

**ACADEMIC-INDUSTRY COLLABORATIONS IN INDIA****RAJNI GUPTA<sup>a1</sup> AND ASTHA JAISWAL<sup>b</sup>**

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**ABSTRACT**

**This paper focuses on the different types of academic-industry collaboration possible in Indian context. It is increasingly felt that universities and industry have long been separated, it is a necessity today that they come closer and work synergistically. Identifying means of further strengthening academia-industry partnerships. It attempts to explore how academia can work closely with industry, study the dimensions of academia-industry partnership, and identify possible areas where industry's contribution to academia would be most effective.**

**KEYWORD:** Academy, Industry, Collaboration and Education

Academic-Industry collaboration, though increasingly recognized as indispensable for, all over world and there is no model still that can be emulated.

Academic-Industry collaboration is a means by which academic institutions and industry can address global challenges to their mutual benefit and the well-being of society.

- Identify the areas where academic industry collaboration increasing?
- To evaluate the perceived benefit accrued from academic industry collaboration in specific areas.
- Major source of research funding for academia.
- Source for external project sponsored by the companies

**THEORETICAL FRAME WORK****Academia-Industry Interface**

Academia- Industry Interface is collaborative and interactive 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 knowledge, skills and attitude to be able to contribute to organization's growth.

According to Aggarwal (2005), the Industries have realized the importance of 'working closely with employers' because:

- Increasing criticality of human competence in creating and sustaining competitiveness of the organizations;
- Growing competition for student placements and industry mind-share, with rapid increase in the

number of business schools and hence the management graduates;

- Increasing complexity in academic and business world and constantly changing needs of the industry;
- Shift in management paradigm of business schools from earlier academic models to revenue based models;
- Increasing interdependence between academia and industry to satisfy need for sustenance and innovation in their respective areas.
- Growing pressure from industry to make their fresh selectees productive from day one to reduce the subsequent training costs.

Greenberger (2001) is of the view that organizations today are looking for trained professionals and students capable of taking decisions, collaborative internships with corporations to enhance learning opportunities.

**Industry Collaboration through Joint Research and Contract Research in Select Universities**

In joint research, industry can finance the research and send co-researchers to a University. Researchers from both universities and industrial firms can work together and depending on the contract, a joint research could be conducted at universities as well as industrial firms.

In contract research, universities could receive projects from industry and carry out research. The result of research would belong to universities but would have to be reported to industry that may be given the priority to get the license of research results.

**MODES OF INTERFACE**

Industry has discovered the advantages of collaborative learning opportunities. Corporations seek to play important role in activities of academic institutions to incubate the talent they need. The shift towards the

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short-term performance metrics and shareholders interest has led to a number of changes in conduct of business, which has translated its effect on business schools.

According to Beard (1994), improve the programmes by encouraging the participation of a number of guest speakers who can offer their own practical experiences increasing and enhancing academia-industry interface. Greater degree of industry-school collaboration to integrate employer's needs into the programmes on offer and real involvement with industry to allow students to gain valuable practical experience to facilitate development of business also increase the academic industry interface.

According to Prof. Dutta Indian Industry, after the liberalization, has become marginally more aware of the vital linkage between the education system and business and corporate productivity. Even with this awareness, its engagement with academia is tentative and ritualistic than real. Indian industry is myopically disengaged, if not wholly divorced from Indian academia. As much as management 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. In fact, input of one is critical for the other.

Dayal (2004), says that "In most cases industry uses business schools as recruitment centers. The right interface can develop only when they approach business schools for help, for which the latter has to equip them to understand business situations in depth and those useful to industry".

### **COLLABORATION IN EDUCATION**

One of the core competencies of academic institutions is teaching. And many institutes engaged in education at high end, have the courseware and ability to provide training for high-end manpower development. Many of these topics are of interest to industry. Therefore, a natural collaboration possibility is for the academic faculty and institutes to conduct training in topics of interest for industry.

In this form of collaboration, continuing education programs are offered which are designed for industry participants. Short courses may be offered by some faculty in some company or institute (Jalote, 2007).

In India, as the level of technology and competence in industry has increased. But the need for programs for working professionals seems to be increasing. Programs for working professionals in

management are now picking up in India. This is best area that can be potentially developed, if both sides collaborate.

### **COLLABORATION IN RESEARCH**

Academicians in most good institutes engage in research, collaboration in this area is possible only if the industry has a need for research. Though the goal of research is to create new knowledge, the purpose of research in a company is to create new knowledge which other parts of the company can use to improve the business.

Research is typically not a business or a profit center but a long term investment, which helps a company, generates more revenue and profits. In India, till recently there was no need for research in most companies – the knowledge that existed in the public domain was sufficient for the business the company was engaged in. But that seems to be changing now (Jalote, 2007).

Service Company can benefit from research, particularly if it is a large player. Research can enhance the ability of a company to adapt to changes and the readiness for absorbing changes in technology. It can also help the company build a leadership position in leveraging the new technology for offering higher value.

India, there is a need for R&D to also shift, so the innovation does not suffer and research becomes more aligned to the needs of the dominant business model of outsourcing. With time the academicians tend to become too conceptual and too far removed from the real problems that the industry might be facing. And academicians realize that, leading to an underlying belief that the work they do is not useful for industry. There is a natural synergy between the academic and the industry researcher –academician can lend the conceptualization and generalization skills and the industry can provide the practical reality in which the conceptualization can be rooted. What both sides have to realize is that bringing the two together requires a great deal of solid interaction as communication gaps exist (Gandhi, 2014).

Industry in India often looks for "consultants" in academic community – basically experts who can guide them in solving their problems. This model assumes that the academic is already working on those problems (Jalote, 2007).

The research interaction to be given an impulse, the starting step is quite simple – concerned people from the two sides need to start spending reasonable time with each other. This is best done by hosting faculty visits

during summer and other such times. These simple steps can be widely practiced, in collaboration in India.

## WAYS FOR ACADEMIC INDUSTRY INTERACTION

A scholar, mentioned some important points in his writing 'Ways for Industry – Institute Interaction' (Gopal, 2011). These are as follows-

- Concept of Industry-Institute Partnership Cell. Dedicated efforts to institutionalize the initiatives.
- Guest Lecture by experienced person from industry.
- Industrial visit.
- Deputing faculty in industry to work in the lean period.
- Organizing workshop/seminar periodically and invite the corporate people to deliver lecture and interact.
- Joint research programmes and field studies by faculty and people from industries.
- Visits of industry executives and practicing engineers to the Institute for seeing
- research work and laboratories, discussions and delivering lectures on industrial
- Practices, trends and experiences
- B.Tech. and M.Tech. Projects / dissertation work in industries under joint guidance of the faculty and experts from industry.
- Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.
- Human resource development programmes by the faculty for practicing engineers.
- R&D Laboratories sponsored by industries at the Institute.
- Scholarships/fellowships instituted by industries at the Institute for students.
- Practising engineers taking up part-time M.Tech ./ Ph.D. programme at academic
- Institutions of repute.
- Panel Discussions.
- CEO Interactions.
- Corporate Excellence Award Functions.

## ANALYSIS AND DISCUSSION

It is observed that the major objective of academia-industry partnership and initiatives taken in this direction revolves around getting lucrative and better job opportunities for Academics have been including the industry inputs into their curriculum and course designing without assessing the effectiveness of such corporate representatives to these committees.

Academia-Industry collaboration is a must if industry has to benefit from research and development activity, and such a relationship should be encouraged across cultures for the benefit of global business. More and more opportunities need to be provided to the faculty through applied research, and case writing to keep them abreast of changes in the business world and hence enhance the overall teaching-learning experience (Rizvi, 2003).

## EXISTING EXAMPLES OF INITIATIVES

During the last two decades the IITS, IIMS, National Institutes of Technology and some other leading universities and institutes have formulated programmes for collaboration between academia and industry (Gandhi, 2014).

Some notable examples are given below:

1. Indian Institute of Technology Madras Research Park
2. Indian Institute of Technology Delhi has established a Foundation for Innovation and Technology Transfer (FITT)
3. The Birla Institute of Technology and Science, Pilani
4. The Tiruchi Regional Engineering College, Tiruchi.
5. MoU between NASSCOM & UGC
6. MoU between NASSCOM & AICTE
7. Regional Intel Higher Education Programmes
8. BIRAC & ABLE

## CONCLUSION

India is steadily growing in economic and industrial development. This leads to mounting demands on education and calls for highly diversified human resource. This supply of competent human resource is vital for our economic restructuring and achieving developmental goals. The purpose of growth should be to enrich people's lives. There is no automatic link between growth and human development. Only in recent years steps have been taken to establish academic-industry links in India. However, such programmes should be carefully designed with effective monitoring mechanisms, and with realistic time-scheduling. The responsibilities of both the partners should be clearly defined. Special attention must be paid to communication between both the partners. It is clear that for sustained success and growth of R& D in a country deep, long-term strategic partnerships are essential between industry and academia. The role of government is to facilitate this natural tendency.

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