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Canadian Printing Industries Sector Council



Review of Education
and Training Programs
and Providers for the
Printing and Graphic
Communications
Industry ■ ■ ■ ■



Canadian Printing Industries Sector Council

TRAINING FOR THE FUTURE

Review of Education and Training Programs and Providers for the Printing and Graphic Communications Industry ■ ■ ■ ■

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The Canadian Printing Industries Sector Council (CPISC) is pleased to acknowledge the considerable project support given by the project team.

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Review of Education and Training Programs and Providers for the Printing and Graphic Communications Industry

EXECUTIVE SUMMARY

BACKGROUND AND OBJECTIVES

The printing and graphic communications industry is Canada's longest established and most widely spread information-based manufacturing industry. The industry has embraced technology but this has resulted in an urgent and continued need to upgrade and retrain current workers. There is also the ever-present desire to attract bright, motivated young people to this vibrant industry.

Helping the industry to meet these challenges is the Canadian Printing Industries Sector Council. CPISC's mission is to identify and implement strategies to address skills development and learning within the sector. The guiding principle within CPISC is partnership – bringing together employers, employees, education, unions and government to meet the current and future human resource development needs of the Canadian print and graphic communications industry. The intent of CPISC is not to duplicate what exists, but to build on what is already being done and develop on a national basis the programs and services that meet the needs of the industry as a whole.

This project is one of a number initiated by CPISC that are designed to address the human resource challenges unique to the printing and graphic communications industry. The objectives of this project are to: review existing education and training offered by institutions, unions, suppliers and the printing companies themselves; compile a list of training programs related to printing and graphic communications; and develop recommendations for next steps. The project also included a preliminary gaps analysis and an exploration of the range of possible training options and the barriers to training.

The aim of this study was to reach those involved with the provision of training to the print and graphic communications industry. To do so, CPISC produced two survey questionnaires, supplemented by additional available data on institutional education and training programs.

FINDINGS

General overview – Based on the responses to the questionnaires, a picture is emerging of education and training pertaining to the printing and graphic communications industry. The majority of employers provide some form of training. Given that most people who work in respondents' organizations have no previous training related to the printing and graphic communications industry, they rely heavily on employee-to-employee transfer of knowledge and equipment suppliers to provide the kind of training needed, which is, for the most part, machine or tool specific training. In fact, supplier-provided training is an important component of the overall training landscape for the printing and graphic communications industry. Cost, convenience and availability are important elements that influence their choices of training delivery models. It is clear that a "one size fits all" approach is not acceptable and that multiple training delivery options must be made available.

While it is not a training issue per se, employers frequently mentioned that it is currently difficult to find enough people interested in careers in the printing and graphic communications sector. Furthermore, the comment was often made that new graduates are not entirely "work ready", that they are lacking in both technical and essential skills to complete the assigned tasks effectively. Yet for the most part, training institutions indicate that they are very or somewhat familiar with the needs of the printing and graphic communications industry.

Much of what we are reporting in this study is not new. However, this report confirms statistically the various anecdotal comments we have heard from printers, suppliers, unions and educators. This report provides a solid foundation of information upon which to build for the future.

Printing Establishments – In an industry where changing technologies are the norm, it is increasingly important that employees have the knowledge and skills needed to do the job effectively and efficiently. Survey responses indicate that printing companies support the notion of training but availability, cost and time present significant barriers. The challenge is to ensure that the training programs offered are accessible to as many printing companies and their employees as possible, that they are structured in a way that does not require lengthy employee release time, and that they are cost-effective. And perhaps most important to printing companies is the quality of the training. Given the identified constraints, it is vital that the training provided meet their particular needs and provide all workers – but particularly new entrants – with the “correct” mix of skills.

Printing Suppliers – Supplier-provided training is an important component of the overall training landscape for the printing and graphic communications industry. Suppliers will continue to respond to their clients’ needs for ongoing specialized training. However, printing companies identified accessibility to supplier-provided training as a major concern. Many printing companies are located outside of city centres, far from major metropolitan areas such as Toronto, Montreal or Vancouver. Travel to suppliers’ sites means additional costs and release time for employees. Suppliers have indicated that they are listening and are moving fairly quickly to offer multiple training delivery options.

Training Institutions – Much of the formal post-secondary training is currently being provided by colleges located across the country. For the most part, institutions feel that they have a fairly solid understanding of the industry and its needs. However, a closer look at their program offerings indicates that there is a tendency to incorporate printing and graphic communications into technology-related programs, with an emphasis on computer and web skills, software and technological literacy. This meets the needs of one very important element of the printing process, i.e. pre-press. However, there is little or no focus on the press or finishing and bindery aspects of the industry, resulting in a feeling on the part of some printing companies that the graduates are not well-prepared for the industry. There is, in effect, a gap between the perceived knowledge of the industry and identified requirements.

ISSUES RAISED

Based on the information gathered from the printing companies, suppliers, unions and education and training institutions, the following issues were raised.

- There is a mismatch between education’s current perception of what the industry needs and the industry’s requirements. Respondents to the survey designed for education and training institutions indicated that they have a fairly solid understanding of the industry and its requirements. Ten years ago, the single biggest transition in the industry as a result of technology was in the pre-press area and education responded to that need. However, the printing companies indicated that the type of training required now is often not available. They are also concerned that the level of understanding of the printing process as a whole and readiness to start work in the industry is lacking in new graduates.
- It is difficult to attract new entrants to the industry. Respondents to the industry survey reported that they have difficulty finding people who are interested in making a career in their industry, let alone people who are well-prepared to start work. Education and training institutions cite lack of interest and low enrolment as reasons for closing programs or discontinuing program components, although a number are prepared to revive the programs or expand existing ones, with the support of the industry.
- Lack of resources influences decisions on training. Participants often commented that the cost of training and the time required to participate influence their decisions on training. Most companies found it difficult to release employees for training.
- There is an interest by everyone involved to consider multiple methods of training delivery. This could include technology assisted education and training.



RECOMMENDATIONS

The Project Working Group, which comprises representatives from printing companies, suppliers, education and training, and unions, reached consensus on the issues raised and identified the following recommendations for future action.

1. Ensure that the education and training provided reflects the needs of the industry by:
 - Creating a continuous dialogue on education and training needs within the industry
 - Communicating to the industry and the education and training sector the skill standards that are being developed
 - Conducting a training needs analysis for the sector
 - Mapping the newly developed skill standards against the training needs of the industry
 - Fostering a continuous dialogue between the industry and education and training at all levels
2. Increase the number of new entrants to the industry by developing a recruitment strategy
3. Ensure consistency of education and training for the industry and consistent skills at all levels by developing a skills recognition strategy that includes an essential skills component
4. Ensure that specialized training for the industry is available, cost-effective and designed in a way that is accessible by exploring a variety of training delivery models
5. Explore the range of incentives such as tax incentives and training rebates provided by various governments to encourage employers to offer training
6. Ensure that the industry is aware of the education and training available by:
 - Publishing a list of training programs and providers on the CPISC website
 - Updating the list of training programs and providers at least annually by inviting training providers to verify the information presented
 - Expanding the list of training providers to include private training providers (both institutions and individuals) and secondary schools

Review of Education and Training Programs for the Printing and Graphic Communications Industry

1. BACKGROUND

Canadian Printing Industries Sector Council – The Canadian Printing Industries Sector Council (CPISC) is a national not-for-profit collaborative forum that addresses human resource issues within the printing industries. CPISC's overall goal is to improve the quality of the Canadian printing industry labour force through workforce and human resource development.

As a new sector council incorporated in April 2006, the potential scope of action for CPISC was vast. To guide the development of the Council, the CPISC Board of Directors approved a three-year Research Framework. Entitled *Making an Impression*, this document outlines the Council's three priority areas of activity:

- **Standards** – Work in partnership with industry stakeholders to address skills development issues through the creation of skill standards and profiles and the provision of relevant tools and resources.
- **Decision-making** – Provide a national forum for collaboration among all stakeholders and create tools and services pertaining to human resource and workforce development issues.
- **Training and career pathways** – improve the image of the industry as a career destination through outreach activities and better communication of education/training and work opportunities to both potential employees and those already employed in the sector.

The first step was the development of the building blocks in each of the priority areas, which form the basis for all future activities: the development of skill standards for the printing and graphic communications sector, a review of training programs and providers, and the development of a database of labour market information. Funding was secured to develop each of the building blocks as well as a skills and technology roadmap for the sector.

The printing and graphic communications industry – The printing and graphic communications industry is Canada's longest established and most widely spread information-based manufacturing industry. The industry employs over 90,000 people working in more than 8,500 establishments from St. John's to Victoria, making it the fourth largest manufacturing employer in the nation (Source: Labour Force Survey 2006). In 2006, these men and women contributed nearly \$5.0 billion to the Canadian GDP (Source: Labour Force Survey 2006).

Establishments in the printing and graphic communications industry range from large production operations with more than 300 employees to smaller establishment with less than 10 employees. The industry is dominated by small firms, with about 75% of companies employing fewer than 20 people and less than 3% employing more than 100 people.

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 pre-press 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 pre-press 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 industry has its challenges, which include rapid technological change, a geographically dispersed and demographically varied workforce, changing demographics, and a lack of skill standards. The printing and graphic communications industry has embraced technology but this has resulted in an urgent and continued need to upgrade and retrain current workers. There is also the ever-present desire to attract bright, motivated young people to this vibrant industry.



2. PURPOSE

The intent of CPISC is not to duplicate what exists, but to build on what is already being done and to develop on a national basis the programs and services that will meet the needs of the industry as a whole. In order to work effectively with education and training providers, CPISC first had to determine which programs are currently offered and where. As well, CPISC needed to explore how institutions relate to the industry.

The objectives of this project are to: review existing education and training offered by institutions, unions, suppliers and the printing companies themselves; compile a list of training programs related to printing and graphic communications; and develop recommendations for next steps. The project also included a preliminary gaps analysis and an exploration of the range of possible training options and the barriers to training.

3. METHODOLOGY

The aim of this study was to reach those involved with the provision of training to the print and graphic communications industry. This included education and training institutions, unions, suppliers, and printing companies themselves. To do so, CPISC produced two survey questionnaires. The questionnaires were administered in September, 2007. Both the English and French versions of the survey questions are attached to this report in Appendix II.

The first survey was broken into two parts. Part one targeted the printing companies, while part two was aimed at the suppliers to those companies. The second survey was designed for education and training institutions. The target population for both surveys included both English and French organizations.

The first survey was sent to 8,322 printers and suppliers. Of those who received the survey, 76 refused the invitation and 486 were undeliverable. Of the 7,760 participants who received the survey, a total of 392 completed the questionnaire. A 5 percent response rate was achieved with the first survey.

The second survey for education and training institutions was sent and received at 410 institutions. A total of 58 completed the survey questionnaire, resulting in a 14 percent response rate. It should be noted that only formal post-secondary training institutions were surveyed. In order to get a more complete picture of training as it pertains to the printing and graphic communications sector, future research will need to include secondary schools as well as private trainers.

4. FINDINGS

4.1 Printing Companies

4.1.1 Who responded?

Based on the survey results, the printing companies were distributed geographically across the country with concentrations

in Quebec, Ontario, Alberta and British Columbia. There were no respondents from Nunavut.

Figure 1: Location of printing companies

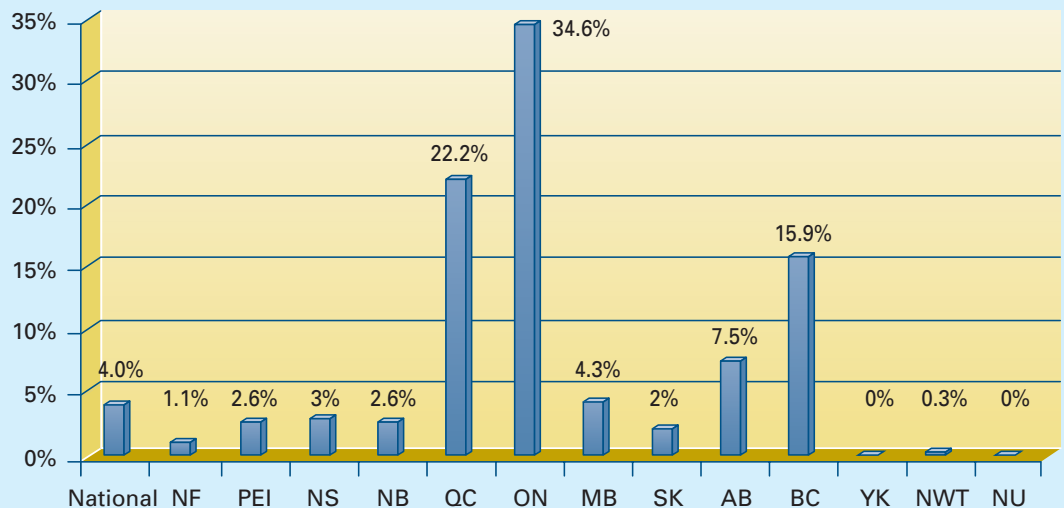
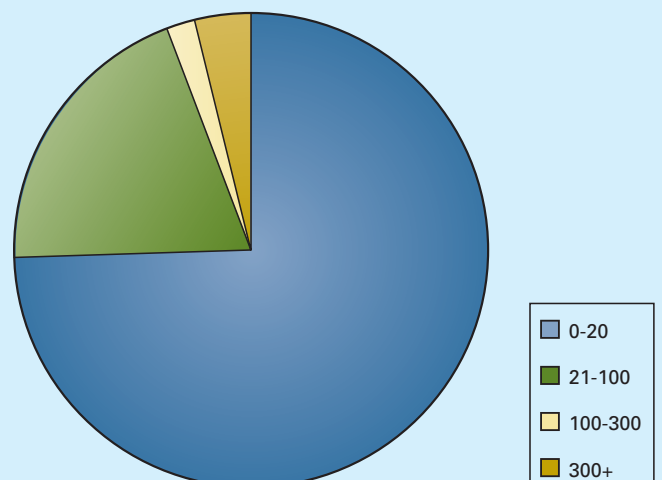


Figure 2 illustrates the number of employees per company. The majority of respondents (74.6%) generally work in organizations with fewer than 20 employees, while 19.6% work in organizations with 21 to 100 employees, 2% work in organizations with 100 to 300 employees, and 3.8% work in organizations with more than 300 employees. This response is consistent with the demographics of the sector, since about 75% of all printing establishments in Canada employ fewer than 20 people.

Figure 2: Number of Employees per Company



Respondents were asked to identify their primary market segments. While respondents could check more than one response, general commercial printing is by far the most prevalent choice (52.8%). The second most popular selection is Quick Printing (23.8%), followed by magazines (15.3%) and business forms (15%).



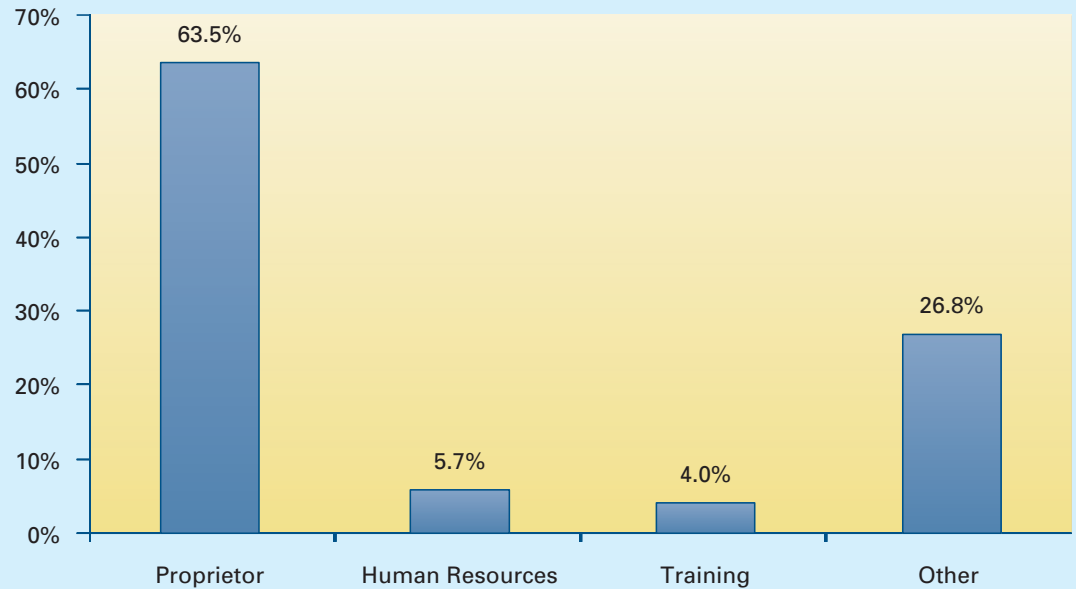
Figure 3: Primary market segments

PRIMARY MARKET SEGMENTS	PERCENTAGE (%)
General Commercial Printing	52.8%
Newspaper Printing	7.8%
Thermography	2.6%
Tag, Ticket, Tape Printing	4.2%
Trade Binding	1.9%
Traditional Pre-press	12.7%
Quick Printing	23.8%
Book Printing	10.7%
Business Forms	15.0%
Greeting Card Printing	8.8%
Other Finishing Service	10.7%
Magazine/Periodicals	15.3%
Financial/Legal	5.9%
Labels/Wrappers	9.8%
Speciality Printing	12.0%
Electronic Pre-press Service	16.3%
Screen Printing	8.8%
Packaging	10.4%

Respondents were asked to select the category that reflects their area of responsibility in the organization. The majority indicated that they are the proprietor (63.5%), 5.7% are in human resource related occupations and 4.0% occupy training-related positions.

A number of respondents (26.8%) indicated that they occupy another position within the organization. For the most part, they are in a managerial position, either on the shop floor or in administration.

Figure 4: Areas of Responsibility



4.1.2 What did they say?

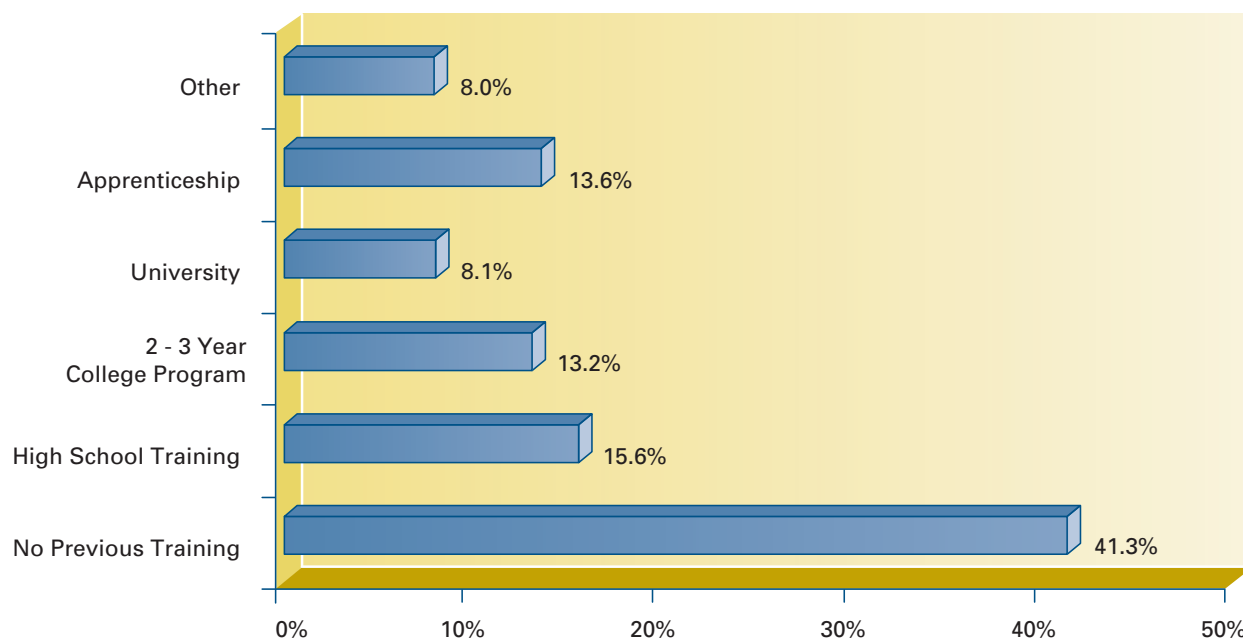
ABOUT TRAINING IN GENERAL

Employers indicated that, in their current workforce, more than one-third (41.3%) of employees have no previous training related to printing and graphic communications industry. As for those who do have previous training, it is fairly evenly distributed among high school training, 2-3 years college programs and apprenticeship.

The survey results show that few (8.1%) have a university degree and a relatively small number of employees (8%) have another type of previous training.



Figure 5: Level of industry-related training



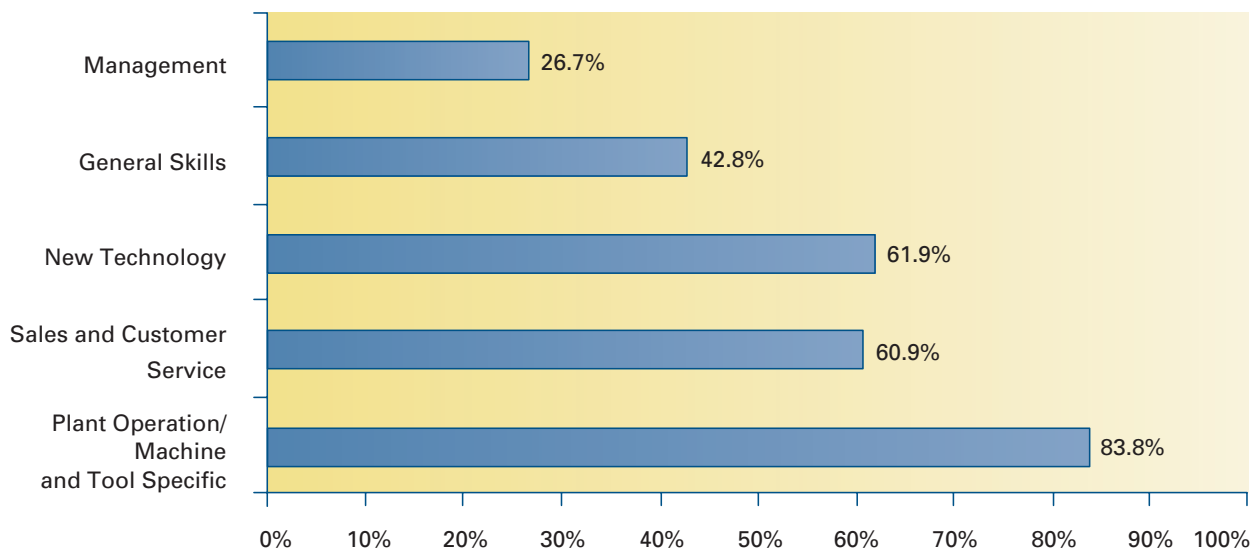
When asked if they provide training to their employees, almost three-quarters (73.9%) of respondents said that they do so. Much of that training relates to new technology and is plant, machine or tool specific.

Employers seemed reluctant to say how much they spend on training or they simply do not know, since nearly three-quarters did not answer the questions on their training expenditures over the

last three years. Of those who responded, the vast majority spent between \$0 - \$5,000 in both 2005 and 2006, and are on track to spend the same amount in 2007.

The vast majority of employer-provided training (83.8%) is plant, machine or tool specific. New technology and sales/customer service training also rank highly. Nearly 62% of training related to new technology and 60.9% of training pertaining to sales and customer service is paid for by employers.

Figure 6: Types of Employer-Paid Training



ABOUT THE NATURE OF TRAINING

Respondents were asked how they provide training to their employees and to quantify each type of training, including in-house training, off-site training, supplier-provided training, and technology assisted options that can be accessed at a distance. The majority of the training is provided in-house and clearly, the most important and prevalent type of in-house training was employee-to-employee knowledge transfer (90.1%). While the question did not specifically ask about mentorship, responses to a further question indicate that it is viewed as one component of in-house training, perhaps as part of employee-to-employee knowledge transfer.

Off-site training ranks highly as well and is most frequently provided by suppliers (89.2%) or by community colleges (67.5%).

Given that most people who work in respondents' organizations have no previous training related to the printing and graphic communications industry, they rely heavily on employee-to-employee transfer of knowledge and equipment suppliers to provide the kind of training needed, which is, for the most part, machine or tool specific training.

ABOUT CHOOSING TRAINING DELIVERY MODELS

Employers were asked to identify the three most important criteria that influence their choice of training delivery models. One quarter of the total number of respondents answered this question. Not surprisingly, the vast majority indicated cost, convenience and availability as being important elements that influence their choices of training delivery models. However, they also noted that it was important for them to know the training providers and be confident that they could provide the required training. As well, they indicated that training must be of benefit to both the company and the employee, with employers often specifically citing that they sought training that was task or equipment specific. Finally, respondents indicate that the training must be of high quality.

ABOUT TRAINING RESOURCES

Employers were asked what form of training delivery would be easiest for them and their employees to access. Taking into account the constraints of their location and the size of their companies, 58.6% felt that online courses would be the easiest for their employees to access. The second choice, at 38.8%, was structured in-house training.

As to what type of training resources would be the most useful to their organizations, they listed the following, in order of preference.

Figure 7: Types of training resources

TRAINING RESOURCES	PERCENTAGE (%)
CD-ROMs	47.7%
Training manuals	45.0%
In-person training on-site	45.0%
Online modules	42.3%
Videos	32.9%
On-site supplier led courses	29.5%
Off-site supplier led courses	26.8%
Webinars	25.5%
Off-site college/university courses	22.8%



There is no one type of training resource that meets the needs of all respondents. Rather, the responses point to the fact that a variety of resources may be required to fit different needs.

ABOUT THE BENEFITS OF TRAINING

When asked what benefits are desired from training, respondents cited efficiency and productivity as a main motivator. Few mentioned increased revenues directly, preferring instead to highlight training as a means of gaining a competitive edge. Also, employee satisfaction is high on the list of benefits. Employers indicate that satisfied employees tend to want to stay in the organization. As well, training was seen as an important tool for succession planning.

ABOUT EMPLOYEE RESPONSIBILITY

As seen previously, while the respondents are willing to provide some time for training, employers also feel that it is the employees' responsibility to seek training related to personal growth and to general skills, particularly language training. One printer summarized the prevailing philosophy by saying "We pay, they learn." However, they also feel that employees must share some of the responsibility for keeping abreast of trends and new developments in the industry, suggesting that they read trade magazines and supplier-provided materials rather than seeking more traditional learning opportunities. However, 63.6% acknowledge that it would be "moderately difficult" or "difficult" for employees to find training that fits their needs if it were not provided by their company.

ABOUT SIGNIFICANT TRAINING ISSUES

In terms of the significant training issues that the printing companies face, respondents cited cost and time as important. However, the most significant issues for many of them remain the availability and quality of training, as well as the difficulty in finding training that meets their specific needs. Respondents also identified the difficulty in adapting to rapidly changing technologies and keeping up with advances in the industry.

While it is not a training issue per se, employers frequently mentioned that it is currently difficult to find enough people interested in careers in the printing and graphic communications

sector. Furthermore, the comment was often made that new graduates are not entirely "work ready", that they are lacking in both technical and essential skills to complete the assigned tasks effectively.

4.1.3 The bottom line

In an industry where changing technologies are the norm, it is increasingly important that employees have the knowledge and skills needed to do the job effectively and efficiently. Responses indicate that printers support the notion of training but availability, cost and time present significant barriers. The challenge is to ensure that the training programs offered are accessible to as many printing companies and their employees as possible, that they are structured in a way that does not require lengthy employee release time, and that they are cost-effective. And perhaps most important to printing companies is the quality of the training.

Given the identified constraints, it is vital that the training provided meet their particular needs and provide all workers – particularly new entrants – with the "correct" mix of skills. The majority of the training is provided in-house and clearly, the most important and prevalent type of in-house training is employee-to-employee knowledge transfer. The vast majority of employer-provided training is plant, machine or tool specific. It is clear that a "one size fits all" approach is not acceptable and that multiple training delivery options must be made available.

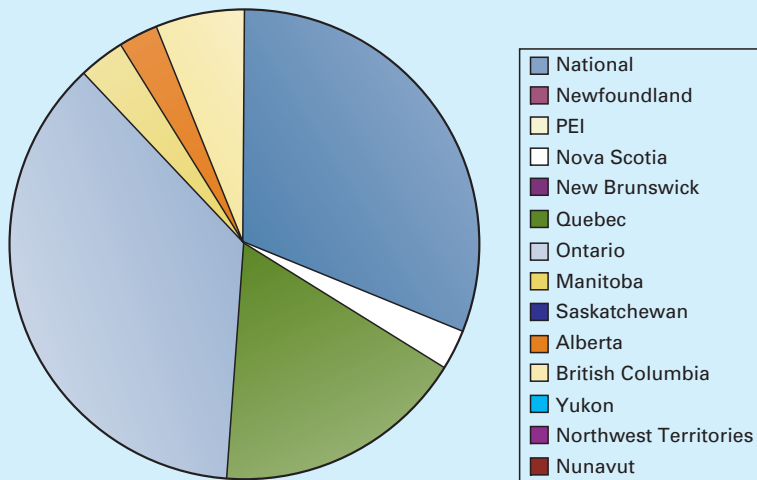
4.2 Printing Suppliers

4.2.1 Who responded?

When asked to indicate in which province or territory their particular organization is located, the majority of suppliers indicated that they are based in either Quebec (17%) or Ontario (37%) or that their scope is national (31%). Fewer than half of the respondents provide software and equipment to the printing industry, with the

majority providing consumables such as ink and paper. For the most part (62.1%), proprietors responded to the survey questionnaire.

Figure 8: Distribution of Suppliers to the Printing and Graphic Communications Industry





4.2.2 What did they say?

ABOUT THE TRAINING PROVIDED

Nearly three-quarters of the suppliers (71.4%) provide training to their customers in support of their products. When asked to quantify the training provided, 57.1% indicated that they offer this service to all of their customers while a further 23.8% offer training to half of their customers. Not surprisingly, the majority of supplier-provided training is specific to their products. Some respondents mentioned that in order for their customers to obtain training on products, they could visit suppliers and observe the production processes at any time. Others pointed out that a broad range of training is available at the time of purchase, and some were even willing to upgrade skills continuously. On the other hand, respondents indicated that a number of their customers do not avail themselves of the proffered training, since training for technology is available through public training institutions at a lower cost than they could provide. Unfortunately, limitations in the survey software do not allow us to delve further into the responses to determine which suppliers offer training, what type of training is provided, and why.

Judging by the comments provided by the respondents, there seems to be a well-established culture among suppliers of providing both product specific and non-specific training support.

Over the next six months, the majority of respondents (72.4%) foresee continuing to provide training in support to their products and almost half may offer training not specific to their products.

ABOUT WHERE TRAINING OCCURS

When asked where they provide training, a significant number of suppliers chose not to respond to this series of questions. However, among respondents, the location is fairly evenly split, with about half of the training being provided at the customer's facility and half at the supplier's facility.

ABOUT TECHNOLOGY ASSISTED OPTIONS

Respondents were asked to indicate if their training is available in technology assisted options that can be accessed at a distance and/or in a self-study format. Two-thirds offer technology assisted training options to their customers. However, only about 10% of their offerings are available online, including webinars. The most commonly used delivery method is CD-ROMs but again, less than 25% of training is available using this medium.

When asked if they plan to add technology assisted options that can be accessed from a distance, there are indications that remote diagnostics, webinars, and online support will be expanded in the future. The vast majority of respondents (91.7%) see technology assisted training options as the way of the future, with a particular focus on online delivery. And they see this move happening within the next six months to a year.

4.2.3 The bottom line

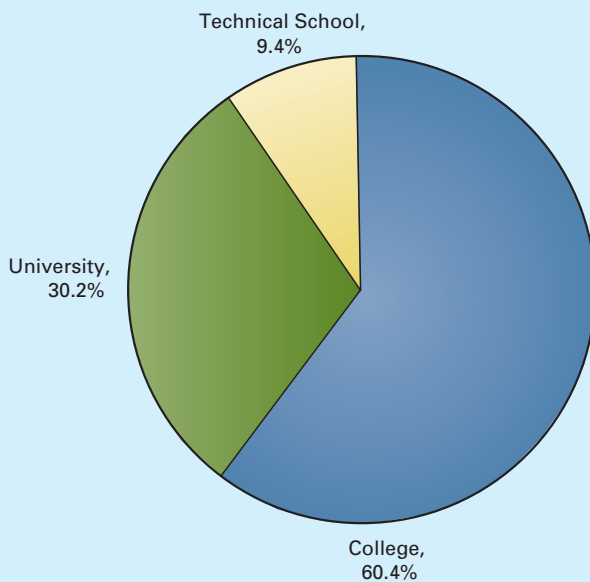
Supplier-provided training is an important component of the overall training landscape for the printing and graphic communications industry. Suppliers will continue to respond to their clients' needs for ongoing specialized training. However, printing companies identified accessibility to supplier-provided training as a major concern. Many printing companies are located outside of city centres, far from major metropolitan areas such as Toronto, Montreal or Vancouver. Travel to suppliers' sites means additional costs and release time for employees. Suppliers have indicated that they are listening and are moving fairly quickly to offer multiple training delivery options.

4.3 Training Institutions

4.3.1 Who responded?

More than half of the respondents (60.4%) categorized their institution as a college. Institutions from every province and territory except Nunavut and Northwest Territories responded to the questionnaire, although nearly half are located in Quebec and Ontario (44% combined).

Figure 9: Training Institutions that Responded to the Survey



Seventy-five percent stated that they currently offer training programs related to the printing and graphic communications industry. It is interesting to note that one-quarter of respondents took the time to go through the questionnaire, even if they do not currently offer a related program.

For the most part, they indicated that they are familiar with the printing industry – 60.4% responded that they are “very familiar” and a further 29.2% are “familiar to some degree”.

4.3.2 What did they say?

ABOUT THEIR PROGRAM OFFERINGS

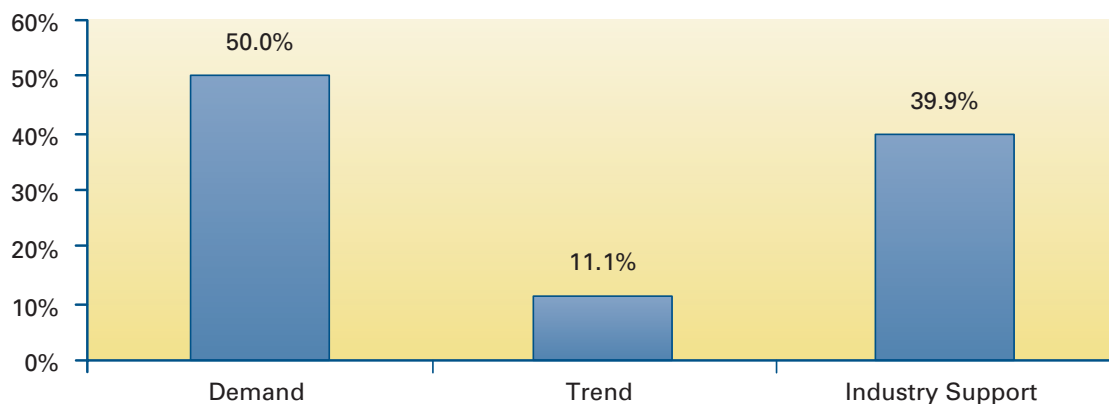
More than one-quarter of respondents report that their institution has discontinued programs related to the printing and graphic communications industry. They sometimes qualified their answers by explaining that one aspect of a program was discontinued as opposed to the entire program. For example, it was reported that their institution no longer offers night courses or that their apprenticeship program was suspended.

When asked why programs were discontinued or suspended, they cited lack of interest and low enrolments. Reluctance on the part of employers to allow time off for training purposes was seen by some as a lack of industry support. However, half of respondents (51.3%) indicated an interest in reviving defunct programs within the next year or two. Some qualified their response by saying that they plan to expand an existing program rather than add a new one. For the most part, they plan to add technical programs to their repertoire (75.0%). Creative programs, with graphic communications components, are a distant second choice (31.2%).

When asked to indicate what will drive the decision to add a program or program component, respondents cited demand and industry support as the major drivers.



Figure 10: Why offer new programs in the near future?



ABOUT HOW THEIR PROGRAMS RELATE TO THE PRINTING AND GRAPHIC COMMUNICATIONS INDUSTRY

When asked to identify the types of programs they currently offer that relate to the printing and graphic communications industry, the majority cited programs related to graphic design, graphic communications, digital communications and technology – a clear emphasis on pre-press processes. Printing in general, print media production and print management were low on the list. There has been a tendency to incorporate printing and graphic communications into more advanced technology-related programs, with an emphasis on computer and web skills, software and technological literacy.

This tendency becomes all the more concrete when respondents were asked to relate the programs they offer to specific job titles and production areas. A majority (86.7%) stated that their programs relate to graphic designers. Programs related to digital (56.7%) were next on the list, while programs pertaining to pre-press operations and printing processes received equal mention at 46.7%.

Figure 11: Relationship of programs to the industry

JOB TITLES / PRODUCTION AREAS	% OF RELATED PROGRAMS
Graphic designers	86.7% *
Digital	56.7%
Pre-press operators	46.7%
Printing processes	46.7%
Lithography	40.0%
Binding and finishing	36.7%
Silk screening	20.0%
Gravure	6.7%
Flexography	6.7%

*Note: Respondents could check more than one job/area.

ABOUT THE PROGRAMS THEMSELVES

The remainder of the questions pertained to the programs themselves, their format, admission requirements, duration, type of certification granted and contact information. For ease of reference, the information gathered is presented in table form in Appendix I. In order to present a more complete picture of available training programs, the table presents information provided by respondents, supplemented with further information gathered through research on the institutions' websites.

Most of the programs offered by respondents' institutions are full-time programs (84.8%). Part-time (36.4%) and continuing education programs (27.3%) are not as frequent. Only 15.2% offer cooperative programs that combine institutional training with work-related experience.

Programs vary in length from 15 weeks to 4 years. More than half of the programs lead to a diploma (56.3%), while 37.5% grant a certificate and 31.2% lead to a degree.

For the most part, responding institutions require a high school diploma in order to be accepted into their programs. While most simply require general high school completion, others are more specific, requiring at least 60% in mathematics, English/French and/or science. Still others require a high school specialization in print media. Some will admit mature students who have not completed high school, based on a combination of work experience and studies undertaken since leaving high school.

4.3.3 The bottom line

Much of the formal post-secondary training is currently being provided by colleges located across the country. For the most part, they feel that they have a fairly solid understanding of the industry and its needs. However, a closer look at their program offerings indicates that there is a tendency to incorporate printing and graphic communications into technology-related programs, with an emphasis on computer and web skills, software and technological literacy. This meets the needs of one very important element of the printing process, i.e. pre-press. However, there is little or no focus on the press or finishing and bindery aspects of the industry, resulting in a feeling on the part of some printers that the graduates are not well-prepared for the industry. There is, in effect, a gap between the perceived knowledge of the industry and the requirements identified by employers.



5. ISSUES RAISED

The printing and graphic communications industry learning environment currently embraces formal, non-formal and informal learning opportunities. Formal learning refers to knowledge and skills acquired through structured programs that are usually offered by colleges, universities and technical schools. Non-formal learning refers to knowledge and skills acquired in structured programs outside of educational institutions. These non-formal learning opportunities may lead to a certificate of completion. It is important to highlight that suppliers provide an important element of this type of training. Their training initiatives are generally practical in nature and relate specifically to their products. Informal learning refers to knowledge and skills acquired through work and life experience, using unstructured methods and settings, such as employee-to-employee knowledge transfer and mentorship.

Based on the information gathered from the printing companies, suppliers, unions and education and training institutions, below is a summary of the issues raised.

- There is a mismatch between education's current perception of what the industry needs and the industry's requirements. Respondents to the survey designed for education and training institutions indicated that they have a fairly solid understanding of the industry and its requirements. Ten years ago, the single biggest

transition in the industry as a result of technology was in the pre-press area and education responded to that need. However, the printing companies indicated that the type of training required now is often not available. They are also concerned that the level of understanding of the printing process as a whole and readiness to start work in the industry is lacking in new graduates.

- It is difficult to attract new entrants to the industry. Respondents to the industry survey reported that they have difficulty finding people who are interested in making a career in their industry, let alone people who are well prepared to start work. Education and training institutions cite lack of interest and low enrolment as reasons for closing programs or discontinuing program components, although a number are prepared to revive the programs or expand existing ones, with the support of the industry.
- Lack of resources influences decisions on training. Participants often commented that the cost of training and the time required to participate influence the decisions on training. Most companies found it difficult to release employees for training.
- There is an interest by everyone involved to consider multiple methods of training delivery. This could include technology assisted education and training.

6. RECOMMENDATIONS

The aim of this study was to reach those involved with the provision of training to the print and graphic communications industry. This included education and training institutions, unions, suppliers, and printing companies themselves.

Much of what we are reporting in this study is not new. However, this report confirms statistically the various anecdotal comments we have heard from printing companies, suppliers, unions and educators. The intent of CPISC is not to duplicate what exists but to build on what is currently being done, in order to meet the human resource development needs of the industry as a whole. This report provides a solid foundation of information upon which to build for the future.

Respondents were offered the opportunity to comment on a number of the questions. These comments were a valuable source of insight into the learning and training issues of the industry. The comments, combined with the statistical data and the analysis, were reviewed by the project team and the Project Working Group, which comprises representatives from printing companies, suppliers, education and training, and unions. The Working Group reached consensus on the issues raised and identified the following recommendations for future action.

1. Ensure that the education and training provided reflects the needs of the industry by:
 - Creating a continuous dialogue on education and training needs within the industry
 - Communicating to the industry and the education and training sector the skill standards that are being developed
 - Conducting a training needs analysis for the sector
 - Mapping the newly developed skill standards against the training needs of the industry
 - Fostering a continuous dialogue between the industry and education and training at all levels
2. Increase the number of new entrants to the industry by developing a recruitment strategy
3. Ensure consistency of education and training for the industry and consistent skills at all levels by developing a skills recognition strategy that includes an essential skills component
4. Ensure that specialized training for the industry is available, cost-effective and designed in a way that is accessible for the industry by exploring a variety of training delivery models
5. Explore the range of incentives such as tax incentives and training rebates provided by various governments to encourage employers to offer training
6. Ensure that the industry is aware of the education and training available by:
 - Publishing a list of training programs and providers on the CPISC website
 - Updating the list of training programs and providers at least annually by inviting training providers to verify the information presented
 - Expanding the list of training providers to include private training providers (both institutions and individuals) and secondary schools

APPENDIX I

Set out in the table below is the information provided by institutions responding to our questionnaire. However, in order to present a more complete picture of available training programs, the information provided by respondents has been supplemented with further information gathered through research on the institutions' websites. For ease of reference, training institutions are listed alphabetically, by province.

Alberta (AB)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
NorQuest College	College; Diploma, Certificate	Graphic Communications Technology in Graphic Communications Print Media Communications Print Media Productions Printing and Digital Technology Desktop Publishing Print Management	Print Media Production Certificate: - G10 level Math & English Digital Graphics Communications Diploma: - G12 level English and G11 level Math	Full-time, Part-time, Continuing Education; Print Media Production Certificate - 5 months, Digital Graphics Communications Diploma - 2 years; English	10135 - 109 Street Edmonton, AB T5J 3P1 (780) 644-6282 doni.miller@norquest.ca
Northern Alberta Institute of Technology (NAIT)	Technical School; Certificate	Graphic Design Graphic Communications Graphic Communications and Publishing Print media communications Digital Communications and Media/Multimedia Print media productions Printing and Digital Technology Desktop Publishing	Grade 11 Math and Grade 12 English	Full-time; 1 Year (2 - 16 week semesters); English	11762 - 106 St Edmonton, AB T5G 2R1 (780) 491-3198 normp@nait.ca
Southern Alberta Institute of Technology (SAIT)	Technical School; Diploma	Graphic Design Graphic Communications Graphic Communications and Publishing Technology in Graphic Communications Communications Multimedia Print Media Communications Digital Communications and Media/Multimedia Design and Visual Communications Print Media Productions Digital Media Technologies Printing and Digital Technology Information Technology – Interactive Multimedia and Design Interactive Arts and Technology Multimedia Design and Production Communications Technology Fundamentals Print Management - Comment: Pre-Flight - Press and Bindery - estimating - MATH for printers	Alberta High School diploma or equivalent with at least 50% in English 30 or 33	Full-time; 2 years (four 16 week semesters); English	1301-16 Ave. NW Calgary, AB T2M 0L4 (403) 284-7286 willem.sijpheer@sait.ca

British Columbia (BC)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
British Columbia Institute of Technology (BCIT)	Technical School; Diploma of Technology	Graphic Communications of Technology The aim of the program is to prepare talented individuals with a solid foundation of education and technical training so that they have the vision and knowledge to lead the printing and publishing industry in Canada into the future. The program will prepare learners for a variety of careers in the print industry in such areas as pre-press, press, bindery, finishing, management, sales, marketing, and customer service.	High school graduation or Age 19+, English 12 or English-language proficiency, Math 11	Full-time; 2 years with a two-week workplacement at the end of 1st year and a six-week work placement at the end of 2nd year; English	3460 Gardner Court Way Burnaby, BC Terri Carde Terri_carde@bcit.ca (604) 451-7032 Karen Harvey (604) 453-4032 Karen_harvey@bcit.ca
Glenn Biech Graphic Arts Training Institute of BC (GATI)	Technical School; Certificate	Pre-press Operations Offset Printing Operations Bindery Operations Offers a variety of courses ranging from Pre-Press Operations to Bindery Operations. Also offers seminars and workshops, distance learning and interactive video conferencing.		Part-time, apprenticeship; English	101 - 33 E. 8th Avenue, Vancouver, BC V5T 1R5 (604) 879-4423 Christine Braithwaite chris@gatiofbc.org
Malaspina University-College	University; Degree, Diploma, Certificate	Graphic Design Technology in Graphic Communications Print Media Communications Digital Communications and Media/Multimedia Digital Media Technologies Multimedia Design and Production Desktop Publishing	Grade 12	Full-time, Continuing Education; Varies from four months to degree length; English	900 5th Street Nanaimo, BC V9R 5S5 (250) 740-6161 silvestrd@mala.bc.ca
Selkirk College	College; Diploma	Graphic Design Graphic Communications Technology in Graphic Communications Communications Multimedia Print Media Communications Digital Communications and Media/Multimedia Design and Visual Communications Print Media Productions Digital Media Technologies Information Technology – Interactive Multimedia and Design Interactive Arts and Technology Multimedia Design and Production	EDUCATION High school graduation (or equivalent) with a “C”+ or higher in Math 11 (Principles, Applications or Essentials of Mathematics 11) and a “C+” or higher in English 12. Information & Communications Technology 11(or equivalent) is highly recommended. MATURE APPLICANTS Mature applicants without the above qualifications for full-time study are required to arrange an interview with a faculty member to discuss probationary admission to the program. An assessment will be made of the applicant’s ability to complete the program based on work experience, studies undertaken since leaving school, and recommendations for upgrading if deemed necessary.	Full-time, Part-time; English	820 Tenth Street Nelson, BC V1L 3C7 (250) 505-1305 jtaylor@selkirk.ca

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Selkirk College (cont'd)			<p>INTERVIEW</p> <p>All applicants are required to attend a panel interview with representatives from the Digital Arts & New Media Program. In situations where a face-to-face interview is not possible, a telephone interview will be arranged. The interview is an opportunity for faculty to recommend upgrading if necessary, and for applicants to ask any questions they might have about the program. Applicants are encouraged to bring any examples of the following: web design (either professional or academic examples) print design (business cards, logos, brochures, posters, etc) video production, 3D modeling and animation, and/or stop motion photography traditional artwork (drawing, painting, sculpture, photography) digital artwork (Illustrator, Photoshop, Flash, etc.</p> <p>COMPUTER AND SOFTWARE KNOWLEDGE</p> <p>The production labs in the Digital Arts & New Media program use Microsoft Windows XP as the primary operating system. Applicants must have an intermediate level of understanding of Windows 9X, NT, XP and/or MacOS prior to entering the program. It is recommended that applicants possess basic Internet skills (email, searching and downloading), mousing skills and keyboarding skills of at least 25 wpm. Computer fundamentals are a prerequisite to this program, and are not taught as part of the curriculum. It is strongly recommended that applicants who do not possess an operating systems consult with a faculty member before making a formal application to the program.</p>		
University College of the Fraser Valley	University; Degree, Diploma, Certificate	Graphic Design Digital Media Technologies Printing and Digital Technology Multimedia Design and Production		Full-time, Part-time, Continuing Education; English	33844 King Rd. Abbotsford, BC

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Vancouver Community College	College; Certificate	Digital Graphic Design The Digital Graphic Design program focuses on bridging the gap between creative and digital innovation. Graphic art techniques and digital software applications will be explored to teach students how to bring their visual ideas to life artistically and with technical efficiency.	Grade 12 graduation, GED or equivalent Resume and portfolio submission OR Department Head Approval	9 months; English	250 West Pender Street Vancouver, BC V6B 1S9 (604) 443-8300

Manitoba (MB)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
University of Manitoba	University; Degree	Graphic Design Graphic Communications Graphic Communications and Publishing Technology in Graphic Communications Communications Multimedia Print Media Communications Digital Communications and Media/Multimedia Design and Visual Communications Print Media Productions Digital Media Technologies Printing and Digital Technology Information Technology – Interactive Multimedia and Design Interactive Arts and Technology Multimedia Design and Production Communications Technology Fundamentals Print Management	High School Diploma Portfolio Review	Full-time, Part-time; 3-4 years full-time equivalent;	410 FitzGerald Building Winnipeg, MB R3T 2N2 (204) 474-8788 cokell@cc.umanitoba.ca
Winnipeg Technical College	College; Certificate	Graphic Design Graphic Communications Technology in Graphic Communications Print Media Communications Design and Visual Communications Print media productions Digital Media Technologies Printing and Digital Technology Desktop Publishing Communications Technology Fundamentals Print Management	Grade 10 math and English	Full-time, Part-time, Cooperative (alternative institutional training with related work experience), Continuing Education; 10 months full-time if the student rate of progress is on track (the course may be shorter or longer depending upon the student's effort); English	130 Henlow Bay Winnipeg, MB R3Y 1G4 (204) 989-6500 eargib@wtc.mb.ca

New Brunswick (NB)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
NBCC Woodstock	College; Diploma	Graphic Design	High School Diploma	Full-time; 2 years; English;	100 Broadway St.

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
NBCC Woodstock (cont'd)		Graphic Communications Graphic Communications and Publishing Technology in Graphic Communications Digital Communications and Media/Multimedia Print Media Productions Printing and Digital Technology Desktop Publishing			Woodstock, NB E7M 5C5 (506)325-4933 steve.morris@gnb.ca

Newfoundland (NL)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
College of the North Atlantic	College; Diploma and Certificate	Graphic Design Digital Communications and Media/Multimedia Printing and Digital Technology Desktop Publishing	Various but normally high school graduation with a 60% overall average (in key subjects)	Full-time; 2 years; English;	College of the North Atlantic P.O. Box 1693 St. John's, NL A1C 5P7

Nova Scotia (NS)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Cape Breton University	University; Degree	Communications Multimedia Information Technology – Interactive Multimedia and Design	Average of 60% or above	Full-time, Part-time; 4 years; English	1250 Grand Lake Rd. Sydney, NS B1P 1L2 (902) 539-5300 welcome@cbu.ca
Nova Scotia College of Art and Design (NSCAD)	University; Degree	Bachelor of Design Major in Interdisciplinary Design Master of Design International Master of Design Bachelor of Fine Arts Major in Fine Art (Printmaking)	Undergraduate admission to the Foundation Program - minimum 65% high school graduating average with a 70% minimum in Grade 12 English, portfolio submission, English proficiency score if English is not first language.	Full-time, Part-time; Continuing Education; Undergraduate program is 4 years, Graduate program is 12 months; English	5163 Duke Street Halifax, NS B3J 3J6 (888) 444-5989 admissions@nscad.ca
Nova Scotia Community College	College; Diploma	Graphic Design Graphic Communications Graphic Communications and Publishing Technology in Graphic Communications Communications Multimedia Print media communications Digital Communications and Media/Multimedia Design and Visual Communications Print media productions Digital Media Technologies Printing and Digital Technology Information Technology - Interactive Multimedia and Design	High school graduation and entrance portfolio	Full-time; Applied Communication Arts (ACAP) is one year certificate), Graphic Design is one- year Diploma after ACAP, All other programs are two-year Diploma; English	5685 Leeds Street Halifax, NS B3J 2X1 (902) 491-2184 bruce.tawse@nsc.ca

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Nova Scotia Community College (cont'd)		Interactive Arts and Technology Multimedia Design and Production Desktop Publishing Communications Technology Fundamentals Print Management			

Ontario (ON)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Algonquin College	College; Diploma	Graphic Design Print Media Communications Digital Communications and Media/Multimedia Design and Visual Communications Print Media Productions Digital Media Technologies Printing and Digital Technology Information Technology – Interactive Multimedia and Design Interactive Arts and Technology Multimedia Design and Production Desktop Publishing Print Management	Print Media - grade 12 Eng. & grade 11 Math	Full-time; Print Media – diploma in 45 weeks; English	1385 Woodroffe Ave Ottawa, ON K2G 1V8 (613) 727-4723 stortov@algonquincollege.com
Brock University	University; Degree	BSc Honours in Computer Science & Visual Arts		Full-time; 4 years; English	St. Catharine's, ON L2S 3A1 (905) 688-5550 ext. 3333 president@brocku.ca
Humber College Institute of Technology and Advanced Learning	College; Certificate	Graphic Design for Print and Web This hands-on curriculum examines some of the industry's most widely used software applications through project-based instruction. The program is conducted in four parts: learning how to use the Macintosh operating system and main print design software applications, then learning general design theory and typographic design. The second section presents complex technical issues related to print design and production, culminating in a field trip to print houses for a first-hand look at press runs. In the third section, students will have projects such as: designing for a favourite magazine, developing an on-the-shelf box package, and creating an online portfolio website. The final part of the program prepares students for their portfolio presentation and future employment interviews.		22 weeks; English	205 Humber College Blvd Etobicoke, ON M9W 5L7 (416) 675-6622 ext. 4734 Natasha Haniff
La Cité collégiale	College; Diploma	Graphic Design Graphic Communications Graphic Communications and Publishing	Basic knowledge of visual arts	Full-time; 3 years; French	801 Aviation Parkway Ottawa, ON K1K 4R3 (613) 742-2493

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
La Cité collégiale (cont'd)		Technology in Graphic Communications Print media communications Digital Communications and Media/Multimedia Design and Visual Communications Print media productions Digital Media Technologies Printing and Digital Technology Information Technology – Interactive Multimedia and Design Desktop Publishing Print Management			stessi@lacitec.on.ca
Mohawk College	College; Diploma	Graphic Design Production – Creative Graphic Design Production – Digital Graphic Design Production – Packaging CREATIVE Creative Media is designed to produce skilled artists with high levels of competence in both traditional design techniques and electronic computer applications for graphic design arts. Students learn how to develop effective layout and design concepts, how to prepare art and print for reproduction, and how to illustrate for presentations and publications with both traditional mechanical and computer electronic procedures. DIGITAL The emphasis of this program is to design and build projects for the printing industry. PACKAGING Packaging Design focuses on the design, development, and testing of packages, packaging materials, packaging systems, and transportation and handling systems of products.		2 years; English	P.O. Box 2034 Hamilton, ON L8N 3T2 president@brocku.ca Phil Richardson (Creative & Digital) (905) 575-1212 ext. 7104 (519) 759-7200 ext. 7104 Derek Whitney (Packaging) (905) 575-1212 ext. 6084 (519) 759-7200 ext. 6084
Ontario Graphic Communications Training Centre	Technical School; Certificate	Technology in Graphic Communications Print Media Communications Digital Communications and Media/Multimedia Printing and Digital Technology Desktop Publishing Print Management	Member of Communications Energy and Paper Workers Union of Canada (CEP)	Part-time, Cooperative (alternative institutional training with related work experience), Continuing Education; 5 Semesters (15 weeks – 45 hours per semester); English	12 - 1521 Trinity Drive Mississauga, ON L5T 1P6 (289) 562-0144 graph.comm@bellnet.ca
Ryerson University	University; Bachelor of Technology	Graphic Communications Management Business management in the print industry.		4 years; English	350 Victoria St. Toronto, ON M5B 2K3 (416) 979-5050 mcanlas@ryerson.ca

Prince Edward Island (PE)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Holland College	College; Diploma, Certificate	Graphic Design Digital Communications and Media/Multimedia Information Technology – Interactive Multimedia and Design Multimedia Design and Production	Grade 12, Portfolio, Interview	Full-time; 2 years, 9 Months; English	140 Weymouth Street Charlottetown, PE C1A 4Z1 (902) 629-4225 swhite@hollandc.pe.ca

Quebec (QC)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Academy of Arts and Design	Technical School	1-Editorial Design 2-Advertising Design 1-Upon completion of the Editorial design program, students will be able to take knowledge of the projects, determine the phases of the project and the proper production means for each phase, conceive a presentation mock-up and present it to clients, and capture the different elements of the document. 2-Upon completion of the Advertising design program, students will be able thoroughly understand the role a designer has in the development of an advertisement campaign, make judicious use of the principles of visual design and typography, develop slogans, logos, brochures, catalogues, and create advertising.		1-1216 hours, 2-1216 hours; French	1253 McGill College Avenue, 10th Floor Montreal, QC H2B 2Y5 (514) 875-9777
Ahuntsic College	College; Diploma	1-Graphic Design 2-Printing Technology 3-Pre-press Computer Graphics 4-Print Management 5-Print Projects Manager 6-Web Page Production (Graphic Design) 7-Computer Graphics and Printing Technologies 8-Offset Printing 9-Flexographic Printing Technology 1-The graphic designer conceives the projects. Therefore, students will learn to organize and structure the typographic, photographic, and graphic elements of a project and learn to evaluate its feasibility while taking into account the current printing technologies. 2-The printing technician controls the different parameters in the printing process in order to complete the work in keeping with industry standards. 3-Training centers around the upscale treatment of images: preparing the images with specialized electronic devices		1, 2, 3, 4 - 2910 hours, 5, 7 - 960 hours, 6 - 1065 hours, 8, 9 - 900 hours; French	9155, rue Saint-Hubert Montreal, QC H2M 1Y8 (514) 389-5921 information@collegeahuntsic.qc.ca

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Ahuntsic College (cont'd)		<p>and computer stations, and the preparation of documents to make them press-ready.</p> <p>4-The Print Management program focuses on training technicians to fill management functions related to print production. There are two components: graphic communications and industrial management.</p> <p>5-This enables students to develop skills related to human resources and physical resources management, interpersonal relationships and communication, as well as print estimation.</p> <p>6-This is aimed at training technicians to be able to enter the current graphics design market in Quebec, where new technologies abound. This training, which focuses on design and technology, will help students learn how to assemble and integrate multimedia components, as well as program interactivity into a given scenario.</p> <p>7-This trains individuals to be able to prepare the page make-up of documents intended for print. This work involves managing the text, reproducing illustrations and handling photos in order to produce press-ready documents.</p> <p>8-This provides training to enable individuals to work as an assistant press operator using sheet-fed or web offset presses of varying formats.</p> <p>9-This focuses on training technicians in charge of print production in an environment that uses flexographic presses of varying formats.</p>			
Centre de Formation Professionnelle (C.F.P.) 24-Juin	Vocational Training Centre	<p>1- Computer Graphics Techniques 2- Printing</p> <p>1- This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.</p> <p>2- This focuses on training students who, at the end of their training, will be able to carry out the production of various types of printed materials using offset or screen presses.</p>		1-1800 hours, 2-1350 hours; French	639, rue du Vingt-Quatre-Juin Sherbrooke, QC J1E 1H1 (819) 822-5420 ext. 230 couturej@csrs.qc.ca
C.F.P. Bel-Avenir	Vocational Training Centre	<p>1- Computer Graphics Techniques 2- Printing</p> <p>1- This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.</p> <p>2- This focuses on training students who, at the end of their training, will be able to carry out the production of various types of printed materials using offset or screen presses.</p>		1-1850 hours, 2-1350 hours; French	1725, boul. Du Caramel Trois-Rivière, QC G8Z 3R8 (819) 691-3366 belavenir.info@csduroy.qc.ca

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
C.F.P. Calixa-Lavallée	Vocational Training Centre	1- Computer Graphics Techniques 2- Printing 3- Reprography and Finishing 1-This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product. 2-This focuses on training students who, at the end of their training, will be able to carry out the production of various types of printed materials using offset or screen presses. 3-This enables students to acquire the knowledge, skills and abilities necessary for performing reprography-related duties and activities.		1-1800 hours, 2-1350 hours, 3-840 hours; French	4555, rue d'Amos Montréal-Nord, QC H1H 1P9 (514) 955-4555 Centre-calixa-lavalee@cspi.qc.ca
C.F.P. Compétences-Outaouais	Vocational Training Centre	Computer Graphics Techniques This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.		1800 hours; French	361, boul. Maloney Ouest Gatineau, QC J8P 7E9 (819) 643-2000 Nancy Schoenfeldt OR cco@csdraveurs.qc.ca www.csdraveurs.qc.ca/cc
C.F.P. Jacques-Rousseau	Vocational Training Centre	1- Computer Graphics Techniques 2- Printing 1- This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product. 2- This focuses on training students who, at the end of their training, will be able to carry out the production of various types of printed materials using offset or screen presses.		1-1800 hours, 2-1350 hours; French	444, boul. Gentilly Est Longueuil, QC J4H 3X7 (450) 651-6800 Michel_lamarche@csmv.qc.ca
C.F.P. L'Émergence	Vocational Training Centre	Computer Graphics Techniques This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.		1800 hours; French	1415, chemin de L'avenir Deux-Montagnes, QC J7R 7B4 (450) 623-3079 Benoît Lebel, ext. 5900
C.F.P. Marie-Rollet	Vocational Training Centre	1-Computer Graphics Techniques 2-Reprography and Finishing 1-This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.		1-1800 hours, 2-840 hours; French	3000, boul. Hochelaga Sainte-Foy, QC G1V 3Y4 (418) 652-2159 Dominic Lemieux ext. 7148 cfpmr@csdecou.qc.ca

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
C.F.P. Marie-Rollet (cont'd)		2-This enables students to acquire the knowledge, skills and abilities necessary for performing reprography-related duties and activities.			
C.F.P. Verdun	Vocational Training Centre	Computer Graphics Techniques This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.		1800 hours; French	3010, boul. Gaetan-Laberge Verdun, QC H4G 3C1 Ginette Lebrun (514) 765-7516 info.admfp@csemb.qc.ca
CEFPA	Technical Secondary School (vocational training centre)	Computer Graphics Techniques This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.		1800 hours; French	1550, boul. Auger Ouest Alma, QC G8C 1H8 (418) 669-6280 ext. 6600 France.villeneuve@cslsj.qc.ca
Cégep Beauce-Appalaches	College; Diploma	Print Management	High School Diploma	Full-time, Cooperative program (alternating work —studies: in-class training and practicum); 3 years; French	1055 116e rue St-Georges, QC G5Y 3G1 (418) 228-8896 jpaube@cegepbceapp.qc.ca
Cégep de Rivière-du-Loup	Cegep	1-Graphic Design 2-DEC-BAC in Graphic Design 1-The graphic designer conceives the projects. Therefore, students will learn to organize and structure the typographic, photographic, and graphic elements of a project and learn to evaluate its feasibility while taking into account the current printing technologies. 2-The DEC-BAC is a Memorandum of Understanding resulting from structured agreements between Laval University and certain Cegeps to combine technical training in graphic design with the Bachelor's Degree program, since they share the same field of study.		1-2640 hours, 2-5 years; French infoscol@cegep-rdl.qc.ca	80 rue Frontenac Rivière-du-Loup, QC G5R 1R1 (418) 862-6903
Cégep de Sainte-Foy	Cegep	1-Graphic Design 2-DEC-BAC in Graphic Design 3-Electronic Publishing GRAPHIC DESIGN The graphic designer conceives the projects. Therefore, students will learn to organize and structure the typographic, photographic, and graphic elements of a project and learn to evaluate its feasibility while taking into account the current printing technologies. DEC-BAC IN GRAPHIC DESIGN The DEC-BAC is a Memorandum of Understanding resulting		1-2640 hours, 2-5 years, 3-1140 hours; French	2410 chemin Sainte Foy Sainte-Foy, QC G1V 1T3 Carol Arseneault (418) 659-6600 ext. 6651 Graphisme@cegep-ste-foy.qc.ca

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Cégep de Sainte-Foy (cont'd)		<p>from structured agreements between Laval University and certain Cegeps to combine technical training in graphic design with the Bachelor's Degree program, since they share the same field of study.</p> <p>ELECTRONIC PUBLISHING</p> <p>This centres on training individuals to be able to work in the field of graphic communications as a computer graphics designer specializing in reprinting. This training helps students acquire the job skills needed for project planning, production and management.</p>			
Cégep de Sherbrooke	College; Diploma	Graphic Communications Technology	High School Diploma	Full-time; 3 years; French	
Cégep de Trois-Rivières	Cegep	<p>Digital Graphic Design</p> <p>This focuses on training designers, illustrators and artists who will master digital graphic technologies, while developing their creative talents. This training will help students learn how to design and produce digital images for production and distribution by means of various supports used in the graphic communications and advertising industries.</p>		1050 hours; French	<p>Continuing Education Department 3500, rue Courval, C.P. 97 Trois-Rivières, QC G9A 5E6 819-378-4911 Richard St.-Pierre ext. 2183 formation.continue@cegeptr.qc.ca</p>
Cégep du Vieux Montreal	Cegep	<p>1-Graphic Design 2-DEC-BAC in Graphic Design</p> <p>1-The graphic designer conceives the projects. Therefore, students will learn to organize and structure the typographic, photographic, and graphic elements of a project and learn to evaluate its feasibility while taking into account the current printing technologies.</p> <p>2-The DEC-BAC is a Memorandum of Understanding resulting from structured agreements between Laval University and certain Cegeps to combine technical training in graphic design with the Bachelor's Degree program, since they share the same field of study.</p>		1-2640 hours, 2-5 years; French	<p>255, rue Ontario Est Montreal, QC H2X 1X6 (514) 982-3437 Daniel Jalbert ext. 2186 Hélène Deschamps ext. 2200 Linda Berthiaume ext. 2036 lberthiaume@cvm.qc.ca</p>
Cégep Marie-Victorin	Cegep	<p>Graphic Design</p> <p>The graphic designer conceives the projects. Therefore, students will learn to organize and structure the typographic, photographic, and graphic elements of a project and learn to evaluate its feasibility while taking into account the current printing technologies.</p>		2640 hours; French	<p>7000, rue Marie-Victorin Montreal, QC H1G 2J6 (514) 325-0150 Michel Haworth, ext. 2609 promotion@collegemv.qc.ca</p>
Centre Bernard-Gariepy	Vocational Training Centre	<p>Computer Graphics Techniques</p> <p>This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.</p>		1800 hours; French	<p>5105, boul. des Étudiants Sorel-Tracy, QC J3R 1C2 (450) 743-1285 Robert Begin beginr@cs-soreltracy.qc.ca</p>

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Centre de formation Compétences-2000	Vocational Training Centre	1- Computer Graphics Techniques 2- Printing 1- This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product. 2- This focuses on training students who, at the end of their training, will be able to carry out the production of various types of printed materials using offset or screen presses.		1-1800 hours, 2-1350 hours; French	777 av. De bois-de-Boulogne Laval, QC H7N 4G1 (450) 662-7000 ext. 2028 Manon Comeau ext. 2020 cfc2000@cslava.qc.ca
Centre de Formation des Bâtisseurs	Vocational Training Centre	1- Computer Graphics Techniques 2- Printing 1- This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product. 2- This focuses on training students who, at the end of their training, will be able to carry out the production of various types of printed materials using offset or screen presses.		1-1800 hours, 2-1350 hours; French	102, Place de L'église, C.P. 400 Beauceville, QC G5X 1X3 (418) 228-5541 ext. 6030
Collège d'affaires Ellis	College	Computer Graphics Techniques This provides training for computer graphics designers who will be able to use computer technologies in order to carry out jobs that involve reprinting, image processing and developing products and services in multimedia, within a creative environment.		1170 hours; French	235, Moisan Drummondville, QC J2C 1W9 (819) 477-3113 info@ellis.qc.ca
Collège Inter-Dec	College	Computer Graphics Design This provides training for computer graphics designers who will be able to use computer technologies in order to carry out jobs that involve reprinting, image processing and developing products and services in multimedia, within a creative environment.		915 hours; French	2000, rue Ste-Catherine Ouest Bureau 6000 Montreal, QC H3H 2T2 (514) 939-4444 Interdecinfo@clasalle.com
Concordia University	University; Diploma	Bachelor's Degree in Graphic Design This provides training for multifaceted designers whose work will consist of designing, producing and managing projects in graphic design and visual communications in the areas of printing and multimedia.		6 semesters (3 years); French	1455, boul. Maisonneuve Ouest Montreal, QC H3G 1M8 (514) 848-2424 gradadm@alcor.concordia.ca
Cowansville Vocational Education Training Centre	Vocational Training Centre	Computer Graphics Techniques This provides training for computer graphics technicians who, using computer systems, will be able to produce graphic layouts of books, newspapers, posters, etc., through page make-up of texts and images that will result in an attractive, readable and technically impeccable product.		1800 hours	180, rue Adelard-Godbout Cowansville, QC J2K 3X9 (450) 263-3726 Linda Brault braultl@etsb.qc.ca

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Dawson College	College; Diploma	Graphic Design		Full time; English	
École Commerciale du Cap		Computer Graphics Techniques This provides training for computer graphics designers who will be able to use computer technologies in order to carry out jobs that involve reprinting, image processing and developing products and services in multimedia, within a creative environment.		1170 hours; French	155, rue Latreille Trois Riviere secteur Cap-de-la-Madelaine, QC G8T 3E8 Monique Martel (819) 691-2600 Information@ecc.qc.ca
École de technologie supérieure	University; Certificate	Certificate in Industrial Production	Must have a DEC (technical college-level diploma) in a related program or have adequate relevant experience and be at least 21 years old or have a university degree in sciences, engineering or administration	Part-time; 9 semesters; French	
Heritage College	College; Diploma	Graphic Design Graphic Communications Graphic Communications and Publishing Technology in Graphic Communications Print media communications Design and Visual Communications Print media productions Digital Media Technologies Printing and Digital Technology Multimedia Design and Production Desktop Publishing	High School Diploma	Full-time; 3 years; English	325 boul. Cité des Jeunes Gatineau, QC J8Y 6T3 (819) 778-2280 jmullaly@cegep-heritage.qc.ca
Laval University	University; Bachelor's Degree	Graphic Design Graphic Communications Graphic Communications and Editing Multimedia Communications Print Media Communications Digital Communications and Media/Multimedia Design and Visual Communications Interactive Arts and Technology Multimedia Design and Production		Full-time; 3 years; French	School of Visual Arts 295, boulevard Charest Est Quebec, QC G1R 3G8 (450) 656-2131 ext. 5155 nadine.ouellet@arv.ulaval.ca
Quebec Institute of Graphic Communications	Non-profit organization; University Certificate in Industrial Production/Graphic Communications	Industrial Production – Graphic Communications Courses include pre-press software, press and finishing. Courses and training are delivered on demand. Scheduled seminars and workshops; includes work practicum. It aims to provide professional undergraduate education to those who hold or wish to hold production-related technical and administrative positions within a company.		3 years; French	999, avenue Émile-Journault Est Montreal, QC H2M 2E2 (514) 389-5061 information@icgq.qc.ca

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Rosemount Technology Centre		1-Desktop Publishing 2-Printing 1- Students will learn to layout pages with type and images to successfully meet technical requirements for printing in full colour as well as for the internet. They will acquire the knowledge and the skills necessary to do basic designs and commercial drawing techniques, using pen and production techniques, to achieve artistic and commercial standardized advertisement and to participate in the layout. 2- Students will learn all aspects of the printing trade from computer layout, to operating offset and screen presses as well as finishing and bindery equipment operations.		1-1800 hours, 2-1350 hours; English	3737, Beaubien Est Montreal, QC H1X 1H2 (514) 376-9736 info@rosemount-technology.qc.ca
Salette College	College	Computer Graphics Designer This provides skills training for technicians in all of the three major areas of visual communications: graphic design, computer graphics and multimedia.		1260 hours; French	418, rue Sherbrooke Est, 3e étage Montreal, QC H2L 1J6 (514) 388-5725 info@collegesalette.qc.ca
Université du Québec à Montréal	University; Diploma	Bachelor's Degree in Graphic Design This provides training for multifaceted designers whose work will consist of designing, producing and managing projects in graphic design and visual communications in the areas of printing and multimedia.		6 semesters (3 years); French	Faculty of Arts C.P. 8888, succ. Centre-ville Montreal, QC H3C 3P8 Frédéric Metz (514) 987-3000, ext. 3921 ecole.design@uqam.ca
Université du Québec en Outaouais	University; Diploma	Bachelor's Degree in Arts and Design, Concentration in Graphic Design This provides an introduction to the world of visual communications through the interplay of mastering formal language and its application by employing various means of expression in visual arts and graphic design.		6 semesters (3 years); French	101, rue Saint Jean Bosco Case postale 1250, succursale Hull Gatineau, QC J8X 3X7 (819) 773-1880 emi@uqo.ca

Saskatchewan (SK)

Name	Type of Institution; Certification	Program	Requirements	Format; Duration; Language	Contact Information
Carlton Trail Regional College	College;	Graphic Design Information Technology – Interactive Multimedia and Design Desktop Publishing		Continuing Education; Varies; English	Box 720 Humboldt, SK S0K 2A0 (306) 682-2623 ulrichs@ctr.c.sk.ca

APPENDIX II

PRINTING ORGANIZATIONS

SECTION 1 - Demographics

A. Please provide the name of your organization.

B. In which province or territory is your particular organization located?

(If responding for a Canada-wide organization, select National.)

- | | | |
|--|---|---------------------------------------|
| <input type="checkbox"/> National | <input type="checkbox"/> Newfoundland | <input type="checkbox"/> PEI |
| <input type="checkbox"/> Nova Scotia | <input type="checkbox"/> New Brunswick | <input type="checkbox"/> Quebec |
| <input type="checkbox"/> Ontario | <input type="checkbox"/> Manitoba | <input type="checkbox"/> Saskatchewan |
| <input type="checkbox"/> Alberta | <input type="checkbox"/> British Columbia | <input type="checkbox"/> Yukon |
| <input type="checkbox"/> Northwest Territories | <input type="checkbox"/> Nunavut | |

C. Please indicate your firm's primary market segments:

- | | | |
|---|--|---|
| <input type="checkbox"/> General Commercial | <input type="checkbox"/> Newspaper Printing | <input type="checkbox"/> Thermography |
| <input type="checkbox"/> Tag, Ticket, Tape Printing | <input type="checkbox"/> Trade Binding | <input type="checkbox"/> Traditional Prepress |
| <input type="checkbox"/> Quick Printing | <input type="checkbox"/> Book Printing | <input type="checkbox"/> Business Forms |
| <input type="checkbox"/> Greeting Card Printing | <input type="checkbox"/> Other Finishing service | <input type="checkbox"/> Magazine/Periodicals |
| <input type="checkbox"/> Financial/Legal | <input type="checkbox"/> Labels/Wrappers | <input type="checkbox"/> Speciality Printing |
| <input type="checkbox"/> Electronic Prepress Service | <input type="checkbox"/> Screen Printing | <input type="checkbox"/> Packaging |
| <input type="checkbox"/> Other (please specify) _____ | | |

D. Number of Employees:

- | | | |
|------------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> 1 - 4 | <input type="checkbox"/> 5 - 19 | <input type="checkbox"/> 20 - 49 |
| <input type="checkbox"/> 50 - 99 | <input type="checkbox"/> 100 - 199 | <input type="checkbox"/> 200 - 299 |
| <input type="checkbox"/> 300 - 399 | <input type="checkbox"/> 400 - 499 | <input type="checkbox"/> 500 + |

E. Please select the category that best reflects your area of responsibility in the organization:

- | | | |
|---|--|--|
| <input type="checkbox"/> Proprietor | <input type="checkbox"/> Human Resources | <input type="checkbox"/> Training Co-ordinator |
| <input type="checkbox"/> Other (please specify) _____ | | |

SECTION 2 - Training and your organization

Training' refers to any organized attempt to assist employee learning through instruction, observation, or practice, whether partially or fully completed. Training may occur in many different settings such as: in-class, in-house or online, etc. Training can be taken through many different activities including courses, pilot programs, seminars, workshops or professional development activities, etc.

A. How many of your employees have previous training related to the print and graphic communications industry?

- No previous training High School Training 2 or 3 year College Programs
 University (Bachelor Degree) Apprenticeship Other (For example - Equipment specific)

B. For the year ending December 2006 how many employees in your organization took training of some form?

- 1 - 4 5 - 19 20 - 49
 50 - 99 100 - 199 200 - 299
 300 - 399 400 - 499 500 +

C. Do you provide training to your employees?

- Yes No

If Yes

D. How much do you spend on training in a twelve month period?

- \$ _____ Year ending December 2007
\$ _____ Year ending December 2006
\$ _____ Year ending December 2005

E. What type of training do you pay for?

- Plant operation specific Machine/tool specific Management training
 Customer service training New Technology Sales Training
 General Skills
 Literacy
 Math
 Interpersonal

F. How do you provide training to your employees? Please estimate the approximate % of your total training for each of the following:

- In-house training
 Structured training sessions _____ % Employee-to-employee transfer of knowledge _____ %
 Apprenticeship - approximately _____ % On-site training provided by suppliers _____ %
- Off-site training
 Equipment supplier sites _____ % Community college courses _____ %
 University courses _____ % Union sponsored training _____ %

Supplier provided, technology assisted options that can be accessed from a distance and/or self-study formats

CD ROM

Video

Accessed on employee time _____ %

Accessed on employee time _____ %

Accessed on company time _____ %

Accessed on company time _____ %

Online

Accessed on employee time _____ %

Accessed on company time _____ %

Technology assisted options that can be accessed from a distance and/or self-study formats provided by other Training Providers

CD ROM

Video

Accessed on employee time _____ %

Accessed on employee time _____ %

Accessed on company time _____ %

Accessed on company time _____ %

Online

Accessed on employee time _____ %

Accessed on company time _____ %

Mentorship

Within your company _____ %

Outside of your company _____ %

Other (please specify)

G. What are the three most important criteria that influence your choice of training delivery method?

1. _____
2. _____
3. _____

H. What are the three most important benefits brought to your organization by employee training?

1. _____
2. _____
3. _____

I. What are the types of training you feel employees should take responsibility for?

1. _____
2. _____
3. _____

J. How difficult is it for employees to find training that fits their needs if it is not provided by your company?

(Please identify the order of importance.)

Easy

Moderately Easy

Moderately Difficult

Difficult

K. What are the three most significant training issues affecting your business?

(Please identify the order of importance.)

1. _____
2. _____
3. _____

L. Please use the space below to provide any additional comments regarding training as it relates to your organization?

SECTION 3 - Training Resources

Training Resources' are products or services that are designed to support or to enhance the training abilities of organizations. Training resources can be paper-based, electronic or web-based. Examples of training resources include manuals, syllabi, CD-ROMs, videos, instructional materials, training gaps analyses or guides for the professional development of employees, etc.

A. Given the constraints of your location and the size of your firm what form of delivery for training would be easiest for you and your employees to access?

- Online Outside courses Structured in-house training
 Other (please specify) _____

B. What type of training resources would be most useful to your organization?

(Choose as many as appropriate to your needs)

- Training manuals CD-ROMs Videos
 Online modules Webinars In person training courses on site
 Off-site supplier led courses On-site supplier led courses Off-site college or university courses

C. Please use the space below to provide any additional comments regarding the training resources that would be most useful to your organization

SECTION 4 - Future contact

A. For further important information about Canadian Printing Industries Sector Council initiatives please provide your contact information.

Address _____
City _____ Town _____
Province _____ Postal Code _____
Telephone _____
Email _____

SUPPLIERS TO THE PRINTING AND GRAPHIC COMMUNICATIONS INDUSTRY

SECTION 1 - Demographics

A. Please provide the name of your organization.

B. In which province or territory is your particular organization located?

(If responding for a Canada-wide organization, select National.)

- | | | |
|--|---|---------------------------------------|
| <input type="checkbox"/> National | <input type="checkbox"/> Newfoundland | <input type="checkbox"/> PEI |
| <input type="checkbox"/> Nova Scotia | <input type="checkbox"/> New Brunswick | <input type="checkbox"/> Quebec |
| <input type="checkbox"/> Ontario | <input type="checkbox"/> Manitoba | <input type="checkbox"/> Saskatchewan |
| <input type="checkbox"/> Alberta | <input type="checkbox"/> British Columbia | <input type="checkbox"/> Yukon |
| <input type="checkbox"/> Northwest Territories | <input type="checkbox"/> Nunavut | |

C. Please indicate your firm's primary market segments:

- | | | |
|---|------------------------------------|--------------------------------------|
| <input type="checkbox"/> Technology | <input type="checkbox"/> Machinery | <input type="checkbox"/> Consumables |
| <input type="checkbox"/> Other (please specify) _____ | | |

D. Please select the category that best reflects your area of responsibility in the organization:

- | | |
|---|---|
| <input type="checkbox"/> Proprietor | <input type="checkbox"/> Training Coordinator |
| <input type="checkbox"/> Other (please specify) _____ | |

SECTION 2 - Customer Training

A. Do you provide training to customers in the printing and graphic communications industry in support of your product(s)?

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

If Yes

B. To what percent of your customers in the printing and graphic communications industry do you offer training?

- | | | |
|--------------|--------------|--------------|
| a. 0 - 10 % | b. 10 - 25 % | c. 25 - 50 % |
| d. 50 - 75 % | e. 100 % | |

C. What % your customers in the printing and graphic communications industry avail themselves of your training?

- | | | |
|--------------|--------------|--------------|
| a. 0 - 10 % | b. 10 - 25 % | c. 25 - 50 % |
| d. 50 - 75 % | e. 100 % | |

D. What % of your training is specific to your product?

- | | | |
|--------------|--------------|--------------|
| a. 0 - 10 % | b. 10 - 25 % | c. 25 - 50 % |
| d. 50 - 75 % | e. 100 % | |

SECTION 4 - Future contact

A. For further important information about Canadian Printing Industries Sector Council initiatives please provide your contact information.

Address _____
City _____
Town _____
Province _____
Postal Code _____
Telephone _____
Email _____

TRAINING INSTITUTIONS

SECTION 1 - Demographics

A. Please provide the name of your institution. This information will be included into a Compendium of Education and Training for Printing and Graphic Communications.

B. How would you categorize your institution?

University

College

Technical School

C. In which province or territory is the main campus of your institution located?

Newfoundland

PEI

Nova Scotia

New Brunswick

Quebec

Ontario

Manitoba

Saskatchewan

Alberta

British Columbia

Yukon

Northwest Territories

Nunavut

SECTION 2 - Education and Training for the Printing and Graphics Communications Sector

The print and graphic communications industry is Canada's longest established and most widely dispersed information technology-based manufacturing industry. The industry includes printing and imaging establishments, bindery operations and allied industries such as equipment manufacturers. Following is a list of the types of job titles and production areas that represent the print and graphic communications industry.

- Graphic Designers
 - Pre-press Operators
 - Printing Processes
 - Binding and Finishing
- Gravure
Flexography
Lithography
Silk screening
Digital

A. How familiar would you say your institution is with the print and graphic communications industry?

Very

To some degree

Not at all

B. Do you currently offer training programs related to the printing and graphics communications industry?

Yes

No

If No

C. Did your institution discontinue programs related to the printing and graphics communications industry?

Yes

No

D. If your institution has discontinued programs related to the printing and graphics communications industry, when were they discontinued?

E. If your institution has discontinued programs related to the printing and graphics communications industry, why were they discontinued?

F. Do you plan to offer programs related to the printing and graphic communications industry in the near future?

- Yes No

G. When would you be adding these programs?

- Within 1 year Within 2 years

H. What types of programs to you plan to add?

- Technical

Please specify _____

Why

- Demand Trend Industry recommendation

- Creative

Please specify _____

Why

- Demand Trend Industry recommendation

- Business

Please specify _____

Why

- Demand Trend Industry recommendation

If Yes

**I. What types of programs do you offer that relate to the print and graphic communications industry?
Following are some examples of course titles but please be specific, using the "Other" category if at all possible.**

- | | | |
|--|---|--|
| <input type="checkbox"/> Graphic Design | <input type="checkbox"/> Graphic Communications | <input type="checkbox"/> Graphic Communications and Publishing |
| <input type="checkbox"/> Technology in Graphic Communications | <input type="checkbox"/> Communications Multimedia | <input type="checkbox"/> Print media communications |
| <input type="checkbox"/> Digital Communications and Media/Multimedia | <input type="checkbox"/> Design and Visual Communications | <input type="checkbox"/> Print media productions |
| <input type="checkbox"/> Digital Media Technologies | <input type="checkbox"/> Printing and Digital Technology | <input type="checkbox"/> Information Technology - Interactive |
| <input type="checkbox"/> Multimedia and Design | <input type="checkbox"/> Interactive Arts and Technology | <input type="checkbox"/> Multimedia Design and Production |
| <input type="checkbox"/> Desktop Publishing | <input type="checkbox"/> Communications Technology Fundamentals | <input type="checkbox"/> Print Management |
| <input type="checkbox"/> Other _____ | | |
-
-

J. How do the programs you offer relate to the job titles and production areas we have identified for the industry?

- | | | |
|--|--|--|
| <input type="checkbox"/> Graphic Designers | <input type="checkbox"/> Pre-press Operators | <input type="checkbox"/> Printing Processes |
| <input type="checkbox"/> Gravure | <input type="checkbox"/> Flexography | <input type="checkbox"/> Lithography |
| <input type="checkbox"/> Silk screening | <input type="checkbox"/> Digital | <input type="checkbox"/> Binding and Finishing |

K. Under what faculty or program area are these programs currently offered?

- a. _____
- b. _____
- c. _____

L. What are the program admission requirements?

- a. _____
- b. _____
- c. _____

M. What is the program format?

- | | | |
|---|------------------------------------|--|
| <input type="checkbox"/> Full time | <input type="checkbox"/> Part time | <input type="checkbox"/> Cooperative (alternative institutional training with related work experience) |
| <input type="checkbox"/> Continuing Education | | |

N. What is the duration of the program?

- _____
- _____
- _____

O. In what language(s) are the programs offered?

English French

Other (please specify) _____

P. What type of certification is granted?

Degree Diploma Certificate

Q. Please use the space below to provide any additional comments regarding training, print and graphic communications industry, and your institution.

SECTION 3 - Future contact

A. For further important information about Canadian Printing Industries Sector Council initiatives please provide your contact information.

Address _____

City _____

Town _____

Province _____

Postal Code _____

Telephone _____

Email _____