



ROLE OF INDUSTRY IN DEVELOPING THE EDUCATION SYSTEM

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Abstract

Higher education serves several important functions in the society, the most important being production of knowledgeable individuals who will contribute to the society. However, many of the Indian universities do not fulfil this purpose. The demands of skilled and specialised manpower from the industry are not being met, as majority of students lack the necessary skill sets required by the industry. In recent years, a major concern of higher education planners and academics, the world over, has been linking universities and other research institutions with industries. Universities can enhance the value of products in the form of knowledge; industry can augment the university's value in the form of funds. In India, way back in 1986, the National Policy on Education (NPE) highlighted the need for university-industry interaction. In my paper, I would be concentrating on this need of interface between the industry and education institutes. Also, on innovative ways and means of improving and making the interaction more effective.

Index Terms: NPE, Interface & Manpower

Introduction:

The tremendous infrastructure for higher education that the Indian government has created over the decades is proving inadequate for the millions of young men and women who could be in colleges and institutions. This is despite the fact that India has over 400 universities and more than 20,000 colleges with an enrolment of 14 million students. The added dimension that needs to be addressed simultaneously along with creating better and professional infrastructure is the need for increasing employability of graduates emerging out of the HEI's (Higher Educational Institutions). This is vital for sustainability as 80 % of graduates stepping out with degrees do not have any professional skills. Thus an industry-institution interface has to be evolved in tandem with resource and infrastructure generation

Extremely dynamic business world and the rapidly developing knowledge based service economy have put in an increased demand for professionals to manage the business effectively. And this is precisely the reason why amongst various other fields of knowledge, desire for acquiring professional qualifications is growing, both amongst the fresh graduates and working executives. Indian Industry, after the liberalization, has become more aware of the vital linkage between the education system and business and corporate productivity.

Though there is a massive pool of the unemployed, contradicting there is an acute shortage of skilled and productive professionals in every sector of Indian Economy. This is partly because the Indian Academy has been churning out graduates not in line with the needs of the industry. As much as professional institutes aim to provide well groomed manpower to industry, the latter needs to involve in the affairs of the former for improving quality of manpower. There exists principal-agent relationship between institute and industry. It maintains that there is a theoretical base for a strong institute-industry interface; and hence industry needs to contribute to professional institutes, which, in turn, will have to look forward to the industry for

input. Failure to recognize each other's role will reduce the interface between institute and industry; and it can potentially give rise to mismatch between demand and supply of manpower, which, in turn, can cause disruption in the job market.

Today's world demands practical education. Apart from having text book knowledge it is essential to know latest trends, happenings in the industry when student is studying in the higher education, professional educational area. Most of the higher educational institutes are also considering importance of industry interface and setting up new campuses near industry areas.

Need for Academia-Industry Interface:

Academia- Industry Interface could be defined as interactive and collaborative arrangement between academic institutions and business corporations for the achievement of certain mutually inclusive goals and objectives. Traditionally, business schools were looking for placements and internships for their students and the industry for fresh recruits who are well trained and equipped with the right KSA (knowledge, skills and attitude) to be able to contribute to organization's growth.

A productive interface between academia and industry, in the present times of knowledge economy, is a critical requirement. The constantly changing management paradigms, in response to growing complexity of the business environment today have necessitated these two to come closer. The industry academia interface is all about knowledge transfer and experience/technology transfer. Today, the professional institutes have realized the importance of 'working closely with employers' for the following reasons:

- ✓ Increasing complexity in academic and business world and constantly changing needs of the industry;
- ✓ Increasing criticality of human competence in creating and sustaining competitiveness of the organizations;
- ✓ Shift in management paradigm of professional schools from earlier academic models to revenue based models;
- ✓ Growing competition for student placements and industry mind-share, with rapid increase in the number of professional schools and hence the graduates;
- ✓ Growing pressure from industry to make their fresh inductees productive from day one to reduce the subsequent training costs.

Academic world is creative and the industry has the task of commercializing ideas. Academia-industry collaboration, world over, is quite limited and no model that is widely used exists, though this has always been a topic of discussion on both sides.

Ways of Achieving Industry-Institute Interface:

For achieving a mutually beneficial relationship, there is a need for change in the approach of both the university and industry. To promote university-industry interaction, following steps can be undertaken:

- ✓ Establishment of university-industry partnership/interaction cell.
- ✓ Organising workshops, conferences & symposia with joint participation
- ✓ Participation of experts from industry in curriculum development.
- ✓ Professional consultancy by the faculty to industries.
- ✓ Visits of industry executives to the university and deliver lectures on industrial practices, trends and experiences.
- ✓ Joint research programmes
- ✓ R&D laboratories sponsored by industries at the university.
- ✓ Scholarships/fellowships instituted by industries for students.
- ✓ Practical training of students in industries.

Apart from industry associations, the universities should also establish linkages with government agencies which are engaged in industrial development activities

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 Collaboration:

- ✓ Guest Lectures Training and Internship of students including industry into Governing Councils and Board of studies
- ✓ Executive Education programmes
- ✓ Industry inputs in curriculum designing
- ✓ Joint community development services
- ✓ Helping industry in training and selection of their staff
- ✓ Financial support from industry for academic activities
- ✓ Providing incubator services for start up companies
- ✓ Joint Seminars Case writing Management Development Programmes
- ✓ Faculty Selection and Induction
- ✓ Outsourcing complete courses
- ✓ Academic intervention in solving specific industry problems
- ✓ Employment and transfer of skilled researchers
- ✓ Consulting agreement
- ✓ Collaborative agreements for development of new products
- ✓ Establishment of interaction Cell.

Government Role:

- ✓ IT exemption to Donations to Colleges
- ✓ 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:

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-fit trained and self motivated employees
- ✓ Live project benefits the both Joint committee to monitor and improve the drawbacks.
- ✓ Reduce attrition rate, operational expenses and long term losses.
- ✓ Consulting on management and related issues by academia

- ✓ Academia generating ideas and acting as incubators to new business bridging the gap between knowledge and application
- ✓ Getting superior innovative ideas to stay competitive
- ✓ Getting opportunity to grow its business by using the results of academic research
- ✓ Getting global visibility resolving the business intricacies with the help of live project
- ✓ Realizing the possibilities of innovation in products and process through smart brains at institutes
- ✓ 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
- ✓ New start-ups by commercializing ideas given by the academic fraternity thus helping the corporate grow
- ✓ Including the academia into their strategic decisions regarding new business ideas

Benefits to Institute:

- ✓ Guest Lectures by industry representatives.
- ✓ Suggestions in curriculum and content designing.
- ✓ Executive Education and Management Development Programmes.
- ✓ Joint seminars by academia and industry both for executives and students.
- ✓ Inclusion of industry experts in governing councils and other board of studies.
- ✓ 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.
- ✓ Industrial Chairs/Endowments Sabbatical for Faculty to get real life work experience
- ✓ Regular Industrial Visits Internship and placements
- ✓ Adoption of B-School by nearest Industries Association
- ✓ Students can develop application orientation and gain confidence in their practical knowledge
- ✓ The academic institution is in need of a partner that can take its discoveries to the market place
- ✓ Adopting market concepts in education and R&D
- ✓ 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
- ✓ Exposure to practical aspects of management

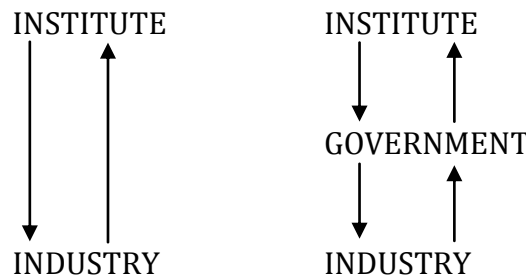
- ✓ Possibility of getting absorbed in the company as soon as they finish the course
- ✓ Increasing the “employability factor”
- ✓ Earn while learn

Benefits to Government:

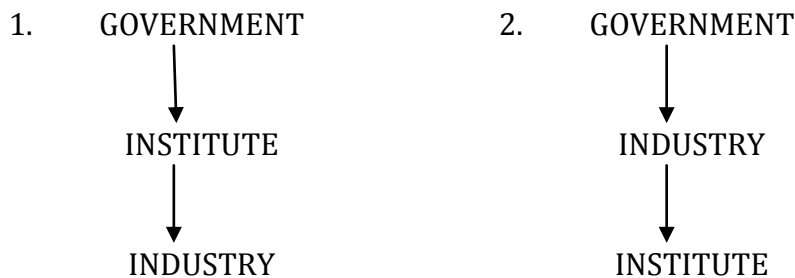
- ✓ Reducing unemployment
- ✓ Increasing the industrial productivity & efficiency.
- ✓ Better economic conditions.
- ✓ Contributing towards Human Resource Development: - such that the potentials of the candidates can be utilized efficiently thereby leading them into specialized streams of business and management.

Present Interface Model:

Here we see that the interface between the industry & institute is both ways, initiated by either parties. Else, it can also be with the help of government as a facilitator.



Future Interface Model:



In model 1 the government should look at the economy & find out which sector or industry is doing well and instructs the institutes to teach or concentrate on a particular curriculum which is beneficial for that sector. Then instruct the industry to hire employees from that institute only, by which way both the parties are satisfied. This can be called as “planned employment”.

In model 2 the government should ask or consult the industry about the requirements & the skill set of manpower required for their future expansions (which the companies usually do through Manpower / HR Budgeting). Similarly inform the institutes to train students with that skill set & in that particular area, so that when they finish their education they are ready to work without any additional training.

Recommendations:

- ✓ Government should be initiator rather than facilitator.
- ✓ Government should make industry & institute to go hand in hand.
- ✓ The education cess collected should be utilised for the development of the industry in terms of interface development.
- ✓ Government should show the path to the youth by educating & ensuring their employment.
- ✓ Planned employment – i.e opportunities & skills should match.

Conclusion:

In spite of the very substantial mutual benefits of cooperation, interaction between higher Education institutions and companies' remains at a low level in India – and this threatens educational and industrial development. However, despite efforts on the part of the Centre and State governments, university-industry interaction has not shown a significant improvement till date. It still remains marginal and largely confined to a few institutions such as the IITs, IIMs, IIITs, NITs, etc. All this only enforces the belief that a collective effort on the part of industry and government is inevitable, if our country is to gain a foothold in the global knowledge workforce. This is possible only if government becomes initiator & takes action keeping the growth of the nation in mind.

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