

# Enhancing Quality in Higher Education Institution: Measures and Practices

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## **Abstract**

Enhancing quality in all the functions of HEI is a critical issue to be addressed due to increased competition globally. In this article, an overview of measures and practices that can be adopted by a Higher Education Institution(HEI) to ensure and enhance quality in its functions. These measures and practices are generic in nature and can be applied to varied disciplines of HEI. The objective of this article is to highlight the need for enhancing and assuring quality in HEI. The quality enhancement directly contributes to the improvement in governance, leadership, and sustenance of HEI.

**Keywords:** quality, quality enhancement, quality management, HEI;

## **Introduction**

Quality is a critical term that is used as a measurable terminology to determine excellence, to showcase distinctive characteristics and compliance with implied needs. Furthermore, it is also subjective in nature as it varies with respect to an individual's opinion. Quality is an important factor to be considered by any kind of organization to survive and thrive in the environment. Quality practices ensure value to the stakeholders of an organization.

There are varied approaches for ensuring quality in HEI. However, there is no concredited evidence of best results from any of the approaches. Quality in HEI is highly subjective in nature and there are no universally accepted methods or practices that can be applied to HEI [Jennierf Rowley]. The diversity in HEI makes defining quality practices even more difficult. However, quality in HEI is time-tested in nature and through proper quality practice; the HEI will eventually evolve its own model of quality management. This is the ultimate goal of ensuring quality.

In literature, we can find a good number of articles on aspects of quality in HEI. In this section, a brief review of some important articles is presented.

Magda and Henrich address the challenges to enhance quality in teaching and learning with reference to the quality assurance policy in South African Universities. Furthermore, they suggested strategies for adopting the quality assurance models in the HEI.

Pennington and O'Neil compared and contrasted the learning experiences and application of strategic objectives required for quality teaching.

Alice and David propose a new framework for experimental learning and suggested the benefits of experimental learning in key areas such as assessment, student and faculty development, etc.

Jo et al., suggests that the existence of three conceptual categories: 'Establishing Readiness', and 'Connecting with the Students' and 'Developing a Work and Learning Environment' in enhancing student learning experience based on a modified model for analysis.

Fanz and Jill suggest a pedagogical model which considers practice, pedagogy, and partnership for enhancing students' employability and professionalism.

The authors in [G. Srikanthan] proposed a model quality management model for HEI that is capable of addressing the service and implementation functions of HEI.

Zhao examines the efficacy of online education and elaborates on the various issues involved. Furthermore, he proposes a framework for assessing the quality of online teaching and learning.

Sahney et al., argues that HEI should adopt the quality measuring techniques of service industry for ascertaining the satisfaction of the stakeholders. They suggested the use of statistical tools for framing and analyzing the questionnaire.

Zhuair and Al-Hemyari proposes a knowledge management model for monitoring the quality in HEI. Furthermore, the implication of the use of the model in the HEI's of Oman has found that it can be used as an effective tool for monitoring the quality and performance of HEI.

Maria and Maria reported the implication of teachers' performance assessment. They propose a 36 degree model for feedback for the evaluation of teacher's performance and argued that the new model is fit for objective assessment.

Maureem attempts to analyze the relevance of measurement of quality and performance in their work. Furthermore, they investigate the measurement models in literature such as value-added approach, production model, total quality experience approach, and highlight the pros and cons of each of the models.

In another work, Teeroovengadum proposed the hierarchical model for measuring quality which considered both the functional and technical aspects in HEI. The model contains 48 dimensions for measuring quality and can be applied for enhancing quality.

Mizikaci proposed a systems approach-based program evaluation model for quality in HEI. They argued that the new model is efficient for evaluation and helps in enhancing quality in HEI and claimed to be the first to combine the concepts of social, technical and managerial aspects for quality measurement.

Kay proposed an evaluation model for ascertaining the service quality in education. The tool gathers the student's perceptions, analyzes them and provides useful analysis for decision making.

Oria addressed the issue of enhancing the employability of students by incorporating additional courses and activities. These activities specifically aimed at improving the students' skills and competencies.

Kye and Miyeon in their study reported that there is a significant link between the ratio of a number of students and full-time teachers which affects the students' employability rates.

McCarthy reports on the study of feedback models in HEI to understand the attitude of students towards online and regular classes. They record the feedback using the faculty feedback, student feedback, and peer feedback models. The findings of the study directed the increase in the use of collaborative learning and interest towards peer feedback.

We highlight the implications from some of the survey papers on quality in HEI in the following paragraphs.

Halina and Bjorn analyze the context of quality management in the HEI. They highlighted the reported literature on quality management shares similarities of opinion.

Nina and Maureen reviewed the implications of quality management practices in HEI for the time period between 1996 and 2006. They highlighted that the models rely on quality models used in the manufacturing industry and inferred that the industrial models required fine-tuning and refinement to be used in HEI. Nonetheless, the authors argued the need for quality models specifically for the HEI.

Reema et al., systematically review the methods to assess and enhance quality in particular to teaching functionality. Their review synthesized the efficacy of student feedback data, assessment tools, peer review, and teaching portfolios. Furthermore, they suggested a multimodal approach is more apt for the assessment of teaching.

Mohammad reports the findings of the survey on the adoption of total quality management in HEI. Furthermore, they argued that the industry-related quality models cannot be directly applied to the HEI due to the persistence of high diversity. In a similar survey on total quality management, Mary reports on the application of total quality management and continuous quality improvement in the HEI.

Ka ho Mok reviews the quality enhancement and assurance techniques adopted by the Hong Kong Special Administrative Region and highlights the challenges encountered by the state.

In summary, all the articles reported in this domain focus on mandatory enforcing quality in HEI functions for excellence. It is evident with numerous case studies the importance of quality management in HEI. Furthermore, the quality management has been part of the industrial revolution for producing high-quality goods or services which meets the customer's expectation. Therefore, quality in HEI should be an integral factor for overall improvement. Additional literature on quality in HEI can be found in [Fry et al., Rey and George, Bamber et al., Pokorny and Warren].

### **Role of HEI in ensuring quality management**

Each entity of an HEI is responsible for maintaining and enhancement of quality in what they do. The purpose of quality has to be determined whether the education is given for knowledge or education is for employment or education is given for becoming an entrepreneur. i.e., learning to understand or learning for learning or learning for earning or learning for employment creation. The purpose has to be chalked out for each of the programmes offered by the HEI and an appropriate quality policy has to be enforced. The quality policy should address the goals of quality, schedule of review and audit activities, management guidelines, commitment to quality standards and continuous improvement, etc. When the quality in each of the function in HEI is ensured then quality management is attained. HEI should give more prominence for exploring thoughts and ideas which directly reflects continuous improvement. Further. HEI should provide the right tools and platform for activities in quality management.

### **Importance of quality in HEI**

The importance of quality in HEI is mainly dependent on the following factors. Fig. 1 pictorially represents the importance of quality.

- **Stakeholder satisfaction:** When quality is maintained, the stakeholders of HEI are satisfied and thereby reflect the growth of the institution.
- **Building reputation:** Help to uplift the reputation of the institution worldwide.
- **Objective achievement:** Help to achieve stated objectives of the Institution.

- **Systematic approach:** When a standard practice is followed in all the functions of HEI then a systematic approach for the management of HEI is achieved.
- **Improved professionalism:** A quality practice incorporates a high degree of professionalism.
- **Quality output:** It is certain that the students' output from the HEI will be highly skilled and sound when HEI involves best practices in teaching and learning.



Fig.1: Importance of quality in HEI

### Quality assurance in HEI

Quality assurance is always aligned to requirements and a scheduled time frame. This aims in ascertaining the intention of meeting the requirement or not. There are two major drivers for quality assurance viz., reviewing and auditing and accreditation. These drivers aim to verify, validate and qualify the aspects of quality in HEI.

### Drivers for quality assurance

- 1) **Review and auditing:** A review followed by periodic quality audit is the first steps in the procedure of assuring the quality of the teacher, education processes, practices,

programmes, and services through appropriate techniques, mechanisms, and activities. This can be done in three levels peer level, internal expert level, and external expert level. Furthermore, incorporating of stakeholders views such as feedback, suggestions, etc., are also considered in this process.

- 2) **Accreditation for quality assurance:** The most widely used method of external quality assurance is accreditation and participation in National or International Ranking System. This helps in uplifting the image of HEI across the globe for quality practices and assurance.

### **Measuring quality in teaching and learning**

Teaching and learning is a functional quality that reflects how well it satisfies based on the requirements and perception. Measuring quality in education is highly complex and challenging as teaching and learning is not the product or service that can be measured. However, some yardsticks can be used for measuring quality in teaching in learning such as:

- Performance of students along with other measures such as employment rate, tracking of advancement of the students, etc., are indicators of quality teaching and learning.
- Review to ensure and check whether the teaching process is satisfactory as expected. Any deviations reported should be addressed and suitable corrective measures have to be adopted. Approval of quality practices is directly proportional to the outcome of the review.
- Audit is a higher-level activity of reviewing. This help in verifying the compliance of the HEI to set quality standards.
- Feedback and approval by the stakeholders.
- Some kind of automated tools, for example, an algorithm to measure the degree of quality can be used for checking quality.
- Benchmarking the process should be involved which helps to know the actual performance by comparing with external best practices.

### **Some measures for improving quality in HEI**

- **Curriculum framing and revision:** The curriculum is the main aspect in deciding the purpose of education. HEI should follow proper guidelines for framing the curriculum. Furthermore, the board should be composed of internal and external experts. HEI should have futuristic ideas and creativity should be given more prominence. The curriculum should relate to the actual work carried out in the real world. Furthermore, we recommend the 40:60 ratio to be followed during the framing of the curriculum, wherein 40% and 60% refer to basic and advanced topics respectively. Also, HEI should give importance to design new courses which are needed for society as well as futuristic in

nature. The curriculum has to be revised periodically to address the dynamic environment.

- **Curriculum planning:** Teaching, examination and all the events of the HEI should be practiced with a strategic calendar of events.
- **Working with real-time:** HEI should align to real-time and in fact foresee the demands of the future and prepare the resources for the needs of society.
- **Collaboration:** It is a known fact that HEI will thrive in the dynamic environment only through strategic partnering in activities such as research, offering joint degree programmes, exchange programs, internships, industrial exposure, MOU's, etc., and build an ecosystem for sustenance.
- **Teaching methods:** Delivery of teaching is successful only through appropriate usage of teaching methods such as direct instruction, flipped classrooms, inquiry-based, personalized, etc.
- **Best practices:** For all the processes HEI should evolve with quality practices which will result in the best practices. Through the best practices, the quality will certainly enhance.
- **Data management:** Data of each and every activity and entity in HEI has to be methodologically documented for effective data management.
- **Quality Manuals:** A quality manual for each of the processes has to be designed and followed. The standard operating procedures have to be given to all the employees of an HEI. Any of the process that is clearly defined should be given with templates and checklists for smoother functioning and reviewing.
- **Bridging teaching and industry:** This is an example for student-centric approaches, wherein an HEI plays the role of filling the gaps so as to ensure the students will align the industry as they are incubated.
- **Course materials:** Most of the HEI's fail to address this issue and do not give much of prominence. However, it is the course material that helps the teachers to deliver the right content. Further, it makes learning easy for the students. Depending on the nature of the course, materials can be given in four categories viz., 1. Reading material 2. Textbook 3. Case study 4. E-resources. This helps in ensuring the student is given ample resources to learn and also promotes a blended mode of learning.
- **Scope for soft skills, personality development, and moral education:** Most of the graduating students fail to adapt the society after graduating as they are unaware of the practicalities. Also, some of them strive to adhere to fundamental behavioral responsibilities. Therefore, for the proper transformation of the student HEI should focus on imparting these required skills.
- **Quality of teachers:** HEI should take suitable measures to recruit quality human resource for teaching failing which major part of the quality objective shall not be achieved. Proper

IQ and EQ along with epithetical quality have to be tested during the recruitment process. Furthermore, the spirit of learning forever has to be imbibed in the teachers.

- **Training the teachers:** Periodic and need-based training has to be provided for upskilling and reskilling.
- **Use of standard tools:** The HEI should be techno-futuristic and use ICT enabled tools, automation of process by software, etc., in its functions.
- **External quality management models:** Use of quality management models such as ISO, TQM, etc., helps to improve the overall activities and streamlines the quality management.
- **Research:** HEI should ensure that the knowledge created by the HEI is published in universally accepted quality publication houses. Furthermore, the research measures such as the i-10 index, h-index, g-index, citation count, bibliometric analysis, etc., should be used for the determining the impact of research.
- **Bound to Vision and Mission:** The vision and mission of an HEI plays a vital role in quality management.
- **Capacity building initiatives:** HEI should focus on capacity building initiatives for decreasing the dependency.

## Conclusion

This article has served to provide a brief overview of quality management in HEI to ensure quality in its functions. It is evident from the current dynamic environment, the sooner the HEI enforces quality policies the better the results expected. Various measures for enhancing quality in all aspects of HEI have been discussed by providing brief guidelines that can be followed by HEI for quality management. When an HEI instills the aspects of quality in all its functions then quality management is achieved.

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## References

1. Halina Pratasavitskaya & Bjørn Stensaker (2010) Quality Management in Higher Education: Towards a Better Understanding of an Emerging Field, *Quality in Higher Education*, 16:1, 37-50, DOI: [10.1080/13538321003679465](https://doi.org/10.1080/13538321003679465)



2. Nina Becket, Maureen Brookes, Quality Management Practice in Higher Education – What Quality Are We Actually Enhancing?, *Journal of Hospitality, Leisure, Sport and Tourism Education*, Vol. 7, No. 1.,2008, DOI:10.3794/johlste.71.174.
3. Reema Harrison, Lois Meyer, Patrick Rawstorne, Husna Razee, Upma Chitkara, Steven Mears & Chinthaka Balasooriya (2020) Evaluating and enhancing quality in higher education teaching practice: a meta- review, *Studies in Higher Education*, DOI: 10.1080/03075079.2020.1730315
4. Mohammad S. Owlia (1996) Quality in higher education-a survey, *Total Quality Management*, 7:2, 161-172, DOI: 10.1080/09544129650034918
5. Mary Cruickshank (2003) Total Quality Management in the higher education sector: A literature review from an international and Australian perspective, *Total Quality Management & Business Excellence*, 14:10, 1159-167, DOI: 10.1080/1478336032000107717
6. Ka Ho Mok (2014) Enhancing Quality of Higher Education for World-Class Status, *Chinese Education & Society*, 47:1, 44-64, DOI: 10.2753/CED1061-1932470103
7. Zhao, F. (2003), "Enhancing the quality of online higher education through measurement", *Quality Assurance in Education*, Vol. 11 No. 4, pp. 214-221. <https://doi.org/10.1108/09684880310501395>
8. Zuhair A. Al-Hemyari, *International Journal of Quality and Innovation* 2019 4:1-2, 99-119
9. Magda Fourie & Heinrich Alt (2000) Challenges to Sustaining and Enhancing Quality of Teaching and Learning in South African Universities, *Quality in Higher Education*, 6:2, 115-124, DOI: 10.1080/713692737
10. Sahney, S., Banwet, D.K. and Karunes, S. (2003), "Enhancing quality in education: application of quality function deployment – an industry perspective", *Work Study*, Vol. 52 No. 6, pp. 297-309. <https://doi.org/10.1108/00438020310496569>
11. Oriá, Beatriz, Enhancing higher education students' employability: A Spanish case study, *International Journal of Technology Management & Sustainable Development*, Volume 11, Number 3, 1 September 2012, pp. 217-230(14), DOI: [https://doi.org/10.1386/tmsd.11.3.217\\_1](https://doi.org/10.1386/tmsd.11.3.217_1)
12. Pennington, G. and O'Neil, M. (1994), "Enhancing the Quality of Teaching and Learning in Higher Education", *Quality Assurance in Education*, Vol. 2 No. 3, pp. 13-18. <https://doi.org/10.1108/09684889410071087>
13. Kye Woo Lee, Miyeon Chung, Enhancing the link between higher education and employment, *International Journal of Educational Development*, Volume 40, 2015, Pages 19-27, ISSN 0738-0593, <https://doi.org/10.1016/j.ijedudev.2014.11.014>.
14. Maria Luskova, Maria Hudakova, Approaches to Teachers' Performance Assessment for Enhancing Quality of Education at Universities, *Procedia - Social and Behavioral Sciences*, Volume 106, 2013, Pages 476-484, ISSN 1877-0428, <https://doi.org/10.1016/j.sbspro.2013.12.053>.
15. Alice Y. Kolb and David A. Kolb, Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education, 30 Nov 2017 <https://doi.org/10.5465/amle.2005.17268566>
16. Maureen Tam (2001) Measuring Quality and Performance in Higher Education, *Quality in Higher Education*, 7:1, 47-54, DOI: 10.1080/13538320120045076
17. McCarthy, J. (2017). Enhancing feedback in higher education: Students' attitudes towards online and in-class formative assessment feedback models. *Active Learning in Higher Education*, 18(2), 127–141. <https://doi.org/10.1177/1469787417707615>

18. Jo Cahill, Jan Turner & Helen Barefoot (2010) Enhancing the student learning experience: the perspective of academic staff, *Educational Research*, 52:3, 283-295, DOI: 10.1080/00131881.2010.504063
19. Franz, Jill (2008) A pedagogical model of higher education/industry engagement for enhancing employability and professional practice. In Kay, J (Ed.) *Work Integrated Learning (WIL): Transforming Futures...Practice...Pedagogy...Partnerships*. Australian Collaborative Education Network (ACEN), Australia, pp. 164-169.
20. Teeroovengadum, V., Kamalanabhan, T.J. and Seebaluck, A.K. (2016), "Measuring service quality in higher education: Development of a hierarchical model (HESQUAL)", *Quality Assurance in Education*, Vol. 24 No. 2, pp. 244-258. <https://doi.org/10.1108/QAE-06-2014-0028>
21. Mizikaci, F. (2006), "A systems approach to program evaluation model for quality in higher education", *Quality Assurance in Education*, Vol. 14 No. 1, pp. 37-53. <https://doi.org/10.1108/09684880610643601>
22. Kay C. Tan & Sei W. Kek (2004) Service quality in Higher Education using an enhanced SERVQUAL approach, *Quality in Higher Education*, 10:1, 17-24, DOI: 10.1080/1353832242000195032
23. G. Srikanthan & John F. Dalrymple (2002) Developing a Holistic Model for Quality in Higher Education, *Quality in Higher Education*, 8:3, 215-224, DOI: 10.1080/1353832022000031656
24. Jennifer Rowley (1996) Measuring Quality in Higher Education, *Quality in Higher Education*, 2:3, 237-255, DOI: 10.1080/1353832960020306
25. Fry, H., Ketteridge, S., & Marshall, S. (Eds.). (2014). *A Handbook for Teaching and Learning in Higher Education: Enhancing academic practice* (4th ed.). Routledge. <https://doi.org/10.4324/9781315763088>
26. Gordon, G., & Land, R. (Eds.). (2013). *Enhancing Quality in Higher Education: International perspectives* (1st ed.). Routledge. <https://doi.org/10.4324/9780203590218>
27. Bamber, V., Trowler, P., Saunders, M., & Knight, P. (2009). *Enhancing learning, teaching, assessment and curriculum in higher education*. Maidenhead: Open University Press.
28. Pokorny, H., and Warren, D. (Eds.). (2016). *Enhancing teaching practice in higher education*. London: Sage.