

Labour Market Partnership Skills Assessment for Eastern Ontario

Project Report
for the

Ministry of Training, Colleges, and Universities

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Introduction

The Ontario Ministry of Training, Colleges, and Universities awarded a contract to the Eastern Ontario Manufacturers Network (EOMN) to survey the skills needed by Eastern Ontario manufacturers so that they can increase the Eastern Ontario economy.

The EOMN selected Algonquin College to conduct the survey and to analyze the results. Students were hired for the survey which was completed through the Department of Applied Research.

The survey region included the City of Ottawa and the counties of Lanark, Leeds & Grenville, Lennox & Addington, Prescott & Russell, Renfrew (partial), and Stormont, Dundas, & Glengarry. The Ontario Government 2009 Population estimates indicated the survey region would grow by 43,000 (3%) the next three years and by 150,000 (10%) by 2020. These population increases will further stretch training resources.

The project includes two surveys: one for manufacturing companies and one for individuals. The survey of individuals was included to ensure there was an opportunity for unemployed manufacturing workers to express their skills needs. The initial survey was completed in July / August, 2010. A second survey was completed in November 2010 to increase the participation. 600 manufacturing companies in the survey region.

As depicted in the following chart, there is a very diverse manufacturing sector in the survey region

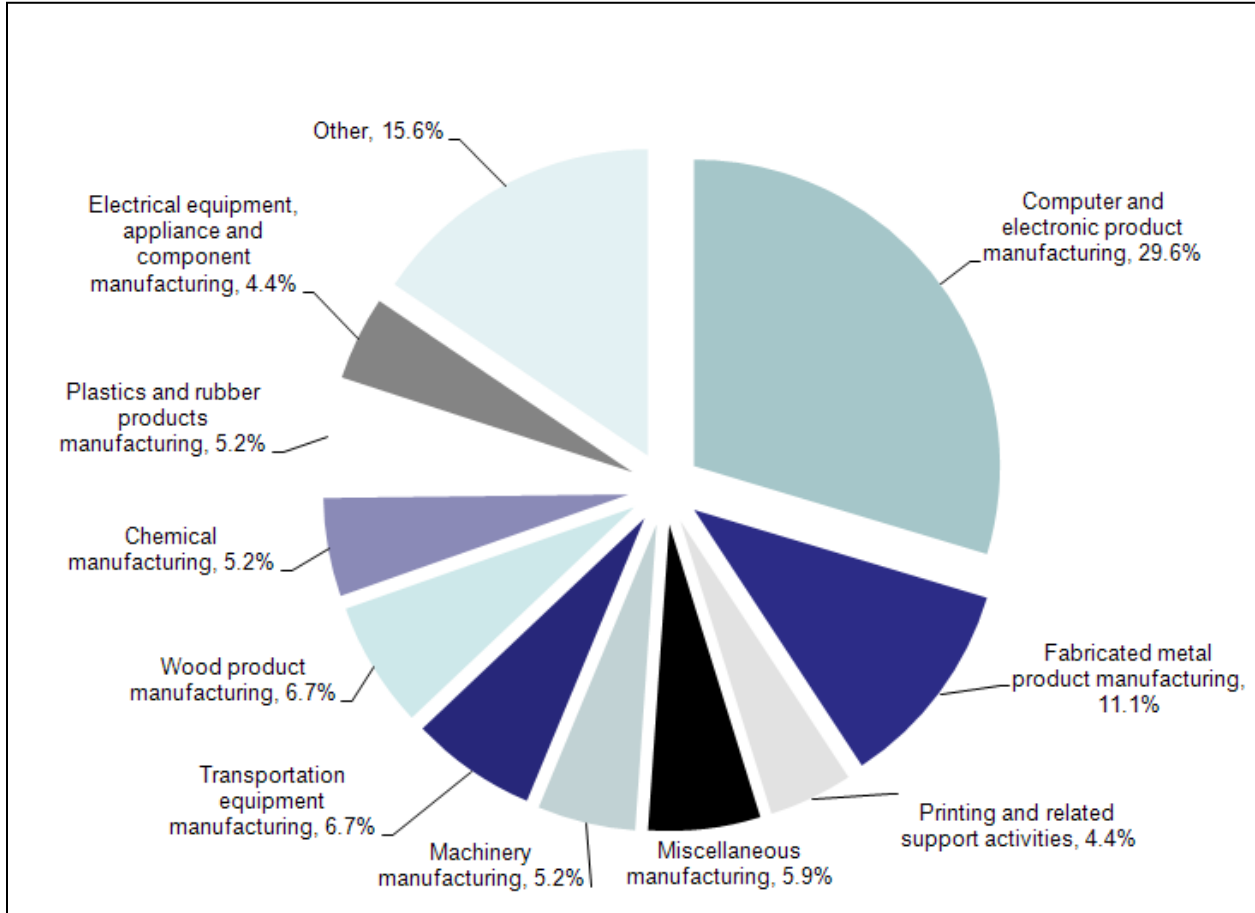


Figure 1: Survey Region Manufacturing Sectors

Companies are typically small with approximately 50% of the companies with fewer than 20 employees and 80% with fewer than 50 employees. However, the huge contribution to GDP relative to employment size indicates a very productive, highly skilled sector.

Many economic development and support programs, such as the Smart Program and Yves Landry Foundation, require a minimum company size, typically at least ten employees. As these data indicate, the minimum company size excludes a significant proportion of small companies, companies that need the support to develop their products and management expertise.




Figure 2: Company Size

Major Findings

1. Manufacturers plan to increase employment approximately 5% in the next three years. The survey was completed in the summer of 2010, a time of great economic uncertainty. As a result, the 5% growth is considered to be very conservative.
2. Many technical skills are important when hiring. In order of Importance:

Skill	Response Rate
• Engineering	46%
• Computer & Electronics	39%
• Specific Skills	38%
• Technical Diploma	34%
• Quality Management	31%
• General Business	21%
• Supply Chain Management	16%
• Business Management	15%
• Other	22%
3. The greatest skills needs identified by manufacturers are the soft skills. Since the technical skills are valued most when hiring, the soft skills (management, business, communications) are the most important for continuing development.

From most needed to least needed:

- Communication
 - Quality Management
 - Supply Chain
 - Operation Management
 - Business
 - Management
 - Advanced Manufacture
 - Green Technology
 - Health & Safety
 - Technical
 - Trade Specific
- 
- Most needed
- Least needed

4. For every company that uses the Apprenticeship program, there are two companies that could use the program but do not. A variety of reasons were used. Some lacked information. Several anecdotal comments included:
 - There was no journeyman in the company and, therefore, the company was not allowed to participate.
 - The Ministry emphasis is on enrolment in the apprenticeship program without a Ministry commitment to foster successful completion.
 - Companies that wish to participate in the apprenticeship program must devote a significant amount of their time to select a candidate, accept the risk that the apprentice may not integrate well into the company, and then spend significant time training the apprentice. For hands-on owners in very small companies, this diversion from running

the company is too great an obstacle to participation. A pre-screening process would facilitate participation.

5. A variety of training approaches is needed, including:

Preferred Training Method	Response Rate
• On job	82%
• On site	59%
• Online	36%
• Focused topics	36%
• In class	32%
• Apprenticeship programs	30%
• Conferences	28%
• Hybrid	24%

6. The skills needs are not consistent throughout all municipalities, possibly a reflection of the diverse industry sector distribution. There is no single set of training priorities that will satisfy all municipalities.

Main Categories	Ottawa	Leeds & Grenville	Lanark	Prescott & Russell	Stormount, Dundas & Glengarry	Renfrew
Communication	■	■			■	■
Quality Management	■		■			■
Advanced Manufacturing			■	■	■	
Operations Management		■		■		
Supply Chain	■			■		
Business			■			■
Green Technology		■			■	

7. There is a discrepancy between the industry sector jobs available and the sectors preferred by individuals. For example, 50% of individuals prefer to work in electronics which has 20% of the employment. Conversely, 10% of the employment is in wood products but nobody indicated a preference for that sector. While this may be a sampling problem due to a low individual participation, it may also highlight a significant difference between training that is popular and training that is needed to increase economic output.

8. Other anecdotal feedback included:

- There is an inadequate supply of electronics assembly personnel. The 48-week electronics assembly program is no longer offered.
- There is an insufficient supply of trained machinists, resulting in the need to travel to Windsor to interview candidates.
- CAD and CNC personnel required a large training investment in software such as ProEng. Once trained, these employees find that they can earn more with other companies, another indication of an insufficient supply.
- Students who leave high school without an effective introduction to machining, drafting, woodworking, electronics, and other trades are much less likely to recognize the trades as a career opportunity. Training needs to start in high school so that students are better prepared to make effective post-secondary choices.

Recommendations

1. A plan is required to translate these findings into actions that will provide an adequate supply of employees with the appropriate skills to foster economic development in Eastern Ontario.
2. An annual survey will enhance Ministry success by updating skills needs and trends that are so important to understanding the evolving needs.
3. Focused surveys with very few questions, less than 10, will result in greater participation. These surveys can be used to provide insight into specific areas such as the Apprenticeship Program, the current need for trained electronics assembly personnel, and the need to travel to interview skilled trades people.
4. Manufacturing's economic contribution justifies the effort to promote manufacturing as a viable career choice and to promote the need for associated skills training within high schools, colleges, and universities so that the economic development of Eastern Ontario is maximized.

Next Steps

1. Develop and implementation plan, possibly in conjunction with the Ministry of Economic Development and Trade, to:
 - Promote manufacturing as a career choice in the High Schools
 - Promote the need for manufacturing skills training in colleges and universities.
2. Provide on-going survey support to:
 - Maintain knowledge of the size of the manufacturing industry in Eastern Ontario and its contribution to the GDP
 - Determine key concerns for the manufacturing community
 - Explore the key concerns of the manufacturing community from a training perspective.
3. Enhance Work Experience Opportunities during training:
 - Investigate and address Apprenticeship Program issues to increase corporate participation and successful apprentice completion.
 - Increase co-op program availability and use so that non-trades students have access to work experience development.

Appendices

1. EOMN Labour Skills Presentation (Separate File)
2. Algonquin College Corporate Final Report (Separate File)
3. Algonquin College Final Report Corporate Appendices (Separate File)
4. Algonquin College Individuals Final Report (Separate File)