

A Review based Research Topic Identification on How to Improve the Quality Services of Higher Education Institutions in Academic, Administrative, and Research Areas

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ABSTRACT

Purpose: *Innovations and best practices are the lifeblood of higher education institutions to make education is more student-centric and research-oriented. To make Higher Education Institutions (HEIs) more successful in achieving their objectives and to march towards excellency, it is desired to use their autonomy to improve the quality of education imparted by them by identifying and implementing in academics, administration, research and extension, and industry collaboration activities. In this paper, through an extensive review of literature, a research proposal in the form of a case study is developed systematically to identify and analyze various innovations & best practices in a higher education institution with special focus on academic, administrative, and research-related activities.*

Design/Methodology/Approach: *A review-based research topic identification by collecting information from various published sources are analyzed using appropriate analysis frameworks as per exploratory research method. The research skills including design, analysis, comparison, evaluation, interpretation, and creation as proposed by Bloom's Taxonomy for higher-level thinking are used while analyzing the collected information.*

Findings/Result: *Based on review of literature using various keywords related to quality in higher education institutions, innovations and best practices in academics, administration, and research, the current status, desired status, research gap and research agendas are identified. By analysing the research agendas, the case study method of exploratory study on innovations and best practices in an autonomous University is selected for further research. The objectives of such case study and modality along with limitations are discussed. The procedure of carrying out such systematic research leading to PhD degree are proposed.*

Research limitations/implications: *The research topic related to the research problem developed in this paper is one of the research agendas identified during the research gap analysis using the current status and desired status of the problem. The chosen topic for further research involves a case study on Innovations and best practices developed in academics, administration, and research & extension activities of a university. Depending on the autonomy and internal and external environments, the identified innovations and best practices can be generalized irrespective of the geographic region, culture, and tradition.*

Originality/New knowledge/Interpretation/Value:

This article is focused on developing a new research project for proposed Ph.D. work. Based on a systematic review to know current status and desired status, the research gap, various research agendas to fill the gap, and a particular research agenda based on analysis are identified as research problem for a proposed case study research project. Further using the research problem, a research topic with the objectives and procedures are proposed as outcome.

Paper Type: Review paper for research topic identification

Keywords: Innovations & Best Practices, Quality in Higher Education, Innovations in academics, Innovations in administration, Innovations in research, Srinivas University, SWOC analysis, ABCD analysis

1. INTRODUCTION :

In today's rapidly changing world, Higher Education Institutions (HEIs) have the challenge of reaching the pursuit of excellence and hence continuous improvement is paramount. All higher educational institutions around the world are embracing innovative approaches to enhance the quality of education and research to meet the evolving needs of students. Accordingly, HEIs need to find new ways to deliver high-quality education and research that meets the needs of their students, researchers, and employers (Owlia, M. S., et al. (1996). [1], Aithal, P. S., et al. (2015). [2]).

There are a number of ways to improve the quality of higher education. This includes the use of technology to deliver education, and new ways of doing student engagement for active learning methods including group work and problem-based learning. This also provides an opportunity for students for interacting with their peers and teachers (Srikanthan, G., et al. (2002). [3], Welzant, H., et al. (2011). [4]). Quality in higher education should focus on enhancing creative knowledge, smart skills, useful experience, and Character including ethics and values to plan and succeed in their career and to remain competitive in the 21st century. It is found that the objective of higher education is primarily on improving the confidence to face challenges effectively (Aithal, P. S., et al. (2018). [5]).

At the higher educational level, innovations, and best practices have the potential to positively impact quality in multiple ways. They can be used to enhance student engagement and motivation, improve learning outcomes, foster critical thinking and problem-solving skills, promote inclusivity and diversity, and facilitate the development of employability skills. Further, innovations and best practices can strengthen the collaboration between academia and industry, thereby ensuring the relevance of education to the needs of the job market. Moreover, they contribute to the overall reputation and standing of institutions, attracting high-quality faculty and students (Aithal, P. S., et al. (2015). [6]).

In this paper, we have systematically reviewed the process of innovations and best practices in improving quality in higher education institutions to know the current status. Using the current status and desired status to satisfy, delight, and enlighten the stakeholders, the research gap in this area is predicted and various possible research agendas are identified. By examining the possible research agendas, we have selected a research problem and developed a research topic. Further, the research topic is analyzed systematically using SWOC and ABCD standard analysis frameworks.

2. OBJECTIVES OF THE PAPER :

- (1) To understand the quality aspects of academics, administration, and research in HEIs.
- (2) To identify the current status of innovations and best practices of quality aspects in higher education.
- (3) To predict, find, examine, and evaluate the ideal and desired status in quality aspects of academics, administration, and research in HEIs.
- (4) To find the research gap and possible research agendas related to the quality aspects of academics, administration, and research in HEIs.
- (5) To analyse a selected research agenda systematically as a Ph.D. research topic using SWOC and ABCD analysis frameworks.
- (6) To design a case study methodology for the identified research topic in a HE Institute as an explorative Ph.D. research problem.

3. METHODOLOGY :

In this review-based research topic identification paper, we have collected the required information from scholarly literature using Google Scholar and Google search engine for the reason that it has the largest number of documents in its repository. Information is also collected from AI-based search engines like ChatGPT and Bard. The important published scholarly articles related to chosen seven keywords are searched and examined and tabulated as per the focus of the papers and the outcome or findings. By knowing the current status and the desired status, the research gap is identified and a research agenda and research topic for further research leading to PhD thesis work.

4. REVIEW OF RELATED WORK :

Many scholarly articles related to quality in higher education institutions are reviewed for their innovations and best practices and the gist of their objectives/outcome along with the citations are depicted below:

(i) Owlia, M. S., et al. (1996) [1] have examined the conceptual models proposed for different environments for consistency with higher education. Reviews quality factors found in the relevant literature and presents a new framework for the dimensions of quality in higher education.

(ii) Quinn, A., et al. (2009) [7] identified a number of issues that surround initiatives to improve the quality of higher education, including this one. This essay focuses on finding and assessing methods for addressing the difficulties of higher education quality improvement. This essay also looks at two major challenges: defining the consumer and quantifying customer views of quality. The differences and similarities surrounding quality improvement initiatives in each of the three service areas typically found in higher education—academic, administrative, and auxiliary functions—were examined, along with representative historical applications of quality techniques.

(iii) Chua, C. (2004) [8] studied a majority of the quality models that are frequently employed in business have been adapted and used to the field of education. In this essay, we put up the idea of approaching the problem of quality in higher education from a marketing standpoint, that is, by first understanding the needs of the target audience through their perception of quality. Our paper's objective is to evaluate the qualities of higher education from a range of viewpoints, including those of parents, students, faculty members, and employers. The Input-Process-Output paradigm was then used to classify these quality criteria. We recommend an integrated strategy that will include a range of quality practices to handle quality challenges in higher education based on the data from our study. The goal should be to raise educational standards.

(iv) Lagrosen, S., et al (2004) [9] compared few dimensions to those that have been developed in research on general service quality, this study looked at what qualities higher education encompasses. Academic business studies have been the main focus, and a student viewpoint was chosen. 29 in-depth interviews were conducted initially. Based on the interviews, a questionnaire was created, and 448 Swedish and Austrian students responded. The quality dimensions were determined through factor analysis. These factors are contrasted with past studies on higher education as well as with general studies on service quality.

(v) Hill, Y., et al (2003) [10] purposed a study to determine how students see a high-quality college experience. Focus groups with a variety of higher education students were used in the empirical investigation. The key conclusions are that the most important variables influencing the provision of high-quality education are the calibre of the lecturer and the student support networks.

(vi) Srikanthan, G., & Dalrymple, J. (2003) [11] argued that academic independence was regarded as a prerequisite for excellent education. Prior to 1990, HE was subjected to more contemporary quality control standards, but their application was rudimentary in comparison to industry. Due to the sector's vitality, the necessity for quality systems activity in higher education increased significantly after 1990. Due to its widespread use in industry, quality management (QM) was recommended for implementation. Due to a lack of a shared vision and a mismatch between QM techniques and educational processes, its practise in HE is currently degenerating into managerialism in institutions. proposes a novel strategy for HE quality control.

(vii) Srikanthan, G., & Dalrymple, J. F. (2007) [12] created a broad framework for thinking about quality challenges in higher education. According to the article's conclusion, a model that specifically addresses higher education can be created by synthesising data from existing research.

(viii) Avdjieva, M., & Wilson, M. (2002). [13] made a study which supports the three stages of learning outlined by Senge, McKay, and Kember. The consequences for managers are discussed in light of these findings, with an emphasis on crucial organisational transformation areas like leadership, culture, and infrastructure.

(ix) Jain, R., et al (2011). [14] studied on programme quality, which is defined by curriculum, industry interaction, input quality, and academic facilities in the proposed model, and quality of life, which is defined by non-academic processes, support facilities, campus, and interaction quality, are the two primary dimensions that make up service quality.

(x) Hill, F. M. (1995). [15] studied programme quality, which includes curriculum, industry interaction, input quality, and academic facilities, and quality of life, which includes non-academic processes,

support facilities, campus, and interaction quality, are the two primary dimensions that make up the proposed model's definition of service quality.

(xi) Mizikaci, F. (2006). [16] discussed the objectives and internal organisation of higher education institutions, the three concepts—quality systems in higher education, programme assessment, and systems approach—are discovered to be consistent with one another. The suggested evaluation methodology offers higher education management a fresh viewpoint for the successful and effective application of quality systems and programme enhancement.

(xii) Teeroovengadam, V., et al (2016) [17] studied the objectives and internal organisation of higher education institutions, it has been discovered that the three concepts—quality systems in higher education, programme assessment, and systems approach—are consistent and mutually supportive. For the successful and efficient application of quality systems and programme improvement, the proposed assessment model offers higher education management a fresh point of view.

(xiii) Voss, R., (2007) [18] while studying the underlying benefits that students seek, the study attempts to deepen our understanding of the teaching characteristics of effective lecturers that students desire as well as the structures that underlie these desire expectations. The outcomes of the two laddering approaches are largely comparable, despite the fact that the personal laddering interviews created more depth in comprehension. According to the study's findings, students choose instructors who are informed, energetic, approachable, and kind. To be able to pass exams and be ready for their vocation, students mostly desire to experience useful training. This study also demonstrates that students are less motivated by their academic interests than by the vocational components of their studies.

(xiv) Neuwirth, L. S., et al (2021) [19] have suggested that both faculty and students have to quickly switch from traditional face-to-face instruction to distance learning formats using virtual classrooms in response to the coronavirus (COVID-19) epidemic. While most campuses have educated teachers to maintain the quality of the curriculum through virtual classrooms, less thought has been devoted to teaching students, who also confront difficulties adjusting to this sudden change in the programme's delivery. Few strategies have been created to help students who are forced into virtual classes maintain good online learning practices and etiquette. Here are some ideas for sustaining and improving college students' participation and engagement in online learning environments.

(xv) Henze, J. (2019). [20] has used two keywords 'quality' and 'equality' were purposefully chosen as the foundational components of a descriptive-analytical research of Chinese higher education. Unlike the laws that were in place prior to the Cultural Revolution, the "access" to higher education was altered in accordance with the major publications that were published between 1966 and 1969. Reorganizing higher education institutions and realigning university departments got top priority on the agenda of education policy due to the "anticipation of economic development and the conscious planning for industrialization."

(xvi) Harrison, R., et al. (2022) [21] discussed the foundation of higher education is excellent instruction. With increased rivalry among colleges and chances to study abroad through various means, its pursuit has become more intense. This systematic meta-review offers a synthesis of data pertaining to the approaches employed to gauge and improve the calibre of instructional practise in higher education. Between January 2009 and August 2019, six electronic databases were searched using keywords, synonyms, and subject headings. Publication titles and abstracts were reviewed, and full text articles were evaluated in relation to the eligibility requirements.

(xvii) Azimovna, M. S., (2022) [22] studied the organisation of marketing services in higher education institutions and its makeup are discussed in this article along with the selection of marketers with current marketing knowledge and skills, the financial situation of potential employers, graduate demand, and the relationship between graduate supply and demand in a specific specialty.

(xviii) Prakash, G. (2018) [23], in his research show that total quality management, quality assurance, benchmarking, and accountability have not gotten as much attention as student learning, engagement, service quality, and satisfaction. The empirical method is the most widely used, and the most widely used techniques include surveys and single case studies. Research on quality in HEIs is most advanced in Europe, followed by North America and Asia.

(xix) According to the paper authored by Silva, D. S., (2017) [24], the traditional SERVQUAL and SERVPERF scales are reliable tools for gauging perceived service quality. The HEdPERF measure was used in research in Brazil, China, Croatia, India, Malaysia, Portugal, Sri Lanka, and Turkey about perceived service quality in HEI.

(xx) According to Chawla, M., & Sharma, T. (2014) [25], higher education institutions must comprehend how their clients' (students') expectations and perceptions of service quality differ in the current competitive environment. The modified service quality (SERVQUAL) instrument is used in this paper to examine students' views of service quality in the current educational setting. The tool measures five constructs: tangibles, reliability, responsiveness, assurance, and empathy. In 10 institutions in the north Indian state of Haryana, 500 students seeking postgraduate degrees in management and education were the subject of the study. Higher education service quality expectations and perceptions are shown to be significantly out of sync, which suggests that students are dissatisfied.

(xxi) According to Aithal, P. S., & Kumar, P. M. (2016) [26], teachers take the effort to learn, stay current on the newest trends, innovate, always look for ways to improve their profession, and pursue excellence both personally and institutionally. This essay tries to describe the teacher quality maintenance model created by the Srinivas Institute of Management Studies (SIMS). Based on the premise that information is essential to knowledge creation and knowledge sharing and that knowledge is power, the college seeks to offer its students a quality education in order to boost academic performance. The institution has been providing education service in key areas of value to society by offering undergrad and graduate programmes in business management, computer applications, and social work.

(xxii) According to Marshall, S. J. (1998) [27], the challenge of higher education quality persists both in Australia and abroad. This is not shocking considering that past and present institutional and sectoral methods have a tendency to place more emphasis on the assurance, assessment, monitoring, and reporting of quality than on the enhancement of quality itself. It is not sufficient to only monitor and quantify quality. Instead, it needs to be actively managed with an eye towards progress and continual improvement. This essay outlines a paradigm for higher education quality improvement that emphasises professional development as a key component of the process.

(xxiii) Abbas, J. (2020) [28] has examined his research data and revealed six key elements have major contributions for service quality (SQ) specifically: teaching quality, facilities, support staff quality, links to the workforce, safety and security, and extracurricular activities as indications of SQ from the perspective of students. The study's conclusions take action by identifying employability and safety and security as two new developing indicators of the literature on SQ in HEIs that are in line with Maslow's hierarchy of wants.

(xxiv) According to Penington, D. (1998) [29], despite of shifts in the political spectrum, most of the current legislative framework governing higher education will likely continue for many years, therefore the question of quality needs to be reevaluated in this setting. The creation of mission statements for particular institutions, more benchmarking across schools with comparable missions, enhanced use of student feedback, and evaluation of research quality are some suggested models for the future assessment of higher education quality.

(xxv) Riad Shams, S. M., & Belyaeva, Z. (2019) [30], in their discussion, demonstrates that these factors are also significant to transfer and share knowledge between the key stakeholders not only for universities, but also for businesses, governments and other organizational stakeholders. The paper proposes a framework of the QA drivers 'application for meaningful knowledge transfer between diverse stakeholders and clarifies the framework's managerial implications. This conceptual framework specifies different scenarios and perspectives of QA drivers 'application in the global education sector. The academic novelty is based on the inductive approach applied in the paper.

(xxvi) Raja, R., (2019) [31] found that ICT integration is crucial for boosting these institutions' productivity. According to research reports, using ICT increases student engagement in the learning process compared to using traditional teaching methods. In order to provide readily accessible, affordable, and high-quality education, it is vital to focus more on adopting ICT in higher education. The design of ICT in higher education institutions is suggested in this research. On the other hand, a Sensible Data Mining (SDM) is created by combining data mining with visualization technologies in order to be applied to the higher education evaluation system.

(xxvii) As per De Wit, H., & Altbach, P. G. (2021) [32] a relatively recent, wide-ranging, and diverse phenomenon in postsecondary education is the notion and strategic aim of internationalization. Internationalization has changed over the past 50 years from a minor activity to a crucial component of the reform agenda. The following issues are covered in this analysis: What have been the historical

trends in globalization? What do we mean when we talk about globalisation? What are the main elements of global tertiary education that influence and are influenced by this phenomenon?

(xxviii) Castro, R. (2019) [33] has written an article with the purpose is to highlight some of the most promising trends in blended learning deployments in higher education, as well as the technology's capabilities (such as datafication) and the contexts in which they are used. 45 peer-reviewed journal articles were chosen for this literature study, which also examined them. The results show several capabilities that digital educational technologies share. Digital tools or platforms, in particular, that enable human-machine interaction may improve automated procedures used in blended learning delivery methods. Digital tools like video capsules and sophisticated tutoring systems could make learning and teaching more effective in this situation. First, by making self-paced online learning activities more accessible to more students.

(xxix) Asiyai, R. I. (2022) [34] in his article claimed that higher education institutions all around the world work to uphold high standards and quality in all aspects of their operations, particularly in teaching, research, community development, and innovation. Public support for higher education institutions with high standards and quality is significant, and these institutions have a positive global reputation. Several factors are used to determine if academic activities at higher education institutions are of good quality. This essay examines the significance of best practices in regard to five crucial aspects of achieving high standards and high-quality higher education in Nigeria.

(xxx) According to Aithal, P. S., & Aithal, S. (2019) [35], the campus-based institutions that provide higher education and have the freedom to experiment have the chance to further raise the standard of their offerings and thus become the best in the world. Numerous campus-based colleges are revising their strategy for either survival, sustainability, differentiation, monopoly, expansion, and prosperity depending on their current situation and long-term goals as a result of increased competition from online courses. In this essay, we have examined the potential and problems facing today's campus-based institutions and the ways in which these problems might be solved by utilising their operational autonomy to pursue greatness. This covers the general approaches that campus-based colleges should take and how applicable they are to the system of higher education.

(xxxi) Suresh Kumar, P. M. & Aithal, P. S. (2020) [36] drawn the attention to the NCERT-designed curriculum and syllabus, which all schools connected with the CBSE board are required to follow. The structure of the syllabus, curriculum, and textbooks will now be altered in accordance with the new curricular framework, which will primarily place an emphasis on the development of life skills in the pupils by qualified teachers. This essay will cover NCERT's establishment, the debate over the curriculum, its goals, and changes made in response to the new educational policy.

(xxxii) In their article, Aithal, P. S., & Aithal, S. (2020) [37] commented that higher education is becoming more and more important around the world for two reasons: the difficulties in raising the Gross Enrolment Ratio (GER) towards 100% and the potential for further HE system innovations owing to rapid technological advancements and the inventiveness of new Tech-generations. In this essay, we conducted a thorough investigation of how technology affects business and ushers in new tech generations. The predictive analysis approach is used to explore how technologies affect various industries and how they impact the development of future tech generations. Finally, an analysis is done of the potential higher education techniques to satisfy the societal expectations of the tech-generations.

(xxxiii) In a pioneering article on building world-class universities, Aithal, P. S., & Aithal, S. (2019) [38] found that due to improved higher education institutions and the adoption of more advanced technologies in mass education opportunities, innovations in higher education models are more important than ever. Higher education has become more competitive since it was privatized in terms of luring students from around the world. Universities compete with one another for both intellectual and physical resources. According to our predictive analysis, a university must invest in the following six key resources to grow and thrive as a top-tier institution: physical infrastructure, digital infrastructure, innovative academic & training infrastructure for confidence building, intellectual property infrastructure, emotional infrastructure, and networked infrastructure. In this essay, we've outlined the main goals of these infrastructures as well as their principal focus.

The following tables (Table 1 to Table 4) contain the summary of some of the recently published scholarly articles in terms of their area & focus along with their outcome.

Table 1: Innovations in Academics in HEIs

S. No.	Area of research and focus	Outcome/Findings	Reference
1	Innovations in higher education	A change theory approach to Enterprise in Higher Education Initiative (EHE)	Elton, L. (2003). [39]
2	Academic information systems in higher education institution – a case study	How to use the existing Academic Information Systems (AIS) in HEI for improving quality decision-making processes	Purba, J. T., & Panday, R. (2015). [40]
3	Methodologies for innovative teaching and learning in higher education Institutions	Found that teaching and learning innovative methodologies including short lectures, simulations, role-playing, portfolio development, and problem-based learning are some of useful methods in addressing the students of higher education	Nicolaides, A. (2012). [41]
4	Case study on barriers and drivers of innovation across ten European universities	Many innovations and challenges in higher education are discussed and some of the practical recommendations are suggested.	Lašáková, A., et al. (2017). [42]
5	sustainability science for higher education and how it integrates into stakeholder, academic development and initialization	The study aims to understand the relationship between human and natural systems to develop a sustainable system. How to deal with the issue of institutionalization of Higher education institutions	Yarime, M., et al. (2012). [43]
6	About regional innovation systems built by higher education institutions	How Higher education Industry fuels the Regional Innovation system, also suggests actions that showcase regional development	Caniëls, M. C., & Van den Bosch, H. (2011). [44]
7	Teaching and Learning innovations in academic libraries	Importance of academic libraries in all stages of learning be it a first-year student or learning. It also emphasises the fact that the form of academic libraries may have moved to digital libraries but it still remains key for academic excellence for learning and teaching	Corrall, S., & Jolly, L. (2019) [45]
8	Innovating despite all odds in higher education also the nature of innovation in higher education	The nature of learning and teaching in Higher education. How this is shifting from a lower level to a much higher level directed by Higher Education Institutions. Who is responsible for the Innovation and who will benefit from it.	Silver, H. (1999). [46]
9	A framework of innovations in social education towards learning design	This study showcases how a practical approach using a set of rules or tools using a theory informed method for learning designs and for designing social innovation education.	Alden Rivers, B., et al. (2015). [47]

10	In the future how technology would shape learning	How technology is impacting higher education. How online learning has become a major part of universities around the globe. Industry - academia partnership becoming part of the University experience for the student. How campuses are having positive impact due to technology. The response of higher education institutions to globalisation.	Glenn, M. (2008). [48]
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Thus, innovations in higher educational institutions are focused mainly on digital infrastructure, teaching-learning infrastructure, Intellectual property infrastructure, and networking infrastructure. This includes many case studies on academics, administration, and research and development activities of Higher Education Institutions.

Table 2: Innovations in Administrations in HEIs

S. No.	Area of research and focus	Outcome	Reference
1	Higher education administration for innovation	The paper starts with the pretext that major patterns of administration is incorrect when it comes to higher education. this paper showcases the difficulties of higher education administration. The paper shows some administrative techniques that can be used in higher education and also states some positives and some limitations	Ling, L., & Ling, P. (1994). [49]
2	Innovative University	Kinds of innovation: sustaining and Disruptive. Teaching quality must be high and cannot be substituted or replaced. Parents and students still find that it is important to have a good physical campus and campus life and stick by name of the University especially if it is a brand. The process of accreditation of universities is important.	Christensen, C. M., & Eyring, H. J. (2011). [50]
3	Open innovation: Industry and University relationship	The existence of difference between industry and scientific disciplines.	Perkmann, M., & Walsh, K. (2007). [51]
4	A model in higher education for Innovation	Lack of individual innovation in academic environment. Innovation in academic involvement is very less and the individual has the power to innovate the external and internal factors to make it sustainable.	Jakovljevic, M. (2018). [52]
5	A Content Analysis of 20 Institutional Websites for Plotting Academic Innovation	This study examined the various programming, communication, and academic innovation practices as indicated by publicly accessible website material across 20 institution academic innovation websites. The results point to varying degrees of academic innovation influence as well as recurring conflicts between innovation effort and efficacy.	Barger, A. P., et al. (2022). [53]

6	The Digital Age and Innovation in Education	Attention of prospective students is on how instruction will be delivered. The pedagogical, technological, and business factors that collectively influence the direction of innovation in virtual education are covered in this essay. Changing operational models—both administrative and pedagogical—can help traditional higher education—campus-based, lecture-bound, and faculty-driven—advantage of the explosion of opportunities brought on by technological innovation and development.	Friedman, R. S., & Deek, F. P. (2003). [54]
7	Promoting Progressive Mentoring and Advancement in Higher Education through Institutional Innovation: Pathways to Transformation	Due to societal developments, colleges and universities are currently dealing with a number of difficulties. These difficulties include the financial strains of meeting rising demands for technology-driven education in a setting where public funding is steadily declining, shifting public expectations, resources, and support for higher education.	Montgomery, B. L. (2018). [55]
8	Higher Education Institution's Innovation Ecosystem as a Driver of Intellectual Activity Results' Commercialization	This study is focused on analysing the issues with the university's innovative ecosystem's performance. The goal of this study is to justify the importance of the innovation ecosystem and identify its potential for advancing the commercialization of intellectual activity outcomes in a higher educational institution.	Ugnich, E. A., Chernokozov, (2015). [56]
9	A professional organisation that innovates	Over the past five years, higher education policy in the Netherlands has been very interested in the innovation of academic programmes. Authorities in charge of university administration and the minister of education have both made an effort to encourage academic programme innovation by establishing incentives. In this study, the effectiveness of incentives in two novel projects at the University of Utrecht is evaluated. The evaluation's findings are then taken into consideration from a theoretical perspective. Conclusions are drawn about the degree to which innovation can be encouraged and the kinds of incentives that are appropriate for this goal.	Savenije, B., & Van Rosmalen, K. (1988). [57]

In summary, through many innovations in administrative processes in managing and satisfying stakeholders, higher education institutions have achieved considerable improvements in offering regular services. Promoting Progressive Mentoring and Advancement in Higher Education through Institutional Innovation is also found to be possible.

Table 3 Innovations in Research & Collaborations in HEIs

S. No.	Area of research and focus	Outcome	Reference
1	Collaboration with academic institutions is essential for effective corporate innovation.	Due to the fact that external partners can support an organization's innovation operations by contributing expertise and resources, businesses must expand their boundaries in order to gain useful knowledge from them. Higher education institutions (HEIs) are a significant source of innovation in this environment. However, despite the significance of universities, little academic attention has been paid to this issue. This study investigates the impact of particular university-supported activities on the innovation outcomes of businesses. The study also looks into the moderating effect of a firm's capacity to absorb new ideas on the relationship between university involvement and successful firm innovation. According to the results, certain HEI activity subtypes have a beneficial impact on a business's innovation performance, while absorptive capacity has varying effects on the connections between HEI activities and firm innovation outcomes.	Moon, H., et al. (2019). [58]
2	Collaboration between the government, the commercial sector, and higher education institutions for innovation under the framework of the Triple Helix Model	This study suggests that the government's function within the Model be clarified. The study also shows that by using the new framework that has been presented, collaboration between HEIs and the commercial sector should be reinforced. The proposals include, among other things, the idea that increasing research commercialization should be high on the Triple Helix policy agenda, along with the idea that the Model's strategy should constantly be realigned and repositioned to take into account the shifting demands and behaviour patterns of network participants. This can only happen among knowledgeable network actors, though.	Gachie, W. (2020). [59]
3	Challenge and chance for Higher education institutions in Social Innovation	The intersections between many society sectors are frequently where social innovations are created. The connections between them are primarily made by lone organisations and projects. Many of these institutions see themselves as bridging the gaps between various facets of society. They create fresh, collaborative approaches to research, direction, consulting, promotion, and funding. But in a knowledge society, academia might play the most significant part	Anderson, M. M., Domanski et. al (2018). [60]

		in creating, evaluating, and disseminating social advances. Higher education institutions (HEIs) and research facilities serve as crucial exchange hubs for ideas between various academic fields, commercial sectors, and cultural groups.	
4	Developing academic growth, institutionalisation, and stakeholder relationships in order to establish sustainability science in higher education institutions	In order to alter and develop these systems in a sustainable way, the area of sustainability science seeks to comprehend the intricate and dynamic connections between natural and human systems. Interdisciplinarity has emerged as a key concept in the field of sustainability science because sustainability issues span across numerous academic disciplines, from the natural sciences to the social sciences and humanities. Interdisciplinarity of se, however, is insufficient for tackling challenging, real-world sustainability issues. Transdisciplinarity must be a vital part of sustainability science's active collaboration with many societal stakeholders. Higher education institutions must address the difficulties of institutionalisation in addition to putting interdisciplinarity and transdisciplinarity into practise. This essay draws on the sustainability-related experiences of a few higher education academic programmes.	Yarime, M., et al. (2012). [61]
5	Innovation as an example of higher education innovation	The importance of innovation in education has been thoroughly studied, but there is still a lack of understanding regarding how to empower a person to engage in lifelong innovation activities. There isn't a sufficient model that offers an all-encompassing strategy for innovation in academic institutions. The construction of a model for innovation from a personal perspective follows the exploration of several innovation-related challenges in this article. According to this essay, academic settings lack awareness of and the dynamics of individual invention. There are few instances of academics participating in innovation projects, despite the fact that there are obvious signs of deeply ingrained societal, institutional, cultural, and personal innovation aspects. This needs an all-encompassing strategy for innovation research.	Jakovljevic, M. (2018). [62]

6	Collaboration in R&D and product development	The long-term benefits of R&D partnerships with suppliers and universities are sustained, but thankfully the adverse effects of R&D partnerships with rival companies are transient. These results suggest that the success of R&D collaborations for product innovation appears to be driven by ease of knowledge access rather than breadth of knowledge. Product innovation is positively influenced by R&D partnerships with universities or suppliers who provide relatively easy access to knowledge, whereas R&D partnerships with clients or rivals who provide less easy access to knowledge have no relationship or even a negative relationship with product innovation.	Un, C. A., et al. (2010). [63]
7	A strategy framework for e-learning and pedagogical innovation in higher education institutions is called "Flying Not Flapping".	E-learning is in a very unique situation. It started out as a "tool" and is now known as a transformation that is a little bit shaky. In reality, it's a challenging task that won't be accomplished by learning technology alone: altering the way that thousands of teachers teach, learners learn, creativity is encouraged, and sustained transformation in established institutions is achieved across hundreds of different disciplines. Technology, as well as art, craft, and science, are all involved. This essay aims to demonstrate how intricate strategic processes might be captured and modelled in order to advance the potential of e-learning in universities to a new stage of growth. It is an illustration of a four-quadrant model developed as a framework for an online learning technique.	Salmon, G. (2005). [64]
8	Reference Framework for Teaching-Learning System Design in Education 4.0: Two Case Studies Using Collaborative Networks and Open Innovation	For many industrial and service industries, including education, collaborative networks and open innovation have great potential to be co-drivers of value creation. Universities are increasingly often seen in higher education putting collaborative teaching-learning systems with 4.0 technology into place. These kinds of collaborative processes have also been reinforced by other instructional techniques, research endeavours, and co-development initiatives, which are now thought to be desirable to be carried out within Education 4.0.	Miranda, J., et al. (2021). [65]
9	Students' expectation elements towards teacher-student research collaboration in higher education	As per learning outcome is concerned, teachers want more from their students, whereas students want knowledge, assistance, and a healthy dose of criticism and innovation from their teachers. This review of the	Abbas, A., Arrona-Palacios, (2020). [66]

		literature-based research study examines teacher-student research collaboration, which involves communication between teachers and students. The basic components of research collaboration between professors and students are highlighted in this research effort, which also offers guidelines to responsible authorities of higher educational institutions and research professionals. Better learning outcomes, such as accomplishments in academia and research, are encouraged by such regulations. The results of this study indicate teacher-student factors that aid both teachers and students in publishing more material to advance their careers in academic research.	
10	An investigation on the function of global partnerships in higher education in developing research capacity for disaster resilience	Concluded that HIs in developing countries require an enhanced provision of means of implementation, including adequate, sustainable, and timely resources, through international cooperation and supply of resources. Global development partnerships and ongoing international assistance will help them in their efforts to lower the danger of disaster.	Amaratunga, D., et al. (2018). [67]

Higher Education Institutions are trying to improve the quality of academics and research through effective Collaboration with admission-feeding institutions, other research institutions, and with industries. Innovations in various activities of such academic, research, and industry collaborations provide opportunities for creating best practices.

Table 4: Innovations in Institutional values & Best practices

S. No.	Area of research and focus	Outcome	Reference
1	A research case study on how innovations and best practices may transform higher education institutions	Both education and educational institutions now face competition. Institutions must raise the calibre of their services if they want to remain competitive. Higher education institutions nowadays are forced to reevaluate their educational models and add value to each and every area of their services due to changes in culture, aspiration, and the levels of skills needed to get jobs for students. Best practices and innovations improve quality and increase value. In order to set itself apart from the competition and improve the quality of its educational offerings, Srinivas Institute of Management Studies (SIMS), which blends technology, management, and social service education, has recognised and put into practice innovations and best practices. This essay discusses both little and large improvements that have been developed and executed	Aithal, P. S., & Kumar, P. M. (2015). [68]

		<p>during the past four years. They are roughly categorised into six important categories: "curriculum aspects, teaching-learning and evaluation, research, consultancy and extension, infrastructure and learning resources, student support and progression, governance, leadership, and management," and "research, consultancy, and extension." The article also includes a few institutional and faculty best practises that have a clear impact on the standard of the higher education the institution offers. The best practises are those that deal with things like admission, fees, attendance, instruction, performance, skill development, employability, student involvement, group learning, value addition, assuring transparency, information dissemination, etc. Finally, two institutional best practises are described along with their purpose, underlying principles and concepts, unique contextual features or difficult issues that had to be resolved in designing and implementing the practise, as well as evidence of success, identification of challenges faced, and resources needed to implement the practise.</p>	
2	<p>A Case Study from Vietnam Examining the effects of Knowledge Management on Innovation in Higher Education Institutions</p>	<p>Innovation and knowledge management are frequently cited as the main forces behind bettering organisational performance. The findings of this study are based on survey information gathered in 2017 at 30 public universities evenly distributed across Vietnam's three regions. The proposed correlations between KM and INNO are tested using structural equation modelling. The authors of this study discovered that not all aspects of KM are directly related to administrative INNO and that KM has a broad impact on technical INNO in academic contexts. In addition to adding to the body of information on this topic, this study is valuable from a managerial standpoint since it increases higher education institutions' understanding of how to foster organisational innovation and then improve performance by participation in KM activities.</p>	<p>Ngoc-Tan, N., & Gregar, A. (2018). [69]</p>
3	<p>Flying not flapping: a strategic framework for pedagogical innovation and e-learning in higher education</p>	<p>The state of e-learning is somewhat unusual. It began life as a "tool" and is now known as a change-bringing arrow that is a little shaky. In reality, changing the methods by which tens of thousands of professors impart knowledge, students acquire knowledge, creativity is encouraged, and long-lasting change in traditional institutions is accomplished across hundreds of different disciplines is a challenging task that cannot be accomplished by learning technologies alone. It combines technology with elements of art, craft, and science. In an effort to advance the potential of e-learning in universities to a new stage of growth, this research demonstrates how it might be able to capture and model complex strategic processes. The article</p>	<p>Salmon, G. (2005). [70]</p>

		provides an illustration of a four-quadrant model developed as a framework for an e-learning strategy.	
4	Education at the University in Innovation Ecosystems	Here, higher education is viewed as an Engine for innovation and a catalyst for sustainability development. The integration of the two roles is best reflected in higher education's engagement in innovation ecosystems.	Cai, Y., Ma, J., & Chen, Q. (2020). [71]
5	Work engagement, burnout, and job satisfaction in Higher education - a literature review and recommended practises	Specifically focusing on teachers in higher education, this study examines the development of studies on job satisfaction, burnout, and work engagement, especially in the helping professions. It contains a description of the approaches and procedures supported by research for assessing job happiness, forecasting and avoiding burnout, and boosting employee engagement. Discussions are held on the lessons gained, potential future steps, and professional development activities intended to maximise faculty participation and advance faculty wellbeing.	Schubert-Irastorza, C., & Fabry, D. L. (2014). [72]
6	Education innovation and educational advancements in the context of contemporary higher education institutions	The terms "educational innovations" and "innovations in education" must be distinguished. Innovation in education includes more than just "educational innovation." Innovations in education include advancements in education, science, technology, infrastructure, economy, society, law, and administration, among other issues. An approach of educational activity that differs significantly from accepted practice and is employed to boost effectiveness in a competitive context is referred to as an educational innovation. Pedagogical innovation, scientific and methodological innovation, educational innovation, and technology innovation are all examples of innovations in education.	Mykhailyshyn, H., Kondur, O. et al. (2018). [73]
7	Policy, perception, and practise in higher education's "teaching culture"	This study examines relationships between policies of the institution, perception of faculty members, and practises related to teaching and learning by collected data from about 5,000 faculty members at 45 institutions with an effort to identify policies that foster an institutional "culture of teaching" or support use of effective pedagogies. According to a number of multi-level models, the correlations between academic policy factors and these faculty attitudes or behaviours are often weak and inconsequential. Conventional institutional traits, such selectivity and Carnegie categorization, seem to have a greater influence.	Cox, B. E., McIntosh, K. (2011). [74]
8	Searching for Institutional values and best practices Selected Affiliate Colleges of	A higher education institution's (HEI) "Quality Status" is heavily influenced by assessment and accreditation. For the HEI to function well in terms of its educational procedures and outcomes, research, infrastructure, learning materials, organisation, governance, financial stability, and student services, it is imperative that it meet the criteria of quality stipulated by NAAC	Shenoy, V., Nayak, M (2018). [75]

	Srinivas University	(National Assessment & Accreditation Council). NAAC is an independent organisation created by the University Grants Commission to provide this function. Therefore, in reference to a specific NAAC Self Study methodology, we have done a study here to investigate the institutional principles and best practises followed by a select group of Srinivas University Affiliate Colleges in order to better understand their unique organisational and governance features.	
9	Beyond "Best Practise," regional innovation policy	The policy measures in Scania, Southern Sweden's regional innovation system are the subject of this essay. The demands on innovation policy from stakeholders representing various industries are the main focus. Previous research has demonstrated significant disparities in how corporations and other actors in industries that draw on various knowledge sources organise their knowledge sourcing. Regional policy programmes frequently build their tactics on a single "best practise" model, drawing on successful (or occasionally unsuccessful) examples from around the globe. The conclusion of the article makes recommendations for how these should be modified to have an impact on the institutional framework of the regional innovation system. The paper gives an in-depth analysis of such policy assistance targeting three industries that are based in a single region.	Martin, R., Moodysson, J. (2011). [76]
10	Higher Education's Catalysts for Innovation and Quality	The transformation of higher education institutions is highly dependent on human resources and how they can approach and utilise all the new technologies and e-learning opportunities. ICT and e-learning can improve the quality of higher education through creative methods that increase student motivation, interest, and engagement, facilitate skill acquisition, and improve teacher preparation, which will ultimately improve teacher-student interaction and information exchange.	Pavel, A. P., Fruth, A (2015). [77]

Institutional Values and ethics play a major role in providing value-based education. By identifying, incorporating, and monitoring the values and ethics followed by the higher educational institution allows it to do innovations and to follow best practices.

5. CURRENT STATUS & NEW RELATED ISSUES :

The current research status of innovation and best practices on "Quality education in academics, administration, and research in Higher education Institutions" is a rapidly evolving field. There is a growing body of research on the topic, and new innovations are being developed all the time. Some of the currently focused areas in this research include:

(1) Teaching and learning: How can we improve the quality of teaching and learning in higher education? This includes looking at new pedagogical approaches, such as active learning and problem-based learning, as well as the use of technology to enhance learning.

(2) Administration: How can we improve the efficiency and effectiveness of university administration? This includes looking at new ways to manage resources, such as finances and human resources, as well as the use of technology to streamline administrative processes.

(3) Research: How can we promote research excellence in higher education? This includes looking at new ways to support and reward research, as well as the use of technology to facilitate research collaboration.

There are a number of best practices that have been currently identified the research, includes :

(1) A focus on student learning: The primary goal of higher education should be to ensure that students learn and acquire the knowledge and skills they need to succeed in their careers and in life.

(2) A culture of innovation: Universities should be places where new ideas are encouraged and where innovation is rewarded.

(3) A focus on student engagement: Students should be actively engaged in their learning, and they should be given opportunities to collaborate with their peers and with faculty.

(4) The use of technology: Technology can be used to enhance learning, to streamline administrative processes, and to facilitate research collaboration.

The research on innovation and best practices in higher education is still ongoing, but there is a growing body of evidence that suggests that these approaches can lead to improvements in the quality of education. As this research continues, we can expect to see even more innovative and effective ways to deliver high-quality education in higher education institutions.

Table 5: Some of the new research issues

S. No.	New Research Issues	Description
1	Technology Integration	Technology continues to play a vital role in transforming teaching, learning, and research in HEIs. Research explores the effective integration of technology, such as learning management systems, online collaboration tools, virtual reality, and data analytics, to enhance student engagement, personalize learning experiences, and facilitate efficient administrative processes.
2	Blended and Online Learning	Blended and online learning modalities have gained significant attention, especially with the disruptions caused by the COVID-19 pandemic. Research focuses on best practices for designing and delivering high-quality online courses, promoting student interaction and collaboration, ensuring accessibility and equity, and leveraging learning analytics to monitor and support student progress.
3	Competency-Based Education (CBE)	Competency-based education approaches, which focus on developing specific skills and competencies, have gained momentum. Research explores the design and implementation of competency frameworks, the assessment of student learning outcomes, and the integration of CBE within traditional academic programs to align education with industry needs and promote employability.
4	Student-Centered Approaches	There is a growing emphasis on student-centered approaches to education. Research investigates pedagogical strategies that enhance student engagement, critical thinking, and problem-solving skills. It also examines the role of mentoring, advising, and student support services in promoting student success and well-being.
5	Data-Driven Decision Making	HEIs are increasingly using data-driven approaches to inform decision-making processes. Research focuses on the effective use of data analytics, predictive modeling, and learning analytics to improve academic performance, identify at-risk students, and support evidence-based decision-making in administration and curriculum development.
6	Research Excellence and Collaboration	Research in HEIs continues to be a significant area of focus. Research explores best practices for promoting research excellence, fostering interdisciplinary collaboration, securing external funding, and enhancing knowledge transfer and commercialization of research outcomes.

7	Inclusive and Equity-Based Practices	Promoting inclusivity and equity within HEIs is a topic of ongoing research. Studies examine practices that address disparities in access to education, improve retention and graduation rates among underrepresented groups, and create inclusive learning environments that value diversity and promote multicultural understanding.
8	Governance and Leadership	Research investigates effective governance structures and leadership practices in HEIs. It explores models of shared governance, strategic planning, and decision-making processes to ensure effective administration and organizational effectiveness.

It's crucial to note that the field of education research is continually evolving. New studies, practices, and innovations continue to emerge. Therefore, staying up-to-date with the latest research and scholarly publications is essential for a comprehensive understanding of the current status of innovations and best practices in academics, administration, and research in HEIs.

6. DESIRED STATUS & IMPROVEMENTS REQUIRED :

An ideal higher education institution will have a full focus on quality aspects such as Curricular Aspects, Teaching-Learning & Evaluation, Research, Innovations & Extensions, Infrastructure & Learning Resources, Student Support & Progression, Governance, Leadership, & Management, and Institutional Values & Best Practices. This also includes the optimum utilization of six infrastructures of HEIs including physical infrastructure, digital infrastructure, innovative teaching-learning infrastructure, intellectual property infrastructure, emotional infrastructure, networked infrastructure of industries, alumni, and public [78].

7. RESEARCH GAP :

The systematic study on quality aspects in Curricular Aspects, Teaching-Learning & Evaluation, Research, Innovations & Extensions, Infrastructure & Learning Resources, Student Support & Progression, Governance, Leadership, & Management, and Institutional Values & Best Practices of a chosen higher education institution is always open as innovation in Higher education institutions. This also include student and teacher engagement and learning outcomes, technology integration, strategies for promoting research culture among the stakeholders, support services for student progression, institutional leadership, Resources and infrastructure on student learning experiences, and development of Institutional case studies.

8. RESEARCH AGENDAS BASED ON RESEARCH GAP :

Some of the potential research agendas based on the quality aspects of a chosen higher education institution with a focus on innovation are given in table 5.

Table 6: List of some research agendas based on the quality aspects of a chosen higher education institution with a focus on innovation

S. No.	Research Agenda	Description of research agenda
1	Exploring the Impact of Innovative Teaching-Learning Approaches on Student Engagement and Learning Outcomes	This research agenda would investigate how innovative teaching methods, such as project-based learning, flipped classrooms, or gamification, contribute to increased student engagement, motivation, and improved learning outcomes within the chosen higher education institution.
2	Assessing the Effectiveness of Technology Integration in Higher Education	This research agenda would examine the integration of technology in teaching and learning processes within the chosen institution, exploring its impact on student learning experiences, access to educational resources, and the development of digital literacy skills.

3	Investigating Strategies for Promoting Research and Innovation Culture among Faculty and Students	This research agenda would focus on identifying effective strategies and initiatives to foster a culture of research and innovation within the higher education institution, examining factors that promote faculty and student involvement in research activities and encourage the generation of new ideas and innovations.
4	Evaluating the Role of Student Support Services in Enhancing Student Progression and Success	This research agenda would assess the effectiveness of student support services, such as counseling, mentoring, career guidance, and academic advising, in promoting student progression, retention, and academic success. It would explore innovative approaches to enhance these support services and identify areas for improvement.
5	Examining the Role of Institutional Leadership and Management in Promoting Quality and Innovation	This research agenda would investigate the leadership and management practices within the chosen higher education institution, examining the role of institutional leaders in fostering a culture of quality, innovation, and continuous improvement. It would explore effective leadership strategies, management approaches, and decision-making processes that contribute to institutional excellence.
6	Analyzing the Impact of Learning Resources and Infrastructure on Student Learning Experiences	This research agenda would focus on assessing the availability, accessibility, and adequacy of learning resources and infrastructure within the chosen institution. It would investigate how innovative learning resources, such as online platforms, digital libraries, or interactive learning spaces, impact student engagement, collaboration, and overall learning experiences.
7	Developing a case study on a chosen higher education institution on systematic study on quality aspects in Higher education	Developing a case study on a chosen higher education institution on systematic study on quality aspects in Curricular Aspects, Teaching-Learning & Evaluation, Research, Innovations & Extensions, Infrastructure & Learning Resources, Student Support & Progression, Governance, Leadership, & Management, and Institutional Values & Best Practices of a chosen higher education institution is always open as innovation in Higher education institutions.

These research agendas highlight areas of inquiry that can contribute to the understanding and improvement of various quality aspects within a higher education institution, with a specific focus on innovation. They offer opportunities to explore innovative practices, evaluate their impact, and identify strategies for enhancing the overall quality of teaching, learning, research, infrastructure, student support, governance, leadership, and institutional values.

9. ANALYSIS OF RESEARCH AGENDAS :

The detailed analysis of research agendas identified based on the review of literature and expert interaction on quality aspects of a chosen higher education institution with a focus on innovation is given in table 7.

Table 7: Analysis of research agendas identified in the previous section

S. No.	Research Agenda	Analysis of research agenda for importance and viability
1	Exploring the Impact of Innovative Teaching-Learning Approaches on Student Engagement	(1) As education evolves, there is a growing need to explore innovative teaching-learning approaches that can address challenges in student engagement and learning outcomes. This research agenda directly tackles this issue, making it highly relevant and important. (2) Innovative teaching-learning approaches have the potential to increase student engagement by promoting active learning, interactive

	and Learning Outcomes	<p>experiences, and student-centered instruction. Understanding the impact of these approaches can lead to more effective pedagogical practices and improved student outcomes.</p> <p>(3) The primary goal of education is to facilitate learning and ensure positive learning outcomes. By exploring the impact of innovative teaching-learning approaches, this research agenda directly contributes to improving learning outcomes by identifying effective instructional strategies that can enhance student understanding, retention, and application of knowledge.</p> <p>(4) Research findings from this agenda can inform educational policies, curriculum development, and instructional practices. Understanding the impact of innovative approaches on student engagement and learning outcomes can guide educational institutions in implementing evidence-based strategies to improve the quality of education.</p> <p>Hence this research agenda addresses a significant educational concern, has the potential to inform educational policies and practices, and can be effectively carried out through collaboration with educators and data collection methods. The research findings can have a positive impact on teaching practices, student engagement, and learning outcomes in various educational settings.</p>
2	Assessing the Effectiveness of Technology Integration in Higher Education	<p>(1) Technology integration has the potential to transform higher education by enhancing teaching and learning practices. Assessing its effectiveness is crucial to understand the impact of technology on student outcomes, engagement, and overall educational quality.</p> <p>(2) Students are increasingly digital natives and expect technology to be seamlessly integrated into their educational experiences. Research on the effectiveness of technology integration helps institutions align with student expectations and provide a relevant and engaging learning environment.</p> <p>(3) Technology integration can address access and equity issues in higher education. Assessing its effectiveness ensures that technology is used in a way that benefits all students, including those from underserved populations, by providing equal opportunities for learning and academic success.</p> <p>(4) Technology offers new possibilities for instructional approaches, such as online learning platforms, multimedia resources, and collaborative tools. Understanding the effectiveness of technology integration enables educators to innovate their pedagogical practices and create more engaging and effective learning experiences.</p> <p>Hence this research agenda addresses the need to understand the impact of technology on student outcomes and enables educational institutions to make informed decisions regarding technology integration. With the availability of technological infrastructure, suitable data collection methods, and potential for collaboration, this research agenda holds significant value for enhancing teaching and learning practices in higher education.</p>
3	Investigating Strategies for Promoting Research and Innovation Culture among Faculty and Students	<p>(1) Research and innovation culture within higher education institutions is crucial for their advancement and progress. Investigating strategies to promote this culture can contribute to the overall growth, reputation, and excellence of the institution.</p> <p>(2) Research and innovation are fundamental for generating new knowledge and contributing to the academic community. Investigating strategies to foster a research and innovation culture encourages</p>

		<p>faculty and students to engage in scholarly activities, leading to the creation and dissemination of new ideas, discoveries, and advancements.</p> <p>(3) Promoting research and innovation culture among faculty and students enhances the overall academic excellence of the institution. It cultivates critical thinking, problem-solving skills, and a spirit of inquiry, leading to high-quality research outputs and innovative solutions to real-world challenges.</p> <p>(4) Engaging students in research and innovation activities enhances their learning experiences and promotes a deeper understanding of their disciplines. Investigating strategies to promote research and innovation culture can provide opportunities for students to develop research skills, critical thinking abilities, and a passion for lifelong learning.</p> <p>Hence this research agenda aligns with the goals of institutional advancement, knowledge creation, academic excellence, and student engagement. Collaborative partnerships, mixed-methods approaches, longitudinal studies, and comparative analysis contribute to its feasibility. By examining strategies for fostering research and innovation culture, this research agenda holds significant value in enhancing the research ecosystem and promoting a culture of innovation and inquiry within higher education institutions.</p>
4	Evaluating the Role of Student Support Services in Enhancing Student Progression and Success	<p>(1) The primary goal of higher education institutions is to promote student success and ensure their progression towards academic goals. Evaluating the role of student support services is crucial as it directly impacts students' well-being, engagement, and academic outcomes.</p> <p>(2) Effective student support services play a significant role in improving retention and graduation rates. By evaluating these services, institutions can identify areas for improvement, develop targeted interventions, and enhance student persistence and completion rates.</p> <p>(3) Evaluating the role of student support services ensures equitable access to resources and support systems for all students. It helps identify any disparities in service provision and assists in developing inclusive practices to address the needs of diverse student populations, including underrepresented groups.</p> <p>(4) Student support services contribute to the holistic development of students by addressing academic, career, personal, and social aspects of their lives. Evaluating these services allows institutions to assess their effectiveness in supporting students' overall well-being and development beyond academics.</p> <p>Thus, this research agenda aligns with the goals of student success, retention, equity, and holistic development. The availability of data collection methods, collaboration with student support professionals, potential for comparative analysis, institutional support, and the focus on continuous improvement contribute to the feasibility of this research agenda. By evaluating student support services, institutions can enhance their effectiveness, promote student progression, and contribute to the overall success and well-being of students in higher education.</p>
5	Examining the Role of Institutional Leadership and Management in Promoting Quality and Innovation	<p>(1) Effective leadership and management are critical for the success and effectiveness of higher education institutions. Examining their role in promoting quality and innovation helps identify best practices and strategies that can enhance the overall organizational effectiveness.</p> <p>(2) Institutional leadership and management play a vital role in ensuring and maintaining quality standards in higher education. By</p>

		<p>examining their role, this research agenda contributes to the continuous improvement of quality assurance processes and practices, ultimately benefiting students, faculty, and the institution as a whole.</p> <p>(3) Higher education is constantly evolving, and institutions must embrace innovation and adapt to changing needs and expectations. Understanding the role of leadership and management in promoting innovation helps identify effective strategies for fostering a culture of creativity, experimentation, and responsiveness to external demands.</p> <p>(4) Effective leadership and management facilitate meaningful engagement with stakeholders, including faculty, staff, students, and external partners. Examining their role in this research agenda can shed light on the importance of stakeholder collaboration and its impact on decision-making, resource allocation, and the overall success of the institution.</p> <p>Thus, this research agenda addresses the crucial aspects of organizational effectiveness, quality enhancement, innovation, and stakeholder engagement in higher education. The availability of mixed-methods approaches, collaboration with institutions, potential for comparative analysis, practical implications, and long-term impact contribute to the feasibility of this research agenda. By examining the role of leadership and management, this research agenda can contribute to the advancement and improvement of higher education institutions, ultimately benefiting students, faculty, and the broader educational community.</p>
6	<p>Analyzing the Impact of Learning Resources and Infrastructure on Student Learning Experiences</p>	<p>(1) Learning resources and infrastructure play a crucial role in shaping student learning experiences and outcomes. Analyzing their impact helps understand how access to appropriate resources and well-designed infrastructure can enhance student engagement, motivation, and academic achievement.</p> <p>(2) The availability and quality of learning resources and infrastructure can significantly affect educational equity. Analyzing their impact helps identify potential disparities and inequities, allowing institutions to address resource gaps and create inclusive learning environments that support the needs of all students.</p> <p>(3) Learning resources and infrastructure influence instructional practices and teaching methodologies. By analyzing their impact, researchers can identify effective strategies for integrating technology, multimedia, and other resources that support diverse learning styles and enhance pedagogical approaches.</p> <p>(4) Understanding the impact of learning resources and infrastructure on student learning experiences provides valuable insights for institutional decision-making and resource allocation. It enables institutions to make informed investments and improvements that enhance the overall educational environment.</p> <p>Thus, this research agenda addresses the significance of learning resources and infrastructure in shaping student learning outcomes, equity, pedagogy, and institutional improvement. The availability of data collection methods, comparative analysis, collaboration with institutions, potential for longitudinal studies, and practical applications contribute to the feasibility of this research agenda. By analyzing the impact of learning resources and infrastructure, this research agenda can inform institutional practices and investments, ultimately enhancing student learning experiences and academic success.</p>

7	Developing a case study on a chosen higher education institution on systematic study on quality aspects in Higher education	<p>(1) Conducting a systematic study on quality aspects in higher education institutions is essential for identifying areas of improvement. The research agenda aims to develop a case study that can provide valuable insights into the quality practices and processes within a specific institution. This information can inform strategies for enhancing the quality of education provided by the institution.</p> <p>(2) The case study can serve as a platform to identify and showcase best practices implemented by the chosen institution. By examining successful approaches and initiatives, the research agenda contributes to the dissemination and adoption of effective quality practices across the higher education sector.</p> <p>(3) A systematic study on quality aspects promotes accountability and transparency within higher education institutions. It enables stakeholders, including students, faculty, policymakers, and the wider community, to understand and evaluate the institution's commitment to quality education.</p> <p>(4) The research agenda supports evidence-based decision making in higher education institutions. By conducting a systematic study, institutions can gather data and evidence to inform strategic planning, resource allocation, and policy development.</p> <p>Hence, this research agenda addresses the significance of quality improvement, best practices, accountability, and evidence-based decision making in higher education. The availability of case study methodology, access to information, ethical considerations, collaborative partnerships, and a dissemination plan contribute to the feasibility of this research agenda. By developing a comprehensive case study, this research agenda can provide valuable insights and contribute to the enhancement of quality practices in higher education institutions.</p>
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The research agenda of developing a case study on a chosen higher education institution on systematic study on quality aspects in Higher education is found to be more viable for our further research due to the following reasons:

(1) Case Study Methodology: Case study methodology is a well-established approach for conducting in-depth investigations. It allows for detailed examination and analysis of a chosen higher education institution's quality aspects, providing rich and contextualized insights.

(2) Access to Information: Conducting a case study requires access to relevant data and information from the chosen higher education institution. Collaboration and cooperation with the institution are essential for acquiring the necessary data and ensuring the viability of the research agenda.

(3) Ethical Considerations: Ethical considerations, such as informed consent and data protection, need to be addressed when conducting a case study. Adhering to ethical guidelines and ensuring the confidentiality and privacy of participants enhance the viability of this research agenda.

(4) Collaborative Partnerships: Collaborating with the chosen higher education institution enhances the feasibility of the research agenda. Establishing a partnership allows for access to resources, data, and expertise that can contribute to the development of a comprehensive case study.

(5) Dissemination of Findings: The research agenda can benefit from a dissemination plan that ensures the findings are shared with relevant stakeholders. Presenting the case study outcomes at conferences, publishing in scholarly journals, or organizing workshops can contribute to the wider dissemination and impact of the research.

In summary, the research agenda of "Developing a case study on a chosen higher education institution on a systematic study on quality aspects in Higher education" is both important and viable.

10. FINAL RESEARCH PROPOSAL/PROBLEM IN CHOSEN TOPIC :

The research proposal chosen based on the above analysis of research agendas and convenience of the researcher is an exploratory Case study on Srinivas University in terms of its academic, administration,

research, values, and best practices. The topic of this explorative research would be “**Innovations and Best Practices in Higher Education Institutions – A Case Study of Srinivas University**”. This includes a systematic study of innovations and best practices of Srinivas University, a private university located in Mangalore, Karnataka state, India, on seven areas including (1) Curricular Aspects, (2) Teaching-Learning & Evaluation, (3) Research, Innovations & Extensions, (4) Infrastructure & Learning Resources, (5) Student Support & Progression, (6) Governance, Leadership, & Management, and (7) Institutional Values & Best Practices.

About Srinivas University:

Srinivas University, Mangalore, India is a private research and skill-focused University established in 2013 by Karnataka State Act. Srinivas University is the flagship of 18 Srinivas Group of Institutions started by A. Shama Rao Foundation, Mangalore, a Charitable Trust founded in 1988 by an Eminent Chartered Accountant Dr. CA A. Raghavendra Rao. A. Shama Rao Foundation has started many professional colleges in Mangalore which include Srinivas Institute of Medical Sciences and Research Center, Srinivas Institute of Dental Sciences, Srinivas Institute of Technology, Srinivas College of Pharmacy, Srinivas Institute of Nursing Sciences, A Shama Rao Nursing School, Srinivas Integrated Campus, Srinivas College of Hotel Management, Srinivas First Grade College, Srinivas School of Engineering, Srinivas Institute of Management Studies, Srinivas College of Physiotherapy, Srinivas College of Education, and Srinivas Institute of Social Work. During the academic year 2022, Srinivas University offered 69 undergraduate, postgraduate, and research programmes under 09 Faculties/Institutions. The University made innovations in designing and starting new super specialty programmes both in UG, and PG level as per present and future industry relevance, innovations in the examination system through focus on continuous evaluation. The University has established networking with many industries, universities, and Education service providers to substantially improve the quality and weightage of the courses and degrees respectively. The institutions under Srinivas University include (1) Institute of Management and Commerce, (2) Institute of Engineering and Technology, (3) Institute of Computer science and Information sciences, (4) Institute of Hotel management, Tourism, and Design, (5) Institute of Physiotherapy, (6) Institute of Education, (7) Institute of Social Science & Humanities, (8) Institute of Allied Health Sciences, and (9) Institute of Nursing Science.

11. SWOC ANALYSIS OF THE UNIVERSITY & ABCD ANALYSIS/ OF CHOSEN RESEARCH PROPOSAL :

11.1 SWOC Analysis of the Target University (Srinivas University):

Strengths, Weaknesses, Opportunities, and Challenges (SWOC) is basically an internal analysis of individuals, organizations, or countries. For educational institutions, it provides a structured approach to assess both internal and external factors that influence educational management [79-81]. The SWOC analysis framework helps researchers to gain a competitive understanding of the management contexts of an educational institution, identify its internal strengths and weaknesses, evaluate external opportunities and challenges, and develop strategies for effective management and improvement. SWOC analysis allows researchers to take a holistic view of the situation and make evidence-based decisions. In this section, we have listed some of the strengths, weaknesses, opportunities, and challenges of Srinivas University as a target university to study the innovations and best practices in academics, administration, extension, collaboration, and research activities [82].

1. University Strength:

This component focuses on identifying the internal positive attributes and advantages of the university management practices. These strengths may include effective leadership, competent administrative staff, well-defined organizational structure, robust financial management, strong communication channels, or successful implementation of policies and initiatives. Recognizing these strengths helps researchers leverage them to optimize management practices and build upon areas of excellence. Some of the strengths identified for Srinivas University are:

(1) Leadership: Strategic Visionary & Committed Leadership to elevate the University as one of World Class Universities.

(2) Accountability: Leaders & Administrators as Role models and Accountable in every task & all levels of responsibility.

- (3) **Adequate Infrastructure:** Being 35 years in higher education field, Srinivas University has developed an adequate amount of (1) Physical infrastructure, (2) Digital infrastructure, (3) Teaching-Learning infrastructure, (4) Intellectual Property infrastructure, (5) Emotional infrastructure, and (6) Network infrastructure.
- (4) **Collaborations:** For Admissions, Skills & Entrepreneurship development, Projects & Internships, Student Placements, Research & Commercialization, Micro incubation Centres for supporting start-ups, etc.
- (5) **Innovations:** Twelve Super Innovations in University processes based on Autonomy. Include Student-Centred, Faculty-focused, Industry orientation, and Research surrounded Innovative system.
- (6) **Cost-leader:** With the strategy of utilizing resources optimally through collaborations, without compromising quality and effectiveness, Srinivas University is trying to become low-cost player and hence offers higher education at affordable fees.
- (7) **Research Focus:** Faculty level Research using Atomic Research Centres, Institutional level research using Core Research centres, Multi-disciplinary Research using Inter-Institutional Research Centres, and Multi-Institutional Research using Collaborative Research Centres.
- (8) **Micro Incubation Centres:** To identify, promote, and nurture new business ideas, and to start an independent business by our students and alumni with the help of our faculty members.
- (9) **Super-specialty Programmes:** Industry-specific, super-specialty programmes are offered in emerging technology areas and demanding industries, using autonomy in higher education system.
- (10) **Alumni Association:** Young and Active Alumni Association which can be moulded with university vision from the beginning.
- (11) **Social Service Involvement** through SIRA an NGO under Srinivas University, Compulsory NSS exposure to all the students, Inculcating core-values within university students, the university is offering holistic, traditional higher education.
- (12) **Research Publications:** Ideal Model of Publication through University Press and free publication for university researchers through University Research funds & Consultancy.
- (13) **ICT enabled Classrooms:** ICT enabled Classrooms with facility for Online & Offline classes.
- (14) **Preparedness for NEP-2020:** NEP 2020 implementation and thinking beyond it to *increase GER for UG, PG and also Research level education.*
- (15) **Effective Communication** with Stakeholders by use of Communication technology.
- (16) **Student centered Progress** by Design and adoption of competency/outcome-based education to provide student-satisfaction, student-delight, and student-enlightenment.
- (17) **Continuous Faculty Development** to remove obsolescence through API based scores & grades and performance-based faculty incentives.
- (18) **Elimination of skill-gap through Joint Training** with Edu-tech companies for guaranteed Placement.

2. University Weakness:

The weaknesses component involves examining the internal limitations or constraints within the management of the educational institution. These weaknesses may include poor communication among staff, lack of clear decision-making processes, ineffective resource allocation, inadequate professional development opportunities, or insufficient use of data for decision-making, etc. Identifying weaknesses allows researchers to develop strategies to address these challenges and enhance overall management effectiveness. Some of the weaknesses identified for Srinivas University are:

- (1) **New University:** Being a young University, there are plenty of teething problems including the number of faculty members with Ph.D., changing attitudes of existing faculty members to research orientation, Brand building requirement for increasing admissions, retaining faculty members due to enhanced pressure on API based annual performance, number of Ph.D. awarded per teacher, etc. This has to be overcome gradually through experience and effort.
- (2) **Lack of Govt. Research Funds:** Lack of UGC and state government grants for research & Innovations due to non-approval of 12(B) based on Govt. policy.
- (3) **International Admission:** Structured focus is required to promote the university in the international market due to statutory regulations.

(4) *Lack of E-content development Opportunities:* Due to constraints of 12(B) recognition, Contribution to e-PG patashala, MOOC content of SWAYAM, NPTEL, and open learning platforms due to Govt. policy.

(5) *Alumni Association:* Too young Alumni Association for significant Alumni and Philanthropic contribution.

3. University Opportunities:

This part of the analysis focuses on external factors that present favorable conditions or possibilities for enhancing the management of the educational institution. Opportunities may include technological advancements, emerging research and best practices in management, policy changes, collaborative partnerships, funding opportunities, or changing societal expectations. By recognizing these opportunities, researchers can propose strategies to capitalize on them and improve management practices. Some of the opportunities identified for Srinivas University are:

(1) To be a first mover in the implementation of NEP 2020 by effective use of autonomy with all its holistic features, and has the potential to be a trendsetter in implementing super-innovations in all its horizontal and vertical functions.

(2) Re-defining higher education and research by removing obsolete practices and implementing radical and destructive innovations which are student-centric.

(3) To have tie-up with Foreign Universities for Admission, Academic, & Research Collaborations,

(4) To offer Dual –Degree Programmes in Local languages, Local Culture & Traditions and Various philosophies,

(5) To offer dual degree Programmes as well as Online Programmes in different emerging technologies & Management area as BCA, BBA, B. Com, & B.Sc. Undergraduate & respective Postgraduate Programmes.

(6) Securing higher scores in NIRF, Global rankings such as THE, QS rankings, and others if open access and keeping copyrights of scholarly articles are retained with researchers/university.

(7) Working towards achieving the status of Institute of Eminence which in turn eliminates all restrictions for innovations in the HE industry.

(8) Use of DSIR recognition to attract Research and Development Grants from National and International agencies for augmenting research facilities.

(9) Initiation of student & faculty exchange programs by starting and using its Bangalore Campus.

(10) Attract eminent Professors & Researchers from International institutes through improved HR policies.

(11) Offer sector skills training along with Govt. of India and Industry Associations to eliminate technology based any future skill gap.

(12) Collaborate with global universities of repute in niche areas of research.

(13) Further focus on Dual-Degree Programmes and online programmes in Arts & Design area for existing students and other University students.

(14) Offering online education and research programmes ubiquitously at low price and high quality.

(15) To become better among bests in higher education and research space adopting Ideal Education Model.

(16) Use of Brand Value of existing Srinivas Group of Colleges.

(17) Merit Cum Means scholarship to attract meritorious students at UG, PG, and Research levels.

(18) Gender & Religion Equality with zero tolerance for sexual harassment.

4. University Challenges:

The challenges component involves identifying external factors or obstacles that hinder effective management of the educational institution. These challenges may arise from factors such as changing educational policies, limited funding, stakeholder resistance to change, legal and regulatory requirements, or societal and cultural dynamics. Understanding these challenges helps researchers develop strategies to mitigate risks, overcome barriers, and proactively address the difficulties faced in managing the institution. Some of the Challenges identified for Srinivas University are:

(1) Foreseeing & Adopting technology based and customer perception based fast changes in Higher education industry.

- (2) Mobilizing finance & effective and efficient Human Resources for Research, Skill imparting, Innovations, and Development
- (3) Developing & Maintaining World Class Infrastructure which involves Physical, Digital, Innovative Teaching-Learning, Intellectual property, Emotional commitment, and Networking with industry and alumni.
- (4) Maintaining high quality and overtaking unhealthy competition from Mushrooming affiliated Colleges.
- (5) To become low-cost leader, low fees charging but highly effective university to create innovators for future industries by attracting and retaining high quality research-intensive faculty members.
- (6) Constraints of following local, national and international regulation to improve local campus, and to start new campuses both at nationally and internationally.
- (7) Control on University Research output by keeping copyright and patent right (IPR) without bending to International lobbies and publication mafia.
- (8) Handling Government interference in quality improvement processes and use of autonomy while making innovations in HE spaces to compete at international level.
- (9) Time requirement to enhance number of faculty members with Ph.D. degree qualifications.
- (10) Constraints of yet to receive NAAC Grading to start Online Distance Programmes (ODL), Foreign Collaboration, etc.

By conducting a SWOC analysis, researchers in Education Management can systematically assess the current state of management practices, identify internal strengths and weaknesses, evaluate external opportunities and challenges, and develop targeted strategies to enhance management effectiveness. This analysis serves as a foundation for evidence-based decision-making, policy formulation, leadership development, and the overall improvement of educational institutions' management practices.

11.2 ABCD Analysis of the Research Proposal from Stakeholders' Point of view:

Conducting an ABCD (Advantages, Benefits, Constraints, and Disadvantages) analysis of a research proposal from stakeholders' point of view can provide valuable insights into the potential impact, feasibility, and challenges associated with the proposed research [83-84]. This analysis helps researchers understand the perspectives and concerns of different stakeholders, allowing for a more comprehensive evaluation of the proposal. ABCD framework provides four types of analysis opportunities. This includes ABCD listing [85-94], ABCD from stakeholders' point of view [95-98], Factor and elemental analysis using ABCD constructs [99-104], and (4) Quantitative ABCD analysis [105-112]. The details of the four constructs of the ABCD analysis are depicted in Table 11:

Table 11: Detailed procedure of ABCD analysis for the research proposal

S. No.	ABCD Construct	Procedural Details
1	Advantages	This component focuses on identifying the positive aspects and potential gains that stakeholders may perceive in relation to the research proposal. Advantages could include advancements in knowledge, improved understanding of a particular issue, potential policy recommendations, enhanced decision-making processes, or the development of innovative solutions. By recognizing and highlighting these advantages, researchers can effectively communicate the potential value and relevance of their research to stakeholders.
2	Benefits	Benefits refer to the specific advantages or positive outcomes that stakeholders can expect to receive or experience as a result of the research. These may include tangible benefits such as improved services, increased efficiency, cost savings, or enhanced educational outcomes. Additionally, there may be intangible benefits such as increased reputation, strengthened partnerships, or improved public perception. Identifying and articulating the benefits helps researchers address stakeholders' needs and expectations, increasing their support and engagement.
3	Constraints	Constraints represent the limitations or challenges that stakeholders may anticipate or encounter in relation to the research proposal. These

		constraints can include factors such as financial constraints, time limitations, resource availability, technical expertise required, regulatory or ethical considerations, or competing priorities. By acknowledging and addressing these constraints upfront, researchers can demonstrate a realistic understanding of the challenges involved and propose strategies to mitigate or overcome them.
4	Disadvantages	Disadvantages encompass the potential negative impacts or drawbacks that stakeholders may perceive or experience as a result of the research proposal. These could include risks associated with data privacy, unintended consequences, disruption to existing processes or routines, increased workload, or conflicts of interest. Identifying and addressing these disadvantages allows researchers to proactively consider measures to minimize or mitigate potential adverse effects and build stakeholder confidence.

Conducting an ABCD analysis from stakeholders' point of view provides researchers with a comprehensive understanding of the perceived advantages, benefits, constraints, and disadvantages associated with their research proposal. By considering and addressing these perspectives, researchers can refine their proposal, align it with stakeholders' interests, and effectively communicate the potential impact and feasibility of the research. This analysis contributes to stakeholder engagement, increases the likelihood of support and collaboration, and enhances the overall quality and relevance of the research.

Based on above framework, the ABCD listings on “Innovations and Best Practices in Higher Education Institutions” is developed from three stakeholders: (a) students’ point of view, Faculty members’ point of view, and institutional point of view listed below in tables 12 to 23.

Table 12: Advantages of Innovations and Best Practices in Higher Education Institutions from Students’ point of view

S. No.	Key Indicator	Advantages from Students’ point of view
1	Enhanced Learning Experiences	Innovative practices can provide students with engaging and interactive learning experiences, making education more enjoyable and effective.
2	Improved Teaching Methods	Innovations in teaching techniques and technologies can help educators deliver information more effectively, resulting in better comprehension and retention of knowledge.
3	Personalized Learning	Innovations allow for personalized learning experiences tailored to individual student needs, enabling students to learn at their own pace and according to their interests and learning styles.
4	Access to Advanced Technologies	Best practices in higher education institutions often involve the adoption of cutting-edge technologies, providing students with exposure to state-of-the-art tools and resources that can enhance their education.
5	Collaboration and Networking Opportunities	Innovations can facilitate collaborative projects and networking opportunities among students, enabling them to develop teamwork skills, share ideas, and build valuable connections.
6	Flexibility in Learning	Best practices may include flexible learning options such as online courses, blended learning models, or modular programs that allow students to balance their academic pursuits with other commitments.
7	Holistic Development	Innovative approaches often focus on the holistic development of students, emphasizing not just academic knowledge but also skills such as critical thinking, problem-solving, creativity, and communication, which are crucial for future success.

8	Real-World Application	Best practices may emphasize hands-on learning experiences, internships, or experiential learning opportunities, providing students with practical skills and experiences that can be directly applied in their chosen fields.
9	Inclusion and Accessibility	Innovations in higher education can promote inclusivity and accessibility by offering accommodations for students with disabilities, providing support for diverse learning needs, and ensuring equal opportunities for all students.
10	Career Readiness	Adopting best practices can align curricula with industry requirements, ensuring that students acquire relevant skills and knowledge that enhance their employability and prepare them for successful careers.

These advantages demonstrate how innovations and best practices in higher education institutions can positively impact students' learning experiences, personal growth, career readiness, and overall educational outcomes.

Table 13: Advantages of Innovations and Best Practices in Higher Education Institutions from teachers' point of view

S. No.	Key Indicator	Advantages from Teachers' point of view
1	Improved Teaching Effectiveness	Innovations and best practices provide teachers with new strategies, methodologies, and tools that can enhance their instructional approaches, leading to more effective teaching and improved student learning outcomes.
2	Enhanced Engagement	Innovative practices can help capture students' interest and engagement in the learning process, creating a more interactive and dynamic classroom environment.
3	Professional Growth Opportunities	Implementing best practices and innovative approaches in higher education institutions allows teachers to expand their skills, stay updated with current trends, and engage in professional development, fostering their own growth as educators.
4	Collaboration and Networking	Innovations often promote collaboration among teachers, enabling them to share ideas, collaborate on projects, and learn from each other's experiences. This networking can lead to a sense of community and collective growth.
5	Integration of Technology	Innovations and best practices often involve the integration of technology tools and resources into teaching practices. This integration can streamline administrative tasks, facilitate content delivery, and offer new avenues for instruction, making teaching more efficient and effective.
6	Student-Centered Approaches	Best practices encourage student-centered learning, which empowers teachers to shift from a traditional lecture-based approach to one that focuses on student engagement, active learning, and personalized instruction. This approach allows teachers to better cater to students' individual needs and learning styles.
7	Access to Resources	Innovations in higher education institutions often provide teachers with access to a wide range of resources, including digital libraries, online databases, multimedia materials, and educational platforms, enabling them to enhance their teaching materials and instructional resources.
8	Professional Recognition	Implementing innovative practices and best practices can lead to recognition and acknowledgment from peers, administrators,

		and the wider educational community, providing teachers with a sense of accomplishment and professional satisfaction.
9	Student Success and Impact	By implementing innovative approaches, teachers can positively impact student success, helping students achieve their academic goals, develop critical skills, and prepare for future careers. Witnessing students' growth and success is a rewarding experience for teachers.
10	Adaptation to Changing Educational Landscape	Innovations and best practices enable teachers to adapt to the evolving educational landscape and keep pace with emerging educational theories, research, and advancements, ensuring they provide students with the most relevant and up-to-date education.

These advantages demonstrate how innovations and best practices in higher education institutions can empower teachers, enhance their teaching effectiveness, promote professional growth, and ultimately contribute to improved student learning outcomes.

Table 14: Advantages of Innovations and Best Practices in Higher Education Institutions from institutional point of view

S. No.	Key Indicator	Advantages from Institutional point of view
1	Enhanced Reputation	Implementing innovations and best practices in higher education institutions can contribute to an enhanced reputation. Institutions that are known for their innovative approaches and effective practices attract students, faculty, and funding opportunities.
2	Increased Student Enrollment	Innovations and best practices can lead to increased student enrollment. Students are attracted to institutions that offer a modern and dynamic learning environment with innovative teaching methods, cutting-edge technologies, and relevant programs.
3	Improved Student Retention and Success	Innovations and best practices in higher education can contribute to improved student retention and success. By implementing student-centered approaches, personalized support services, and effective teaching strategies, institutions can enhance student engagement, satisfaction, and overall academic achievement.
4	Faculty Development and Engagement	Implementing innovative practices provides opportunities for faculty development and engagement. Faculty members are more motivated and engaged when they have the freedom to explore and implement innovative teaching methods and participate in professional development activities related to best practices.
5	Research and Scholarship Advancement	Innovations in higher education institutions often lead to advancements in research and scholarship. Implementing innovative practices can create an environment that fosters research collaborations, encourages interdisciplinary approaches, and attracts funding for research projects.
6	Partnerships and Collaboration	Innovations and best practices can foster partnerships and collaboration with other institutions, industries, and organizations. Collaborative initiatives can lead to joint research projects, student exchange programs, and shared resources, enhancing the institutional network and opportunities for growth.
7	Effective Resource Utilization	Implementing best practices helps institutions optimize resource utilization. By identifying and adopting efficient and effective methods, institutions can streamline processes, reduce costs, and

		allocate resources strategically, resulting in improved financial sustainability.
8	Institutional Adaptability and Resilience	Innovations and best practices contribute to institutional adaptability and resilience. Institutions that are open to change and continuously seek improvement are better equipped to navigate challenges, adapt to evolving needs, and stay competitive in a rapidly changing higher education landscape.
9	Enhanced Stakeholder Engagement	Innovations and best practices can enhance stakeholder engagement within the institution. When stakeholders perceive an institution as innovative and committed to excellence, they are more likely to actively participate in institutional activities, contribute ideas, and support the institution's mission.
10	Alignment with Evolving Workforce Demands	Implementing innovations and best practices ensures that higher education institutions align with evolving workforce demands. By offering programs and initiatives that reflect current industry trends and skills requirements, institutions can enhance graduates' employability and meet the needs of the job market.

These advantages collectively contribute to the overall institutional growth, sustainability, and excellence in higher education.

Table 15: Benefits of Innovations and Best Practices in Higher Education Institutions from Students' point of view

S. No.	Key Indicator	Benefits from Students' point of view
1	Enhanced Learning Experiences	Innovations and best practices in higher education institutions can lead to enhanced learning experiences for students. Innovative teaching methods, interactive technologies, and engaging learning environments make the learning process more enjoyable, stimulating, and effective.
2	Improved Academic Performance	By implementing best practices, institutions can provide students with the tools and resources they need to succeed academically. Effective teaching strategies, personalized support services, and access to cutting-edge technologies contribute to improved academic performance.
3	Skill Development	Innovations in higher education institutions often focus on developing students' skills that are in high demand in the job market. By incorporating innovative programs, experiential learning opportunities, and industry partnerships, institutions equip students with the relevant skills and competencies needed for future careers.
4	Expanded Access to Education	Innovations in higher education can lead to expanded access to education. Online learning platforms, flexible learning options, and open educational resources make education more accessible to a broader range of students, regardless of their geographical location or personal circumstances.
5	Increased Engagement and Motivation	Innovative practices can enhance student engagement and motivation. Interactive learning activities, gamification, and collaborative projects make the learning process more engaging and encourage active participation, leading to increased motivation and interest in the subject matter.
6	Career Readiness	Institutions that incorporate best practices in curriculum design and experiential learning opportunities prepare students for the workforce. By aligning education with industry needs, providing internships and practical experiences, and fostering entrepreneurship, institutions enhance students' career readiness.

7	Networking and Professional Connections	Innovations in higher education often facilitate networking and professional connections. Through industry partnerships, guest lectures, mentoring programs, and networking events, students have the opportunity to connect with professionals, potential employers, and fellow students, expanding their professional network.
8	Personalized Support Services	Best practices in student support services ensure that students receive the necessary guidance and assistance throughout their educational journey. Innovations such as academic advising, counseling services, and peer mentoring programs provide personalized support tailored to students' individual needs.
9	Holistic Development	Innovations and best practices emphasize holistic development, focusing not only on academic growth but also on students' personal and social development. Institutions may offer programs that promote wellness, diversity and inclusion, leadership development, and civic engagement, nurturing well-rounded individuals.
10	Graduates' Employability	By incorporating best practices, higher education institutions enhance graduates' employability. Through internships, co-op programs, industry collaborations, and career development initiatives, institutions equip students with the skills, experiences, and networks necessary to secure meaningful employment.

These benefits demonstrate the positive impact that innovations and best practices can have on students' educational experiences, skills development, career readiness, and overall well-being.

Table 16: Benefits of Innovations and Best Practices in Higher Education Institutions from teachers' point of view

S. No.	Key Indicator	Benefits from Teachers' point of view
1	Enhanced teaching effectiveness	Innovations and best practices help teachers improve their teaching methods and techniques, leading to increased effectiveness in delivering the curriculum. This can result in higher student engagement, better understanding of concepts, and improved learning outcomes.
2	Personal and professional growth	The adoption of innovative practices encourages teachers to continually develop their skills and knowledge. It allows them to explore new teaching strategies, technologies, and pedagogical approaches, which contributes to their personal and professional growth.
3	Increased student engagement	Innovations in higher education can create more interactive and participatory learning experiences for students. Teachers can leverage technology, collaborative learning methods, and real-world applications to engage students actively in the learning process, leading to increased motivation and interest.
4	Improved student retention and success	By implementing best practices, higher education institutions can enhance student retention rates and improve overall student success. Innovations such as personalized learning, academic support programs, and effective feedback mechanisms can help students stay on track and succeed academically.
5	Efficient assessment and feedback	Innovations in assessment methods and tools, such as online quizzes, automated grading systems, and timely feedback mechanisms, enable teachers to provide more accurate and efficient assessments. This allows them to track student progress effectively and provide timely feedback for improvement.

6	Collaboration and networking opportunities	Innovations in higher education often foster collaboration among teachers, both within the institution and across institutions. Through collaborative platforms, conferences, and workshops, teachers can share best practices, exchange ideas, and build professional networks, enriching their teaching experiences.
7	Customization of learning experiences	Innovations and best practices offer opportunities for teachers to customize learning experiences based on individual student needs and learning styles. Adaptive learning technologies, personalized learning plans, and differentiated instruction can be implemented to cater to diverse student populations effectively.
8	Access to up-to-date resources	Innovations in educational technology provide teachers with access to a wide range of up-to-date resources, including online libraries, educational databases, multimedia content, and interactive learning materials. This empowers teachers to enhance their teaching materials, incorporate current research findings, and stay abreast of the latest developments in their field.
9	Streamlined administrative tasks	Effective implementation of innovations and best practices can help streamline administrative tasks, allowing teachers to focus more on teaching and student interactions. Digital platforms for attendance tracking, grading, and course management systems can save time and simplify administrative processes.
10	Job satisfaction and fulfillment	When teachers have access to innovative practices and resources, they often experience increased job satisfaction and fulfillment. Seeing the positive impact of their teaching on student learning, feeling supported by the institution, and having opportunities for professional growth contribute to a sense of fulfillment in their roles.

These benefits collectively contribute to an improved teaching and learning environment, fostering an atmosphere of continuous improvement and excellence within higher education institutions.

Table 17: Benefits of Innovations and Best Practices in Higher Education Institutions from institutional point of view

S. No.	Key Indicator	Benefits from institutional point of view
1	Enhanced reputation and competitiveness	Adopting innovative practices and implementing best practices can enhance the reputation of an institution. It demonstrates a commitment to excellence in teaching and learning, attracting high-quality students, faculty, and staff. This, in turn, increases the institution's competitiveness in the higher education landscape.
2	Increased student enrollment and retention	Innovative practices in higher education can attract a larger pool of prospective students. When institutions offer unique programs, experiential learning opportunities, and a supportive environment, students are more likely to choose and stay enrolled in the institution, leading to increased student retention rates.
3	Improved student outcomes	By implementing best practices, higher education institutions can improve student outcomes, such as graduation rates, employability, and academic achievements. Innovations in teaching, assessment, and student support services contribute to higher levels of student success and satisfaction.
4	Collaboration and partnerships	Innovations and best practices often foster collaboration and partnerships between higher education institutions and external stakeholders. Collaborative research projects, industry

		partnerships, and community engagement initiatives enhance the institution's visibility, generate new opportunities, and enrich the learning experience for students.
5	Enhanced faculty recruitment and retention	Institutions that prioritize innovation and best practices tend to attract and retain high-quality faculty members. Teachers are more likely to join and stay in institutions that provide opportunities for professional growth, offer innovative teaching environments, and support their research and scholarly pursuits.
6	Cost savings and operational efficiency	Innovations in higher education can result in cost savings and improved operational efficiency for institutions. Automation of administrative processes, digitization of resources, and effective use of technology can streamline operations, reduce paperwork, and optimize resource allocation.
7	Alumni engagement and support	Implementing innovative practices and best practices can enhance alumni engagement and support for the institution. Alumni who have positive experiences during their studies are more likely to maintain strong ties with the institution, contribute to fundraising efforts, mentor current students, and participate in alumni networks.
8	Research and innovation culture	Institutions that foster a culture of innovation and best practices tend to have a vibrant research and innovation ecosystem. By encouraging faculty and students to engage in cutting-edge research, interdisciplinary collaborations, and entrepreneurial activities, the institution can contribute to knowledge creation and drive innovation in various fields.
9	Adaptation to changing educational landscape	Innovations and best practices help institutions adapt to the changing educational landscape and meet the evolving needs of students. By staying current with emerging technologies, pedagogical approaches, and industry demands, institutions can remain relevant and provide a high-quality education that prepares students for the future.
10	Accreditation and quality assurance	Implementing innovative practices and adhering to best practices can positively impact an institution's accreditation status and quality assurance measures. Accrediting bodies often recognize institutions that demonstrate a commitment to continuous improvement, innovation in teaching and learning, and student success.

These benefits contribute to the overall success and sustainability of higher education institutions, positioning them as leaders in the field and ensuring their long-term viability and impact.

Table 18: Constraints of Innovations and Best Practices in Higher Education Institutions from Students' point of view

S. No.	Key Indicator	Constraints from Students' point of view
1	Technological barriers	While innovations often involve the use of technology, some students may face challenges in accessing and effectively using technology. Limited access to devices, unreliable internet connections, or insufficient digital literacy skills can hinder students' ability to fully engage with innovative practices.
2	Learning curve and adjustment	Implementing new innovations and best practices may require students to adapt to different learning methods, tools, or instructional approaches. This adjustment period can be challenging for some students, especially if they are accustomed to more traditional teaching methods.
3	Lack of resources and support	Students may encounter constraints when institutions fail to provide adequate resources and support for implementing

		innovative practices. Insufficient access to updated textbooks, educational materials, technological infrastructure, or support services can hinder the effectiveness of innovations and create barriers to student success.
4	Resistance to change	Some students may resist or struggle with accepting and adapting to new innovative practices. They may be accustomed to a specific learning style or approach and may initially find it difficult to embrace different teaching methods or approaches, affecting their engagement and performance.
5	Time management challenges	Innovations and best practices may introduce new learning activities, collaborative projects, or online components that require students to manage their time effectively. Balancing coursework, assignments, and participation in innovative practices can be demanding, leading to potential time management challenges.
6	Increased workload and expectations	Innovations and best practices may involve additional assignments, projects, or assessments that can increase students' workload. Higher expectations for active participation, critical thinking, or application of knowledge can add to the overall academic demands, potentially creating stress and pressure.
7	Inequality and inequity	Implementation of innovative practices can inadvertently amplify existing inequalities and inequities among students. Factors such as socio-economic status, access to technology, educational background, and support systems can influence students' ability to fully benefit from innovations, creating disparities in learning outcomes.
8	Limited personalization and individual attention	While innovations aim to enhance the learning experience, some students may feel that the increased use of technology or large class sizes limit personalization and individual attention. They may perceive a lack of interaction with instructors or limited opportunities for personalized feedback and support.
9	Reliance on self-directed learning	Innovations may emphasize self-directed learning, independent research, or online resources, which can be challenging for students who thrive in more structured and instructor-led environments. Some students may struggle with self-motivation, time management, or accessing reliable information independently.
10	Uncertainty and experimentation	As institutions explore and implement innovative practices, there can be an element of uncertainty and experimentation involved. Students may experience fluctuations in the effectiveness or consistency of these practices as institutions refine their approaches, potentially impacting their learning experiences.

It is essential for institutions to address these constraints and provide adequate support, resources, and guidance to ensure that all students can fully benefit from the implementation of innovations and best practices.

Table 19: Constraints of Innovations and Best Practices in Higher Education Institutions from teachers' point of view

S. No.	Key Indicator	Constraints from Teachers' point of view
1	Time constraints	Implementing new innovations and best practices often requires additional time and effort from teachers. Developing new teaching materials, learning new technologies, or redesigning

		curriculum can be time-consuming, potentially impacting their workload and work-life balance.
2	Training and professional development needs	Teachers may require training and professional development opportunities to effectively implement innovations and best practices. Lack of access to relevant training or insufficient support for skill development can hinder their ability to adopt and implement new approaches.
3	Resistance to change	Teachers may face resistance to change from colleagues, administrators, or even students. The existing culture, entrenched practices, or skepticism about the benefits of innovations can create barriers to their successful implementation.
4	Resource limitations	Lack of resources, such as funding, technological infrastructure, or access to relevant tools and materials, can impede teachers' ability to fully embrace and implement innovative practices. Limited resources can restrict their creativity and limit the potential impact of their efforts.
5	Assessment and evaluation challenges	Innovations and best practices often require new approaches to assessment and evaluation. Teachers may face challenges in designing effective assessments, aligning them with learning outcomes, and ensuring fairness and accuracy in grading.
6	Resistance from students	Students may resist or struggle to adapt to new innovative practices. They may prefer more traditional teaching methods or find it difficult to engage with unfamiliar approaches, posing challenges for teachers in creating an inclusive and effective learning environment.
7	Institutional constraints	Institutional policies, regulations, and administrative procedures can sometimes hinder the implementation of innovative practices. Teachers may encounter bureaucratic obstacles or face constraints imposed by institutional structures, limiting their autonomy and flexibility in adopting new approaches.
8	Collaboration and coordination difficulties	Some innovations may require collaboration and coordination among teachers or across departments. Limited communication channels, conflicting schedules, or resistance to collaborative efforts can impede the effective implementation of innovative practices.
9	Pedagogical alignment	Aligning innovative practices with existing pedagogical approaches and curriculum requirements can be challenging. Teachers may need to navigate between incorporating new methods while maintaining coherence with established educational frameworks.
10	Evaluation and recognition systems	Traditional evaluation and recognition systems in higher education institutions may not always adequately recognize or reward teachers' efforts in implementing innovative practices. Lack of recognition and incentives can diminish motivation and hinder the widespread adoption of innovative approaches.

Addressing these constraints requires institutional support, professional development opportunities, resource allocation, and a culture that values and rewards innovation. By addressing these challenges, higher education institutions can create an environment that encourages and supports teachers in embracing and implementing innovative practices effectively.

Table 20: Constraints of Innovations and Best Practices in Higher Education Institutions from institutional point of view

S. No.	Key Indicator	Constraints from an Institutional point of view
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1	Financial constraints	Implementing innovative practices often requires financial investments in infrastructure, technology, training, and resources. Limited funding can pose a significant constraint on institutions, hindering their ability to adopt and sustain innovative approaches.
2	Resistance to change	Institutions may face resistance to change from faculty, staff, or other stakeholders. Existing institutional culture, entrenched practices, and fear of the unknown can create barriers to implementing new innovations and best practices.
3	Limited institutional capacity	Institutions may lack the necessary expertise, personnel, or infrastructure to effectively implement and support innovative practices. Insufficient staffing or expertise in instructional design, educational technology, or data analysis can impede the successful adoption of innovative approaches.
4	Compliance and accreditation requirements	Innovations and best practices must align with regulatory and accreditation standards. Institutions may face constraints in implementing innovative approaches due to compliance requirements, ensuring program quality, and meeting accreditation criteria.
5	Resistance to risk-taking	Institutions, particularly those with conservative cultures, may be hesitant to take risks associated with implementing innovative practices. Fear of failure, concerns about reputational risks, or a preference for maintaining the status quo can impede the adoption of new approaches.
6	Lack of institutional support and leadership	The support and commitment of institutional leaders are crucial for successful implementation of innovations and best practices. Without strong support from leadership, including resource allocation, policy changes, and encouragement, initiatives may struggle to gain traction.
7	Legacy systems and infrastructure	Outdated or inflexible institutional systems, processes, and infrastructure can pose significant constraints on implementing innovative practices. Inefficient administrative systems, lack of technological integration, or outdated physical facilities can impede the adoption and effectiveness of innovations.
8	Faculty buy-in and engagement	Faculty buy-in and engagement are essential for successful implementation of innovations. However, some faculty members may be resistant to change or lack the necessary incentives, recognition, or professional development opportunities to actively embrace and participate in innovative practices.
9	Scalability and sustainability	Scaling up innovative practices across an entire institution can be challenging. Ensuring that innovations can be effectively implemented and sustained at a larger scale, while maintaining quality and impact, can be a constraint for institutions.
10	External pressures and expectations	Higher education institutions often face external pressures and expectations, such as demands from government bodies, stakeholders, or the public. Balancing these external pressures with the need for innovation and best practices can create constraints and challenges for institutions.

Overcoming these constraints requires strategic planning, clear communication, adequate resources, strong leadership, and a supportive institutional culture. By addressing these challenges, higher education institutions can foster an environment that encourages and supports the implementation of innovative practices, ultimately enhancing teaching and learning outcomes.

Table 21: Disadvantages of Innovations and Best Practices in Higher Education Institutions from Students' point of view

S. No.	Key Indicator	Disadvantages from Students' point of view
1	Learning curve and adjustment	Implementing new innovations and best practices may require students to adapt to different learning methods, tools, or instructional approaches. This adjustment period can be challenging for some students, potentially affecting their comfort, engagement, and performance.
2	Technological barriers	Innovations often involve the use of technology, which can create barriers for students who lack access to devices, reliable internet connections, or digital literacy skills. This can result in inequitable access to educational resources and opportunities.
3	Increased workload and expectations	Innovations and best practices may introduce additional assignments, projects, or assessments, leading to an increased workload for students. Higher expectations for active participation, critical thinking, or independent learning can create additional stress and pressure.
4	Limited personalization and individual attention	While innovations aim to enhance the learning experience, some students may feel that personalized attention and individual support diminish in certain innovative practices. Large class sizes, reduced interaction with instructors, or automated grading systems can limit personalized guidance and feedback.
5	Reduced face-to-face interaction	Innovations that rely heavily on online or virtual platforms may result in reduced face-to-face interaction among students. This can impact social connections, collaborative learning experiences, and the sense of community within the institution.
6	Increased reliance on self-directed learning	Some innovations emphasize self-directed learning, independent research, or online resources, which may not suit all students' learning preferences or styles. Students who prefer more structured and guided approaches may struggle with self-motivation and time management in such settings.
7	Inequality and inequity	Implementation of innovative practices can unintentionally exacerbate existing inequalities among students. Factors such as socio-economic status, access to technology, or educational background can influence students' ability to fully benefit from innovations, widening the educational gap.
8	Evaluation challenges	Innovations may require new assessment methods or tools that students may find unfamiliar or difficult to navigate. Adjusting to new evaluation formats, rubrics, or grading systems can be challenging, potentially impacting students' performance and overall learning experience.
9	Limited instructor-student interaction	Some innovative practices may result in reduced direct interaction between instructors and students. This can limit opportunities for personalized guidance, clarification, or building strong relationships, potentially affecting students' engagement and academic support.
10	Uncertainty and experimentation	As institutions explore and implement innovative practices, there may be an element of uncertainty and experimentation involved. Changes in curriculum, instructional methods, or assessment approaches can create a sense of instability and unpredictability for students, potentially affecting their confidence and learning outcomes.

Addressing these disadvantages requires a student-centered approach to innovation implementation. Institutions should consider students' diverse needs, provide adequate support and resources, ensure equitable access to technology, and create opportunities for personalized interactions and support.

Table 22: Disadvantages of Innovations and Best Practices in Higher Education Institutions from teachers' point of view

S. No.	Key Indicator	Disadvantages from Teachers' point of view
1	Increased workload and time constraints	Implementing new innovations and best practices often requires additional time and effort from teachers. Developing new teaching materials, incorporating technology, or adapting instructional approaches can lead to an increased workload, potentially impacting their work-life balance.
2	Training and professional development needs	Teachers may require training and professional development opportunities to effectively implement innovations and best practices. The need for acquiring new skills, learning new technologies, or understanding pedagogical shifts can add to their workload and professional development requirements.
3	Resistance to change	Teachers may face resistance to change from colleagues, administrators, or even students. Overcoming resistance and gaining buy-in for new innovations can be challenging, especially in an institution with a deeply entrenched culture or established practices.
4	Resource limitations	Limited resources, such as funding, technological infrastructure, or access to relevant tools and materials, can hinder teachers' ability to fully embrace and implement innovative practices. Inadequate resources can limit their creativity and the potential impact of their efforts.
5	Assessment and evaluation challenges	Innovations and best practices often require new approaches to assessment and evaluation. Teachers may face challenges in designing effective assessments, aligning them with learning outcomes, and ensuring fair and reliable evaluation of students' performance.
6	Pedagogical alignment	Aligning innovative practices with existing pedagogical approaches and curriculum requirements can be challenging. Teachers may need to navigate between incorporating new methods while maintaining coherence with established educational frameworks, leading to potential conflicts or inconsistencies.
7	Limited institutional support and recognition	The level of support and recognition from the institution can impact teachers' motivation and enthusiasm for implementing innovations. Insufficient institutional support, lack of incentives, or limited recognition for innovative efforts can hinder teachers' engagement and commitment.
8	Technology-related difficulties	Implementing technological innovations can pose challenges for teachers who may not be familiar or comfortable with certain technologies. Technical issues, limited access to technology, or insufficient training and support can create barriers to effectively integrating technology into teaching practices.
9	Complexity and learning curves	Implementing innovative practices often involves learning new methodologies, tools, or approaches. Teachers may face a steep learning curve, requiring time and effort to become proficient in the new practices, potentially impacting their confidence and effectiveness initially.
10	Uncertainty and risk-taking	Innovations involve an element of uncertainty and experimentation. Teachers may face challenges in navigating the

		unknown, taking risks, and managing potential failures or setbacks associated with implementing new practices, which can affect their comfort and willingness to adopt innovations.
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It is crucial for institutions to provide ongoing support, professional development opportunities, adequate resources, and recognition for teachers to overcome these disadvantages. Collaborative environments, clear communication, and a culture that values and supports teachers' innovation efforts can help alleviate these constraints and promote successful implementation of innovations and best practices.

Table 23: Disadvantages of Innovations and Best Practices in Higher Education Institutions from an institutional point of view

S. No.	Key Indicator	Disadvantages from Institutional point of view
1	Financial implications	Implementing innovations and best practices often requires significant financial investments. Institutions may face challenges in securing funding to support the necessary infrastructure, technology, training, and resources for successful implementation.
2	Resistance to change	Institutions may encounter resistance to change from faculty, staff, or other stakeholders. The existing institutional culture, entrenched practices, and fear of the unknown can create barriers to implementing new innovations and best practices.
3	Disruption of established systems	Introducing innovative practices can disrupt established systems and processes within the institution. This can cause temporary disruptions, resistance, or delays in the functioning of various departments or administrative processes.
4	Staff training and development	Implementing new innovations and best practices often requires staff training and professional development. Institutions may face challenges in providing sufficient training opportunities and resources to ensure that faculty and staff are adequately equipped to adopt and implement new approaches.
5	Time and resource allocation	Implementing innovative practices can require significant time and resource allocation. This can strain existing institutional resources, particularly if there is limited capacity or competing priorities within the institution.
6	Integration with existing structures	Innovations and best practices may need to be integrated into existing institutional structures, policies, and procedures. Ensuring alignment and coherence between the new approaches and the institution's existing frameworks can be complex and time-consuming.
7	Resistance from students	Students may resist or struggle to adapt to new innovative practices. They may prefer more traditional teaching methods or find it difficult to engage with unfamiliar approaches, posing challenges for institutions in creating an inclusive and effective learning environment.
8	Evaluation and measurement challenges	Assessing the effectiveness and impact of innovations and best practices can be challenging for institutions. Developing appropriate evaluation measures, collecting relevant data, and analyzing the outcomes can require additional resources and expertise.
9	Institutional capacity and readiness	Institutions may lack the necessary capacity, infrastructure, or expertise to effectively implement and sustain innovative practices. Inadequate technological infrastructure, limited personnel, or insufficient support systems can impede the successful adoption of innovative approaches.

10	Scalability and sustainability	Scaling up innovative practices across the institution can present challenges. Ensuring that innovations can be effectively implemented and sustained on a larger scale, while maintaining quality and impact, can be a constraint for institutions.
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Despite these challenges, institutions can overcome the disadvantages by developing comprehensive implementation plans, providing support for faculty and staff, securing adequate resources, fostering a culture of innovation, and actively addressing concerns and resistance. By doing so, institutions can harness the benefits of innovations and best practices while mitigating the associated disadvantages.

12. SUGGESTIONS TO IMPLEMENT RESEARCH ACTIVITIES ACCORDING TO THE PROPOSAL :

Implementing case study-based research activities in the area of qualities in higher education institutions with a special emphasis on innovation and best practices in academics, administration, and research areas can be a valuable approach for gaining insight and understanding the dynamics of higher education institutions. Some suggestions to effectively implement such research activities include:

(1) Define research objectives clearly:

Define the objectives of the case study research activities. Determine the specific areas of focus within academics, administration, and research wherever the researcher wants to explore qualities and best practices. This will provide a clear for the research.

(2) Select relevant institutions:

Identify a diverse set of higher education institutions that can serve as case study subjects. Consider institutions of different sizes, types (public, private, research-intensive liberal arts, etc.), and geographical locations. Ensure the selected institutions have a reputation for innovative practices in the area of interest.

(3) Develop a research framework:

Create a framework that outlines the key research questions, data collection methods, and analysis techniques. The framework should provide a structured approach to guide the research activities and ensure consistency across the case studies.

(4) Conduct interviews and surveys:

Interview key stakeholders, including administrators, faculty members, students, and staff, to gather their perspectives on qualities, innovations, and best practices in the selected areas. Administer surveys to collect quantitative data that can complement the qualitative insights obtained from interviews.

(5) Collect and analyse data & information: Gather data through various sources, such as interviews surveys, documents, and institutional reports. Analyse the collected data using appropriate qualitative and quantitative analysis techniques to identify patterns, themes, and best practices within the case study institutions.

(6) Cross-case analysis:

Compare and contrast the findings across different case study institutions. Identify similarities, differences, and emerging trends to gain a comprehensive understanding of the qualities and best practices in higher education institutions.

(7) Disseminate findings:

Share the research findings with relevant stakeholders including the case study institutions. Higher education communities, and policymakers. Present the findings through reports, publications, conferences, or workshops to promote knowledge sharing and encourage further discussion and collaboration.

(8) Incorporate feedback and recommendations:

Seek feedback from the case study institutions and other experts in the field. Incorporate their insights and recommendations to refine the research findings and make them more actionable for institutions looking to implement innovative practices.

(9) Foster collaboration and knowledge exchange:

Encourage collaboration among higher education institutions by facilitating a platform for sharing best practices hosting workshops, or seminars, or establishing communities of practice. Encourage institutions to learn from each other's successes and challenges.

(10) Continuous evaluation and improvement:

Monitor the impact of the research activities and continuously evaluate the effectiveness of the implemented practices. Use feedback and insights gained from the research to refine and improve future initiatives in the area of qualities and best practices in higher education institutions.

By following these suggestions, one can effectively implement case study-based research activities that contribute to the understanding and enhancement of qualities, innovations, and best practices in higher education institutions.

13. LIMITATIONS & IMPLICATIONS OF THE PROPOSAL :

When conducting case study-based research activities in the area of "Qualities in higher education institutions with special emphasis on innovations and best practices in academics, administration, and research areas," there are several limitations as listed below:

(1) Case studies are typically focused on specific institutions or contexts, which limits the generalizability of the findings. The insights gained from a particular case may not be representative of all higher education institutions, as each institution has its unique characteristics and circumstances.

(2) Case studies heavily rely on qualitative data, which can introduce subjectivity. Researchers' interpretations, biases, or preconceived notions may influence the analysis and findings. It is essential to minimize subjectivity by employing rigorous data collection and analysis techniques and ensuring transparency in the research process.

(3) Conducting in-depth case studies can be time-consuming and resource-intensive. The process of data collection, analysis, and interpretation can require significant investment in terms of personnel, finances, and time. Limited resources may restrict the number of case studies that can be included in the research.

(4) Gaining access to institutions and securing cooperation from key stakeholders, such as administrators, faculty members, and students, can be challenging. Institutional gatekeeping, confidentiality concerns, or limited availability of participants may hinder the research process and data collection.

(5) Researchers may unintentionally introduce bias in the selection and reporting of case study findings. The choice of which institutions to include, which stakeholders to interview, and what information to emphasize or exclude can impact the objectivity and representativeness of the research findings.

(6) Case studies capture a specific moment in time, which may limit their ability to capture long-term trends or changes in the qualities, innovations, and best practices of higher education institutions. The dynamic nature of higher education requires ongoing monitoring and evaluation to capture the evolving landscape accurately.

(7) Case studies involving human subjects require ethical considerations to protect the rights and confidentiality of participants. Obtaining informed consent, ensuring privacy, and adhering to ethical guidelines may introduce additional complexities and limitations in the research process.

(8) Case studies primarily rely on qualitative data, which may limit the ability to conduct comprehensive statistical analyses or quantitative comparisons. The lack of quantitative data can constrain the research's ability to provide robust and statistically significant findings.

(9) Case studies often rely on self-reported information from participants, which may be subject to recall bias or social desirability bias. Participants may provide information that aligns with their perception of what is expected or desired, potentially influencing the accuracy and validity of the data.

(10) The findings of case studies may have limited external validity, meaning they may not be applicable or transferable to other institutions or contexts. The uniqueness of each higher education institution makes it challenging to generalize findings beyond the specific cases studied.

The limitations discussed should not discourage the use of case study research in exploring qualities, innovations, and best practices in higher education institutions. Researchers should be transparent about the limitations and address them through careful methodological considerations, triangulation of data sources, and a balanced interpretation of findings. The research topic related to the research problem developed in this paper is one of the research agendas identified during the research gap analysis using the current status and desired status of the problem. The chosen topic for further research involves a case study on Innovations and best practices developed in academics, administration, and research & extension activities of a university. Depending on the autonomy and internal and external environment, the identified innovations and best practices can be generalized irrespective of the geographic region, culture, and tradition.

14. CONCLUSION :

Based on a systematic review of the literature, it is concluded that conducting a case study of a university-based academics, administration, and research activities focused on qualities in higher education institutions with an emphasis on innovations and best practices offers valuable insights into the dynamic landscape of higher education. Through an in-depth examination of specific institutions of the university, this research can shed light on the qualities that contribute to their success and effectiveness [113-114].

By systematic investigation of innovative and best practices in various domains, such as academics, administration, and research, the proposed case study provides a comprehensive understanding of the factors that drive excellence in higher education institutions. Such an effort will offer a nuanced exploration of the qualities and strategies that foster a culture of innovation, promote academic excellence, and enhance administrative efficiency in the university. It is known that the case study research activities have provided valuable insights into the unique characteristics, challenges, and successes of the selected institutions. Through different ways of data collection and data analysis, the research has uncovered best practices and innovative approaches that have contributed to the institutions' achievements and reputation. Further, it is important to recognize the limitations of the case study approach. The findings may not be generalizable to all higher education institutions, and subjectivity in interpretation and reporting must be acknowledged. The case study-based research provides a snapshot of specific institutions at a given time, and long-term trends and changes may require ongoing monitoring and evaluation continuously. But the case study research serves as a valuable resource for higher education institutions, policymakers, and stakeholders interested in fostering excellence and innovation. The identified qualities and best practices can inform strategic decision-making, guide policy development, and inspire other institutions to implement similar initiatives. The proposed further research in the form of the case study of a university emphasizes the significance of collaboration, knowledge sharing, and continuous improvement in higher education. The case study findings of the proposed research topic should highlight the importance of creating supportive environments that encourage innovation, provide resources and training, and foster a culture of experimentation and risk-taking.

Finally, it can be concluded that the case study of a university-based academic & research activities on qualities in higher education with an emphasis on innovations and best practices provides valuable insights, recommendations, and inspiration for other institutions striving to enhance their academic, administrative, and research excellence. Through its comprehensive exploration, the research in the form of the case study contributes to the ongoing dialogue on fostering qualities in higher education and provides a roadmap for institutions seeking to implement innovative and effective strategies.

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