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QUALITY ASSESSMENT IN HIGHER EDUCATION: THE STUDENTS' VIEWPOINT

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ABSTRACT

This study attempts to assess students' perceptions of the quality of higher education. For this research, under-graduate and post-graduate students from Faculty of Arts, Science and Commerce of the University of Rajasthan and its constituent colleges were taken under study. The primary data was collected through a structured questionnaire designed using a five-point Likert scale. The validity and reliability of this questionnaire have been duly tested. One way ANOVA using IBM SPSS has been computed to test the hypotheses under study. Results indicate that students from Faculty of Arts, Science and Commerce have a similar perception about the quality of higher education in the University of Rajasthan and its constituent colleges. Despite potential improvements being done in the recent past by the University of Rajasthan to uplift the quality of higher education, the results of this research reflect the significant scope of improvements in curriculum, support for student progression and resources & technology.

Keywords: *Quality, Higher Education, Student Perception, Likert Scale, National Education Policy*.

Introduction

"Higher Education should be a transformative process that supports the development of graduates who can make a meaningful contribution to wider society, local communities and the economy." *(Gibbs, 2010)*

Ensuring quality in higher education is a strategic way to build knowledge-based society. Indian Higher Education system is experiencing one of its most turbulent times when COVID-19 has tested its mettle to meet the learning needs of students in lockdown periods as well as the pronouncements of National Education Policy 2020 have indicated need for large scale organization wide changes within HEI for survival and sustenance. Indian Higher Education, having adopted strategy for slow incremental top down changes, now faces faculty shortage, outdated curriculum, inadequate support for student progression and insufficient funding; leading to poor quality of higher education (Agarwal, 2015; Altbach, 2015; Tilak, 2018; Anbalagan, 2011; National Education Policy, 2020). The modern higher education institution must have the capability to meet the demands and expectations of students (Djonlazic and Fazlic, 2015). Students are the key stakeholders as the higher education system shapes their future, career aspirations as well as choices. Therefore, their feedback in assessing what constitutes quality and their perception of quality of education they are receiving at place of enrollment must be taken into account when reflecting on quality with respect to higher education institutions. This makes it prudent to examine students' perception for quality in higher education. For this research, under-graduate and post-graduate students from Faculty of Arts, Science and Commerce of the University of Rajasthan and its constituent colleges were taken under study. University of Rajasthan is one of the oldest institutions of higher education in Rajasthan and is one of the largest State Public Universities in Northern India. It has 7 constituent colleges, 546 affiliated colleges and around 25,000 students' enrolled (University of Rajasthan-NIRF Report, 2020) in campuses of its constituent colleges (for UG) and its main campus (for PG). In 2012, UGC recognized the University of Rajasthan as a (UPE) University with Potential for Excellence (University of Rajasthan, 2013). In addition to financial assistance received from the state government, the central government has also granted INR 30 crores under Rashtriya Uchhatar Shiksha Abhiyan (RUSA) 1.0 and INR 50 crores under RUSA 2.0 (RUSA, 2018).

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Research Questions

- What are the key parameters that play a critical role in assessing quality in higher education?
- What is the perception of students about the quality of higher education in the Faculty of Arts, Science and Commerce in the University of Rajasthan and its constituent colleges?

For higher education institutes, the concept of quality has been elucidated by numerous researchers. Harvey and Green (1992) refer to quality as a relative concept; relative to (a) the user of HEI and (b) benchmark. Quality can also be about products or processes (Harvey and Green, 1992) or relative to the purpose (Gibbs, 2010). Quality has also been explained with a five-dimensional model "as exceptional, as perfection, as a fitness of purpose, as value for money, and as transformative" (Harvey and Green, 1992; Harvey and Knight, 1996). In literature, 'Quality' has been unanimously stated as being transformative (Biggs, 1993; Gibbs, 2010; Harvey and Knight, 1996; Diana Sandru, 2008). Transformation implies change, and with respect to teaching, the transformation in the student can be psychological, behavioral, attitudinal, cognitive, skill focused and is generally multifaceted.

Literature Review

A systematic review of the literature was conducted based on the largest relevant databases available, including SCOPUS, JSTOR, and Google Scholar. Quality in higher education as well as by HEI is well studied and documented. The researcher has critically examined conceptual models for assessing quality in higher education institutions proposed by NAAC (2020), NIRF ranking (2015) , Owlia and Aspinwal (1996), Hasan et al. (2008), Noaman et al. (2013), Donlazic and Fazlic (2015), Green (2014), Gibbs (2010) and Biggs et al. (2001).

Based on this systematic literature review, students' perception of quality in higher education institutions can be broadly assessed under four constructs: Curriculum; Teaching Learning; Career Prospects; and Resources & Technology. At the time of completion of this research paper in the month of July 2020, National Education Policy 2020 was released. NEP 2020 also focuses on these constructs (parameters) of quality differently in their different formats, which have also been covered in this paper. The key is to ascertain, in view of this research, the challenges to State Universities such as University of Rajasthan in the context of NEP 2020 with reference to quality. Some challenges are discussed in the conclusion section of this paper. The four constructs to assess students' perception of quality in higher education institutions, identified by systematic literature review, are detailed below.

- **Curriculum**

Facilitating the flexibility of knowledge by providing interdisciplinary/multidisciplinary options of student's choice is critical for quality in higher education (National Education Policy, 2020; Owlia and Aspinwal, 1996). Owlia and Aspinwal (1996) have emphasized on enhancing communication skills as well as teamwork and ensuring the relevance of the designed curriculum to the present as well as future market needs. Hasan et al. (2008) and Noaman et al. (2013) also laid importance to the up-to-datedness of the curriculum as well as a variety of interdisciplinary/multidisciplinary subjects available in programs offered. Flexibility in the inter-disciplinary options is also an indicator of quality as it "promotes realization of core values and suits the personal and professional needs of students" (NAAC, 2020). Since students are the primary customer of higher education, periodic feedback from students regarding curriculum and teaching staff can significantly help in identifying the weaknesses to boost the learning effectively(NAAC, 2020; Donlazic and Fazlic, 2015; Owlia and Aspinwal, 1996).

- **Teaching Learning**

Adequacy and competence of academic staff and their ability to drive students in learning-focused activities serve to enhance the quality of learning (National Education Policy, 2020; NIRF, 2015; Trigwell et. al, 1997). Engaging students in logical reasoning, aptitude development, innovative and higher-order thinking through debates, focused group discussion, role-plays, brainstorming sessions, and all learning-focused activities significantly catalyze the students' learning process (NAAC, 2020; Gibbs, 2010; Biggs, Leung, Kember, 2001). In addition to this, the ability and willingness of academic staff to help students in solving their academic queries boosts the quality of learning and keeps the students motivated (Green, 2014; Donlazic and Fazlic, 2015; Astin, 1993).

- **Career Prospects**

Supporting students in their career progression through effective placement cells is an important factor determining the quality of HEIs (NAAC, 2020; Noaman et al., 2013). Further, strengthening the industry-academia linkage is a strategic way to give a boost to the employability and career prospects of

students (Agarwal, 2006, 2015; Zaky and EI-Faham, 1998). Zaky and EI-faham (1998) also argue that conducting internship programs and frequent industrial visits give a better understanding of the expectation of employers from future employees. K Venkasubramanium (2004) lays emphasis on "reducing gap between academics and industry by following initiatives by industry: identify HR skills required in future; provide support for student training; hold periodic seminars in collaboration with universities; share equipment and facilities with universities". In addition to this, frequently organizing Skill development programs, Entrepreneurship development programs and Personality development programs (PDPs) plays a significant role in the holistic development of students (NAAC, 2020).

- **Resources and Technology**

The standardized learning environment and appropriate facilities of learning and infrastructure have a significant impact on maintaining students' interest and enhancing quality learning (NEP, 2020; Harvey and William 2010; Astin 2002; Dill and Massy, 1996). Adequacy of the library, technology-aided learning mechanisms, and other infrastructure facilities available with the higher education institution is essential to maintain the quality of academic programs offered (NAAC, 2020; NIRF, 2015; Agarwal 2006). The use of integrated information and communication technology and the internet in higher education can break the time and distance barriers, provide flexibility, and knowledge sharing anytime and anywhere(Noaman et al. 2013; Hasan, 2008). In addition to this, the inclusion of modern teaching equipment, contemporary and high-quality classrooms, and technology-enabled library enhances the learning quality (Palli and Mamilla, 2012; Green, 2014; Harvey and William, 2010). Library, as a learning resource must have an adequate number of latest books, journals, and other learning material in accordance of the courses offered as well as extended working hours for studying to cater student's academic needs (NAAC, 2020; Green, 2014; Noaman et al., 2013; Dill and Massy, 1996).

Research Methodology

Objectives of the Study

- To assess students' perception for the quality of higher education at the selected higher education institution.
- To determine whether Faculty to which students belongs leads to differences in their perception for the quality of higher education at the selected higher education institution.

Hypothesis of the Study

For the purpose of this research, the following research hypothesis was formed:

Null Hypothesis

H_o: There is no significant difference in the average score of student perception for quality of higher education among different Faculties of selected higher education institution.

Alternative Hypothesis

H_a: There is a significant difference in the average score of student perception for quality of higher education among different Faculties of selected higher education institution.

Data Sources and Analytical Tool Used

For this research, under-graduate and post-graduate students from Faculty of Arts, Science and Commerce of the University of Rajasthan and its constituent colleges were taken under study. The primary data was collected through a structured questionnaire designed using a five-point Likert scale. For the purpose of better representation, stratified random sampling technique was used to draw the sample from the target population with proper inclusion of cross sectional parameters such as sex/degree program/Faculty. One way analysis of variance (ANOVA) using IBM SPSS has been computed to test the hypotheses under study because this test is used to determine whether there are any statistically significant differences between the means of more than two independent(unrelated) groups(Cooper and Schindler, 2006).

Survey Instrument

A systematic review of the literature and critical examination of theoretical models gave in-depth knowledge about what constitutes of quality in higher education. It was ensured that the constructs of quality used in this study are adapted from validated prior studies based on well-accepted conceptual models. While designing the questionnaire attention was given to keep the language of the statement simple and clear.

To ensure the content validity of the questionnaire, it was discussed in detail with 5 subject experts. Out of 5 subject experts, 3 were eminent administrators of higher education institutes, 2 were distinguished senior statistical experts. The suggestions and feedback of subject experts were extensively used to further refine the constructs as well as items in each construct. Three questions were removed as they were found overlapping by subject experts and eight questions were reframed to eliminate ambiguity and length.

Finally, the four constructs as mentioned earlier composed of Curriculum, Teaching Learning, Career Prospects, and Resources & Technology as distinct components of quality in higher education were included in questionnaire. The pre-test with the subject expert was followed by a pilot study of 50 students using this questionnaire. Out of which 47 responses were received. The reliability of the instrument was checked during the pilot study by computing Cronbach's Alpha value which was 0.74. Two questions with a value of less than 0.40 were removed from the instrument during the pilot study. The Cronbach's Alpha value should be above 0.70 to consider the instrument reliable for research (Spector, 1992). Thus, the instrument was found reliable. The final instrument comprised of 21 questions and each question was to be answered on a five-point Likert scale of 1 to 5 where 1 denotes 'strongly disagree' or 'worse' and 5 signifies 'strongly agree' or 'best'. The questionnaire was then administered to 200 under-graduate and post-graduate students from Faculty of Arts, Science and Commerce of the University of Rajasthan and its constituents units. 183 duly filled responses were received with a response rate of 91.5%.

Analysis and Discussion

- **Reliability of Instrument**

The Cronbach's Alpha value was computed for each construct of the instrument and was found above 0.70 as shown in table below. This indicates a high level of reliability of the instrument used for this research.

Table 1: Cronbach's Alpha Test for Reliability of Instrument

	Quality Constructs	Variables(items)	Number of Respondents	Cronbach's Alpha
1	Curriculum	1-5	183	0.76
2	Teaching Learning	6-10	183	0.80
3	Career Prospects	11-15	183	0.82
4	Resources and Technology	16-21	183	0.72

Source: Researcher's compilation using IBM SPSS

- **Brief Profile of the Respondents**

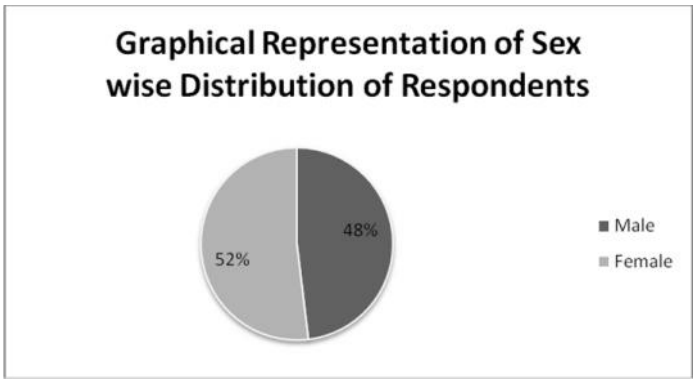
The profiles of the respondents are shown in Table 2. In the survey, 48.1% respondents were male and 52% respondents were female (Figure 1). Out of 183 respondents, 36.6% of the students were from Faculty of Arts, 28.4% belonged to Faculty of Commerce and 35% were from Faculty of Science (Figure 2).

Table 2: Brief profile of the Respondents

	Distribution	Frequency(N)	Percentage (N %)
Age			
	18-21	97	53.01
	22-25	61	33.33
	25 or above	25	13.66
Sex			
	Male	88	48.1
	Female	95	51.9
Faculty			
	Arts	67	36.6
	Commerce	52	28.4
	Science	64	35.0
Level of Course			
	Under-graduate	106	58
	Post-graduate	77	42

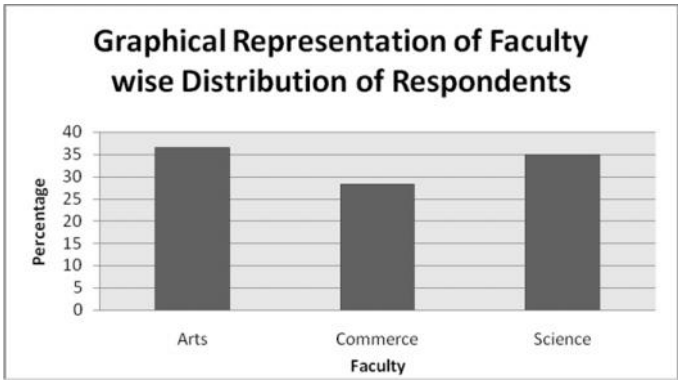
Source: Based on Primary Data

Figure 1: Sex wise Distribution of Respondents



Source: Based on Primary Data

Figure 2: Faculty wise Distribution of Respondents



Source: Based on Primary Data

- **Descriptive Statistics**

The average score and standard deviation was calculated for each item in the questionnaire as shown in Table 3.

Table 3: Descriptive Statistics of the items in the Instrument

Constructs	Item no.	Statements(items)	Mean	S.D.
Curriculum	1	Provision of choice based credit system/Elective course system in curriculum.	2.70	0.77
	2	Curriculum up-to-date according to market needs.	2.27	1.01
	3	Feedback from students about curriculum as well as faculty members	1.46	0.83
	4	Curriculum enhances student skills and self-capabilities	1.85	0.66
	5	Students' engagement in debates, focused group discussions, role plays and brainstorming sessions.	1.58	0.76
Average			**1.97**	
Teaching Learning	6	Adequate number of academic staff	3.49	1.02
	7	Knowledge and experience of academic staff	3.78	0.90
	8	Academic staff ability to solve subject related queries	3.17	1.09
	9	Academic staff identifies student's strength and encourages them by providing the challenges accordingly.	3.25	0.84
	10	Academic staff identifies student's weaknesses and helps in overcome them.	3.14	0.96
Average			**3.37**	

Career Prospects	11	Multiple opportunities to learn and grow.	1.94	0.58
	12	Conducting industrial visits and internship programs.	1.85	0.67
	13	Placement cell support in career counseling and campus placements.	2.22	1.03
	14	Conducting Skill development / Entrepreneurship / Personality development programs (PDPs).	2.30	1.06
	15	Support for participation in conferences and events.	2.25	0.50
Average			**2.11**	
Resources & Technology	16	Adequate computer facilities	3.16	1.00
	17	Library has sufficient number of latest books in print or electronic form as per requirement.	3.49	1.21
	18	Library has extended working hours for studying.	3.96	0.80
	19	Availability of projectors and other modern teaching equipment in classrooms.	2.76	1.15
	20	Provision of Internet/Wi-Fi facility.	3.12	1.20
	21	Infrastructure to conduct online classes and examinations.	2.56	0.54
Average			**3.18**	

Sources: Based on Primary Data

- **Testing the Hypothesis under Study**

The hypothesis under study is:

H_o: There is no significant difference in the average score of student perception for quality of higher education among different Faculties of selected higher education institution.

H_a: There is a significant difference in the average score of student perception for quality of higher education among different Faculties of selected higher education institution.

Faculty-wise mean and standard deviation is shown in Table 4. One way ANOVA using IBM SPSS has been computed to test for differences in average score of perception of students belonging to these three Faculties.

Table 4: Faculty-wise Mean and Std. Deviation of Responses

	Mean	Std. Deviation	N
Arts	2.67	0.51	67
Commerce	2.72	0.53	52
Science	2.65	0.48	64
Total			183

Source: Researcher's compilation using IBM SPSS

Table 5: One Way ANOVA to test for differences in average score of student perception for quality among Faculty of Arts, Science and Commerce

ANOVA					
Average Score					
	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Between Groups	0.014	2	0.007	0.028	0.972
Within Groups	43.395	180	0.241		
Total	43.408	182			

Source: Researcher's compilation using IBM SPSS

The result obtained from One-way ANOVA test (Table 5) indicate that the p-value is 0.972 which is greater than 0.05. Hence, the null hypothesis is accepted that there is no significant difference in the average score of student perception for quality of higher education among Faculty of Arts, Science and Commerce of University of Rajasthan and its constituent colleges.

Discussion

According to average scores presented in Table 3, the value of students' perception regarding the teaching-learning dimension (3.37) is highest as compared to other three aspects viz curricular aspects (1.97), career prospects (2.11) and resources & technology (3.18). This indicates a better perception of students regarding academic staff, their ability and continuous support in assessing

students' performance. The average score of the curriculum dimension (1.97) is the lowest amongst all dimensions. The value of item 4 regarding feedback obtained from students has the lowest value of 1.46 amongst all measured aspects under curriculum. Given the emphasis on the role of students in quality assessment even under NEP (2020), University of Rajasthan and similar Universities would have to invest in improving feedback mechanisms through improvisation in training, data management and student education and awareness.

The average score of students' perception for career prospects dimension is 2.11 which is considerably low. This shows an urgency to enhance awareness about student support services and upright counseling in their career progression at the University and its constituent units. Regarding resources & technology dimension, the average score of item 17 and item 18 regarding library services are 3.49 and 3.96 respectively which are higher than the overall average score of resources and technology dimension(3.18), reflecting students' agreement in the sufficiency of required study material and extended working hours for studying in the library. While, the mean score related to technological enablement of item 19(modern teaching equipment), item 20(internet services) and item 21(infrastructure to conduct online classes and examinations) are 2.76, 3.12 and 2.56 respectively which are below the average score of resources and technology dimension (3.18). This indicates the need for strategic allocation of funds for the technological uplift of the University of Rajasthan and its constituent colleges. This implies that for University of Rajasthan and similar Universities, it is very critical to invest in digital infrastructure and training of Faculty and Staff to use that infrastructure for most effective dissemination of knowledge among students.

Results of the One-way ANOVA test (Table 4 and Table 5) indicate that there is no significant difference in perception for quality in higher education among students from the Faculty of Arts, Science and Commerce. Thus, it is evident that students from all three faculties have a similar perception about the quality of higher education in the University of Rajasthan and its constituent colleges.

Conclusion and Suggestion

Despite many improvements being done in the recent past by the University of Rajasthan to uplift the quality of higher education, the results of this research reflect the significant scope of improvements in curriculum, support for student progression and resource & technology.

The results of this research show that the average score of the curriculum dimension is lowest amongst all the four dimensions. It is therefore suggested to develop a multidisciplinary as well as demand-based curriculum for the well-rounded development of students of the University. National education policy 2020 also has focused on the inclusion of a multidisciplinary approach in learning programs. It is challenging for the University as it needs more academic staff to incorporate multidisciplinary learning programs and train its faculty for the paradigm shift towards multidisciplinary approach from traditional single specialization approach. It is necessary that the University invests more effort in training and development of academic staff for better curriculum design. The establishment of a systematic feedback mechanism from students can also add to making curriculum relevant to future needs of student community.

Regarding teaching learning dimension, students of the University of Rajasthan perceive adequacy, knowledge, competence and support of academic staff much better than curriculum dimension, career prospects dimension and resources & technology dimension. However, the relatively high score in this dimension should not be a cause of complacency. The University needs to develop a long term sustainable plan for faculty induction, training, promotion, developing incentives based on contribution to research. Every faculty needs to be made aware of their contribution to University beyond just teaching in terms of research contributions, publishing in reputed journals, creating innovative academic programs and taking initiative for social citizenship. Training for these outcomes is critical and a challenge for University's centre for HRDC. Promotional ladders and appointments of academic staff in the University should be merit-based instead of tending to be either seniority-based or arbitrary. NEP 2020 has also emphasized on incentivizing teaching excellence and ensuring vertical mobility to be merit-based. As the University is controlled by government, recruitments are influenced by external extraneous variables. Thus, merit based and transparent recruitments would be a challenging task for University of Rajasthan.

With reference to career prospects dimension, results reflect that students perceive inadequate support of University towards their career progression. This suggests that a systematic approach needs to be developed and introduced for supporting and mentoring students in their career progression. In this direction, various activities like aptitude tests, group discussions, guest lectures, and training from

corporate personalities can be organized by the placement/career counseling cell of the University at regular intervals. The placement cell of the University also needs a revamp for better counseling and career progression of students. It needs dynamic leadership and a proactive stance rather than just conducting career fairs.

Regarding resources and technology dimension, students perceive insufficiency in infrastructure & technological enablement and they perceive library facility as satisfactory. To uplift infrastructure and technological support, it is needed to revise the funding pattern of the University by strengthening funding under RUSA as well as other centrally sponsored schemes. National Education Policy 2020 has stated to introduce a transparent mechanism for increasing the level of public funding for State Universities and thereby creating a level playing field for them to grow and develop. It too highlighted to diffuse autonomy and accountability in academic leaders towards efficient resource utilization.

References

- Agarwal, P. (2006) Higher Education in India-Need for Change – ICRIER working page no 180. Indian Council for Research on International Economic relations, Delhi, pp. 19-36.
- Agarwal, P. (2015) Indian Higher Education at the Crossroads. International Higher Education, Vol.51, pp. 14-15.
- Anbalagan, C. (2011) Challenges and Prospects of Indian Higher Educational Services – A Global View. International Journal of Research in Management and Technology (IJRMT) Vol. 1, No. 2.
- Astin, A. (1993) What Matters in College: Four Critical Years Revisited. Jossey-Bass Publishers.
- Biggs, J.B. (1993) From theory to practice: a cognitive systems approach. Higher Education Research and Development. 12(1).pp73-85.
- Biggs, J.B.; Leung Doris, Y.P. and Kember D. (2001) The revised two factor Study Process Questionnaire: R-SPQ-2F. British Journal of Educational Psychology. 71. pp 133-149.
- Cooper, D. R. and Schindler, P.S. (2006) Business Research Methods. McGraw-Hill Irwin.
- Dill, D.; Massy, W.; Williams, P. and Cook, C. (1996) Accreditation & Academic Quality Assurance: Can We Get There from Here? Taylor &Francis, Ltd., pp-16-24.
- Donlazic, S. and Fazlic, S. (2015) Quality Assessment in Higher Education using the SERVQUAL model. Management, Vol 20, 2015, 1, pp. 39-57.
- Gibbs, G. (2010) Dimensions of Quality. Heslington, York: Higher Education Academy.
- Government of India (2015) National Institutional Ranking Framework (NIRF): A methodology for Ranking of Universities and Colleges in India. Department of Higher Education, Ministry of Human Resource Department, Government of India.
- Government of India (2018) Rashtriya Uchhttar Shiksha Abhiyan: RUSA. MHRD, Government of India. Retrieved from https://mhrd.gov.in/rusa/ as on 02/06/2020.
- Government of India (2020) National Education Policy 2020. Ministry of Human Resource and Development, Government of India.
- Green, P. (2014) Measuring Service Quality in Higher Education: A South African Case Study. Journal of International Education Research, Vol. 10, No. 2.pp. 131-142.
- Harvey, L and Green, D. (1992) 'Defining' Quality for Assessment and Evaluation in Higher Education.
- Harvey, L. and Knight, P.T. (1996) Transforming Higher Education. Buckingham: SRHE and Open University Press.
- Harvey, L.; Burrows, A. and Green, D. (1992) Someone who can make an impression. Report of the Employers' Survey of Qualities of Higher Education Graduates. Birmingham. Quality in Higher Education.
- Hasan, H.; Ilias, A.; Rahman, R.and Razak, M. (2008) Service Quality and Student Satisfaction: A Case Study at Private Higher Education Institutions. International Business Research, Vol(1), No.(3),pp. 163-175.
- Jongbloed, B., Enders, J., Salermo, C. (2008): Higher Education and its communities: Interconnections, interdependencies and a research agenda. Higher Education, 56, pp. 303-324.

- Kasetwar, R. B. (2008): Quality in Higher Education, University News, 46 (20), pp. 6-12
- Marić, I. (2013): Stakeholder analysis of higher education institutions. Interdisciplinary Description of Complex Systems, 11 (2), pp. 217-226
- NAAC (2020) Manual for Self-study Report-Universities. National Assessment and Accreditation Council (NAAC). Retrieved on 04/06/2020 from http://www.naac.gov.in/images/docs/ Manuals/Revised-University-Manual-22-01-2020.pdf.
- Noaman, A.; Ragab, A., Fayoumi, G., Khedra, M. and Madbouly, I. (2013) HEQAM: A Developed Higher Education Quality Assessment Model. Proceedings of the FEDCSIS. KRAKOW, pp. 739-746.
- Owlia, M.S. and Aspinwall, E.M. (1996) A framework for the dimensions of quality in higher education. Quality Assurance in Education, Vol. 4 No. 2, pp. 12-20.
- Palli, J. G. and Mamilla, R. (2012) Students' Opinions of Service Quality in the Field of Higher Education. Creative Education, Vol.3, No.4, pp 430-438, 2012.
- Sandru, I.M.D. (2008) Dimensions of Qualilty in Higher Education: Some Insights into Quality Based Performance Measurement. SYNERGY, Vol.(4), No.(2).
- Tilak, J.B.G. (2018) On Planning University Development: Shibboleths versus Stylised Facts? Social Change,Vol. 48, No.(1), 131-152.
- Trigwell, K.; Prosser, M. and Waterhouse F. (1997) Relations between Teachers' Approaches to Teaching and Students' Approaches to Learning. Higher Education, Vol. 37, No. 1, pp. 57-70.
- UNDP (2018) India Skill Report. United Nations Development Programme. Retrieved from https://www.in.undp.org/content/india/en/home/library/poverty/india-skills-report-2018.html as on 04/06/2020.
- University of Rajasthan (2013) AQAR Report 2012-2013. University of Rajasthan. Retrieved from https://www.uniraj.ac.in/iqac/AQAR/AQAR2012-13.pdf as on 04/06/2020.
- Ventakasubramanian, K. (2004) Issues in Higher Education- Vol. II. ICFAI Books.
- Yorke, M. (2001) Formative Assessment and its relevance to retention. Higher Education Research and Development. 20(2).pp115-126.
- Zaky, A. A., & El-Faham, M. M. (1998). The university-industry gap and its effect on research and development. Engineering Science & Education Journal, 7(3), 122- 125.

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