

Accessing Human Resource Quality of Educators in Higher Education– Ahmedabad



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The education system in India is moving from sage learning concept to the new global way of learning system. This paper aims for some clarity to understand the impact of these changes on the educators who are playing a key role in human resource development of students. The research aims to access the Human Resource Quality of Educators in Higher Education. The sample study is Education Institutions from Ahmedabad city. The Human Resource Quality index have three major indicators Cultural change Index Quality of work life index and Employee satisfaction index.

1. Introduction

India is a proud inheritor of a great education system since Vedic period which emphasizes on the quest for the highest knowledge. The original Indian wisdom envisaged education as an instrument to elevate the human personality and promote social, economic, cultural, and developmental needs of the country, ultimately leading to higher education is an important economic as well as social infrastructure for a developing nation like India. It provides appropriate and useful skilled human resource for industry, science and technology, creation of basic social and economic infrastructure and for better social and administrative governance. India has one of the largest higher education systems in the world. The main players in the higher education system in the country are the 'University Grants Commission' (UGC), responsible for coordination and maintenance of standards and release of grants, and the 'Statutory Professional Councils', responsible for recognition of courses, promotion of professional institutions and providing grants to undergraduate programmes and various awards.

Human Resources Development in Higher Education

An ideal system of higher education is supposed to play an innovative, aggressive and revolutionary role in the affairs of the nation. The academic pursuits in higher educational institutions must be marked by modern courses, relevant curriculum, good syllabus, inviting instructional materials, challenging pedagogy, reliable procedures of examination and evaluation, a dynamic and motivating institutional climate. In fine, the higher educational set up must be able enough to promise human resources development in the country. The term Higher Education is ambiguous in nature because it is used in variety of way by different people, different country and in different point of time. In fact, there is no straight forward definition of Higher Education. The National Policy on Education (NPE) that was adopted by Parliament in May 1986 and Programme of Action, 1986, as updated in 1992, are perhaps the last government policy statements on higher education and which have guided actions since the mid-1980s. Now that there are new moves on the policy front, it is necessary to identify the key issues, build on the earlier efforts (especially initiated after studies by the University Grants Commission) and then take a step ahead. The last major initiative on the development of higher education was during the 11th Plan (2007-12).

The problems that confront education today are low rates of enrolment, unequal access, poor quality of delivery and lack of relevance. The goals remain the same — expansion with inclusion and ensuring quality and relevant education. Between 1996 and 2008, private institutions expanded every year at the rate of 10 per cent. The corresponding decline in government and private-aided institutions, by 1.65 per cent yearly, resulted in the share of students in the private, self-financing sector increasing from about 7 per cent in 1996 to about 25 per cent in 2008. For 2013, data from the Ministry of Human Resource Development (MHRD) put the share of private undergraduate colleges and students at 59 per cent and 37 per cent respectively.

The quality of higher education is an equally serious problem. The 11th Plan recognised three areas for interventions — physical infrastructure, academic reform and ensuring adequate faculty. Infrastructure can be improved with an increase in financial allocation. Academic reform such as semester and credit systems, courses by choice, and examination reform such as process which should be advanced only after the pre-requisites are met. In the case of faculty, which is an issue that has assumed serious proportions, several steps were affected in the 11th Plan. However, it still persists. The quality of students, who graduate from the institution, is largely influenced by the talent and commitment of the faculty.

We are moving from sage learning concept to that of broad-based learning. There have been joint efforts, by the government and private sector, to establish and run the educational institutions of higher education to develop human resource. Quantitative growth, both in institutions and enrolment has been unprecedented during the decade 2001 to 2015 in the country to develop more and more human resource to fulfill the demand of job market. But the desired result in the form of Quality of Educators as well as the recipients is not easily measurable.

Quality is measured rigorously in the business world be it a product or service but literature review indicates that there are no concrete measures to check quality in higher education which is essential for overall Human resource development. The literature survey indicates that no authoritative, comprehensive and integrated study, has so far, been made on the quality of Higher education in India in general and Ahmedabad, Gujarat in particular. Higher education in India has been studied from

other perspectives but not from the quality perspective. Therefore, there is an increasing need to develop a comprehensive measurement tool to measure quality of educators in higher education in the current scenario.

2. Literature Survey

The literature survey is divided into three four parts

Higher Education at Global Level

Expansion is higher in economically developed countries (in some but not all analyses) as classic theories would have it. Growth is greater where secondary enrollments are high and where state control over education is low, consistent with conflict and competition theories. Institutional theories get strong support: growth patterns are similar in all types of countries, are especially high in countries more linked to world society, and sharply accelerate in virtually all countries after 1960. The global trends are so strong that developing countries now have higher enrollment rates than European countries did only a few decades ago, and currently about one-fifth of the world cohort is now enrolled in higher education. (Schofer, December 2005)

HEDPERF (Higher Education Performance-only) is a new measuring instrument of service quality that captures the authentic determinants of service quality within the higher education sector. The pro-posed 41-item instrument has been empirically tested for unidimensionality, reliability and validity using both exploratory and confirmatory factor analysis (CFA). Such valid and reliable measuring scale is a tool that tertiary institutions can use to improve service performance in the light of increased competition with the development of global education markets. (Abdullah, November, 2006-Volume 30, Issue 6)

The Paper was for used confirmatory structural equation modeling and testing approach to empirically validate many of the causal relationships in the MBNQA Education model. The research study empirically tested the Baldrige education framework – that there is a significant relationship between the leadership, systems, and processes of higher education organizations and the consequent outcomes. Specifically, this study focused on determining the extent to which higher education results are explained by the Baldrige Criteria. By providing empirical evidence of the nature of the relationships between what institutions do and the results they achieve, this study offered decision makers, managers, and researchers evidence that the Baldrige framework is a useful tool for developing and managing quality systems in institutions of higher education. The research aimed at exploring the nature of educational quality at UAE higher education institutions. The research designed and presented a reliable and valid self-assessment tool for higher education based mainly on the Baldrige Education Criteria for Performance Excellence, which are recognized as involving most comprehensive quality concepts. Through the survey results, the institutions of higher education or just those schools wishing to undertake TQM programs are able to diagnose their quality status, identify their strengths and weaknesses, and develop action plans after performing a thorough cost-benefit analysis. (Masood Abdulla Badri Hassan Selim Khaled Alshare Elizabeth E. Grandon Hassan Younis Mohammed, 2006)

There is evidence of effects on academics' behaviors and management within HEIs, but skepticism surfaces in a number of studies examining the impact of quality assurance on teaching and learning, (Christensen, 2010; Ewell, 2010; Harvey 2006; Newton 2000, 2001), although some authors are more optimistic and report a more concrete impact of evaluations on teaching practices (Brennan, 1997; Silva et al., 1997). Likewise, some of the countries who participated in the OECD Thematic Review of Tertiary Education offered some evidence of the positive impact of quality assurance mechanisms on the quality of teaching and learning, although this impact was measured in terms of the number of negative accreditation evaluations, student satisfaction ratios or the acceptance and recognition of HEIs – i.e. by very rough proxies of impact on student learning. In fact the OECD Review concluded with a recommendation to increase the focus on student outcomes to alleviate this problem (OECD, 2008).

Higher education represents a critical factor in innovation and human capital development and plays a central role in the success and sustainability of the knowledge economy (Dill and Van Vught, 2010). Hence, higher education has become increasingly important on national agendas and has undergone profound mutations and reforms worldwide over the past decades, as portrayed in a recent OECD review of tertiary education policies (OECD, 2008). As stated by Altbach et al., “an academic revolution has taken place in higher education in the past half century marked by transformations unprecedented in scope and diversity” (Altbach et al., 2009).

The popularity of rankings is largely related to their simplicity – but this is also the main source of criticism. Rankings compare HEIs (Higher Education Institutes) using a range of different indicators, and then aggregate the scores into a single digit as a proxy for overall quality. The scores are listed according to a league table. The choice of indicators is based upon the judgement of each ranking organization; there is no such thing as an objective ranking. There is also no agreed method on what or how to measure academic or educational quality. This process ignores the fact that HEIs are complex organizations, residing within vastly different national contexts, underpinned by different value systems, meeting the needs of demographically, ethnically and culturally diverse populations, and responding to complex and Challenging political-economic environments. Most global rankings focus disproportionately on research using data drawn from the Thomson Reuters/ISI World of Science or Scopus Bibliometric databases, or occasionally from Google Scholar. However, this data is most accurate for bio- and medical sciences research. Uniquely, ARWU collects publication data for Nature or Science. Some rankings, notably THE-TR and QS, use questionnaires to gauge institutional reputation assigning weightings of 34.5% and 50%, respectively. On the other hand, rankings do not measure educational quality, e.g. the quality of teaching and learning or

the quality of the student experience. Bibliometric data is less reliable for the arts, humanities and social science disciplines, and there is no focus on the impact or benefit of research. Rather the focus is on quantity or intensity as a proxy for quality. Finally, no attention is given to regional or civic engagement – a major policy objective for many governments and mission focus for many HEIs. (Hazelkorn, 2015)

Assessment of Higher Education Learning Outcomes (AHELO) is a specific project being developed by the OECD to measure the quality of teaching and learning in higher education using a test of generic and discipline-specific skills. AHELO is in its feasibility stage, but is likely to become a tool for comparability and benchmarking similar to the role played by OECD Programme for International Student Assessment (PISA). (Hazelkorn, 2015)

Benchmarking is a process of comparing and evaluating quality and performance across peer countries and institutions. It is usually undertaken as part of a strategic or policy approach to improvement. Benchmarking highlights similarities/differences by the analysis of comparable data, or through more informal mechanisms such as peer-to-peer learning or mentoring. (Hazelkorn, 2015)

Higher Education in India

Azad (1978) says that institutions of higher education spend more on consumption rather than investment. The expenditure on salary, wages, stationery, and expenditure on day-to-day affairs are mounting whereas investment in infrastructure, 27 laboratories and libraries and on research are scanty and seldom happens. Human capital formation must be the aim of higher educational institutions and for achieving it, the institutions must invest in and for human beings, rather than spending on consumption. .

Singh (1985), an Indian critic of higher education criticizes that the major players in higher education are the government, administrators, politicians, teachers, students, parents, and the society in common. But no one is acting in the manner that high quality higher education demands. What is on the stage is nothing but full of struts and frets and nothing significant. A large number of persons have entered the teaching profession without having the qualifications and the essential qualities and it pauses block on the road of human resources formation in higher education. Mahon, W.C (2000), 3 is of the opinion that there has not been any investment in human resources in higher education and what we witness and experience is all about the theories of expenditure. The casualty in the expenditure-investment dichotomy is quality human resources. We must be bothering about investment in human resources rather than listening to the expenditure part on higher education.

(Jayanthu, 1993) illustrates the significant relationship between HRD programmes and productivity of an undertaking. “H.R.D. and Productivity — A Study in Hindustan Photo Films”, the doctoral thesis of Jayanthu stands fast by the thought and belief. There is a significant relationship between HRD and Productivity in any organization. Since HRD is the processes related to the living factor of production which regulates and controls all other factors of production, the role of HRD is central in character in any organizational set up, not only for further growth of it, but for even survival. The Hindustan Photo Films introduced HRD practices modestly in 1982, more than a decade back now, is a leader in the 30 industry at present, the thesis highlights. The training, promotion, welfare measures, workers participation, consultation, grievances redressal and feedback are the main tools used in the organization under the canopy of HRD of Photo Films, adds Jayanthu

Manorama, P.G. (1999)¹⁶ in her thesis for doctoral degree “A Study of the Effectiveness of In-service Education given to Teachers in Chennai City”, highlights that for quality education — primary, secondary and tertiary levels - a continuous in—service study is the basic requirement. Education is the only sector where graduates and post graduates join as teachers without training before or after their joining service. Hence, there is neither quality improvement in teaching nor any scope for measuring the quality of teachers for proper HRD programmes.

Higher Education in Ahmedabad

There are initiatives like Innovative education bank by Professor’s from IIMA for improving Quality Education at school level. Higher Education has brought up tremendous changes in the last decade for improving the learning experience of Students. Best Institutions in the city are adopting new wave of learning with a focus on empowering students towards holistic, multi-disciplinary and multi-cultural development through liberal education. But the effort still lacks in measuring the quality of Educators in the city.

3. Need of the Study

Out of 16,000 Colleges that come under the UGC purview, only 5,813 (36%) are recognised under Section 2(f), and only 5,273 colleges (38%) are eligible to receive development assistance. A large number of colleges are precluded for UGC development grant, as they are unable to meet the minimum eligibility criteria laid down by the UGC - a minimum critical level of quality in terms of physical and academic infrastructure.

Out of a total of 417 university-level institutions, 317 fall under the jurisdiction of the UGC. Out of which, 164 universities were actually provided with development grants during the Tenth Plan. Further, 164 universities which, at present, receive development grants from the UGC, 111 universities are accredited by the National Assessment and Accreditation Council (NAAC) and, among them; only 32 percent have rated as A grade or above. This hardly speaks well of quality and excellence in universities. Amongst the 4,870 colleges, as many as 2,780 are accredited by the NAAC and, among them, barely 9% are rated as A or above. Doubtless, quality and excellence in colleges leaves much to be desired. Thus 68% of the universities and 91 percent of the colleges are rated average or below average in terms of quality parameters specified by the NAAC. The scope for improvement in terms of quality and excellence is apparent.

Education plays an essential role in the overall personality development of individual. Planned efforts to build and sustain quality, efforts which focus not only on increasing admissions but building overall quality is essential. There is a need to analyze in depth the relationship between the stakeholders' expectations which are students and Faculty both. There is also a need to understand the influence of culture change, quality of work life and Job satisfaction on the overall quality of Educators. Hence, the present study titled "Assessing Human Resource Quality of Educators in Higher Education - Ahmedabad" would be both useful and relevant to analyze the parameters affecting quality of Educators in Higher Education and recommend suggestions with a model to measure quality of Educators.

4. Objectives of the Study

The study is designed with the major objective of understanding the relevance of three major parameters; Culture change, Quality of work life and Job satisfaction in reference to the measurement of Quality of Educators in Higher Education. The study in general aims to find out the factors, which influence the quality of a Faculty. The following are the specific objectives of the study

O1. To understand, analyze and evaluate the existing quality parameters to measure quality in Higher Education.

O2. To identify gaps (if any) in the current assessment of quality for Educators.

O3. To propose a model of quality assessment for Educators in Higher Education based on the literature survey.

O5. To list out some of the best practices of Modern broad-based learning of the developing Higher Education Institutions in India.

Human Resource Quality

Human resource is the most important resource in the running of any industry corporate house. Human resource of an organisation includes different types of staff members from top to bottom in the organisational hierarchy. It is a must to improve the quality of human resource of an organisation to make the staff members suitable to the changing needs of organisation.

Human resource quality of an organisation is directly related to development of organisation itself. Organisation's development can be defined as an attempt to achieve corporate excellence by integrating the desires of individuals for growth and development with organisation goals. (Development by W.M.Lindsay P.4)

It can be seen that there are several factors that are involved in the Improvement of Human quality in an organisation as per the Table below:

Table 1 Human Resource Quality Index

HRQ Component	Parameters Included
Cultural Change Index	IN : Workmanship Value MA : Management Attitude EM : Employee Motivation ASA: Ability and Skill Attainment CWF: Cohesive Work Force
Quality of Work Life Index	MP : Motivational Program OT : Orientation and Training CE : Communication Effectiveness ER : Employee Responsibility
Employee Satisfaction Index	EI : Employee Involvement AC : Attitude towards Change GR : Grievance Rate AR : Accident Rate OR : Defect Rate

Above factors have been identified by a detailed review on the linkage between TQM and HRQ. These factors can be grouped under (1) Organizational culture (2) Quality of work life and (3) Employee satisfaction. (Nair, 2012)

(Nair, 2012)The study undertaken by the researcher can make substantial contribution to understand the level of each indicator of human resource quality and thus identify dimensions on which the organization has to concentrate to enhance HRQ. Literature survey, expert opinion and logical reasoning have enabled us to identify the variables of human resource quality. They are mainly organizational culture, quality of work life and employee satisfaction. TQM efforts bring out significant changes in these variables. The major indicators of the above three variables were identified and finally an instrument was developed for assessing the human resource quality. The following flow chart clearly illustrates the various steps adopted by the investigator for developing the instrument for assessing human resource quality.

5. Conclusion

From the above Literature Survey we can observe the need of a research which gives us an indication as to how assessment of Educator's quality with the help of Human resource Quality Index can contribute to the body of Knowledge. This paper aims

for some clarity to understand the impact of these changes on the educators who are playing a key role in human resource development of students. The research aims to access the Human Resource Quality of Educators in Higher Education. For the sample study selected Education Institutions from Ahmedabad city will be considered. The Human Resource Quality index have three major indicators: Cultural change Index, Quality of work life index and Employee satisfaction index and their parameters will be used in the Questionnaire.

Future Scope of Study

The above mentioned HRQ model can be taken as base to measure quality of Educators in selected institutions of Ahmedabad to start with. So we can understand the relationship between Faculty expectations with culture change, quality of work life and Employee satisfaction with help of HRQ Index.

6. References

Work Cited

1. "Global Education". (10 December, 2015). University Analytics.
2. Abdullah, F. (November, 2006-Volume 30, Issue 6). The development of HEDPERF: a new measuring instrument of service quality for the higher education sector. *International Journal of Consumer Studies*, 569–581.
3. Almeida, E, A. M. (2007). A Component quality assurance process. *Foundations of Software Engineering*.
4. Antony, S. (2001). Impact of Assessment and Accreditation on Institutions of Higher Learning. *University News*, Vol.39.
5. Government Resolution of Maharashtra. (n.d.). University Grants Commissions-India.
6. Hazelkorn, E. (2015). *Rankings and the reshaping of Higher Education-The battle for world class education*; 2nd Edition. Hampshire: Palgrave Macmillan.
7. Jayanthu, B. (1993). H.R.D. and Productivity — A Study in Hindustan Photo Films.
8. Karunya Institute of Technology and Science. (n.d.). Innovation and Best Practices. National Assessment and Accreditation council.
9. Masood Abdulla Badri Hassan Selim Khaled Alshare Elizabeth E. Grandon Hassan Younis Mohammed. (2006). The Baldrige Education Criteria for Performance Excellence Framework: Empirical test. *International Journal of Quality & Reliability Management*; Vol. 23 Iss 9, 1118 - 1157.
10. Mayes, J.T. (2001). Quality in an E-university;. *Assessment and Evaluation in Higher Education*; Vol. 26(5), 465-474.
11. NAAC New Guidelines for Assessors (2012). (2012). NAAC.
12. Nair, K. S. (2012). Development of an instrument to assess Human Resource Quality HRQ and measuring the impact of TQM efforts on HRQ using the instrument. *School of Management Studies, Cochin University of Science and Technology*.
13. Prasad V S, A. S. (n.d.). Best Practices Benchmarking in Higher Education.
14. Schofer, E. (December 2005). The Worldwide Expansion of Higher Education in the Twentieth Century. *American Sociological Review*-Volume 70, no. 6, 898-920.

Table 2 Statutory Councils Regulating Higher Education in India

Name of Statutory Council	Summary	Function	Quality Initiatives	Source
All India Council of Technical Education (AICTE)	The economic progress of a country is strongly linked with Quality Education with values for All. It is therefore, necessary for our technical education to undertake periodic review of the curriculum and subject content of the technical programmes to ensure that they are up to date not outmoded or obsolete and effectively fulfill the technological requirements of the country.	<ul style="list-style-type: none"> • Promotion of Quality in Technical Education. • Planning and Co-ordinate Development of Technical Education System. • Regulations and maintenance of Norms and Standards. 	<ul style="list-style-type: none"> • Administration Bureau • Academic Bureau • University Bureau • Hindi Vibhag Bureau • Finance Bureau • Approvals Bureau • Planning & Coordination Bureau • Quality Assurance Bureau: Quality assurance, or QA for short, refers to a program for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met. 	http://www.aicte-india.org/aboutus.php

			<p>It is important to realize also that quality is determined by the program sponsor. QA cannot absolutely guarantee the production of quality products, unfortunately, but makes this more likely.</p> <ul style="list-style-type: none"> • Quality Improvement Programme(QIP) 	
<p>National Council for Teacher Education (NCTE)</p>	<p>The National Council for Teacher Education, commonly known as the Council or the General Body of the NCTE, is constituted by the Government of India under Section 3 of the NCTE Act. It is the highest decision-making body of the NCTE. It lays down policy, frames regulations and takes final decisions on various aspects of the mandate given to it under the NCTE Act.</p>	<p>The NCTE council was established with the objective of:</p> <ul style="list-style-type: none"> • undertake surveys and studies relating to various aspects of teacher education and publish the result thereof; • make recommendations to the Central and State Government, Universities, University Grants Commission and recognised institutions in the matter of preparation of suitable plans and programmes in the field of teacher education; • co-ordinate and monitor teacher education and its development in the country; • lay down guidelines in respect of minimum qualifications for a person to be employed as a teacher in schools or in recognised institutions; • lay down norms for any specified category of courses or trainings in 		<p>http://ncte-india.org/ncte_new/?page_id=2299</p>

		teacher education, including the minimum eligibility criteria for admission thereof, and the method of selection of candidates, duration of the course, course contents and mode of curriculum		
National Assessment and Accreditation Council (NAAC)	An autonomous body has been established by the University Grants Commission in 1994 in pursuance of the recommendations made by the National Policy of Education, 1986 and the Programme of Action (POA), 1992 which lay special emphasis on evaluating the quality of higher education in India.	<p>Education plays a vital role in the development of any nation. There is a premium on both quantity (increased access) and quality (relevance and excellence of academic programmes offered) of higher education.</p> <p>The NAAC has been set up to facilitate the volunteering institutions to assess their performance vis-a-vis set parameters through introspection and a process that provides space for participation of the institution.</p>	<p>Following seven criteria are focused on:</p> <ul style="list-style-type: none"> • Curricular Aspects • Teaching-Learning and Evaluation • Research, Consultancy and Extension • Infrastructure and Learning Resources • Student Support and Progression • Governance, Leadership and Management • Innovations and Best Practices 	http://www.naac.gov.in/assessment_accreditation.asp
Rashtriya Uchchatar Shiksha Abhiyan (RUSA)	Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is a Centrally Sponsored Scheme (CSS), launched in 2013 aims at providing strategic funding to eligible state higher educational institutions.	<ul style="list-style-type: none"> • Improve the overall quality of state institutions by ensuring conformity to prescribed norms and standards and adopt accreditation as a mandatory quality assurance framework. • Usher transformative reforms in the state higher education system by creating a facilitating 	<ul style="list-style-type: none"> • Up gradation of existing autonomous colleges to Universities • Conversion of colleges to Cluster Universities • Infrastructure grants to Universities • New Model Colleges (General) • Up gradation of existing degree colleges to model colleges • New Colleges (Professional) • Infrastructure grants to colleges • Research, innovation and quality improvement • Equity initiatives 	http://mhrd.gov.in/rusa

		<p>institutional structure for planning and monitoring at the state level, promoting autonomy in State Universities and improving governance in institutions.</p> <ul style="list-style-type: none"> • Ensure reforms in the affiliation, academic and examination systems. • Ensure adequate availability of quality faculty in all higher educational institutions and ensure capacity building at all levels of employment. • Create an enabling atmosphere in the higher educational institutions to devote themselves to research and innovations. 	<ul style="list-style-type: none"> • Faculty Recruitment Support • Faculty improvements • Vocationalisation of Higher Education • Leadership Development of Educational Administrators • Institutional restructuring & reforms • Capacity building & preparation, data collection & planning 	
<p>University Grants Commission (UGC)</p>	<p>UGC was formally established in November 1956 as a statutory body of the Government of India through an Act of Parliament for the coordination, determination and maintenance of standards of university education in India. In order to ensure effective region-wise coverage throughout the country, the UGC has decentralised its operations by setting up six regional centres at Pune, Hyderabad, Kolkata, Bhopal, Guwahati and Bangalore.</p>		<ul style="list-style-type: none"> • Augmenting Faculty Resources Involving researchers and academicians Outside the University System • Excellence • Research • Access • Equity • Quality • Promotion of talent • Skill development • The 11th Plan has recommended the policy of compulsory assessment and accreditation. In view of this the UGC has developed a procedure to introduce mandatory assessment and accreditation for universities and colleges. Towards that end UGC has 	<p>http://www.ugc.ac.in/page/UGC-Regulations.aspx</p>

			also approved a Scheme for establishment of Quality Assessment Cell in universities (IQAC) and colleges for regular internal self-assessment and self monitoring of quality and excellence. Both steps help to present an all India quality map of universities and colleges.	
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Table 3 Best Practices in Selected Modern Institution of India

Name of University	Best Practices	Outcomes	Year of Establishment
'Devi Ahilya Vishwavidyalaya's (DAVV)	<p>Energy efficiency and conservation</p> <ul style="list-style-type: none"> • Energy audit of Takshshila Campus • Retrofit in existing buildings for Energy efficiency 	DAVV-GUP Green university policy	1964(Indore)
Jiwaji University	<ul style="list-style-type: none"> • Green Audit Policy • Starter grants: The research policy advocates a provision for seed money as 'Starter-grant' to newly recruited faculty in order to facilitate initiation of research in their areas of specialization. The University also proposes to increase the number of PhD fellowships to non-NET qualified students. Efforts are being made for promotion of product/ patent oriented research. • Patent Cell has recently been created in that direction. A Patent cell has just been created in this direction. 'Advanced Scientific Equipment Facility' which caters to the requirements not only of Jiwaji University but also of other educational Institutes of the region has strongly been advocated. 	Environment conservation	1964(Gwalior)
Karunya Institute of Technology and Science	<ul style="list-style-type: none"> • Student Mentoring • Earn while you learn scheme • International Internships(IAESTE) • Energy Conservation • Safety Insurance • Digital learning Solutions • E-governance 	<ul style="list-style-type: none"> • Mentor-Mentee program with 400 faculty mentors, each helping 22 students. • 50 students employed through Earn while you learn scheme • 91 students traveled abroad for IAESTE • Rs. 1 lakh towards student safety insurance • 998 E-books,2688 E-journals for teaching & research towards digital experience 	2004(Chennai)
FLAME University	<ul style="list-style-type: none"> • Multi-disciplinary approach to education • Open and Common courses 	<ul style="list-style-type: none"> • Liberal Education • Students can take any course delivered by the university in open slots, including literature, philosophy, political science, anything taught at FLAME. This approach allows the students to be exposed to much more than their standard degree curriculum. 	2015(Pune)
Asoka University	<ul style="list-style-type: none"> • Research University • Multi-disciplinary approach to education • Centre for Entrepreneurship • Genpact Centre for Women's Leadership (GCWL) • Centre for Individual and Group Experience (CIGE) 	<ul style="list-style-type: none"> • Exclusive focus on Liberal Arts Education 	2014(DelhiNCR, Haryana)

	<ul style="list-style-type: none"> • Centre for Social Impact and Philanthropy (CSIP) 		
<p>Ahmedabad University</p>	<ul style="list-style-type: none"> • Independent Study Period • Centre for Reading and Writing • The PBL Community • Undergraduate Research Programme • Liberal Studies • Foundation & Bridge courses • Open courses with CEPT • Common course concept for increasing Multidisciplinary approach. 	<ul style="list-style-type: none"> • During the Independent Study Period (ISP) in December, the university offers a range of learning opportunities not available during the regular curricular periods of the semesters. Offerings include block courses, studio-inspired experiential courses, courses on perspective and skill building, innovative experiments in learning, programmes that cut across areas and schools, a University Research Programme for Undergraduates, independent study and more. • Ahmedabad University implements project-based learning (PBL) as an important methodology for building student capabilities of “how to learn” through practical application. The University has developed a highly innovative methodology, ENABLE, that allows design and delivery of a project based course. 	<p>2009(Ahmedabad)</p>