

Seminar Report

Dovetailing Academia and Industry

30th July 2008

A seminar on the topic, "Dovetailing Academia and Industry" was organised by the Model Finishing School, Trivandrum on 30th July 2008. Held at the Seminar Hall of the Science and Technology Museum, PMG Junction in the city, the Seminar was organised on the occasion of the Convocation Ceremony of the first batch of 25 engineering graduates at the Model Finishing School.

The Seminar was chaired by Prof.Jyothi John, Principal, Adoor Engineering College and included eminent panelists like Dr.K.N.Harilal, Member, Planning Board, Government of Kerala, Mr.Sunil Jose, Infosys, Head Trivandrum Development Centre and Mr.Ramesh C.Dutt, Consultant, Technopark, Trivandrum.

Prof.Jyothi John in his opening remarks said that the topic of discussion was relevant today. The Seminar, he said, hoped to bring some key points on what is expected from the industry and the academia.

Keynote Address - Dr.K.N.Harilal

Dr.K.N.Harilal opened by saying that as a planner he was convinced of the need to muster all resources for enhancing the employability of youth. He said that it held special significance in the Indian and Kerala context. Unemployment is a major problem facing the national economy and is more acutely felt in Kerala. Quoting figures, he said that the number of youth registered in the employment exchanges of Kerala had recently crossed the 40 lakh mark. Going on the national scene, he said that unemployment in the national level is also high. He commented on the 'jobless growth strategy' at the national level. There was a lack of general awareness and most of the efforts were being undertaken without addressing the core issue of unemployment, he noted.

Dr.Harilal spoke of the interesting syndrome emerging today. It presented a situation of acute labour shortages in the midst of plenty. Thus there are two sides of the coin. While on the one hand we have more than 40 lakh unemployed youth registered in our employment exchanges, the industry is facing shortage of trained manpower. The case then boils down to the issue of unemployability of our youth today. The industry has been complaining of the lack of trained manpower. This situation is not just the case with the IT industry but other industries as well.

The managers and captains of the industry have also started worrying about the shortage of labour in the future. Competition has widened to an international market. However the positive side of this is that our youth have larger options to choose from.

Dr.Harilal also addressed the interesting manpower management problem that we are faced with now. While the IT and related industries are able to attract youth in greater numbers because of high pay packets, other sectors like construction, refinery etc. are facing a shortage in finding skilled labour. There is a shortage of employable and trained people to do jobs like welding and handling high precision tools

The Planning Board Member said that in this endeavour of enhancing employability, all the stakeholders should come together to build the bridge between unemployment and unemployability. He noted that the present Kerala Government was serious in this aspect. The Eleventh Plan, he said, had made considerable allocations to address employability. He urged all to work with the curriculum and said that the curriculum should be made the focus of change.

In conclusion, he complimented the efforts of the IHRD and said that the Convocation Ceremony of the first batch had proved that IHRD can work faster and beat other Departments. With the successful completion of the first batch at the Model Finishing School, the IHRD has proved that it is possible to increase employability. He noted that he, as a planner, was happy to see this turn of events and promised to use his "humble influence to allocate more preference to IHRD when thinking of allocating money".

Mr.Sunil Jose

Mr.Sunil Jose first congratulated the students on their successful completion of the programme at Model Finishing School. He said that he had interacted with the people behind the programme since its inception and had a word of praise for the great work done by IHRD and Model Finishing School.

He noted that education and industry are vital pillars in any economy. Though the two work with diametrically opposite objectives, they must come together to achieve common results. The Indian economy is now showing signs of progress. Several opportunities are also available now due to globalization. He quoted a Mckinsey study which has stated that nearly 160 million jobs are to be outsourced in the next two years and India is well poised to get a share of it. An estimated 2.3 million jobs in IT and ITeS would also come up in the near future. Regarding higher education in the country, he said that there are 350 colleges of higher education and 16,800 colleges which produce more than 5.9 million graduates each year. In Kerala, there are

77 engineering colleges which produce 25,000 graduates annually. The State thus has enough human resource, he noted. Mr.Sunil said that there was a shortage in manpower because of the shortcomings of our education system and also because of the shortage of sufficient trained faculty.

Coming to the employability perspective, he said that only 25% of the students who pass out are directly employable. In Tier I colleges, only 20% are directly employable, in Tier II colleges it is 40% and Tier III colleges it is must lesser. There are as many as 90,000 MBAs passing out each year but 85,000 are not directly employed. To correct this, he said, proactive measures need to be taken by the Government and noted that there were glimpses of good planning and initiative to be seen. Mr.Jose then spoke of the certifications introduced by NASSCOM in technology and other domains. NASSCOM has been working with UGC in this venture.

With regard to education institutions in the State, he said that they should be more proactive and have greater industry focus. Corporates and industries, on their part, should work with the academia. He likened the relationship between academia and industry to that of producer and consumer and therefore there must be greater interaction between the two. The academia is the producers and the industry consumes the graduates produced by the former. Mr.Jose reiterated the need for correlation between the two sections and that there are gaps between the supply and demand. Supply is not definitely tuned to the demand. He attributed this to the theoretical nature of courses and programmes and that there is no application of knowledge. Research institutes believe in basic research and they conceptualise a basic research. However industry looks at specific problems. The industry looks up to the academia as consultants. He wished for a situation where generalized solutions brought out by the academia would be used for solving specific problems of the industry. The Institutes are often compartmentalized and there is a lack of inter relationship between the industry and academia. There in fact should be dovetailing of the two.

Lack of industry exposure of the faculty serves as a hindrance in moulding the students. The students too lack sufficient exposure. Our education is oriented to examination. But in fact there is demand for people with better soft skills; those can empathise, understand and define a problem better. Mr.Jose described theory as a hygiene factor and employees can make a difference through the softer aspects of life. Working in a team to achieve a result is imperative in the corporate setting. Companies work in teams and it is therefore important for employees to have a team spirit to achieve results. He stressed that we lack employees, especially freshers, who can be assertive and articulate well, especially working in an international setting.

Mr. Jose then spoke of the initiative called Campus Connect run by Infosys for preparing college students to employment. It is an extensive eight to 12 week programme. To facilitate this, the faculty members are given a two-week intensive programme. The Campus Connect programme has so far covered some 2000 students in Kerala. He then mentioned the need for frequent upgradation of curriculum to make it industry aligned. He advised the students to be more proactive in looking for opportunities and they must be prepared to conceptualise better. Mr. Jose concluded by reiterating the importance of articulation skills and said that an ability to articulate well can lead one up the ladder of success.

Mr. Ramesh.C. Dutt

Mr. Ramesh C. Dutt started by commenting on the higher education system of our country. He remarked that there is a major flaw in our university education. Securing a degree has become a social norm in our culture and he pointed out that this was a fallacy. Universities, he opined, are bodies meant for creating knowledge and building people with knowledge. University is not entrusted with the responsibility of creating hands for the industry.

Mr. Dutt then spoke about the Institute of Human Resources Development and they said that this institution was formed for remedying the manpower shortage in electronics. It was designed to serve as a non formal centre but now it has become a formal education centre. He opined that IHRD's affiliation with the universities is a faulty one. Mr. Dutt then spoke about the Algonquin Academy in Ottawa, Canada where they do not give degrees but affiliated degrees. There, they train people in all walks of life and have specialized departments to cater to different specialties, say even carpentry. This is a problem that our policy makers and planners will have to work on, he added. Coming to the case of our education system, he said that the Finishing School is attempting to cover what should have been part of the education system.

The IT industry, Mr. Dutt said, has an average age of 27 years. Fifty per cent of the industry's workforce is below 27 years of age. Most of them return to the university to pursue learning after some years in the industry. He told the students once into work, they would realize that it is not what they want to do with their life. Mr. Dutt urged them to be domain/knowledge specialists as no school could teach domain knowledge. It was up to the students to acquire this.

Mr. Dutt then reminisced the days of his training at Tata Steel. He was put through a gruelling 18 month training schedule. The industry, he said, in those days had a specific agenda whereby they could invest in their employees by providing intensive training. He then advised the students to invest in themselves for building a career. Mr. Dutt spoke of the enormous opportunities available to students today. They have an option for an international career subject to their

proving themselves. He concluded by reiterating his advise to the students; of building on the domain skills and knowledge.

This was followed by a question and answer session, in which participants asked questions on various topics. Questions were raised on the need for revising the curriculum, training for faculty members, autonomy of institutions etc.

Mr.Jyothi John

The presentations were followed by a summarisation by Mr.Jyothi John. Speaking also as a representative of the academia, he said while the industry complained of our curriculum being too theoretical, the fact was that the curriculum was neither theory nor practice. To drive home the aspect of unemployability, he informed the audience that the pass percentage in Cochin University of Science and Technology was only 20 per cent.

Commenting on affiliating degrees, he said that the system was wrongly copied from the United Kingdom. Mr.John then touched upon the need for changing the evaluation system for imparting better learning to the students. With our present system, he said that the teachers are forced to stick to a curriculum. The method of evaluation can be changed by giving more autonomy to the institutions. He however cautioned that autonomy given to the institutions could be misused.

Mr.John said that there was no problem in attracting qualified and highly specialized teaching faculty in Kerala. However in the absence of autonomy, the teachers are not given any freedom. The faculty members, he opined, should be empowered to design new courses and teach new courses. Under the present system of affiliating with the university, the syllabus is revised once in four years. Thus the syllabus to be covered by a student in 2012 gets actually prepared in 2008. He noted that the faculty should be given more freedom to do their consulting work and regularly update their knowledge. The faculty, he opined, should develop a vested interest with the institution in the interest of its long-term upgradation and repute.

Mr.John concluded by saying that autonomy to a large extent can help solve the problems faced by our education system today. To the students, he advised that employability enhances only with a base degree and ask to judiciously pursue it.