

# THE ANALYSIS OF HIGHER EDUCATION'S TEACHERS BASED ON FEEDBACK USING QUANTITATIVE AND QUALITATIVE APPROACH

Vinita Singh<sup>1</sup>, \*Dharm Raj Singh<sup>2</sup>, Vijay Kant Sharma<sup>2</sup>

<sup>1</sup>MGU Bhopal, M.P,India

E-mail: [vinitasng92@gmail.com](mailto:vinitasng92@gmail.com)

<sup>2</sup>Department of Computer Applications (\*corresponding Author)

Jagatpur P. G. College, Varanasi-221302, Uttar Pradesh, India

E-mail: [dharmrajsingh67@yahoo.com](mailto:dharmrajsingh67@yahoo.com),

E-mail: [mzp.vijay@gmail.com](mailto:mzp.vijay@gmail.com)

## To Cite this Article

Vinita Singh, Dharm Raj Singh, Vijay Kant Sharma “THE ANALYSIS OF HIGHER EDUCATION'S TEACHERS BASED ON FEEDBACK USING QUANTITATIVE AND QUALITATIVE APPROACH”, *Journal of Science and Technology*, Vol. 07, Issue 10, -December 2022, pp18-29

## Article Info

Received: 2-10-2022

Revised: 12-11-2022

Accepted: 10-12-2022

Published: 20-12-2022

## Abstract

In this paper, we analyze and investigate on quality concerns in higher education institutions (HEIs) as assessed and certified by National Assessment and Accreditation Council (NAAC), in addition to the approach and opinion of college and university teachers. We design a hybrid method and used to investigate various elements of quality indicators that are used to investigate the new criterion, if any, for estimation and acceptance. A hybrid method analysis design is a way for gathering, testing, and 'blending' significant and subjective ways in one or more studies to better understand a research subject [1]. Our hybrid method design is that combining quantitative and qualitative methodologies yields a greater knowledge of the study problem and subject than either method alone. Because the programme evaluation frame of reference are used in the design and execution to assess quality assurance in higher education institutions. In order to facilitate the process of effective teaching and learning process quality management (TQM) tool for data analysis, HEI in terms of self evaluation and effective quality and evaluation of Faculty Effectiveness Index (FEI) based on valid feedback is also presented.

**KEYWORDS:** Introduction resources, Methodology, Teaching and learning quality management, data and result analysis.

## INTRODUCTION

### Literature Review

Higher education quality has become a serious problem, according to the department's strategy document on transformation and growth in higher education [2]. According to Josip et.al [3], the quality of higher education pupils has decreases. A student's educational foundation is inadequate if he or she comes from a school that lacks basic facilities. According to S. Nurlatifah [4], globalization has a negative impact on educational quality. According to Amzat [5], higher education institutions aren't doing enough to help

communities, nations, and the global community as a whole identifies and address challenges that impedes advancement. He also said that a counterfeit would stay if it didn't have access to high-quality education. M. B. Murray examined the sociological viewpoint of higher education and came to the conclusion that the current educational system should be replaced with one that takes a comprehensive and well-integrated view of human existence [6]. Jayaram highlighted that the development of higher education in India has not been matched by an increase in the quality of the education [7].

B. S. Madhukar observed that higher education in India has grown considerably in terms of quantity without a corresponding increase in the level of quality of instruction[8]. He stressed that the quality issue in higher education had arisen as a result of the institution's uncontrolled expansion. A study conducted by P. Gibbs [9] examined the problems associated with educational quality, concluding that the most significant task for education in the new century was to develop coordination in terms of "quantity" and "quality". Taylor [11] conducted an investigation into the factors contributing to the decline in the quality of higher education and discovered that favoritism and corruption were known to exist in all types of higher education institutions in the areas of admission, internal assessment, practical examination, and other aspects of education. Rodriguez [10] published a discussion paper in which they examined the issues surrounding the regulation of higher education in India. According to them, in general higher education, the institutional hurdles to entrance have resulted in a lack of both quality and quantity in terms of offerings. According to Wareing [12], the most serious issue to be concerned about is that academic staff members get preoccupied with developing and adhering to formal quality assurance procedures, which causes them to lose focus on teaching and research. T. Leiber [13] observed the quality assurance in higher education, "some infrastructure and teaching/learning process related aspects are required to be monitored and assessed" in order to maintain a minimum standard of higher education, and that "some infrastructure and teaching/learning process related aspects are required to be monitored and assessed." According to Sangeeta [14], the capacity and skill of the teachers determines the quality of education provided to students. According to Lee et.al [16], students play a significant role in quality monitoring and assessment, thus it's critical to get input from them. In order to improve the quality of higher education, it is critical to hear what they have to say about how they perceive the teaching-learning process and the resources available to them, including libraries, computer labs, classrooms, common areas, dining halls, athletic facilities, and other campus amenities. McGhee [15] conducted a study to ensure that the current education system is capable of providing quality education; x suggested that our education system must first acquire the "quality pre-requisites." On the basis of an analysis of the NAAC's standards, he concluded that six criteria, including those related to instruction, measurement of student learning outcomes, faculty support for student growth, educational infrastructure, and healthy behaviors, were eligible for assessment. Hitesh et.al [17] examined the evolution of an external quality assurance process in India over the course of a decade, as well as the function of the National Assessment and Accreditation Council (NAAC). Arun Jamkar [18] suggested that the National Assessment and Accreditation Council (NAAC) had been able to make its assessment and accreditation procedure acceptable to institutions and academia as a result of an active awareness campaign and contacts with academics. Ruben [19] study in a qualitative research of students" views of quality of teaching in higher education maintained that quality teaching in higher education had different meanings for individual students: what was good quality teaching for some was not for others. Zhang et. al [20] addressed the NAAC for Higher Education's basic principles and quality assurance requirements, as well as the accreditation process. Kundu et. al [21] reported the importance of quality management in the present day for Indian higher education institutions was highlighted, and it was strongly recommended that total quality management practices be implemented in order to survive in international academic circles as well as to meet the demands of the industry. J. Rosak-Szyrocka[22] was analyzed the quality of life improvement in the running aspect in Poland. Haenen et. al [23] was explained about honours programmes, teachers face the task of designing courses in which students feel challenges and learn from accomplishing demanding assignments and was to investigate students' and teachers' perceptions of challenge and learning in an honours programme. M. Ocean and K. Hicks [24] observed the US system of higher education is almost exclusively evaluated by quantitative data based on traditional student trajectories and university structured programmes. S. K. Ntim was survey measured the perspectives of teacher trainees, classrooms teachers and stakeholders in teacher education regarding factors that could enhance teaching and quality teacher education in Ghana [25]. Leisyte and

Westerheijden explains about changes in post-bureaucratic organising, which are moving towards network approaches, coupled with the managerial agenda of corporate governance, have redefined the roles of various internal and external stakeholders in the governance of higher education institutions [26].

In recent years Naïve Bayes, neural networks for forecasting, classification and supervised learning is used in decision trees, as well as reinforcement learning is used in Bayesian and neural network. In this paper, we examine at quality concerns TQM in higher education institutions (HEIs) as assessed and certified by NAAC, as well as the perspectives and perceptions of college and university professors. The NAAC provides "Quality Status" to institutions that fulfill or exceed these requirements. Teaching, learning, and assessment get the highest weight among these activities, and as a result, they take precedence over all others. The traditional evaluation and accreditation system overlooks the influence of students' personal efforts, motivation, and reactions to various pedagogical attitudes on the teaching-learning process in HEIs because it is believed that the learning gained in HEI is the result of a wider range of factors external to the institution. On the other hand it is a synthesis of the outcomes of instruction, practice, behavioral skills, and other elements outside of the school itself. Other organizations, such as the NBA and the NIRF, place a high value on teaching, learning, and assessment. It has been found that TQM is one of the most effective tools for the teaching learning process because it helps to focus on the right issues and can be applied to higher education to revive the system by using various instruments and hypotheses to support human resource development, imbuing a positive atmosphere, and emphasizing the importance of student-centric teaching in the study to evaluating teaching and learning is to provide students with timely.

The rest of paper organized as follows: section 2, describes the research methodology. The tool development described in section 3. Section 4, describes the result analysis. Section 5, contains the work of conclusion.

## I. RESEARCH METHODOLOGY

The NAAC of UGC aims to improve the quality of teaching and learning in higher education institutions. An objective and transparent approach is the goal of NAAC. Teaching, learning, and evaluation are one of the most essential factors used by NAAC to evaluate HEIs. This comprises profile of students and teacher's performance and learning outcomes, satisfaction, teaching learning process, and student diversity.

- We will be analyzing the various Machine learning algorithms which will be used for classification and prediction operation of the teaching learning process.
- The feedback and results will quantify using probabilities and indices respectively.
- An analytical study will performed for quality management of teaching learning process in Higher Education Institutions.
- A statistical technique has been used to analyze the feedback data.

An exploratory sequential design is used to combines qualitative data collection, analysis with quantitative data collection and interpretation of data. The hybrid-method includes both qualitative and quantitative data collection and analysis of data. Together with we include structured interview schedule for college and university teachers, structured questionnaire – cum – interview schedule for university students, Open – ended questions for college and university students and university teachers, NAAC reports, UGC reports and research articles/reports etc. In this paper, we conduct two phases: i) Documentary Analysis and Tool Development ii) Conduct of Field Survey.

1. Documentary analysis concerning National Assessment and Accreditation Council (NAAC) observations;
2. Tool development to views, perceptions of teachers and students with regard to quality concerns in higher education institutions (HEIs).
3. Field surveys are used to gather information about college teacher's perspectives on quality issues in higher education.

## II. TOOL DEVELOPMENT

NAAC has identified six criteria for evaluating and accrediting college and university teachers, and the interview schedule is developed with these criteria in mind: teaching learning and evaluation; curricular aspects; research, consultancy and extension; infrastructure and learning resources; student support and progression; and innovative practice. For the evaluation purpose, two schedules are created and standardized: one for students, one for faculty members. Both schedules are based on the three major purposes of higher education institutions: teaching, research, and extension. As a response pattern, it is determined to ask instructors and students for their "agreement or disagreement" on several aspects

relating to curriculum creation. All of these metrics and respondents are asked to score each statement on a 3-point continuum (Agree, Disagree, or No Response).

### Questionnaires–Cum–Interview Schedule for University Students

Questionnaires and interviews with university students have been used to get their thoughts on teaching, research, and extension, the three fundamental pillars of the university experience. The time table is tested on 70 teachers of college and University, ranging in age, level of study, discipline, and gender, with the support of expert input and a pre-test run of the programme. All of these academics have long been involved in the higher education system and the evaluation and accreditation processes. The scale is administered to a sample of 70 teachers of college and University, and on the basis of their responses and the faculty's professional judgment based questionnaire-cum interview are included in the final draught. A total of 33 statements are included in the final version of the questionnaire-cum-interview schedule.

#### Organization, Tabulation and Treatment of Data

- According to the findings of the NAAC committees in their reports, the qualitative data are compared to the policy statements and identified indicators from various quality assessment methods and government documents that reflect on the development of higher education in India—expansion, equity, and excellence—based on documentation provided by higher education institutions, in the case of quantitative data pertaining to instructors and students' thoughts and impressions, during the interview process, it was confirmed that all of the tools had been filled out completely and truthfully.
- Using content analysis, the NAAC reports and other relevant research materials were mined for their qualitative data.
- Percentage analysis are used to analyze quantitative data on a three-point scale to examine and evaluate the perspectives and perceptions of faculty and students on various topics pertaining to the three primary roles of higher education (i.e. teaching, research, and extension). Additionally, content analysis is utilize to categorize the open-ended replies of professors and students to open-ended questions on quality issues in higher education and to assign meanings to these comments as per certain to offer quality inputs to higher education.

### III. RESULTS

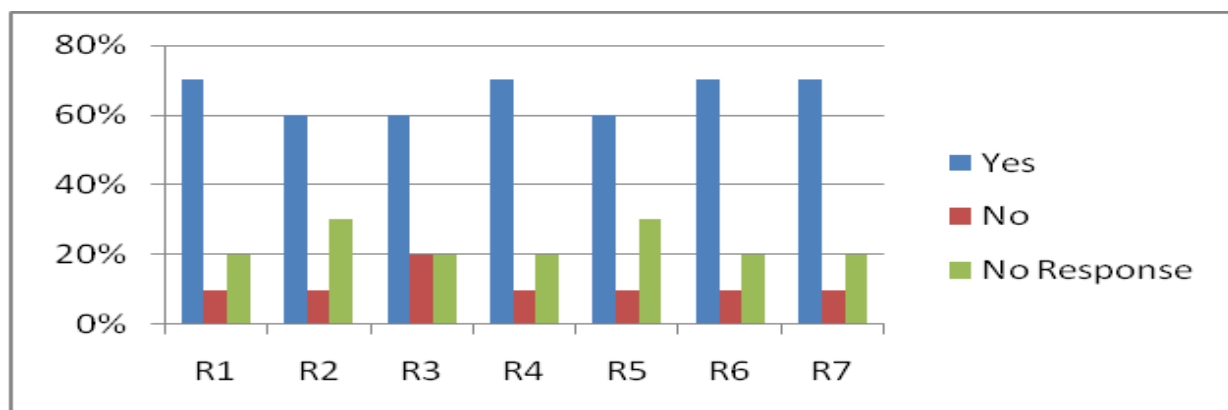
#### Views and Perceptions of Teachers About Quality Assurance in Higher Education

A random sample of 70 teachers of college and University has recruited to assess their perspectives on key quality concerns in higher education. These fundamental concerns are chosen based on the NAAC's standards for assessing and accrediting higher education institutions, which include some, generalize statement given in Table 1. In figure1, bar chart represents percentage of Perceptions of Teachers about Quality Assurance in Higher Education.

**Table 1 Perception of Teachers about Quality Assurance in Higher Education**

Reasons	Agreed	Neither Agree/Nor Disagree	Disagree	Total
Indian education system needs digital transformation (R1)	63 (90)	7 (10)	0 (0)	70 (100)
Is the new education policy plays a significant role in Indian education system (R2)	42 (60)	7 (10)	21 (30)	70 (100)
Higher educational institution needs to improve their policies for better cooperation among student and faculty (R3)	42 (60)	14 (20)	14 (20)	70 (100)
Higher educational institutions also include smart classes to improve their teaching experience. (R4)	49 (70)	7 (10)	14 (20)	70 (100)
Indian government increases the educational budget (R5)	42 (60)	7 (10)	21 (30)	70 (100)
Is Indian higher educational institutions need to work on their quality education programmes (R7)	49 (70)	7 (10)	14 (20)	70 (100)

Educational institutes include skill development programme which are job oriented (R8)	49 (70)	7 (10)	14 (20)	70 (100)
--	------------	-----------	------------	-------------



**Figure 1 percentage of Perceptions of Teachers about Quality Assurance in Higher Education**

Apart from these questionnaires, a set of questions are sub-divided into various categories as Curricular Aspects, Research, Consultancy and Extension, Infrastructure and Learning Resources, Student Support and Progression and Innovative Practices. Percentage analysis has been used to examine the replies of teachers to different quality concerns related to the aforementioned factors.

The observations of teachers regarding the quality issues related to curricular aspects at higher education have been given in Table 2. The syllabus of different courses is reviewed and updated in order to incorporate latest knowledge 77.14 per cent of the teacher respondents are in agreement. Regarding the quality to promote research and development most of these respondents (67.14 percent) agreed. A majority of improvement in the quality of education by semester system (94.29 percent) are agreed. Percentages of Teachers' Perceptions about Quality of Curricular Aspects are shown in Figure2.

**Table 2 Teachers' Perceptions about Quality of Curricular Aspects (N=70)**

S. N	Aspects	Response					
		Yes		No		No Response	
		N	%	N	%	N	%
1.	The syllabus of different courses is reviewed and updated regularly in the college in order to incorporate latest knowledge(A1)	54	77.14	11	15.72	5	7.14
2.	The present syllabi of different courses are equipping students with sufficient knowledge and skills in accordance with the emerging demands of the employment market(A2)	19	27.14	49	70.00	2	2.86
3	The syllabus nowadays is being revised/ designed to promote research and develop analytical thinking among students(A3)	47	67.14	19	27.14	4	5.72
4	By consulting different stakeholders like alumni, parents, industry and social organizations while developing the curriculum would improve its quality.(A4)	53	75.72	12	17.14	5	7.14
5	The move from the annual to the semester system and from award of marks to award of credits would contribute towards improving the quality of education.(A5)	66	94.29	0	0	4	5.71

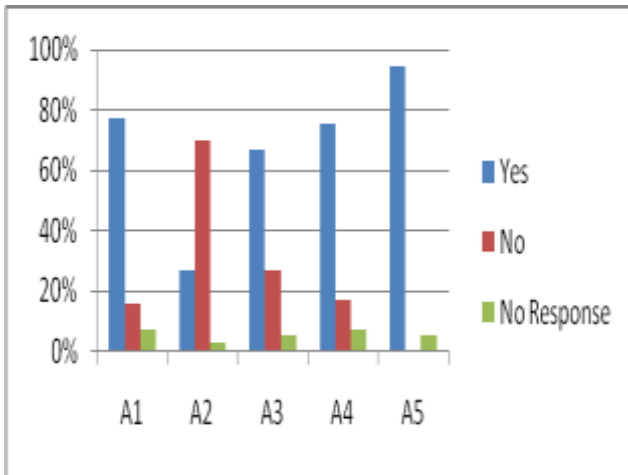


Figure 2 Percentages of Teachers' Perceptions about Quality of Curricular Aspects

The teacher's comments on many elements of quality of research, consultancy and extension activities have been assessed by percentage analysis and have been shown in Table 3. The question pertaining to the good quality research activity in college 61.43 per cent of the teacher respondents are in agreed. Regarding the quality of research and providing excellent research facilities in the form of laboratory facilities, library facilities, and software for statistical analysis etc. 88.57 percent teachers are agreed. The College promotes research activities among teachers and students by organizing research development programs and workshops 74.29 percent are agreed. Percentages of Teachers' Perceptions about Quality of Research, Consultancy and Extension Activities are shown figure 3.

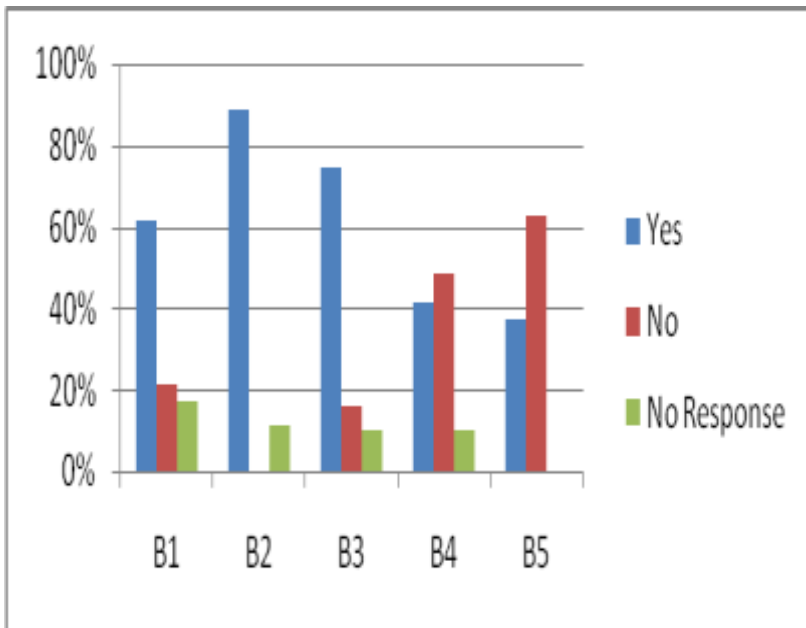


Figure 3 Percentages of Teachers' Perceptions about Quality of Research, Consultancy and Extension Activities.

Table 3 Teachers' Perceptions about Quality of Research, Consultancy and Extension Activities (N=70)

S.N	Aspects	Response					
		Yes		No		No Response	
		N	%	N	%	N	%
1.	In the college, different departments are undertaking significant and good quality research (B1)	43	61.43	15	21.43	12	17.14
2.	The college is providing excellent research facilities in the form of laboratory facilities, library facilities, software's for statistical analysis etc. for promoting research work in all the departments.(B2)	62	88.57	00	00	8	11.43
3.	College promotes research activities among teachers and students by organizing research development programs and workshops.(B3)	52	74.29	11	15.71	7	10.00
4.	Significant achievements have been made by the college faculty in terms of research awards, patents, research projects and publications of research papers and books(B4)	29	41.43	34	48.57	7	10.00
5.	The departments of the college have national and international collaborations in the field of research expertise, exchange and use of infrastructure and other facilities.(B5)	26	37.14	44	62.86	00	00

Table 4 summarizes teachers' assessments of the quality of infrastructural and educational resources. The question pertaining to infrastructural facilities for different curricular and co-curricular activities of the teachers 82.86 percent respondents are in agreement with the statement. The library facilities available in the college are satisfactory in terms of regular book addition and subscription of reputed journals most of the teacher's respondents (88.57 percent) agreed. Percentages of Teachers Perceptions of the quality of infrastructural and learning resources are shown in figure 4.

Table 4 Teachers' Perceptions about Quality of Infrastructure and Learning Resources (N=70)

S.N.	Aspects	Response					
		Yes		No		No Response	
		N	%	N	%	N	%
1.	The college has excellent infrastructural facilities for different curricular and co-curricular activities.(C1)	58	82.86	00	00	12	17.14
2.	The college has excellent infrastructural facilities for different sports activities.(C2)	70	100	00	00	00	00
3.	The infrastructural facilities in the college are properly maintained and are augmented from time to time.(C3)	52	74.29	13	18.57	5	7.14
4.	The library facilities available in the college are satisfactory in terms of regular book addition and subscription of reputed journals.(C4)	62	88.57	00	00	8	11.43
5.	The college is providing good hostel facility to the students.(C5)	11	15.71	59	84.29	00	00

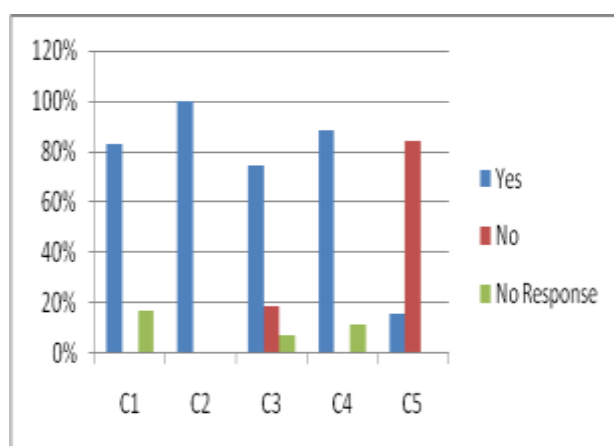


Figure 4 Percentages of Teachers Perceptions of the quality of infrastructural and learning resources.

Table 5 summarizes teachers' views on several areas of student support services in higher education. Eighty percent teachers are agreed to evolve an effective mechanism of providing financial aid to the socio-economically weaker sections in the college. 81.43 percent teachers are responded agree regarding the quality to promote effective support services are in place in the college for differently-abled students. Percentages of Teachers' Perceptions about Student Support and Progression are shown in figure 5.

Figure 5 Percentages of Teachers' Perceptions about Student Support and Progression.



S.N.	Aspects	Response					
		Yes		No		No Response	
		N	%	N	%	N	%
1.	The college has evolved an effective mechanism of providing financial aid (scholarships/free ships) in order to ensure equitable participation of students from the socio-economically weaker sections of the society. (D1)	56	80.00	00	00	14	20.00
2.	The College has been successfully adopting some specific strategies to meet the specific needs of advanced learners as well as of slow learners.(D2)	31	44.29	34	48.57	5	7.14
3.	Effective support services are in place in the college for differently-abled students.(D3)	57	81.43	6	8.57	7	10.00
4.	The placement record of the students passing out from the college in recent years has been very impressive.(D4)	21	30.00	43	61.43	6	8.57
5.	The college is effectively providing placement and counseling services to students.(D5)	15	21.43	55	78.57	00	00

Table 5 Teachers' Perceptions about Student Support and regression N=70)

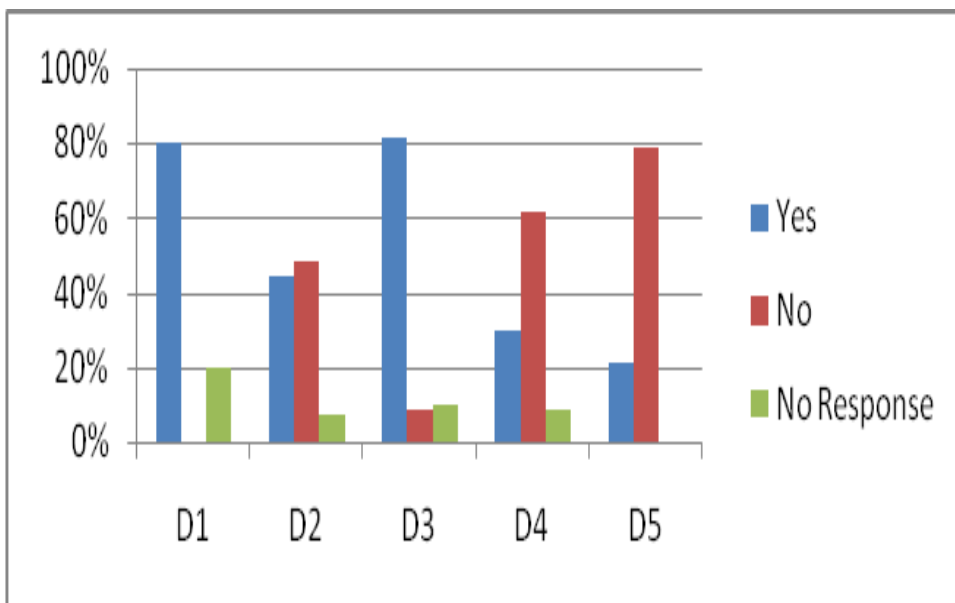


Table 5 Teachers' Perceptions about Innovative Practices (N=70)

S.N.	Aspects	Response					
		Yes		No		No Response	
		N	%	N	%	N	%
1.	The college has an internal quality assurance mechanism and is effective to a considerable extent in ensuring quality of education.(E1)	62	88.57	00	00	8	11.43
2.	Attempts are being regularly made by Internal Quality Assurance Cell (IQAC) of the college to institutionalize the best practices and to develop academic bench marks.(E2)	48	68.57	13	18.57	9	12.86
3.	The college has evolved practices to involve its different stakeholders in planning, implementation and evaluation of the academic programmes.(E3)	11	15.71	59	84.29	00	00
4.	The college has evolved an effective complaint management mechanism for better stakeholder-relationship.(E4)	52	74.29	14	20.00	4	5.71
5.	The college regularly organizes such activities which promote a sense of social responsibility and good citizenship among the students.(E5)	53	75.71	10	14.29	7	10.00

Table 6 provides a summary of teachers' perspectives on faculty and higher education institution introductions of innovative techniques. The internal quality assurance mechanism to quality of education 88.57 per cent of the teacher respondents are in agreement with the statement. A majority of improvement in the Internal Quality Assurance Cell (IQAC) of the college to institutionalize the best practices and to develop academic bench marks (68.57 percent) are agreed. Percentages of Teachers' Perceptions about Innovative Practices are shown in figure 6.

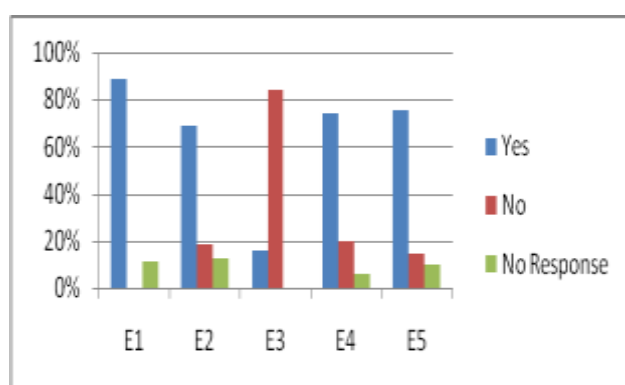


Figure 6 Percentages of Teachers' Perceptions about Innovative Practices.

#### IV. DISCUSSION

The documentary analysis of NAAC evaluation reports on the assessment and accreditation of degree colleges and universities has revealed some key findings about the institutions strengths, weaknesses, and opportunities. In this paper the TQM is one of the most efficient tools in the field of teaching & learning that provides, quality assurance and holistic strategy that encompasses all procedures in a higher education institution. The management's support is critical to the success of a quality assurance system. Students

and other stakeholders in the required quality standards Indian higher education institutions' quality of education varies widely, according to several studies, and only a tiny minority of students obtains international-standard education. The perceptions on quality issues in higher education have been used to identify two types of threats or dissent opinion: one dealing with contentious issues showing bipolarity among teaching faculty; and the other showing disagreement or dissatisfaction on certain issues with a large majority or high percentage of teachers dissatisfied with the institution. The issue of bipolarity in Views and Perceptions The teachers has given divergent views on certain issues concerning quality in higher education. Any time a syllabus is changed or redesigned, it is always a very difficult process that takes a long time and requires a lot of thought and discussion. The college faculty has made significant contributions in the areas of research prizes, patents, research initiatives, and the production of research articles and books. The collaboration between universities, business, and NGOs would help to make research more relevant to society. The college's research, consulting, and extension efforts are all geared on ensuring and promoting social justice and empowerment for the most vulnerable members of society. The college allocates enough money for the upkeep of buildings, furniture, and other things. The College has been able to use some specific strategies to meet the needs of both advanced and slow learners. These strategies have worked well. The college system has not been able to establish procedures that include its many stakeholders in the design, execution, and assessment of academic programs; rather, their system is becoming more and more focused on socio-cultural and economic elements of human existence in society.

#### REFERENCES

- [1] Guest, G., & Fleming, P. (2014). Mixed methods research. *Public Health Research Methods*. Thousand Oaks, CA: Sage, 581-610.
- [2] Ashour, S. (2020). How technology has shaped university students' perceptions and expectations around higher education: an exploratory study of the United Arab Emirates. *Studies in Higher Education*, 45(12), 2513-2525.
- [3] Šabić, J., & Jokić, B. (2021). Elementary school pupils' aspirations for higher education: The role of status attainment, blocked opportunities and school context. *Educational studies*, 47(2), 200-216.
- [4] Nurlatifah, S. (2019). HOW EDUCATION FUNDING MANAGEMENT CAN INCREASE THE QUALITY OF EDUCATION IN VOCATIONAL HIGH SCHOOLS?. *EARR (Educational Administration Research and Review)*, 3(1), 29-34.
- [5] Amzat, I. H. (2016). Branding higher education institutions: What it takes to be branded. In *Fast forwarding Higher Education Institutions for Global Challenges* (pp. 147-162). Springer, Singapore.
- [6] Murray, M. B. (2021). The uneasy, unexplored, and under-examined existence of Ballet in American higher education. *Research in Dance Education*, 1-17.
- [7] Jayaram, N. (2018). Research on Higher Education in India. *India Higher Education Report 2017: Teaching, Learning and Quality in Higher Education*.
- [8] Madhukar, B. S. (2018). Managing Quality at Institutional Level. *India Higher Education Report 2017: Teaching, Learning and Quality in Higher Education*.
- [9] Gibbs, P. (2021). 3 A Pedagogy of Emergent Self-Cultivation; Why Students Should Have a "Sameness" and Why They Should Not1. *Philosophy and Theory in Higher Education*, 3(2), 43-58.
- [10] Rodriguez, A. (2018). Inequity by design? Aligning high school math offerings and public flagship college entrance requirements. *The Journal of Higher Education*, 89(2), 153-183.
- [11] Taylor, B. J. (2020). Recruitment and Admission Management, Higher Education Institutions. *Journal: The International Encyclopedia of Higher Education Systems and Institutions*, 2425-2430.
- [12] Wareing, S. (2018). Staff Development and Quality Assurance. In *Handbook of Quality Assurance for University Teaching* (pp. 363-370). Routledge.
- [13] Leiber, T. (2019). A general theory of learning and teaching and a related comprehensive set of performance indicators for higher education institutions. *Quality in Higher Education*.
- [14] Angom, S. (2018). Role of teachers in academic reforms for quality higher education. In *Higher Education and Professional Ethics* (pp. 27-44). Routledge India.
- [15] McGhee, P. (2021). *The academic quality handbook: Enhancing higher education in universities and further education colleges*. Routledge.
- [16] Lee, N. Y., Wang, Z., & Lim, B. (2021). The development of critical thinking: what university students have to say. *Teaching in Higher Education*, 1-14.
- [17] Vaghela, H., & Venkatraman, A. (2017). NAAC: Assurance of Quality to Assurance of Accreditation.
- [18] Jamkar, A. (2019). National Assessment and Accreditation Council (NAAC)'s accreditation of health sciences institutes: Challenges and the road ahead. *Journal of Education Technology in Health Sciences*, 6(3), 57-58.

- [19] Ruben, B. D. (2018). What students remember: Teaching, learning, and human communication. In *Quality in higher education* (pp. 189-200). Routledge.
- [20] Zhang, C., Moreira, M. R., & Sousa, P. S. (2021). A bibliometric view on the use of total quality management in services. *Total Quality Management & Business Excellence*, 32(13-14), 1466-1493.
- [21] Kundu, G. K., & Majumdar, J. P. (2020). The learning and teaching area of AACSB standards: a process model framework. *Business Process Management Journal*, 26(6), 1379-1399.
- [22] Rosak-Szyrocka, J. (2019). Quality of life improvement in Kaizen aspect. *Quality Production Improvement-QPI*, 1.
- [23] Haenen, J., Vink, S., Sjoer, E., & Admiraal, W. (2021). Challenge and learning in honours education: a quantitative and qualitative study on students' and teachers' perceptions. *Teaching in Higher Education*, 1-17.
- [24] Ocean, M., & Hicks, K. T. (2021). A Qualitative Description Investigation of US Higher Education Quantitative Datasets. *Qualitative Report*, 26(3).
- [25] Ntim, S. (2017). Transforming teaching and learning for quality teacher education in Ghana: Perspectives from selected teacher trainees and stakeholders in teacher education. *International Journal of Education*, 9(3), 149.
- [26] Leisyte, L., & Westerheijden, D. F. (2014). Stakeholders and quality assurance in higher education. In *Drivers and barriers to achieving quality in higher education* (pp. 83-97). Brill.