

## QUALITY ASSURANCE IN HIGHER EDUCATION: A NEEDS ANALYSIS

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### **Abstract**

Quality assurance is a holistic approach covering all the processes in a higher educational institution, to serve the students and stakeholders in expected quality standards. The success of quality assurance system depends on the support of the management. Hence quality assurance should also cover the strategic management, process management and measuring-monitoring systems which interact with each other for enabling the institution to improve its processes. Furthermore, information systems should be implemented to integrate the quality assurance system with management processes for enhancing the overall success, and to provide information about quality assurance system. In this study, a quality assurance framework supported by strategic information system is suggested for higher education institutions. The proposed strategic information system also integrates the strategic management, process management and measuring-monitoring systems as well as takes into consideration international, national and regional external factors.

Quality improvement in education system is mainly related to teaching, evaluation techniques, results and placements of the institution. In recent years India has seen tremendous growth in the number and types of institutions providing higher education. In order for organizations and individuals to remain competitive in a rapidly changing environment, demand for education and training has become more critical than before. The performance of higher education institutions is a growing concern. The pressure for quality assurance poses a major challenge to higher education in many developing countries including India. With increasing interaction of commerce, trade and education across national borders, needs for measures of the quality of education in a given country or region are growing each year. The purpose of this paper is to determine the state of research with respect to quality assurance in higher education institutions in India based on a review of academic literature.

**Keywords:** Quality Assurance, Higher Education, Strategic Management, Process Management, Measuring-monitoring Systems, Information Systems.

### **INTRODUCTION**

In today's era of knowledge-driven economy and learning societies, both formal and informal education are playing an increasingly vital role in promoting economic solidarity, social cohesion, individual growth, sustainable development, and a culture of peace and world citizenship.

Globalization is one of the most transformative forces of our times. It has altered every conceivable aspect of our lives, not the least of which is higher education. Quality in the context of higher education can be defined as a judgment about the level of goal achievement and the value and worth of that achievement. It is also a judgment about the degree to which activities or outputs have desirable characteristics, according to some norm or against particular specified criteria or objectives. Available literature on quality of higher education in India has dealt with issues ranging from professional examination results to internal aspects of inputs i.e. accreditation, students intake, basic infrastructure, qualifications of teaching faculty etc.

The term quality also means different to different people. Quality word comes from Latin word *qualis*, meaning what kind of. Harvey defined 5 different approaches to define quality:

- In terms of exceptional (above high standards)
- In terms of consistency (zero defects and getting right the first time making quality a culture)
- As fitness for purpose (means the product meets the stated purpose, customer satisfaction)
- As value for money (through efficiency and effectiveness)
- As transformative (in terms of qualitative change)

Quality has few central ideas i.e. quality as absolute, quality as relative, quality as a process and quality as culture. Quality as absolute is considered as the highest possible standard. When it comes to quality in higher education it emphasises the need of higher standards in education which makes it appropriate and upto the mark. Quality assurance is the responsibility of everyone in an educational institution, although the top management sets the policies. Thus assuring quality should be a continuous and on-going process. Across the world quality assurance is done in given ways: self evaluation, peer review by a panel of experts, usually including some external panel members, analysis of statistical information and /or use of performance indicators or the best practices benchmarking, survey of students, graduates, employers, professional bodies.

Quality assurance refers to the policies, attitudes, actions and procedures necessary to ensure that quality is being maintained and enhanced. In a society full of diversity, ideologies and opinions, higher education means different things to different people. Higher education includes college and university teaching-learning for students' progress to attain higher educational qualification. Higher education imparts in-depth knowledge and understanding so as to advance the students to new frontiers of knowledge in different walks of life (subject domains). It develops the student's ability to question and seek truth and makes him/her competent to critique on contemporary issues. It broadens the intellectual powers of the individual within a narrow specialization and also gives him/her a wider perspective of the world around.

According to Ronald Barnett (1992) there are four predominant concepts of higher education:

- Higher education as the production of qualified human resources. In this view, higher education is seen as a process in which the students are counted as “products” absorbed in the labour market. Thus, higher education becomes input to the growth and development of business and industry.
- Higher education as training for a research career. In this view, higher education is preparation for qualified scientists and researchers who would continuously develop the frontiers of knowledge.
- Higher education as the efficient management of teaching provision. Higher education institutions focus on efficient management of teaching-learning provisions by improving the quality of teaching, enabling a higher competition among the students.
- Higher education as a matter of extending life chances. Higher education is seen as an opportunity to participate in the development process of the individual through a flexible, continuing education mode.

Higher education has undergone significant transformation on account of widespread expansion, increased autonomy and introduction of programmes in emerging areas. The fact remains that there is tremendous quantitative increase in terms of access to higher education but at the same time it has also led to the widespread concern on the quality and relevance of higher education. The traditional set-up for imparting higher education, comprising of mostly government funded public Institutions of Higher Learning (IHL) is facing competition from the private sector in the age of globalisation. Over the years, inertia has crept into the traditional set-up and despite having faculty with qualifications and experience, their systems for service delivery and quality have not responded to the fast pace of change encompassing the education sector.

## **ROLE OF HIGHER EDUCATION IN THE SOCIETY**

The issue of higher education in India has always been in the limelight for being one of the chief driving forces contributing to social mobility. Sound education, undoubtedly, paves the way for an exalted career. Higher education is generally understood to cover teaching, research and extension. The Kothari Commission (1966) listed the following roles of the universities (higher education institutions in the modern society):

- to seek and cultivate new knowledge, to engage vigorously and fearlessly in the pursuit of truth, and to interpret old knowledge and beliefs in the light of new needs and discoveries;
- to provide the right kind of leadership in all walks of life, to identify gifted youth and help them develop their potential to the full by cultivating physical fitness, developing the powers of the mind and cultivating right interests, attitudes and moral and intellectual values;
- to provide the society with competent men and women trained in agriculture, arts, medicine, science and technology and various other professions, who will also be cultivated individuals, imbued with a sense of social purpose;

- to strive to promote quality and social justice, and to reduce social and cultural differences through diffusion of education; and
- to foster in the teachers and students, and through them in the society generally, the attitudes and values needed for developing the ‘good life’ in individuals and society (GOI, 1966, p. 497-8).

The British Standard Institution (BSI) defines quality as “*the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs*” (BSI, 1991). Green and Harvey (1993) identified five different approaches to defining quality:

- in terms of exceptional (exceeding high standards and passing a required standard);
- in terms of consistency (exhibited through “zero defects” and “getting right the first time”, making quality a culture);
- as fitness for purpose (meaning the product or service meets the stated purpose, customer specifications and satisfaction);
- as value for money (through efficiency and effectiveness); and
- as transformative (in term of qualitative change).

Table 2 shows the hierarchy of quality management.

Total Quality Management	<ul style="list-style-type: none"> <li>• Involves supplier and customers</li> <li>• Aims for continuous improvements</li> <li>• Concerns products and processes</li> <li>• Responsibility with all workers</li> <li>• Delivered through team work</li> </ul>
Quality Assurance	<ul style="list-style-type: none"> <li>• Use of statistical process control</li> <li>• Emphasis on prevention</li> <li>• External accreditation</li> <li>• Delegated involvement</li> <li>• Audit of quality systems</li> <li>• Cause and effects analysis</li> </ul>
Quality Control	<ul style="list-style-type: none"> <li>• Concerned with product testing</li> <li>• Responsibility with supervisors</li> <li>• Limited quality criteria</li> <li>• Some self-inspection</li> <li>• Paper based system</li> </ul>

Inspection	<ul style="list-style-type: none"> <li>• Post production review</li> <li>• Re-working</li> <li>• Rejection</li> <li>• Control of workforce</li> <li>• Limited to physical products</li> </ul>
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Source: Dale and Plunkett (1980)

## **DIMENSIONS OF QUALITY IN HIGHER EDUCATION: A CONCEPTUAL FRAMEWORK**

The report of the UNESCO International Commission on Education in 21st century titled “Learning: The Treasure Within” (also known as Delors Commission) focused on 4 elements of Education: Learning to Know, Learning to Do, Learning to Live Together and Learning to Be. The report highlighted the four functions of higher education:

- To prepare the students for research and teaching
- To provide highly specialized training courses adapted to the needs of economic and social life
- To be open to all, so as to cater to the main aspects of lifelong education in the wider sense
- To promote international cooperation through internationalisation of research, technology, networking and free movement of persons and scientific ideas.

Quality assurance in education is a methodology in the broadest sense of its application to check a process or outcome with different purposes of compliance, control, accountability and improvement (Harvey, 2012). Nowadays, quality assurance processes in higher education are becoming increasingly frequent and widespread across the nation. As the government and the industry advocate the need for a well-educated workforce, essential to increase productivity and maintain a competitive edge in the global knowledge economy, this has resulted in an increase in public funding for higher education and a drive to make post- secondary education more accessible, particularly for under-represented populations. This, in turn, has brought about calls for greater accountability on the part of educational providers and the measuring of outputs through quality assurance processes.

When quality has been successfully embedded within an educational system, there could potentially be sustainable enhancements to the process and procedures, and consequently students will benefit in terms of receiving better quality education and skills development, which in turn could also contribute to the nation’s economic and social success for the future. As good quality assurance practices require a strong internal quality assurance system, it requires balancing the policy roles and responsibilities of not only the higher education providers, but also the government, quality assurance agency and professional bodies to ensure that effective and

sustainable quality management system can be successfully implemented in higher education institutions across the nation.

In an age of increasingly internationalised higher education, it has become the norm that both universities and quality assurance agencies are subject to external scrutiny. Yet it is becoming increasingly difficult to assess quality and to demonstrate the impact of external quality assurance. In this diverse society where there is variation in ideas, opinions, views, the meaning of higher education is different for people. But when we want to talk and discuss about quality in higher education we should also be aware about what is important in higher education. So we as a teacher educator and stakeholder of higher education would agree on the fact that it is not just the higher level of education but when we talk of the level higher education, it includes college and university teaching–learning towards which everyone progresses to achieve higher education. Higher education means in-depth knowledge to acquaint the learner to the new horizons of knowledge in different domains. Higher education develops the student’s ability to enquire and seek answers and makes him/her competent enough to analyse the issues in a critical manner.

Quality assurance in higher education includes all policies, measures, planned processes and actions through which the quality of higher education is maintained and developed. Quality of higher education can be described as the degree to which the education meets the client’s needs and demands. In this respect higher education has two different clients: students and society. The expectations of these clients differ depending on whether it regards hae-sector, that is, academic (science/research-driven) study programmes or hpe-sector, that is, labour market’s demand-driven programmes. It is, therefore, obvious that by putting the concept ‘quality’ into practice the further filling in of ‘quality’ differs as well.

Quality, as we know so far, was originally developed in the manufacturing industry. In the area of higher education, the adoption of quality control has been superficial and diluted by the exercise of academic freedom (Largosenet al, 2004). The service dimension of quality is probably more akin to the educational processes. We know that unlike physical goods, services are ephemeral to the extent that they can be consumed only as long as the activity or the process continues. Thus, there is inseparability of production and consumption. Thus, services can’t be stored and are perishable. The consumer is also an integral part of the service process. Thus, in higher education, this framework is more applicable as the teaching-learning situations are more like a service.

Based on the review of literature in the area of quality in higher education, Owlia and Aspinwall (1996) present a conceptual framework that covers six criteria to depict quality dimensions. These are tangibles, competence, attitude, content, delivery and reliability as shown below. These dimensions are indicative of the areas that should be of concern to ensure quality in higher education.

### *Quality Dimensions in Higher Education*

#### Tangibles

- Sufficient equipment/facilities
- Modern equipment/facilities
- Ease of access
- Visually appealing environment
- Support services (accommodation, sports...)

#### Competence

- Sufficient (academic) staff
- Theoretical knowledge, qualifications
- Practical knowledge
- Up to date information
- Teaching expertise, communication.

#### Attitude

- Understanding students' needs
- Willingness to help
- Availability for guidance and advice
- Giving personal attention
- Emotional courtesy

#### Content

- Relevance of curriculum to the future jobs of students
- Effectiveness
- Primary knowledge/skills
- Use of computers
- Communication skills and team working
- Flexibility of knowledge, being cross-disciplinary

#### Delivery

- Effective presentation
- Sequencing, timeliness
- Consistency/Fairness of examinations
- Feedback from students
- Encouraging students

#### Reliability

- Trustworthiness
- Giving valid award

- Keeping promises, match to the goals
- Handling complaints, solving problems.

## MAIN FEATURES OF QUALITY ASSURANCE

Quality assurance protects and enhances quality through system design and performance monitoring. Monitoring may occur informally in the course of collaborative practice. Quality assurance in higher education is defined as systematic management and assessment procedures adopted by a higher education institution or system to monitor performance and to ensure achievement of quality outputs or improved quality. In the organization of quality assurance the key word is ‘independent evaluation’. Quality assurance systems should be independent from state interference, from educational macro-planning policy and from the particular interests of the individual establishments if these consider interests other than quality matters. The reliability of quality assurance systems depends on the independence of the evaluation.

Though quality assurance systems in the hae-sector and in the hpe-sector are basically the same, it is obvious that in the further elaboration differences will occur related to the distinct nature and objectives of both these types of education. In particular this regards not only the performance-indicators, which structure the quality assessment but also the background or qualification of the external experts involved in the evaluation. In the hae- sector the performance indicators and the experts chosen reflect the scientific and research objectives of its education. In the hpe-sector occupational requirements are the guiding principle.

For that reason some countries have established two distinct national quality assurance bodies or agencies - one for the academic sector and one for the hpe-sector. However this is not necessary since both systems are basically the same. In some of the CEEC-countries it is even not preferable in view of their limited resources. Regardless of the degree to which educational establishments are autonomous, in every country educational establishments are considered as to be fully accountable to society being the financier and the consumer. Quality assurance systems, therefore, are designed in such a manner that establishments can give that account in a systematic and transparent way. Consequently, the outcomes of evaluations are public. Accountability in this respect is not only a formal matter. More important than the formal aspect is the social aspect. In particular this regards the hpe-sector being a relatively new phenomenon, which in many CEEC-countries still has to gain social recognition. The experience in EU-countries shows that a systematic approach in quality assurance resulting in public conclusions furthers a broadly based recognition from society.

The other purpose of national quality assurance systems is the maintenance and development of the quality. Since this is by definition the major concern of every establishment, quality assurance is a quality-driven rather than an accreditation driven-process. This implies that at establishment level the organization and the planning of quality assurance are not determined by the



accreditation-cycle but by the establishment itself, since quality is not only a major but also a constant concern of the establishment. Internal evaluation will provide the establishment with relevant information about its own performance. In particular the (causes of) the weak and strong points are identified by assessing (e.g.): the feasibility of the strategy, the adequacy of the educational objectives (relevant, achievable, testable?), the relevance of the study programme, the effectiveness of the education and assessment-methods, the competence of the staff, the effectiveness of both the internal and the external (information) network and the efficiency in the use of human, financial and other resources.

Based on the conclusions from this analysis arrangements are defined and implemented in order to further the quality of the establishment and its study programmes. During consecutive internal evaluations it will be verified whether these arrangements really have been implemented and, if so, whether they have resulted into the intended effects. Internal evaluation or self-assessment is, therefore, considered as to be an indispensable management-tool to assure the quality. For that reason the planning and the organization of internal evaluation are designed in such a way that quality assurance and institutional decision-making are integrated.

Systematic introduction of quality assurance in education forces the educational establishments to define very clearly their objectives and to involve the ‘outside world’ in the assessment of their performance. In that respect quality assurance will lead to a demarcation of the educational sectors each of them with their own (recognized) identity. This is relevant in particular to the hpe-sector in CEEC-countries since this sector still has to get full position in the education system and in the social appreciation. Quality assurance aims to give stakeholders confidence about the management of quality and the outcomes achieved. Internationalisation in higher education has resulted in “a growing demand for accountability and transparency . . . [which has] in turn led to a need to develop while addressing the challenges of globalised higher education”

Table 1 gives the chronology of quality movement.

**TABLE 1: The chronology of quality movement**

<b>Pre-1900</b>	<b>Quality as an integral element of craftsmanship</b>
1900-1920	Quality control by foreman
1920-1940	Inspection-based quality control
1940-1960	Statistical process control
1960-1980	Quality assurance/total quality control (thequality department)
1980-1990	Total quality management

1990-Present	TQM, the culture of continuous improvement, organization-wide quality management
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*Source: Sallis (1996).*

## ADRI APPROACH OF QUALITY ASSURANCE

The four-step quality cycle: Approach-Deploy-Review- Improve (ADRI) is explained with the help of figure no. 1.

1. Approach – The Thinking and Planning Phase. The ‘Approach’ includes the trail from an organisation’s mission, vision and values (i.e. its overall objectives) through to more specific goals and the planned arrangements for how these will be achieved. The latter may culminate in written policies and procedures. Some questions to consider:
  - What is this organisation about?
  - What outcomes is it trying to achieve?
  - What, if any, reference points (internal or external) are used in establishing the organisation’s objectives?
  - How does the organisation plan to achieve its objectives?
  - Does it understand its context and capabilities?
  - Are the organisation’s objectives set against appropriate benchmarks?
  - What risk management processes does it have in place?
  - Is the approach aligned and communicated throughout the organisation and more widely?
  
2. Deployment – The Implementation Phase. The ‘Deployment’ dimension considers whether, and how effectively, the approach is being put into effect. Some questions to consider:
  - Is the approach being deployed in the best possible manner? According to whom?
  - What standards and benchmarks is the organisation using to assess this?
  - If the approach is not being deployed, why not, and how is this managed?
  - Are staff appropriately trained, and resources appropriately deployed, to fulfill the approach?
  
3. Results – The Monitoring and Evaluation Phase. The ‘Results’ dimension looks at an organisation’s results as a means of determining how well the deployment is achieving the planned approach. Some questions to consider:
  - Is the organisation achieving its intended objectives and outcomes?
  - Does the organisation understand why and how it achieved those particular results, i.e. are the results a consequence of the approach and deployment?

- How are the results reported and used within the organisation?
4. Improvement – The Learning and Adapting Phase. The ‘Improvement’ dimension focuses on whether the organisation is actively and continuously engaged with understanding its performance in each of the A-D-R dimensions, and is using this understanding to bring about improvements. Some questions to consider:
- Does the organisation know how it can improve?
  - How does it know this (e.g. through the use of external benchmarks)?
  - How is it acting upon this knowledge?
  - Does the organisation have a sustained history of improvement?



Fig. 1. ADRI Approach

### TOTAL QUALITY CARE

One of the contemporary thinkers of higher education and total quality management, Ronald Barnett (1992) says “*Quality in higher education demands the establishment of an institutional culture, not so much a matter of total quality management but rather one of total quality care, in*

which each professional is seized of his or her responsibilities and takes care over all his or her own professional efforts” (p. 133). According to him, quality should be seen as a process of critical dialogue within an institution, where course teams accept ownership and facilitate student engagement towards learning and development, and there is a self-critical culture of continuous care for the students’ quality course experience.

Barnett suggested that there are four core activities that takes care of quality in higher education: (1) teaching and learning; (2) student assessment; (3) staff development; and (4) curriculum/courses. These form a ‘protective belt’ to the overall student development and experience that is central to quality higher education. The ideas of Barnett are depicted in Figure 2. Beyond this, the activities within ‘auxiliary belt’ are important but have less direct bearing on the quality of student experiences. These are research and publication, institution policy towards access and recruitment, institution’s academic development plans, and link with industry, business and the professional community. Within this framework, quality in higher education institutions can be seen both in qualitative and quantitative terms.

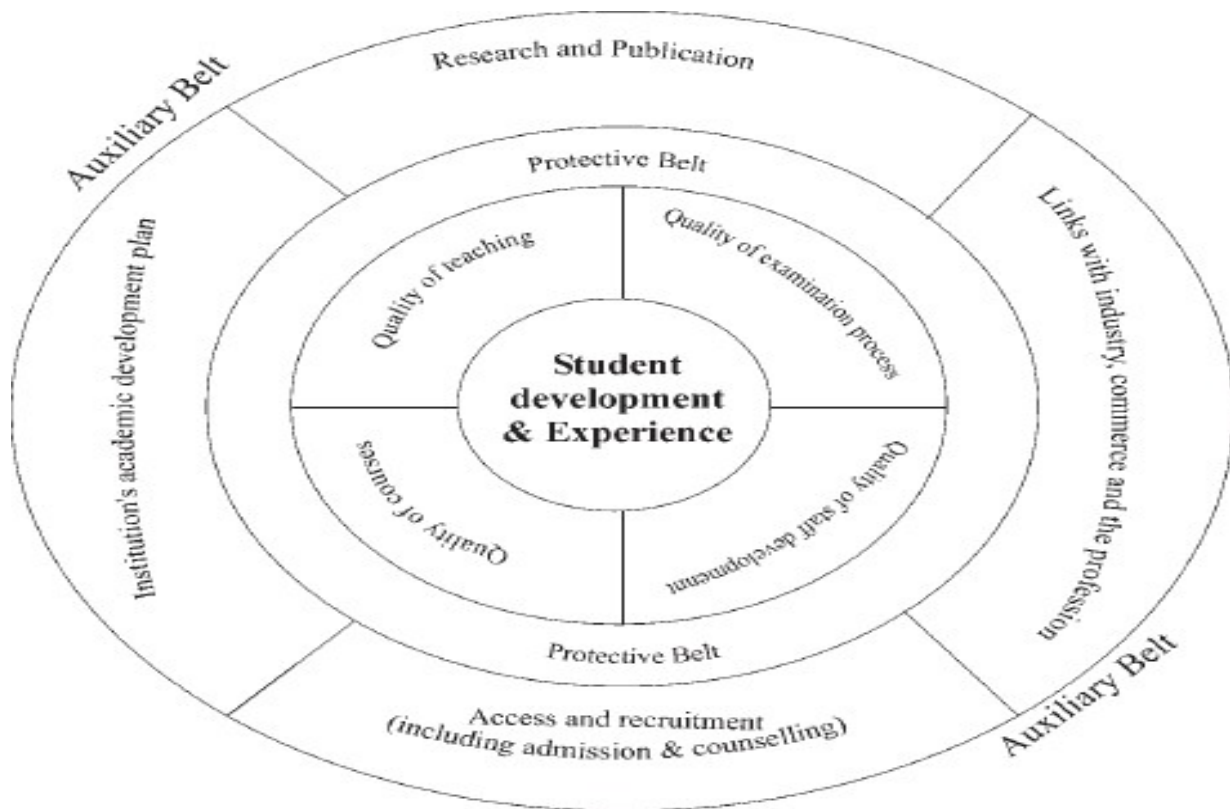


Fig. 2. Barnett’s Quality Framework

## CONCLUSION

*“What is important in knowledge is not quantity, but quality. It is important to know what is significant, what is less so, and what is trivial”.*

Educational institutions should have responsibility towards their immediate surroundings and give back to society a part of the benefit they gain.” as mentioned by Prof H.A. Ranganath, Director, National Assessment and Accreditation Council (NAAC), Bangalore. He further mentioned that, University should become a socially-conscious and meaningful enterprise. The repositories of intellectual wealth were often looked upon to take a leadership role within a society, and that the students should be exposed to social learning, community and team-building skills, civic education and awareness of social responsibility. Quality assurance is the main driver for accreditation of on-campus programs by national and international accreditation agencies. It is ultimately the responsibility of the institution themselves. The real and enduring quality can only come from by the universities as a result of self-evaluation and peer review.

*"The aim of teaching is simple: it is to make student learning possible ... To teach is to make an assumption about what and how the student learns; therefore, to teach well implies learning about students' learning".- Ramsden, 1992.* Education is the foundation for a vibrant democracy in which all informed citizens exercise their franchise to support the internal growth of the nation, its constructive role in the world community. It is the foundation for growth in productivity, incomes and employment opportunities, and for the development, application and adaptation of sciences and technology to enhance the quality of life. The conclusions indicate there is very little research on quality management, despite quality's role growing in importance as universities strive to compete in an increasingly underfunded market for students and research funds. The pressure for quality assurance poses a major challenge for higher education as in case of many developing countries including India. While quality assurance has always been a matter of concern and significance in education, in general, and in professional education such as technical education in particular. The recent quantitative expansion of an unprecedented nature, in India, has caused educators to devote careful attention to the quality aspect.

## REFERENCES

- Altman, B. W., Schwegler, A. F., & Bunkowski, L. M. (2014). Beliefs regarding faculty participation in peer reviews of online courses. *Internet Learning*, 3(1).
- Asif, M. & Raouf, A. (2012). Setting the course for quality assurance in higher education. *Quality & Quantity*, 1–16.
- Barnett, R. (1992). *Improving higher education: Total quality care*. Bristol, PA: SRHE and Open University Press.

- BIS (1988). IS13999 Quality System Vocabulary. IS 14000 Quality System: Guidelines for Selection and Use of Standards on Quality System, New Delhi: BIS.
- BSI (1991) Quality Vocabulary Part 2: Quality Concepts and Related Definitions. London: BSI.
- Dale, B.G. and Plunkett, J.J. (1990). *Managing Quality*, Hertfordshire: Philip Allan.
- Grifoll, J., Hopbach, A., Kekalainen, H., Lugano, N., Rozsnyai, C., & Shopov, T. (2012). Quality procedures in the European higher education area and beyond – visions for the future: Third ENQUA survey.
- Knight, J. (2005). International race for accreditation stars in cross-border education. *International Higher Education*, 40, 2-3.
- Lagrosen, S.; Seyed-Hashemi, R. and Leitner, M. (2004). Examination of the dimension of quality in higher education, *Quality Assurance in Education*, 12(2), 61-69.
- Lomas, L. (2003, September). Embedding quality: The challenges for higher education. Paper presented at the European Conference on Educational Research, University of Hamburg.
- OECD & World Bank. (2007). *Cross-border tertiary education: A way towards capacity development*.
- Online Learning Consortium. (2014, September 23). The online learning consortium unveils new release of its quality scorecard for online programs. [Press Release]. Retrieved from <http://onlinelearningconsortium.org/>
- Owlia, M.S. and Aspinwall, E.M. (1996). A framework for the dimensions of quality in higher education, *Quality Assurance in Education*, 4(2), 12-20.
- Palomares, F. M. G. (2014, February 14). Involving students in quality assurance. *University World News*.
- Pillai, C.R. (2006). Understanding quality in higher education, Personal communication to NAAC.
- Pollacia, L., & Terrie, M. (2009). Using web 2.0 technologies to meet Quality Matters (QM) requirements. *Journal of Information Systems Education*, 20(2), 155–164.
- Puzziferro, M. & Shelton, K. (2008). A model for developing high-quality online courses: Integrating a systems approach with learning theory. *Journal of Asynchronous Learning Networks*, 12(3–4). Newbury, MA: Online Learning Consortium.

Quality Assurance Agency for Higher Education (QAA). (2009). Integrated quality and enhancement review: Student engagement. [Information bulletin 2010]. The Quality Assurance Agency for Higher Education: Gloucester.

Shelton, K. (2014). Quality scorecard 2014: Criteria for performance excellence in the administration of online programs. Session presented at the Online Learning Consortium International Conference, Orlando, FL.

Stella, A., & Woodhouse, D. (2011). Evolving dimensions of transnational education. In A. Stella & S. Bhushan (Eds.), *Quality assurance of transnational higher education: The experiences of Australia and India*. New Dehli, India: AUQA/NUEPA.

Vincent, T. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: University of Chicago Press.

Wilger, A. (1997). *Quality assurance in higher education: A literature review*. Stanford, CA: National Center for Postsecondary Improvement.