

Education and training in pulp and paper technology

ADYANTHAYA P.S.*, VISWANATHAN M.**

ABSTRACT :

The Paper stresses the necessity of education and training in pulp and paper technology. The various modes of imparting education is dealt with. The concept of training schools meant for 'Online education' is narrated. Distant education a way of sharing the knowledge to those in the field is also suggested.

The theme for the Education and Training in the Pulp and Paper Technology is relevant to present content and is for a strong linkage required to orient the education to meet the rapidly changing needs and challenges of the environment. It is an accepted fact that university education is an organised attempt to help people become adapted and be able to face open ended real life situations. It should also have an economic relevance to the society.

The needs of the industry must manifest in the restructuring of the educational programmes to make it more enriched, inter disciplinary, flexible. Institutional efforts to be made to create a purposeful linkage between the professional work and the educational world. Research and consultancy which makes research relevant to the national development and social needs must be adequately encouraged. This should keep in view the advances made in the industry worldwide and the future requirement of society. This assumes special significance in view of the fact that paper is the medium of projects, and any neglect of research in paper industry effects the progress of the nation as a whole.

Generally, the pattern of imparting education for the pulp and paper technology can be grouped as formal education, and informal on line and education like training school and distance education. The imparting of formal education can follow a three tier structure namely the integrated first degree/diploma programmes higher degree programmes and doctoral programmes. All these programmes must be designed to teach as

much component of fibre science and applied technology as needed for the students of the programme to function effectively and efficiently in the technological society, catering to paper industry in particular. All the above programmes will have to cover a wide spectrum of knowledge, covering the latest improvements pulp and paper making with a keen emphasis on the necessary thrust for energy conservation, usage of secondary fibre to alleviate the alarming problem of shortage of conventional raw materials, pulping of unconventional raw materials, bagasse mechanical pulping etc.. This will direct the minds of the students to the realities of the situation which is facing the industry.

The similarity and distinctiveness among various fields of education required for pulp and paper technology is further welded into a strong professional bond when the student works as an internee by being part of informal on line education like training school, necessarily to be organised by the industry. This training school will act as a vital link between the institution and the industry. In fact the training school can be best thought of a coin with education and industry forming the two sides. The vast experience available at the industry and the problems encountering the industry can very well be a form of education for the future paper technologists coming out of the training school. The members of the training school can act as a member in a team working on a mission oriented time bound research programmes of importance to the industry and the nation as a whole.

The various structural flexibilities may very well provide not only the scope for multiple point entries of problems facing the industry but also enable the system to accommodate many legitimate educational and operational needs of students. Through the training school, attempts can be made to awaken the curiosity in mind of the student and to train him to think in a rational and scientific manner and to prepare him to face odd and unfamiliar situations. Also the flavour of the professional world is ought to be imbibed by the student as well as the teacher by the utilisation of training school. In the training school, education for the development of the student is a continuing operation.

Along with this aspect of educating and training younger generation entering the pulp and paper field which has so far been discussed, the intricacy of imparting essential elements necessary for the survival of the industry to those already in the field assumes equal significance. Through the method of distant education-correspondence courses, an avenue can be created for imparting the technological aspects of paper making and the latest technological trends. This distant

formal education need not have a strict line of demarcation for the various fields of study. Instead this can be a source of specialised knowledge transfer for varying degrees of application with a view to cater to the demands of the situation in an industry and the technical expertise elsewhere available can be utilised to the needy. The beneficiaries of the scheme of distant education can vary right from executives to the labourers. There is no doubt that much enthusiasm will be generated, for this distant education amongst those in the field of pulp and paper making. The lead for this should be from the Institute of Paper Technology and central pulp and paper research institute, Saharanpur. An earnest beginning towards this will definitely help in a long way towards quenching the thirst for knowledge.

To sum up, the thrust of any education and training programme for pulp and paper field must be towards an integrated approach of basic learning and the on line learning in training schools. Also the benefits of distant education can only be qualitatively felt and cannot be quantified thereby increasing the importance of such a mode of correspondence education.