Yorke, 1998; Dill, 2000; Fullan, 2009	
Cross-cultural management and QA	O'Mahony and Garavan; 2012; Viverg and Grönlund, 2013	
Trust and social responsibility	Bengoa and Kaufmann, 2016	

Table 1 summarises the key factors that are discussed in the previous section as quality assurance driving factors in higher education. Since all these factors of Table 1 influence the quality assurance processes in the contemporary higher education service, they are recognised as quality assurance driving factors in higher education. This section focuses on the significance of these factors to knowledge management in higher education, in terms of transferring and sharing knowledge with the associated stakeholders in higher education. 'Sharing best practices among the institutions' is a QA driving factor that is generally instrumental to share and transfer knowledge with the external stakeholders, such as other higher education institutions, industry-based research organisations and others. Similar to 'sharing best practices among the institutions', in general, some other QA driving factors also appear as instrumental to share knowledge among the key stakeholders in the higher education sector. These factors include 'students' influence and engagement', 'other stakeholder communication, cooperation and engagement', 'external quality audits' based on government and industry-based quality assurance agencies, and 'institutional structure of a QA team'.

‘Internal evaluations/self-assessments and follow-ups’ and ‘compliance-driven QA’, as other two QA driving factors also extend the opportunity to share knowledge with the key stakeholders. For example, for ‘internal evaluations/self-assessments and follow-ups’, academic faculty members and administrative personnel in the higher education sector are accountable to the respective internal evaluation team to share their knowledge that is developed from their professional experience, in order to justify their academic and administrative performance. The evaluation team would be able to develop a benchmark of quality, based on such shared knowledge of all academic and administrative staff members, which would be instrumental to set a performance target for the following year. In terms of ‘compliance-driven QA’, higher education institutions are generally responsible to share their knowledge and experience with government agencies, in order to comply with the quality standard set by the government agencies for QA. The government QA agencies will also be able to set a benchmark of quality for all institutions in the state, based on the shared knowledge of the current higher education institutions.

However, ‘faculty autonomy’ as a QA driving factor helps individual faculty members to implement their innovative thoughts in practice for their research and teaching; generally, the implementation of such innovative thoughts are subject to internal and/or external peer review and acceptance. Therefore, ‘faculty autonomy’ as a QA driving factor is also influential to share knowledge (e.g. individual’s thoughts) with the key stakeholders. In terms of ‘online-centred quality management’ in higher education, it is already cross-referenced in the previous section that higher education institutions with multiple campuses are able to share knowledge between the internal stakeholders of their various campuses, in order to equally uphold the quality of their education service in their different campuses. [Online-centred quality assurance and knowledge management is also widely recognised \(Romano et al., 2014; Giudice et al., 2015; Giudice and Peruta, 2016\), which is instrumental for creating mutually beneficial value through developing new insights on stakeholder relationships, in support of information technology \(Lombardi et al., 2016\).](#)

[National culture can be defined as the set of norms, values, and beliefs that people from a certain nation have in common and that describes their identity, making them different from people from other nations. Individuals who live in a particular cultural environment may behave in a way they assume is right, but others, who live in a different context, may consider their actions inconvenient or may not comprehend them. Misunderstanding what occurs in a different culture may cause uneasiness, especially when the language and the behavioral norms differ from the ones people are accustomed to. \(Giudice et al., 2011, p. 49\).](#)

[From this context, ‘cross-cultural management and QA’ is generally valuable to share and educate stakeholders including students and staff members in a multicultural campus, based on the knowledge learnt over time from their respective cultural perspectives.](#)

A stakeholder-centred quality assurance (QA) framework for knowledge management

“Companies which foster knowledge management practices that generate new knowledge from external subsidiaries, internal or external social relationships, will facilitate the generation of innovations” (Jiménez, et al., 2014, p. 905). Also, “the current economic context is characterized by a global hypercompetition” (Dell’Anno et al., 2016, p. 1). In order to deal with the changing economic environments, researchers argue that (Giudice et al., 2013)

the management of knowledge is increasingly considered as a main source of competitive advantage for corporations. It is argued that organizations enjoy a competitive advantage if they know how to expand, disseminate, and exploit organizational knowledge internally. Moreover, organizations can achieve their strategic goals by encouraging knowledge sharing, flexibility, and adaptation to change. (p. 260)

Therefore, “it is...necessary to identify an integrating framework that can clarify the state-of-the-art in the field (Peruta et al., 2016, p. 1), in order ensure a smooth flow of knowledge sharing among the key stakeholders. From this context, Figure 1 overviews the general significance of the discussed QA driving factors as the mediator between the normative and legal issues and institutional issues in QA. Here, the QA driving factors plays an influential role as triggers of different interdependent variables as indicated in Figure 1, in order to flourish the opportunities to reinforce an integrated stakeholder-centred creation, management and QA process.

(Please insert figure 1 about here)

Figure 1. Internal and external stakeholders’ influence in quality assurance processes for knowledge management (adapted from Belyaeva, 2015 and Kaufmann and Shams, 2015).

Social engagement of higher education institutions stands for a more effective way of being sustainable both as an organisation and as a sustainable role-model for the future graduates. Simultaneously rankings and international accreditation Agencies have growingly had impact on the quality assurance issue to expand original target group of students (Hazelkorn, 2014) as key stakeholders towards multistakeholder community of corporate partners, employers, policy-makers, and government and non-government stakeholders (Belyaeva, 2016). The process of knowledge creation is deeply driven by the institutional corporate and cultural trends in a certain world regions. In the same time international accreditation bodies force standartisation of QA approach in innovative and ambitious Universities (OECD, 2012;

ENQA, 2013). Academic circles are sometimes trapped in balancing national and international standards of QA, while balancing soft knowledge dissemination and formal requirements (OECD, 2012). A global knowledge dissemination model requires working both in bottom-up strategy field, making sure to integrate internal stakeholders' cultural and formal expertise, and also in top-down direction, including formal and institutional requirements and best practices. The creation of shared value impacts the positive consequences of QA ongoing processes for all stakeholders not only in solving socio-economic issues, but also in managing knowledge dissemination in a sustainable way. From this contexts, Figure 1 portraits such interrelations in knowledge creation, management and overall QA processes, focusing on the influences of diverse internal and external stakeholders.

Conclusion

This paper highlights the significance of the extant QA driving factors for knowledge management, particularly for sharing and transferring knowledge between the associated stakeholders in and out of the circle of the higher education sector. The concise review of this study on the QA driving factors is achieved through re-designing the contemporary approach to QA. Thus it is meant to be instrumental for current and future academic researchers to proactively exploit stakeholders' dialogue, in order to create and transfer knowledge. QA practitioners will be able to follow these factors as steering phenomena to uphold QA processes in higher education and beyond. Furthermore, this summary would also be instrumental to use in the training of new/inexperienced QA practitioners in the higher education sector, in order to develop greater insights in the field, within short possible time. Carayannis and Campbell (2010) suggested quintuple helix innovation model to stimulate and visualise excelling the sustainable economy and co-evolution of knowledge economy. Supporting this idea, we have suggested how long-time ago approved mechanism of QA can be revitalised in the lens of cross-cultural context of social responsibility, multi-stakeholder audit and modern communication techniques. *A holistic approach for the traditional University QA issues perhaps brings on a new paradigm shift which is becoming visible over the last few years.* Suggested framework of stakeholder interrelations helps to define the most influential stream of knowledge at the time as well as drivers' impacts for creative knowledge creation and management through QA.

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Global Education Regulations Policy and Rankings

Normative and Legal QA framework

Institutional Environment

