A STUDY ON UNIVERSITY- INDUSTRY INTERFACE FOR QUALITY EDUCATION

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Abstract
In all types of economies not only in developed countries but also in developing and less developed economies higher education is gaining increasing importance because modern sector require highly qualified people. Having more number of qualified people it is possible to expect more number of highly qualified people. Quality education also important to expect high quality in teaching, learning and research activities. Universities should put efforts to enhance quality of education. Apart from traditional type of education Universities should provide scientific type of education which will enhance the skill of the people which is the very need of the day. Then only it is possible to enhance the competitive strength of Indian Universities and Indian Universities can compete with foreign private Universities. Government should provide proper financial assistance and other types of support to enhance quality of Universities. Considering all these issues the study conducted with specific objectives ie., to examine the University, industry interface on educational sector.

Key Words: Higher Education, Qualified People, Scientific Education, Financial Assistance.

Introduction
Higher education really playing significant role in all types of economies, because for the production of qualified persons who will contribute to the economy and society. In spite of that majority of the Indian universities do not fulfill the very purpose. of enhancing quality of education. As majority of the students do not have adequate skills it is too difficult for them to get jobs and to retain the jobs especially in technical wing. In Indian economy productive age group population should have more efficiency in all the sectors ie., agriculture, industry and service sector. In recent years to get more funds and and to enhance competitiveness Universities should be linked with industries so that it is possible to enhance quality of education Very fortunate aspect is Universities can enhance the value of products in the form of knowledge; industry can mobilise the value of the University in the form of enormous funds . In India, during 1986, the National Policy on Education (NPE) highlighted the need for university industry interaction.

The Research Methodology
The overall objective of the study is to examine the link between the University, industry and educational sector.

The specific objective of the study is to examine the linkage between University, industry and educational sector, to know the influence of Industry on educational sector.

To examine the advancement of education sector because of the influence of Industry.

Significance of the Study: It is possible to know about the changes in the educational sector because of the influence of Industrial sector.

Statement of the Problem
The infrastructure for higher education that the Indian government has provided over the decades is inadequate. Employability of graduates should be enhanced so that it is possible to enhance the income levels of graduates. They can lead decent standard of living.

It is clear from the secondary data and information that 80% of graduates do not have adequate professional skills though they are very good in theory.

Extremely dynamic business world and the rapidly developing knowledge based service economy have made increased demand for professionals to manage the business effectively and efficiently. Majority of the graduates have continued for higher education.

There is an acute shortage of skilled and productive professionals in each sector of Indian Economy. One more issue observed in the market ie., failure to recognize each other's role will reduce the interface between institute and industry; and it can potentially cause for imbalance between demand and supply of manpower, which, in turn, can cause lot of disturbances in the job market. As today's world demands practical highly scientific, technical and advanced education. Some of the Universities have established nearby Industrial areas.

The major objectives of Industry Institute Interaction / Interface:
To improve the quality of education, to meet industry and economy needs, to deliver quality product to employers, to integrate industrial training and other inputs to develop students, to offer research, development, consultancy and testing

services, to solve industrial problems, to offer growth oriented training Programmes to working personnel. to share the experience and expertise between institutions and industry for mutual benefit. to develop good work culture in students. to organize lectures by experts from industry, to participate in curriculum design activity, Areas of Financial support from industry for academic activities, Providing incubator services for start up companies, Academic intervention in solving specific industry problems., Employment and transfer of skilled researchers, Collaborative agreements for development of new products, Incentive to Industries for Sponsors/Donations to Workshops, Seminars etc, Grants to B School to conduct free Refresher courses for SMEs Deemed University status to leading B school, Encourage Industry professional to do Research and earn Doctorates Benefits to the Members in the Interface which Benefits to Industry, Institutes can train employees who are on probation, Institutes help to cut the cost of time, training and energy, Institutes can incorporate the curriculum given by the industry in its course, Institutes to provide dedicated Job.

Live project benefits the both Joint committee to monitor and improve the drawbacks, Reduce attrition rate, operational expenses and long term losses, .Academia generating ideas and acting as incubators to new business bridging the gap between knowledge and application, Getting superior innovative ideas to stay competitive Identifying priority institutes which may help with innovation for competitive advantage, Allocating funds for R&D and innovation activities, Sharing free information with academic institutes on market and technical problems, Collaborating on a long term basis with appropriate institutes for R&D activities, Allocating supervisors for monitoring and supervising project work and research programs of students at the industry, Industry providing financial and infrastructure support to business schools for their development, Funding for academic and applied research Opportunity for Research & Consultancy, Getting the status for "Centre of Excellence" Infrastructure Development, Identifying priority industries which need innovation for competitive advantage, Developing long term sustainable collaboration with prioritized industries, Mobilizing funds for developing infrastructure in the institute for specified R&D activities, Promoting compulsory internship program for students and industrial research Benefits to Students, Improving competency in managing situations, Reducing unemployment increasing the industrial productivity & efficiency. Better economic conditions, Contributing towards Human Resource Development: such that the potentials of the candidates can be utilized efficiently thereby leading them into specialized streams of business and management.

Table 1: Details about Number of Central Universities, State Universities, Deemed Universities, Private Universities

State	Central Universities	State Universities	Deemed Universities	Private Universities	Total
Andhra Pradesh	0	20	5	0	25
Arunachal Pradesh	1	0	1	7	9
Assam	2	12	0	4	18
Bihar	0	15	1	0	19
Chandigarh	0	1	1	0	2
Chhattisgarh	1	13	0	8	22
Delhi	5	7	10	0	22
Goa	0	1	0	0	1
Gujarat	1	25	2	24	52
Haryana	1	14	6	19	40
Himachal Pradesh	1	4	0	17	22
Jammu and Kashmir	2	7	1	0	10
Jharkhand	1	7	2	3	13
Karnataka	1	25	14	12	52
Kerala	1	13	2	0	16
Madhya Pradesh	2	21	1	20	44
Maharashtra	1	21	21	5	48
Manipur	2	0	0	1	3
Meghalaya	1	0	0	8	9
Mizoram	1	0	0	1	2
Nagaland	1	0	0	2	3
Odisha	1	13	2	3	19
Puducherry	1	0	1	0	2

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Punjab	1	9	2	13	25
Rajasthan	1	21	8	4	71
Sikkim	1	0	0	1	6
Tamil Nadu	2	22	28	5	52
Telangana	3	16	2	0	21
Tripura	1	1	0	0	3
Uttar Pradesh	6	24	9	1	63
Uttarakhand	1	10	3	11	25
West Bengal	1	25	1	8	35
Total	47	347	123	237	754

The above table gives the information about Central, State, deemed and private Universities.

Table 2: Details of Degree Awarding Institute and their Ranks

Degree Awarding Institute	Rank
Indian Institute of Science, Bangalore	1
Indian Institute of Technology, Bombay	2
Indian Institute of Technology, Kharagpur	3
Indian Institute of Technology, Madras	4
Indian Institute of Technology, Delhi	5
Institute of Chemical Technology, Mumbai	6
University of Hyderabad, Hyderabad	7
All India Institute of Medical Sciences, New Delhi	8
Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore	9
National Institute of Pharmaceutical Education and Research, Mohali	10
Indian Institute of Technology, Kanpur	11
Jadavpur University, Kolkata	12
Banaras Hindu University, Varanasi	13
JamiaHamdard, New Delhi	14
Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore	15
National Institute of Pharmaceutical Education and Research, Mohali	16
Indian Institute of Technology, Kanpur	17
Jadavpur University, Kolkata	18
Banaras Hindu University, Varanasi	19
JamiaHamdard, New Delhi	20
University of Delhi, Delhi	21
Panjab University, Chandigarh	22
Tata Institute of Fundamental Research, Mumbai	23
SreeChitraTirunal Institute for Medical Sciences and Technology, Trivandrum	24
University of Calcutta, Kolkata	25
Banaras Hindu University, Varanasi	26
JamiaHamdard, New Delhi	27
University of Delhi, Delhi	28
Panjab University, Chandigarh	29
Tata Institute of Fundamental Research, Mumbai	30
SreeChitraTirunal Institute for Medical Sciences and Technology, Trivandrum	31
University of Calcutta, Kolkata	32
Indian Institute of Technology, Roorkee	33
Indian Institute of Technology, Guwahati	34
Indian Institute of Technology, Indore	35
Jawaharlal Nehru University, New Delhi	36
Guru Nanak Dev University, Amritsar	37
University of Madras, Chennai	38

Indian Institute of Science Education and Research, Pune	39
Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow	40
Indian Institute of Science Education and Research, Kolkata	41
International Institute for Population Sciences, Mumbai	42
Anna University, Chennai	43
Indian Inst47itute of Science Education an48d Research, Pune	44
Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow	45
Indian Institute of Science Education and Research, Kolkata	46
International Institute for Population Sciences, Mumbai	47
Osmania University, Hyderabad	48
Guru Jambheshwar University of Science and Technology, Hisar	49
Anna University, Chennai	50
Aligarh Muslim University, Aligarh	51
Indian Institute of Technology, Ropar	52
University of Jammu, Jammu	53
Postgraduate Institute of Medical Education and Research, Chandigarh	54
VisvaBharati, Santinikaten	55
Indian Agricultural Research Institute, New Delhi	56
SavitribaiPhule Pune University, Pune	57
Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow	58
Indian Institute of Science Education and Research, Kolkata	59
International Institute for Population Sciences, Mumbai	60
Osmania University, Hyderabad	61
Guru Jambheshwar University of Science and Technology, Hisar	62
Anna U4niversity, Chennai	63
Aligarh M65uslim University, Aligarh	64
Indian Institute of Technology, Ropar	65
University of Jammu, Jammu	66
Postgraduate Institute of Medical Education and Research, Chandigarh	67
VisvaBharati, Santinikaten	68
Indian Agricultural Research Institute, New Delhi	69
SavitribaiPhule Pune University, Pune	70
National Brain Research Centre, Gurgao	71
Indian Institute of Science Education and Research, Thiruvananthapuram	72
National Dairy Research Institute, Karnal	73
Tezpur University, Tezpur	74
Madurai Kamaraj University, Madurai	75
Bharathiar University, Coimbatore	76
Indian Institute of Science Education and Research, Bhopal	77
National Institute of Technology, Tiruchirappalli	78
National Dairy Research Institute, Karnal	79
Tezpur University, Tezpur	80
Madurai Kamaraj University, Madurai	81
Madurai Kamaraj University, Madurai	82
Bharathiar University, Coimbatore	83
Indian Institute of Science Education and Research, Bhopal	84
National Institute of Technology, Tiruchirappalli	85
Indian Statistical Institute, Kolkata	86
Indian Veterinary Research Institute, Izatnagar	87
Kurukshetra University, Kurukshetra	88
Sri Venkateswara University, Tirupati	89
Indian Institute of Technology, Bhubaneswar	90
Indian Institute of Science Education and Research, Mohali	91
Indian Institute of Technology, Hyderabad	92

National Institute of Technology, Rourkela	93
National Institute of Pharmaceutical Education and Research, Hyderabad	94
Annamalai University, Annamalai Nagar	95
National Institute of Pharmaceutical Education and Research, Guwahati	96
University of Mumbai, Mumbai	97
Delhi Technological University, Delhi	98
Indian School of Mines, Dhanbad	99
National Institute of Mental Health and Neuro Sciences, Bangalore	100
National Institute of Technology, Durgapur	101
Indian Institute of Technology, Patna	102
Pondicherry University, Puducherry	103
Nizam's Institute of Medical Sciences, Hyderabad	104
Indian Institute of Technology, Gandhinagar	105
Alagappa University, Karaikudi	106
Shivaji University, Kolhapur	107
Indian Institute of Technology, Mandi	108
Motilal Nehru National Institute of Technology, Allahabad	109
Jawaharlal Nehru Technological University, Hyderabad	110
DrHarisinghGourVishwavidyalaya, Sagar	111
Gauhati University, Guwahati	112
King George's Medical University, Lucknow	113
Maharaja Sayajirao University of Baroda, Vadodara	114
Indira Gandhi Institute of Development Research, Mumbai	115
Central University of Tamil Nadu, Thiruvarur	116
Maulana Azad National Institute of Technology, Bhopal	117
SardarVallabhbhai National Institute of Technology, Surat	118
University of Kalyani, Kalyani	119
University of Burdwan, Bardhaman	120
Himachal Pradesh University, Shimla	121
Central University of Punjab, Bathinda	122
National Institute of Technology, Warangal	123
Central Institute of Fisheries Education, Mumbai	124
Defence Institute of Advanced Technology, Pune	125
Goa University,Taleigao Plateau, Goa	126
Mahatma Gandhi University, Kottayam	127

The above table gives the information about the Indian Universities and their rankings.

Table 3: Details of Universities, Rankings and their Score

Top Private Universities in India 2016 – Where Engineering Universities still dominate

Name of the University	Ranking	Score
VIT University, Vellore	1	429.08
Manipal University, Manipal	2	227.29
Birla Institute of Technology and Science, Pilani	3	395.27
Indian Institute of Technology, Madras	4	363.64
Indian Institute of Technology, Delhi	5	353.01
	6	
Sri Ramachandra University, Chennai	7	
Thapar University, Patiala	8	207.23
Birla Institute of Technology, Mesra	9	205.34
Shiv Nadar University, Dadri	10	202.36
International Institute of Information Technology, Hyderabad	11	185.47
Amity University, Noida	12	181.90

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Dr DY PatilVidyapeeth, Pune	13	181.12
ICFAI Foundation for Higher Education, Hyderabad	14	179.45
University of Delhi, Delhi	15	289.54
Panjab University, Chandigarh	16	283.80
Tata Institute of Fundamental Research, Mumbai	17	281.62
JSS University, Mysore	18	171.61
Vel Tech DrRangrajanDrSakunthala Technical University, Chennai	19	266.11
Indian Institute of Technology, Roorkee	20	169.54
Kalinga Institute of Industrial Technology, Bhubaneswar	21	166.85
Indian Institute of Technology, Indore	22	166.09
DattaMeghe Institute of Medical Sciences, Nagpur	23	165.69
Guru Nanak Dev University, Amritsar	24	162.91
NITTE University, Mangalore	25	159.60
ManavRachna International University, Faridabad	26	158.16
BS AbdurRahman University, Chennai	27	158.07
Sam Higginbottom Institute of Agriculture, Technology and Science, Allahabad	28	157.38
Sathyabama University, Chennai	29	157.31
Jaypee Institute of Information Technology, Noida		156.48

The above table clearly gives the information about private Universities in India, their ranking and score.

Table 4: Details of Companies, Industries, Revenue, Profits Assets and Market Value

47 Indian companies were listed in the Forbes Global 2000 ranking for 2015. The 10 leading companies were:

World Rank	Company	Industry	Revenue (billion $)	Profits (billion $)	Assets (billion $)	Market Value (billion $)
142	Reliance Industries	Oil & Gas Operations	71.7	3.7	76.6	42.9
152	State Bank of India	Banking	40.8	2.3	400.6	33
183	Oil and Natural Gas Corporation	Oil & Gas Operations	28.7	28.7	59.3	43.7
263	NTPC	Utilities	12.9	1.9	35.4	20.2
431	ICICI Bank	Banking	14.2	1.9	124.8	30
283	Tata Steel	Materials	32.77	3.08	31.16	2.46
463	Tata Steel					
349	Indian oil corporation			1.2	44.7	14.6
485	HDFC	Banking	8.4	1.4	84.3	41.6
485	TCS			3.5	11	80.3

The above table gives the information about the revenue, profit, assets, market value of various important companies.

Table 5: Details of Important Industries their Weights and Contribution

Item Group	Weights	Contribution
High Positive Contributors		
Gems And Jewellery	1.77	1.9747
Cable, Rubber Insulated	0.12	1.0640
Electricity	10.32	1.0440
Telephone Instruments Including Mobile Phone And Accessories	0.22	0.7039
Passenger Cars	1.97	0.5634

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High Negative Contributors		
H R Coils/Skelp	1.30	-0.2850
sponge iron	0.99	-0.1803
Conductor, Aluminium	0.20	-0.1296
Polythene Bags Incl. Hdpe & Ldpe Bags	0.17	-0.1263
Stainless/ alloy steel	0.64	-0.1226

It is clear from the above table that electricity is having more weights followed by passenger cars, jems and jewellary, HR Coils, sponge iron, telephone instruments, conductor, aluminium, polythene bags and cable rubber in this chronological order. Contribution of gems and jewellary, cable rubber insulated, electricity, telephone instruments, passenger cars, followed by H R Coils, songe iron, conductor/aluminium, polythene bags and stainless alloy steel . In Indian economy higher education is increasing its importance. Government is giving proper attention to enhance the growth rate of manufacturing sector. Increasing performance of manufacturing sector has promoted the development of educational sector especially higher education sector. In the modern era number of higher education institutes, Universities enhanced because of advancement in development process. Because of the enhanced number of Universities and colleges enhancement of the development of overall educational sector noticed. People should be aware about the sarvashikshaabhiyan campaign and should be aware about the importance of higher education.

Suggestion
Government should give proper financial support to Universities and colleges to enhance quality of education ie, teaching and research. Then only it is possible to enhance the development of educational sector particularly higher education.

Recommendations
Government should make industry & institute to go hand in hand related to this, Government should be initiator rather than facilitator.

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