



CPISC CSIC

people in print

# TRAINING FOR THE FUTURE

A Compendium of Training Programs and Providers



*April 2007*

Canadian Printing Industries Sector Council



## ABOUT CPISC

**T**he Canadian Printing Industries Sector Council (CPISC) provides a national forum for collaboration on human resource and workforce development issues within the printing and graphic communications industry. Incorporated in April 2006, CPISC's mission is to identify and implement strategies to address skills development and learning within the sector. Our overall goal is to improve the quality of the sector's labour force.

The guiding principle within CPISC is partnership. We bring together employers, employees, education and government to develop innovative approaches to skills development for the current and future workforce of this technology-based industry. The intent of CPISC is not to duplicate what exists but to build on what is currently being done and to develop on a national basis the programs and services that will meet the human resource development needs of the industry as a whole.

## INTRODUCTION


**T**he past two decades have been characterized by rapid changes in technology, increasing global competitiveness and the restructuring of business practices. Despite this, the Canadian printing and graphic communications industry has continued to grow and flourish.

The printing and graphic communications industry has embraced technology. This has resulted in a constant need to upgrade and retrain the current workforce while ensuring that bright, motivated young people are attracted to this vibrant industry. All workers – current, new and potential – need to have opportunities to acquire the high level of skills they will need to succeed in the future.

Jobs within the printing and graphic communications industry fall into the following production process areas.

**Pre-press** – Pre-press includes preparing digital and traditional material for the press, according to customer's specifications. Traditionally, pre-press occupations included scanner and camera operators and film strippers – we used to talk about proofing the blues, going to film and preparing a camera-ready version. However, digital technologies and increased customer participation in prepress activities have blurred previous traditional classifications. Responsibilities now include revisions and corrections of customer files, digital creation of type, page layout, scanning, imposition, colour separation, film and plate preparation and digital asset management. The majority of the work performed in the prepress process requires highly sophisticated software.

**Press** – Press involves the actual printing of the document on a sheet-fed or web offset press. A sheet-fed press is just what the name implies – sheets of paper being fed into a printing press. Web presses operate with rolls of paper rather than single sheets – for example, newspapers are usually printed on Web presses. This process area includes press operation and troubleshooting. Employees install and adjust plates, prepare blankets and cylinders, select and mix inks, run the



press, monitor print quality and press performance, troubleshoot problems, ensure a safe operating environment and perform preventive maintenance on presses. As well, two other press systems – flexographic printing and digital printing – are rapidly growing areas that warrant particular attention.

**Finishing and bindery** – Finishing, bindery and distribution are the final steps in the production process. They include the assembly of finished products for the customer or consumer. Employees collate and bind printed sheets, perform finishing operations such as drilling, embossing and laminating, and prepare the final product for mailing and distribution. This process area now frequently includes the creation of a website that can host catalogues, databases and even e-commerce. As such, aside from the traditional occupations involved in finishing and binding a document together, this area now also includes a rapidly growing graphic communications component.

In addition, there are a number of jobs that support the production processes. **Production support** occupations include customer service and sales representatives, estimators, production managers and schedulers, and plant supervisors, as well as accounting and office staff, mechanics, electricians and material handlers.

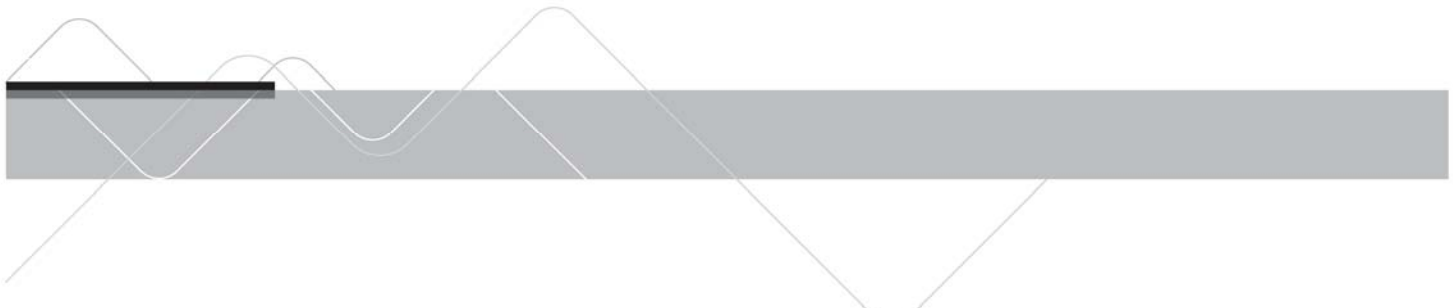
The three production process areas and the production support area are each highly complex and integrated, and vary widely with the size of the company, types of presses, range of job titles and production output.

## DEVELOPING A COMPENDIUM OF TRAINING

**T**he print and graphic communications industry has embraced rapid changes in information technology to keep pace with global competition. Consequently, workers need opportunities to acquire skills – operating core and essential skills – throughout their career. However, the printing and graphic communications industry faces a number of unique challenges, including:

- rapid technological change
- a geographically dispersed, varied workforce
- a lack of skill standards
- few training programs, many of which do not meet the needs of the industry
- changing demographics of the workforce as employees near retirement and recruitment efforts target – along with all the other sectors – a dwindling cohort of young people.

In order to work effectively with education and training providers, CPISC must first determine which programs are currently offered and where. As well, CPISC needs to explore how institutions relate to the industry. And lastly, in-house training offered by industry leaders and suppliers as well as the



printing companies themselves need to be examined, with a view to beginning to develop a profile of the range of available training options.

As with many other sectors, there are a variety of types of education, training and learning opportunities available to young people as well as to employees already in the industry.

Formal learning is knowledge and skills acquired through structured programs offered by colleges and universities. These programs are long-term – usually two or three years – and usually lead to a certificate or diploma. Some programs include work placements in their curriculum. Such programs are geared to young people or to current employees who wish to change careers or update their skill sets for advancement. As well, industry insiders often comment on the disconnect between formal training and on-the-job requirements.

Non-formal learning is knowledge and skills acquired in structured programs outside of educational institutions. Apprenticeship could be considered a form of non-formal learning, although some elements of apprenticeship fall under the category of formal learning while others might be considered informal learning. Non-formal learning opportunities may also take the form of seminars and mini-courses that may lead to a certificate of completion. In some instances, the recognized learning may be applied towards a formal certificate or degree. These seminars and mini-courses vary in length from a couple of hours to a week. They can be delivered in-house or off-site. However, in order to register, a person must be employed in the printing and graphic communications sector.

As well, many companies – both large and small – provide in-house, ad hoc, informal learning opportunities – knowledge and skills acquired through work and life experiences, using unstructured methods and settings. Mentoring could be considered an informal learning situation, although some mentoring programs may be structured. The information about this kind of training is, for the most part, anecdotal. Informal learning opportunities are most often designed to meet a particular need at a particular time. This form of learning is especially attractive for small companies – which comprise about 75% of the industry – because an SME with less than 20 employees cannot afford to lose an employee for an extended period of time – even half a day. However, there are currently no standards by which to judge the quality of the learning provided, nor any skill standards against which to map the knowledge and skills acquired.

## PROJECT OBJECTIVES

The objectives of this project are to: review existing education and training offered by institutions, private training providers, unions, suppliers and the printing companies themselves, compile a Compendium of Education and Training for Printing and Graphic Communications, and develop recommendations for next steps, including a preliminary gaps analysis and exploration of the range of possible training options and the barriers to training.



## PROJECT ACTIVITIES AND TIMELINES

The six-month project will run from April 19, 2007 to October 31, 2007. In order to work effectively with education and training providers, CPISC must first determine which formal programs are currently offered and where. CPISC will also explore how institutions relate to the industry. Non-formal and informal training offered by suppliers such as Xerox and Heidelberg as well as the printing companies themselves will need to be examined. CPISC will also explore how and why training choices are made, with a view to beginning to develop a profile of the range of available training options.

To this end, CPISC will conduct a review of current education and training offered by institutions, private training providers, unions, suppliers and the printing companies themselves. A profile of the type and scope of existing training programs will allow CPISC to identify – in a preliminary fashion – training gaps and determine strategies to fill these gaps. Once the skill standards have been developed for the sector, the type and scope of existing programs as well as the identified gaps will be mapped against them, allowing CPISC to further refine its strategies for filling these gaps. With the skill standards and profiles, labour market information and the technology roadmaps that will be developed concurrently, the Compendium will provide a foundation for future discussions on identifying the training options that best meet the sector's needs.

The project comprises four parts:

- CPISC will use as a starting point the updated table from the 2003 *Canadian Print Industry Human Resource Sector Council Study* to get a preliminary list of training institutions and providers. We will refine this preliminary listing, working with the Project Working Group to ensure that we have as complete and accurate a list of current institutions and training providers as possible. As well, we will consult with partners such the Association of Canadian Community Colleges, the Association of Universities and Colleges of Canada, the Canadian Printing Industries Association and the provincial printing associations, unions, and the Comité sectoriel de main-d'œuvre des communications graphiques du Québec.
- We will then develop an online survey questionnaire to which all training institutions and providers as well as a representative sample of suppliers and printers will be invited to respond. Follow-up e-mails and telephone calls will ensure a robust response rate. The objective of this online survey is not only to refine the list of institutions, programs and training providers. We will also begin to explore how and why training choices are made in order to begin to develop a profile of the range of available training options.
- We will compile the information received into a Compendium of Education and Training for Printing and Graphic Communications.
- CPISC will also work with the Project Working Group to develop recommendations for next steps, including a gaps analysis and exploration of the range of possible training options and the barriers to training.



## AND THIS PROJECT WILL LEAD TO...

**T**he Compendium constitutes one of the three building blocks that CPISC needs in order to function effectively and meet the needs of the sector. Having a clear sense of the type and scope of existing training programs will enable CPISC to map them against the skill standards and the technology roadmap(s) for the sector, in order to then identify training gaps and determine strategies to fill these gaps.

In the short term, the Compendium will provide a solid foundation for discussions on training and apprenticeship. In the long term, the Compendium will provide a basis upon which to:

- make adjustments made to existing training programs to meet the evolving needs of the printing and graphic communications sector
- implement a range of training and apprenticeship options
- maintain an ongoing dialogue between the industry and formal and non-formal training providers.