



QUARTERLY NEWSLETTER

TRAINING AND EDUCATION

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ippStar's Newsletter on Education and Training

As you may have heard, ippStar is a new company that wants to build a common resource centre for the graphic arts that will provide several types of services to industry. One of the missions of the new company is to better understand the training and education needs of the industry and to convey these to the printing schools and colleges and then to enable the institutions to respond. This will require listening, documenting and communicating. It will lead to the raising of resources for these institutions and then professionally monitoring the use of these resources. We have taken on the job of helping the printing schools and printing engineering colleges. We are not alone, there are many printers and manufacturers who want to help. We want to now formally hear from them and to pursue this mission with them. We would also like to hear from the printing schools. How can industry help them? What do they want? Is it money, training, or equipment? If they can come up with a plan, we will help them convince donors and get these things for them. And on behalf of the donors we will ensure that these inputs are not misused.

We will also help the industry to institute and administer scholarships for printing students. If your company wants to be a part of ippStar's efforts in helping the printing schools and colleges, contact us. The easiest part of helping is to donate money or equipment to the institutions. Remember that these machines will lie idle without money and skilled people. More important and valuable will be your commitment and interaction to make the printing school or college of your choice a place of excellence and one that is responsive to industry's needs.

The future depends on high value services that use the vast resources of skilled and educated young people that are coming out of our institutes and engineering colleges. Either we will use them to absorb new technology and enhance our productivity or we will stagnate and maybe even go out of business. If we are not prepared to grow our businesses into capitalised companies that can perform with entrepreneurial flair and produce high quality goods and services, we will remain a last option for the best young people. For further information and interaction write to education.ippstar@ipppmail.com.

Grey scales and grey matter

by Namrta Dhar

The first day in an Engineering College...the inquisitiveness of students to know each other ... the zest to evaluate their own decisions and choices with fire in the soul and dreams in their eyes ... the attempts to pre-judge the fields of which they stand novices...a zillion dialogues abound ... let's make an attempt to overhear one out of a myriad conversations:

Rahul (*first semester, Information Technology*) So, which branch are you in?

Neeta (*first semester, Printing Technology*) I've opted for Printing.

Rahul Printing? Didn't you have any other choice? Or does someone in your family own a printing press or something?

Neeta No, neither of these things really, I find it quite a unique and upcoming branch.

Rahul You mean you don't even plan for a branch change? Then what really took you there? How can anyone be drawn towards something so obscure, monotonous and mundane? All you do out there is simply feed in some paper, use some inks and just print on some kind of machine!

Neeta Well! Well dear we sure need to talk, but all I can say for now is that what people know of printing is very little and what they are ignorant of is immense...and I guess, I choose paths less traversed.



A second year printing student at the Don Bosco Technical Institute in Delhi

There is little the layperson knows about this oldest, rare and specialized branch of technology —and it is the ignorance of such naive print knowers that— makes it one of the most misunderstood of applications today. Moreover, we seem to forget that some of the increasingly essential branches of knowledge

owe their origin to printing. Mass communication today is widely thought of as the result of centuries of change in the print culture. This article aims to educate the reader about the nature and structure of Printing Engineering pointing out how the branch is characterized by poor linkage between the printing industry and institutions teaching this discipline. In brief, the synergy needed to maintain a healthy relationship between the student and the industry is absent.

Institutional set-up in India

Education in Printing Technology continued to remain a neglected field for a considerable period and not many efforts were made for the training of technical personnel needed for the industry at different levels. In 1955 the Government of India started establishing Institutes of Printing with Diploma courses. Fortunately, today we have a number of institutes imparting education and conferring degrees at the Graduate level.



“Industry has a cautious approach, a narrow mentality, harps on prior experience and is too conscious about profit.”

Father K. C. John
Bosco School of Printing, New Delhi

Compelled to compromise, students are trained on insufficient, old, and malfunctioning equipment where the absence of a skilled trainer makes it even worse.

Syllabi

Like information technology, printing is growing rapidly and changing at an alarming speed; in particular, prepress techniques and operations are adopting new technologies in an ‘everyday-routine’ fashion.

The training institutes inevitably require updating and revising the existing syllabi so that the students who are to be the future Printing Engineers possess the expertise that the printing industry demands. Unfortunately, some of the institutes haven’t bothered to bring about such a modification and seem quite content with what the London School of Printing taught decades back! In any graduate technology course, the historical aspect is important for students in understanding the phases of progress and the underlying chain of innovations. However, we have students spending substantial amounts of their training time in repeatedly learning about the innovations of hand composing and Linotype! This, when they could have been students of digital printing today and pioneers of a true information superhighway tomorrow. In the four years of study, students of printing technology are only taught the non-printing subjects in the first year, that are common to all branches of Engineering. The second year and the first half of the third year of Engineering is again an unplanned and inharmonious blend of printing and non-printing subjects. Some subjects are of great benefit while others are a sheer waste of time and energy, as the student never gets to apply this knowledge in his own field to any considerable extent. The contents of some of the subjects if changed and taught according to the branch to which the student belongs could make education much more rational and useful. Only the last one and a half years are purely dedicated to printing subjects, out of which students spend the last 8-9 months accomplishing respective projects. In a nutshell, such an educational system yields students who –‘make haste...slowly’!

Colleges

There are eight colleges in India providing students with a Bachelors Degree in Printing Technology. Choosing the right institute is the most crucial decision to be made since the colleges do not follow any common standards with regard to a number of vital parameters. The colleges differ from each other in terms of:

- Student intake
- Nature of faculty available
- Infrastructure — labs and lab equipment available
- Syllabi
- Industry exposure
- Campus placement

Student intake

The intake in various colleges ranges from 15-35 students per year; having fewer students might facilitate more frequent industry visits.

Faculty

Without an adequate and an efficient staff, it is rarely possible to provide students with proper and timely education. Very few print engineering colleges have full-fledged and qualified in-house faculty; most of the institutes rely on outsourcing teachers. Generally, the visiting faculty consists of people with decades of experience but no scientific or academic expertise in printing operations owing to a lack of any formal education in this field. Short cuts, tricks, trial and error methods, and their own self-devised techniques that have no scientific basis, introduced by them to students must be discouraged. The regularity of their visits is another critical aspect. Students often find themselves at the receiving end of absconding professors and frequently changing timetables, leaving them downcast and demoralized. The best refuge for genuine students seems to be the college library. However, the complexities do not end here...once again, the quantity of reference material and manuals are insufficient and it takes more than a miracle to find up-to-date or even recent editions of books.

Infrastructure

‘See it to believe it’ remains the mantra for all the scientific pro-

Industry exposure

cesses. Printing and other fields of engineering education have to be balanced in terms of concept and application. Ideally, to develop firm convictions about the processes, a student of Printing Engineering needs to undergo intense practical training as a true operator in various printing processes to verify the functions and nullify misconceptions. Therefore, the institutes must primarily provide students with essential and separate laboratories, with adequate equipment and consumables in each area and of course, a well-qualified and skilled trainer. Most colleges do proudly display all the nametags and signage of the required labs, but it’s a different picture once you peep behind the facade. Compelled to compromise, students are trained on insufficient, old, and malfunctioning equipment where the absence of a skilled trainer makes it even worse.

It is imperative that students have frequent industry visits to explore and become familiar with various new technologies that cannot otherwise be taught or demonstrated in their respective college labs. Again, without the unanimous consent and interest of both the Institute staff and industry personnel, such ventures are hardly accomplished. There seems to be a wide gap between the institutes and industry in terms of communication and healthy interaction. The visits to the industrial units are limited and of a ‘one-day’ nature where students often find themselves in an exhibition of equipment. The line separating dramatization and demonstration is very blurred, and the student is left to inspect in general rather than to learn.

It is a saddening fact that industry personnel for some unknown reason discard the notion of looking at students as a future resource for their own industries. Students wanting to visit industries of their own volition are hardly entertained without proper references. If different industries could pick up a set of students every year on the basis of their past academic achievements or any other suitable criterion which proves their mettle and train them, the industry would be developing human resources of the type they require. Needless to say, the students would learn, contribute and grow. Trained students will also require less managerial control and supervision as compared to fresh graduates. A well-trained student will commit the least errors, adjust fast and if allowed, will help in executing plans and implementing new ideas – ‘New brooms always sweep clean!’ What’s more, we could have an industry with a pool of enthusiastic, well-qualified and skilled professionals.

Campus placement and prospects

A student of Printing Engineering could find placement in a multitude of establishments in any of the three divisions of the printing industry namely prepress, press and postpress. If a student is proficient in the prepress section, he or she might find a placement as an Operator in a prepress setup

- A Quality Control manager
- A Graphic Designer in an Advertising concern
- An Application Software Developer

Even multimedia and animation options would be open to such students, requiring a vast knowledge of a number of application software, a creative bent of mind and the ability to learn on their own during studies.

As a fresher with no hands-on experience, a student is taken in as a trainee operator with a remuneration ranging from Rs 3000 to 5000 per month. The trainee period could also last for 1-3 years depending on the company. The pay packages provided in the multimedia concerns can, however, range anywhere between Rs 15000-30000 or more depending upon the individual’s acumen and the company.

A student more inclined towards press could find a place in production as,

- A Production Trainee in the presses and newspapers
- A Research and Development Engineer.

- A Marketing and Sales Trainee
- A Quality Control Management Trainee
- A Production Executive in publishing concerns

If designing and presentation are interests, a student has a fair chance of getting into the packaging industry at different levels. A number of newspapers, presses, paper and ink manufacturers, like *Deccan Herald*, Thapar Group of Industries, Coates of India, Thomson Press and Tata Press to name a few, do come forward with traineeship programs. These might involve intensive training of about 12-13 hours a day for a year in the press or the so-called hazardous zone of core production that might even cost a young trainee a finger or two. At times, they are also required to work in shifts. The stipend provided during the trainee period ranges from Rs 5000-7000 per month.

Even though the printing industry is vast and requires the best human resources available, and the number of students coming out as printing engineers each year a maximum of only 200, there is still a dearth of suitable jobs for them. One can compromise on the monetary benefits as a newcomer and work passionately towards task accomplishment provided one is at least assured of future job security and promotion.

There seems to be no career graph or performance pattern designed to outline the opportunities for future responsibilities, advancement, recognition, achievement and growth. Apparently, trainees are viewed more as a possible threat than an asset. Students of other branches of engineering who get placements in computer firms also undergo traineeship programs but are armed with a vision of tomorrow and security. On successful completion of their traineeship programs they become what they were promised as newcomers. Their future designations, remuneration and job profile are made known to them right from the beginning and reflect the employers concern and seriousness regarding human resources and values.

As I often say, ‘the printing industry strictly and stringently adheres to its *grey scales* no matter how important sometimes it might be to put things across in black and white only.’ Fortunately, some printing organizations are considering these issues and putting in efforts to make the life of a Printing Engineer more secure and are thereby raising human resource issues that seemed to be a closed chapter in this industry.

The Eighth Annual Publishing, Printing and Packaging Technology Conference

December 6 Newspaper, Magazines and New Media

December 7 Commercial and Digital Printing and Signage

December 8 Packaging and Converting of Agricultural and Food Products



www.ippconference.com

Conference fees are
Rs 2500 for any one day
Rs 3500 for any two days
and Rs 4000 for all three days

Current graphic arts students and faculty can avail a special rate of Rs 1500 per day, Rs 2000 for any two days and Rs 2500 for all three days

Please contact
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Colleges offering

Degree Courses in Printing

- Anna University, Chennai
- Avanashilingam College for Home Science for Women, Coimbatore
- B.M.S. College of Engineering, Bangalore, Karnataka
- Guru Jampashwar University, Hissar, Haryana
- Jadavpur University, Jadavpur, Kolkatta
- Jawahar Nehru Technical University, Hyderabad, Andra Pradesh
- Manipal Institute of Technology, Manipal, Karnataka
- Pune Vidhyarthi Graha, Pune

Colleges offering

Diploma Courses in Printing

- Arasan Ganesan Polytechnic, Sivakasi, TN
- Bosco School of Printing, New Delhi
- Dr. T.M.A. Pai Polytechnic, Manipal, Karnataka
- Eastern Regional Institute of Printing Technology, Kolkata
- Govt. Institute of Printing Technology, Secunderabad, AP
- Government Polytechnic, Department of Packaging Technology, Nagpur, Maharashtra
- Government Polytechnic, Patna
- Government Polytechnic, Mandi, Sirsa, Haryana
- Government Polytechnic, Beed, Maharashtra
- Government Poytechnic, Ajmer, Rajasthan
- Government Polytechnic, Department of Printing Technology, Gandhinagar, Gujarat
- Ingole S.S. Institute of Printing Technology, Nagpur
- Institute of Printing Technology, Chennai, Tamil Nadu
- Institute of Printing Technology, Shoranur, Kerala
- Institute of Printing Technology, S.J.Polytechnic, Bangalore, Karnataka
- Kala Niketan Institute of Printing, Jabalpur, Madhya Pradesh
- Maharashtra Institute of Printing Technology, Pune
- Northern Regional Institute of Printing Technology, Allahabad, UP
- Pusa Polytechnic, Pusa, New Delhi
- Salesian Institute of Graphic Arts, Chennai
- Scad Gromodhaya Polytechnic, Cheranmahadevi, TN
- Southern Regional Institute of Printing Technology, Chennai, TN
- Western Regional Institute of Printing Technology, Mumbai

Convergent Print Technologies

*A sourcebook
for the contemporary
graphic arts*

Increased digitisation, automation and convergence of technologies in all the areas of modern commercial, publication and packaging printing are epitomised by CIP3 and its data standards for linking all aspects of print. 20 Authors, 25 Chapters, app. 216 pages. Glossary and Index.

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IPP Services Training and Research Pvt. Ltd.

*A
modern
resource centre
for the
Graphic Arts Community*

IppStar is committed to assist industry associations, educational institutions, individual businesses, equipment and consumable manufacturers and vendors in the defining and implementation of educational and training objectives. Library, Internet, and software demonstration have been activated. Software application courses in Quark Xpress 4.1, Adobe Photoshop 6, Adobe Indesign will begin on January 1, 2002.

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