

Repositório ISCTE-IUL

Deposited in Repositório ISCTE-IUL:

2022-05-18

Deposited version:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Nogueiro, Teresa, Saraiva, M. & Jorge, F. (2021). Total quality management and social responsibility an approach through their synergies in higher education institutions. In Mesquita, A., Abreu, A., and Carvalho, J. V. (Ed.), Perspectives and Trends in Education and Technology. Smart Innovation, Systems and Technologies. (pp. 311-321). São Paulo: Springer Singapore.

Further information on publisher's website:

10.1007/978-981-16-5063-5 26

Publisher's copyright statement:

This is the peer reviewed version of the following article: Nogueiro, Teresa, Saraiva, M. & Jorge, F. (2021). Total quality management and social responsibility an approach through their synergies in higher education institutions. In Mesquita, A., Abreu, A., and Carvalho, J. V. (Ed.), Perspectives and Trends in Education and Technology. Smart Innovation, Systems and Technologies. (pp. 311-321). São Paulo: Springer Singapore., which has been published in final form at https://dx.doi.org/10.1007/978-981-16-5063-5_26. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Total Quality Management and Social Responsibility an approach through their synergies in Higher Education Institutions

T. Nogueiro^{1[0000-0001-7117-7880]}, M. Saraiva^{2[0000-0001-7256-0769]} and F. Jorge^{3[0000-0001-6960-9023]}

¹ University of Évora, Largo dos Colegiais, 2, Évora, Portugal

² University of Évora, Largo dos Colegiais, 2, Évora, Portugal and BRU-UNIDE/ISCTE-IUL, Lisbon, Portugal

³ University of Évora, Largo dos Colegiais, 2, Évora, Portugal and CICP, Évora, Portugal t.nogueiro@gmail.com; msaraiva@uevora.pt; mfj@uevora.pt

Abstract. Growing social concerns have led organisations to think evolutionarily about quality as it is not only relevant to satisfy customers, generate quality products or services and focus on results but also to encourage a participatory, flexible and sustainable value-oriented management. Due to the complex environment and structure of higher education, quality measurement and management have created a number of challenges. Around the world, higher education institutions have adopted various quality management practices, mostly drawn from existing models. Corporate Social Responsibility (CSR), like most management concepts, has been gradually incorporated into the management practice of organizations. The implementation of TQM systems can facilitate the incorporation of the CSR objectives and practices by operating changes in organizational culture. TQM and Social Responsibility are undeniably two dimensions increasingly associated with organisations of any kind, including higher education institutions. Quality indicators on sustainable development for education have been of growing interest and for this reason the possibility of creating a model that fits the reality of higher education integrating total quality and social responsibility should not be overlooked. Nevertheless, this work is focused on an approach to the relationship between TQM and Social Responsibility associated to organisations in general but also related to higher education institutions.

Keywords: Higher Education Institutions, Social Responsibility, Total Quality Management.

This study was conducted at the Research Center in Political Science (UID/CPO/0758/2019), University of Minho/University of Évora, and was supported by the Portuguese Foundation for Science and Technology and the Portuguese Ministry of Education and Science through national funds.

1 An approach to Total Quality Management and Social Responsibility

1.1 Total Quality Management

Total Quality Management (TQM) is an integrated management effort aimed at improving quality at any level to achieve excellence. According to Lima, Cavalcanti and Ponte (2004), TQM stimulates creativity at all levels of the organization and enables better systematic monitoring and implementation of corrective actions in operational processes. TQM was considered a business management philosophy which recognised that the needs of customers and the objectives of the organisation were inseparable (Pike and Barnes, 1996). Merli (1993) summarises TQM's philosophy in four aspects: (a) complete customer satisfaction; (b) quality above all; (c) continuous improvement; and, (d) maximum involvement of the company's staff.

According to Al-Bashir (2016), TQM has a remarkable application in higher education institutions, where its adaptation will help them to keep their competitive position, to continue to satisfy all stakeholders, to focus on market needs and to attain better performance. Achieving high performance by comparing high quality and innovation of products and services to meet the needs of customers and other stakeholders has become a critical issue for universities, both academically and in practice (Chen and Chen, 2012).

Associated with human resources and knowledge management, Raharjo, Xie and Brombacher (2011) came across 3 challenges which HEIs are dealing with:

- 1. The role that students and other end-users play in relation to knowledge creation, dissemination, acceptance and use;
- 2. Aspects of these two indicators cross academic and business issues, in relation to the roles of teachers and the outputs and institutional mechanisms that support them;
- 3. Expectations of end-users, especially employers, who see higher education as a service-industry, related to the benefits of knowledge transfer by hiring graduates and receiving the benefits of faculty research.

There is therefore an implicit link between human resources and knowledge management, which is the presence of qualified teachers and students. In turn, knowledge management is linked to knowledge transfer. Universities, as well as businesses, need to be knowledge-based (Chen, Chen, and Padro, 2017). Higher education institutions therefore need to respond to the needs of knowledge society by increasing their capacity and willingness to engage in the production of knowledge that is useful, and to develop their own specialised missions and profiles (Roper and Hirth, 2010).

In higher education, the definition of client is important. This definition can be based on the principle of Quality Management with the same designation, although it may be complex. This complexity is due to what authors Meirovich and Romar (2006) refer to as the difficulty in identifying clients and their expectations, and to the diversity of clients and stakeholders.

It is sometimes the lack of consensus on client definition in higher education institutions that creates problems in implementing TQM (Asif *et al.*, 2013). Students can be

seen in different perspectives or roles (Manatos, Sarrico and Rosa, 2017), i.e., as internal clients, workers in the learning process or product in process (Helms and Key, 1994; Sirvanci, 1996), or even as a product for a client who will be the employer (Bailey and Bennett, 1996).

Elements of TQM have relevance in Higher Education, as demonstrated by Bayraktar et al. (2008) who concluded that these, such as leadership, vision, measurement and evaluation, employee involvement, recognition and reward, programme design, quality system improvement, process control and improvement, evaluation and training, student focus and other stakeholder focus, play a critical role in the improvement process and in improving customer satisfaction. Although the elements of TQM are important in Higher Education, the critical success factors (CSF) of TQM in Higher Education are also very important and these can be different according to the context and level of development of the various countries (Asif et al., 2013). Kanji et al. (1999) identified continuous improvement, leadership, external client satisfaction, people management, teamwork, process improvement, internal client satisfaction, resource measurement and prevention as CSF for UK higher education institutions. Asif et al. (2013) identified the following CSF for higher education institutions in Pakistan: vision, measurement and assessment, monitoring and process improvement, resource allocation and programme design, focus on other stakeholders and leadership. As it is possible to see there are common CSF in both realities.

1.2 Social Responsibility

The issue of social responsibility has been addressed since 1953 and has been present since companies began to emerge (Cajazeira, and Barbieri, n/d). It can be said that Howard Bowen was the first author to start dealing with the subject, with the publication of the work Responsibility of the Businessman (Carroll, 1979). In 1958, in contrast to Bowen's ideas, Levitt states that the role of companies is to generate profits and that the function of ensuring social welfare lies with the state. In the 1960s, Bowen's proposed term "entrepreneur social responsibility" was changed to "corporate social responsibility" (Carroll, 1999).

Social responsibility is the recognition that the activities of organizations have an impact on society and that this impact has to be considered in management decision-making (Pride, Hughes and Kapoor, 2008).

The values underlying the concept of Social Responsibility, according to Ghobadian *et al.* (2007), are to seek to understand and meet the needs of stakeholders (customers, owners, employees, suppliers and society in general), the integrity of individual and collective actions, honour, fairness, respect, participation and individual and collective responsibility towards others.

The International Organization for Standardization (ISO) Advisory Strategy Group, according to Leonard and McAdam (2008), describes CSR as a balanced approach by organizations to address economic, social and environmental issues in ways that benefit people, communities and society.

It is common for people to believe that social responsibility refers to a series of actions to protect the environment or to provide considerable amounts of money to solve

social cases (Staiculescua, 2014). However, ISO 26000:2010 states that social responsibility is an organization's responsibility for the impacts of its decisions and activities on society and the environment, through ethical and transparent behaviour that contributes to sustainable development (includes the health and well-being of society); takes into account the expectations of stakeholders; complies with applicable law and is consistent with international standards of behaviour; and is integrated throughout the organization and put into practice in its relationships.

Staiculescua (2014) points out that the motto of many organisations operating in the new consent trends seems to be "Doing well, doing good". In this regard, the author states that social responsibility is not a philanthropic option, but a new way of doing business. In order to remain in the market under the current economic conditions, companies must meet customer needs without compromising the future. However, to do so they must take into account four factors: financial, social, environmental and quality.

Corporate social responsibility, like most management concepts, has been gradually incorporated into the management practice of organizations. Thus, in order to effectively manage socially responsible business, the organization needs to define strategies, programmes and action plans.

According to Bakić *et al.* (2015) the specificities of social responsibility management are reflected in the fact that the CSR concept is strategic and multi-functional, thus requiring a commitment from management and workers for its implementation, which in turn requires the coordination of various organizational processes (legal, financial, sales, quality control, among others). It is possible that socially responsible activities already exist in the organisation and that there is a need to change, systematise and reposition them in a strategic context.

Social responsibility is not an easy altruistic action aimed at helping those in need outside an organisation, but rather an uncomfortable process of reorganising internal routines to support its continuous improvement by eliminating "impacts" (Valleys, 2016).

Nadeem and Kakakhel (2012) state in their study that universities are essentially social institutions, and work to promote the social cause. It is therefore increasingly essential that universities consider CSR as a strategy for growth.

University Social Responsibility cannot be seen as short-term projects, but as a continuous process where new objectives and tasks are gradually incorporated, some with greater ease of implementation, others that require more time and effort, and others that will only be able to see results in longer periods, as they constitute processes of transformation that require continuity and whose results depend on their evolution (Brivio Borja and Montano Rodríguez, 2016).

The Bologna Declaration, dated 1999, creates the European Higher Education Area (Lourtie, 2002; Damião, 2015), which emerged after the signing of the Magna Charta Universitatum in 1988, stating that the future of Europe would depend to a large extent on the cultural, scientific and technical development that higher education offered. According to the Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning (2006/962/EC), "education in its dual function - social and economic - has an essential role to play in ensuring that European citizens acquire the necessary key competences to enable them to adapt

flexibly to these changes," in which each citizen will have to have key competences extended to adapt flexibly to a rapidly changing and highly interconnected world.

University Social Responsibility, from a holistic perspective, requires linking the various aspects of the institution in a project for the social promotion of ethical principles and equitable and sustainable social development, for the production and transmission of responsible knowledge and the professional training of responsible citizens (Vallaeys, 2008). The scheme that Vallaeys (2008) suggests (Figure 2) can help visualize the global and central character of university reform that is desired.

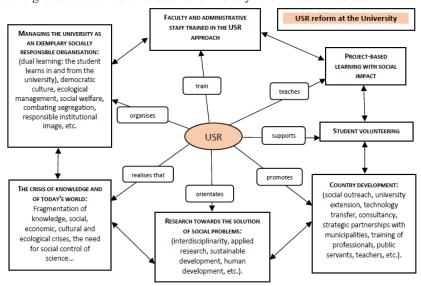


Fig. 1. Social responsibility reform model (Own translation, Vallaeys, 2008, p. 5)

Vallaeys (2007, p. 11) defines university social responsibility as

...an ethical quality management policy of the University that seeks to align its four processes (management, teaching, research, extension) with the university mission, its values and social commitment, through the achievement of institutional congruence, transparency and the dialogical participation of the entire university community (authorities, students, teachers, administrative staff) with the multiple social actors interested in good university performance and in need of it, for the effective transformation of society towards the solution of its problems of exclusion, inequity and sustainability. (Own translation)

2 Synergies between Total Quality Management and Social Responsibility

TQM and CSR have common ground in terms of their application in organisational management practices (Ghobadian *et al.*, 2007; Moratis, 2017).

Following what has been said about TQM and CSR, the history and profound development of the TQM concept reveal that there is a considerable overlap between the

values that support the two concepts. There are elements of the TQM process that are common to or overlap with those of CSR and can therefore be implemented as part of TQM processes, which will require some adjustment and rethinking of the elements of TQM (Table 1).

Table 1. Overlapping elements in TQM and CSR processes

Common elements of TQM and CSR		
TQM	CSR	Alignment
Promotion of TQM values and principles	Integrity	There is an alignment between the dif- fusion of TQM values through the virtue of ethical theory where integrity has its basis.
Open and participatory management style	Equity	Both are based on justice
Focused on considering the needs of customers, workers, society and owners	Benefit	There is a focus on meeting the needs of stakeholders.
Delegation of authority and responsibility to lower levels in the chain of command	Voice (it is an element that appears su- perimposed on	There is a need for effective participation, with a concern for the delegation of authority and responsibility to lower hierarchical levels.
Harnessing the creative ca- pacity of workers through their active participation	several ele- ments of TQM)	Workers should have a voice on their impact on harnessing the creative capacity of the organisation.
Developing partnerships with key stakeholders		A voice for those who do business with the organization.
Empowering all workers to solve problems and make decisions		There is a focus on empowering or giving workers a voice
Openness in terms of sharing and wide communication of information	Transparency	Both elements deal with the issue of supply and full dissemination of information.

Source: Adapted from Ghobadian et al. (2007)

TQM and CSR are considered potential sources for achieving sustainable competitive advantage (Benavides-Velasco, Quintana-García and Marchante-Lara, 2014).

According to Van der Wiele *et al.* (2001) the European Quality Award was the first model that explicitly showed that social responsibility is strongly linked to quality thinking.

CSR has a strong link with the principles of quality management (McAdam & Leonard, 2003). According to these authors, existing models and methodologies of quality incorporate core elements of CSR. The questions below reflect not only the strategic influence of CSR but also the inherent importance of CSR and its place in the everyday practice of quality.

1. How to address the impacts of products, services and operations on society?

- 2. How to anticipate current and future public concerns with products, services and operations and how to proactively prepare?
- 3. How are ethical business practices carried out in all stakeholder transactions and interactions?
- 4. How are key communities actively supported and strengthened by the organisation, leaders and employees?
- 5. How to determine areas of emphasis for organisational involvement and support and identify key communities?

As has been observed, there is a great similarity between TQM and CSR. Vinten (1998) states that TQM crosses the concept of legitimate ethics and the instrumental dimension of CSR. TQM is driven, according to Wicks and Freeman (1998), by a set of interrelated concepts that simultaneously present management practices and moral values.

In the framework of TQM and CSR the synergies between the themes can be seen through the complementarity of their elements/critical success factors and not only through the overlapping of the elements common to both. To McDonald, Zairi and Idris (2002) the critical success factors for TQM are leadership, policy and strategy, customer focus, information and analysis, human resource focus, process management, and business results.

TQM and CSR can improve the institution efficiency, a reduction of bureaucracy by eliminating duplication of policies and procedures and the alignment of goals and processes. TQM systems are valuable instruments to put the concept of corporate sustainability into practice (Jalilvand, Pool, Jamkhaneh & Tabaeeian, 2018). The implementation of TQM systems can facilitate the incorporation of the CSR objectives and practices by operating changes in organizational culture. To Jalilvand *et al.* (2018) TQM and CSR practices are in many ways complementary, and based on other researchers, these authors confirm that there are clear links between these two themes:

- In both TQM and CSR, it is common to focus on a company's responsibilities toward different stakeholders (Kanji and Chopra, 2010).
- Both topics are founded on ethics (Tari, 2011).
- An evaluation and understanding that a socially responsible organisation helps companies in the development of environmental management enables an effective implementation of TQM (Molina-Azorin et al., 2009).
- Both themes are philosophies and a set of practices for the responsible management of a company that may have positive effects on the performance (impacts on society, customers, employees and finances) (Tari, 2011).

According to Nasim *et al.* (2020) the present research has contributed to the literature of TQM in Higher Education by linking higher education institutions (HEI) with society at large. Existing research suggests that quality improvement has to be achieved by integrating all available resources, both within and outside the Higher Education sector. TQM involves academic staff, students and management in HEI but also stakeholders in the wider society interested in HE (Nasim *et al.*, 2020; Ruben & Lawrence, 2018).

Research on TQM in Higher Education has become an interdisciplinary effort (Nasim *et al.*, 2020).

With the commitment of management, the support of administrative staff and teachers, continuous communication, review, verification and validation, constructive alignment of processes can be reached. It was recognised that quality indicators on sustainable development for education have started to receive growing interest in the education sector (Yeung, 2018).

The design of a possible qualitative assessment model of Quality and Social Responsibility will be an aspect to consider and will be supported by the integration of the EFMQ version 2020 model and Bakic's Corporate Social Responsibility Management Model (2012). The philosophy of the model will be anchored in ethical considerations of human behaviour and ethical behaviour itself. It will be rooted in the social systems school of thought, and ultimately expand the horizon of the organisation beyond economic performance itself. The model is intended to present 3 major dimensions at the level of organisations and which characterise their general management plan: Direction, Execution and Results. The aim is that within each dimension, the criteria must be related in order to respond to the issues associated with the Quality and Social Responsibility of each organisation.

3 Final considerations

Over time, organizations have resorted to management models that support their continuous improvement towards what they consider excellence.

This work has identified overlapping elements in terms of TQM and CSR, such as the integrity and promotion of TQM values and principles, equity and open and participatory management style, the benefit and focus on considering the needs of customers, workers, society and owners, having and giving voice, and finally transparency and openness in terms of sharing and wide communication of information.

The survey of these overlaps has allowed us to see that there is some overlap between business and universities regarding Social Responsibility and not only between TQM and CSR. This finding, which we find to be particularly interesting, could be the basis for future research, such as the creation of an integrated model for social responsibility and quality management evaluation.

However, some weaknesses or limitations emerge from this study, such as the fact that it is not an exhaustive research on the themes of TQM, CSR and USR and, therefore, it falls short of providing a more in-depth insight on the synergies between the three aforementioned themes.

References

- 1. Al-Bashir, A.: Applying total quality management tools using qfd at higher education institutions in gulf area (Case study: ALHOSN University). *International Journal of Production Management and Engineering*, 4(2), 87-98 (2016).
- 2. Asif, M., Awan, M. U., Khan, M. K., & Ahmad, N.: A model for total quality management in higher education. *Quality & Quantity*, 47(4), 1883-1904 (2013).
- 3. Bailey, D., & Bennett, J. V.: The realistic model of higher education. *Quality progress*, 29(11), 77 (1996).
- 4. Bakić, T. V., Kostić, S. C., & Nešković, E.: Model for managing corporate social responsibility. *Management*, 222(74), 47-56 (2015).
- Bayraktar, E., Tatoglu, E., & Zaim, S.: An instrument for measuring the critical factors of TQM in Turkish higher education. *Total Quality Management*, 19(6), 551-574 (2008).
- Benavides-Velasco, C. A., Quintana-García, C., & Marchante-Lara, M.: Total quality management, corporate social responsibility and performance in the hotel industry. *International Journal of Hospitality Management*, 41, 77-87 (2014).
- 7. Brivio Borja, A. R., & Montano Rodríguez, F.: La responsabilidad social universitaria. Tratamiento en la UMET. *Conrado*, *12*(1), 111-118 (2016).
- 8. Cajazeira, J. E. R., & Barbieri, J. C.: Responsabilidade social e excelência empresarial: um estudo com empresas ganhadoras do prêmio nacional da qualidade (s/d).
- 9. Carroll, A. B.: A three-dimensional conceptual model of corporate performance. *Academy of management review*, 4(4), 497-505 (1979).
- 10. Carroll, A. B.: Corporate social responsibility: Evolution of a definitional construct. *Business & society*, *38*(3), 268-295 (1999).
- 11. Chen, J. K., & Chen, I. S.: Critical creativity criteria for students in higher education: Taking the interrelationship effect among dimensions into account. *Quality & Quantity*, 46(4), 1057-1075 (2012).
- 12. Chen, I. S., Chen, J. K., & Padro, F. F.: Critical quality indicators of higher education. *Total Quality Management & Business Excellence*, 28(1-2), 130-146 (2017).
- 13. Damião, M. H: Desenvolvimento de competências ou transmissão de conhecimento: acerca da necessidade de superar uma antinomia curricular no Ensino Universitário. *Revista Portuguesa de Pedagogia*, 59-82 (2015).
- 14. Ghobadian, A., Gallear, D., & Hopkins, M.: TQM and CSR nexus. *International Journal of Quality & Reliability Management*, 24(7), 704-721 (2015).
- 15. Helms, S. & Key, C. H.: Are students more than customers in the classroom?. *Quality progress*, 27(9), 97 (1994).
- Jalilvand, M. R., Pool, J. K., Jamkhaneh, H. B., & Tabaeeian, R. A.: Total quality management, corporate social responsibility and entrepreneurial orientation in the hotel industry. Social Responsibility Journal, 14(3), 601-618 (2018).
- 17. Kanji, G.K. and Chopra, P.K.: Corporate social responsibility in a global economy. *Total Quality Management & Business Excellence*, Vol. 21 No. 2, pp. 119-143 (2010).
- Kanji, G. K., Malek, A., & Tambi, B. A.: Total quality management in UK higher education institutions. *Total Quality Management*, 10(1), 129-153 (1999).
- Leonard, H. B., & McAdam, R.: Corporate Social Responsibility. In Conference on CSR (2008, May).
- Lima, A. C. C., Cavalcanti, A. A., & Ponte, V.: Da onda da gestão da qualidade a uma filosofia da qualidade da gestão: Balanced Scorecard promovendo mudanças. *Revista Contabilidade & Finanças*, 15(SPE), 79-94 (2004).

- Lourtie, P.: A declaração de Bolonha. Revista Lusófona de Humanidades e Tecnologias, (6/7/8) (2002).
- 22. Manatos, M. J., Sarrico, C. S., & Rosa, M. J.: The integration of quality management in higher education institutions: a systematic literature review. *Total Quality Management & Business Excellence*, 28(1-2), 159-175 (2017).
- 23. McAdam, R., & Leonard, D.: Corporate social responsibility in a total quality management context: opportunities for sustainable growth. *Corporate Governance: The international journal of business in society* (2003).
- 24. McDonald, I., Zairi, M. and Idris, M.A.: Sustaining and transferring excellence: a framework of best practice of TQM transformation based on winners of Baldrige and European quality awards, *Measuring Business Excellence*, Vol. 6 No. 3, pp. 20-30 (2002).
- 25. Meirovich, G. & Romar, E. J.: The difficulty in implementing TQM in higher education instruction. *Quality Assurance in Education*, 14 (4), 324-337 (2006).
- Merli, G.: Eurochallenge: the TQM approach to capturing global markets. IFS, Limited (1993).
- Molina-Azorin, J.F., Tari, J.J., Claver-Cortes, E. and Lopez-Gamero, M.D.: Quality management, environmental management and firm performance: a review of empirical studies and issues of integration. *International Journal of Management Reviews*, Vol. 11 No. 2, pp. 197-222 (2009).
- 28. Moratis, L.: The credibility of corporate CSR claims: A taxonomy based on ISO 26000 and a research agenda. *Total Quality Management & Business Excellence*, 28(1-2), 147-158 (2017).
- Nadeem, A., & Kakakhel, S. J.: An investigation into corporate social responsibility (CSR) of public sector universities in KPK. Abasyn University Journal of Social Sciences, 5(2), 14-27 (2012).
- Nasim, K., Sikander, A., & Tian, X.: Twenty years of research on total quality management in Higher Education: A systematic literature review. *Higher Education Quarterly*, 74(1), 75-97 (2020).
- 31. Parlamento Europeu e Conselho. Recomendação 2006/962/CE sobre as competências essenciais para a aprendizagem ao longo da vida. *Jornal Oficial da União Europeia*, *L 394* de 18 de dezembro. Last access 2020/04/28 https://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:32006H0962&from=PT.
- 32. Pike, J. & Barnes, R.: Total Quality Management in Action. *A practical approach to continuous performance* improvement, 2nd Editions, Chapman & Hall, London (1996).
- Practical overview of the linkages between ISO 26000:2010, Guidance on social responsibility and OECD Guidelines for Multinational Enterprises (2017). Last access 2020/04/28 http://iso26000.info/wpcontent/uploads/2017/02/ISO26000_and_OECD_Guidelines_MNE_PPO_v1.pdf
- 34. Pride, W. M., Hughes, R. J., & Kapoor, R. J.: Business, 9th Edition, USA: Library Edition (2008).
- Raharjo, H., Xie, M. & Brombacher, A. C.: A systematic methodology to deal with the dynamics of customer needs in Quality Function Deployment. *Expert Systems with Applications*, 38(4), 3653-3662 (2011).
- 36. Roper, C. D. & Hirth, M. A.: A history of change in the third mission of higher education: The evolution of one-way service to interactive engagement. *Journal of Higher Education Outreach and Engagement*, 3-21 (2010).
- 37. Ruben, B. D. & Lawrence, F.L.: *Quality in higher education*. Routledge, New York, NY: (2018).

- 38. Sirvanci, M.: Are students the true customers of higher education?. *Quality progress*, 29(10), 99 (1996).
- 39. Staiculescua, O.: Quality and social responsibility: a pathway to the future. *Procedia-Social and Behavioral Sciences*, 109, 241-245 (2014).
- 40. Tari, J.J.: Research into quality management and social responsibility. *Journal of Business Ethics*, Vol. 102 No. 4, pp. 623-638 (2011).
- 41. Vallaeys, F.: Responsabilidad social universitaria. Propuesta para una definición madura y eficiente. *Recuperado el*, 12(06), 2014 (2007).
- 42. Vallaeys, F. (2008). ¿Qué es la responsabilidad social universitaria. Nuevo León, México. Last access 2020/04/28 www. cedus. cl.
- Vallaeys, F. (2016). Defining social responsibility: a matter of philosophical urgency for universities. Global University Network for Innovation. Last access 2020/04/28 http://www.guninetwork.org.
- 44. Van der Wiele, T., Kok, P., McKenna, R., & Brown, A.: A corporate social responsibility audit within a quality management framework. *Journal of Business Ethics*, *31*(4), 285-297 (2001).
- 45. Vinten, G.: Putting ethics into quality. The TQM Magazine, 10(2), 89-94(1998).
- 46. Wicks, A. C., & Freeman, R. E.: Organization studies and the new pragmatism: Positivism, anti-positivism, and the search for ethics. *Organization science*, 9(2), 123-140 (1998).
- 47. Yeung, S. M. C.: Linking ISO 9000 (QMS), ISO 26000 (CSR) with accreditation requirements for quality indicators in higher education. *Total Quality Management & Business Excellence*, 29(13-14), 1594-1611 (2018).