

Issue Brief

Workforce Competitiveness: Business Needs for International Knowledge, Skills & Abilities

Analysis and Evaluation

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Introduction

Minnesota businesses are experiencing a period of unprecedented change in the marketplace, with increased involvement in the global economy via exporting, importing and foreign direct investment. A recent survey by the Minnesota Department of Employment and Economic Development (DEED)¹ showed that companies of all sizes engage in these activities and that many anticipate increasing these activities within the next five years.

Exporting and foreign direct investment contribute significantly to Minnesota's economy. Minnesota companies exported more than \$20 billion in manufacturing, agriculture and services-related exports in 2004², and these exports are growing. The state's manufactured exports alone were valued at \$11.8 billion in 2004, growing by 22 percent (adjusted for inflation) between 1998 and 2004. In contrast, U.S. manufactured exports grew by 2.5 percent (adjusted for inflation) during the same period. U.S. affiliates of foreign companies employed 84,600 people and invested \$10.8 billion in gross plant, property and equipment in Minnesota in 2003.³

Increasingly global activity requires that the workforce be skilled – through education prior to employment or through training on the job – to excel in an international business environment. To better understand the international business workforce needs of businesses in Minnesota, DEED and Metropolitan State University⁴ collaborated on a survey of Minnesota businesses known to be involved in international business through importing, exporting or investment activities.

The study examined international business knowledge, skills, and abilities (KSAs), second languages that businesses need for their employees and the academic or professional qualifications required for such skills, and the areas in which businesses are willing to provide training and whether related costs were reimbursed.

Highlights of Results

The survey was sent to a targeted pool of 1,200 businesses in Minnesota identified as being involved or having an interest in international business and trade. This analysis summarizes the results of the 100 respondents (of all 294 respondents) who were “most active” in international business areas – as defined by having one or more professional employees involved in international business activities, and hence more likely to be most knowledgeable about these business needs.

- About half of the respondents had hired an employee in a professional international business position within the past year.
- Responses were mixed on degree requirements. While many respondents required Bachelor's degrees in international business particularly for management and experienced positions, many others had no such requirements for these positions.
- New employees in experienced or management positions were more likely to possess an international business background than reassigned employees.
- Employees most frequently need to know Spanish, Chinese or French.
- The five most frequently mentioned essential skills needed for hire were general skills: writing skills, teamwork, computer software skills, presentation skills and project leadership. Many companies were willing to provide and pay for training related to international business KSAs.
- Current employees were more likely to be eligible for training than new employees.
- Almost 60 percent of respondents fully paid for or reimbursed tuition and fees for international business-related professional development in the form of job-specific training. More than 40 percent also fully paid for or reimbursed costs of continuing education or professional qualification.
- Over the next five years, many respondents expect to increase their training budgets, particularly in job-specific training and continuing education. Few respondents expect a decrease in their budgets for training costs.

Related Research

The wage gap between high school and college graduates is well documented. The wage advantage is measurable, whether postsecondary education involves four-year college or vocational degrees.^{5 6}

However, there is limited survey research on the needs of businesses for particular advanced KSAs derived from advanced training. Such research is important in order to improve training and education programs so that students or current workers are better prepared for the workplace.

A closely related survey of businesses in England examined the needs of small and medium-sized businesses as their operations became increasingly global.⁷ About 75 companies were interviewed and divided into five groups – ranging in size from five to 26 firms – based on their experience with international business activities.

The types of resources and support most needed for strategic planning, staffing and market research needed by companies in each of these small groupings were identified. For example, companies with the most international experience needed more assistance in developing management skills; companies with limited international experience needed help with strategic planning; and companies with no international experience needed the most assistance in areas of marketing intelligence and strategic planning. However the value of the results is limited because of the small sub-samples.

Survey studies of business leaders initiated by schools in New Mexico aimed to identify local businesses' need for KSAs in technical and vocational areas in order to help the schools better tailor programs and curricula to businesses' needs.^{8 9} Other surveys have asked about the need for “business analysis” skills¹⁰ or foreign language skills and showed that businesses considered these types of skills to be valuable in their employees.

A survey administered by a local economic development agency in Colchester, Nova Scotia, is in the process of assessing businesses' need for training and skills enhancement – in the areas of financial management, regulatory areas and sales and marketing – in order to develop relevant training initiatives.¹¹

While this is a limited review of existing studies, it appears that research with a similar intent is not extensive. This study aims to broaden understanding of international business KSAs needed by businesses, particularly in Minnesota, and identify training and education areas that would best address these needs.

Methodology

The survey instrument was designed to determine whether companies actively sought to hire new employees with specific international business-related KSAs; which KSAs were particularly valued; and whether companies were prepared to financially support employees who needed to acquire such KSAs.

The survey instrument was mailed¹² in May and June 2005 to 1,210 businesses known to be involved in exporting or importing activities. The surveys were addressed to the Director of Human Resources when a specific name was not available. Most of the records were obtained from the *Minnesota Directory of Manufacturers* (1,014), and were limited to businesses with employment of at least 20 people. Additional records were obtained from printed publications of importers and exporters (42) and the Midwest Global Trade Association's list of corporate members (154) in an effort to add non-manufacturing businesses known to be involved in exporting or importing activities to the survey sample.

There were two mailings and follow-up phone calls to about 300 additional randomly chosen businesses that had not yet responded. After accounting for 11 non-useable surveys (due to bad addresses), there were 294 returned surveys for a response rate of 24.5 percent.

By two measures, the entire group of respondents and the sub-sample of 100 respondents most active in international business were representative of the businesses covered in the survey pool. The differences in the distributions between the entire group of 294 respondents and the 1,200 businesses receiving the survey, and between the 100 respondents “most active” in international businesses and the 1,200 businesses receiving the survey were not statistically significant at the 99 percent level of confidence based on a Chi-square test, whether based on primary three-digit NAICS industry or overall employment size.

Because the survey pool does not represent the population of all businesses in Minnesota and there were relatively few respondents, the results should be interpreted with caution. However, the limited results do offer some guidance on the international business KSA needs of the business community in Minnesota.

Results

International Business Experience

There were 147 respondents (50 percent of all 294 respondents) who said that their business was involved in at least one activity related to exporting or importing goods or services, or investing in a foreign entity.¹³

The most commonly performed activities were exporting goods (42 percent) and importing goods (28 percent) as shown in Figure 1. Less than 10 percent of respondents exported services (9 percent), invested in a foreign entity (7 percent) or imported services (6 percent).

Many respondents were very experienced, with 10 or more years of experience in the two most common activities, exporting and importing goods. Fewer respondents had experience in exporting and importing services and foreign investment. Importing services is also known as offshore outsourcing of services. (See Figure 2.)

Figure 1. International Business Activities of Respondents

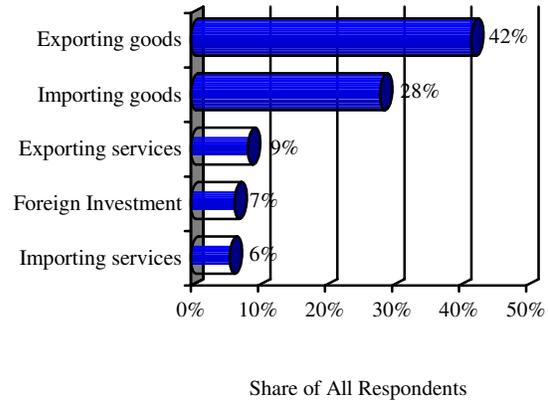
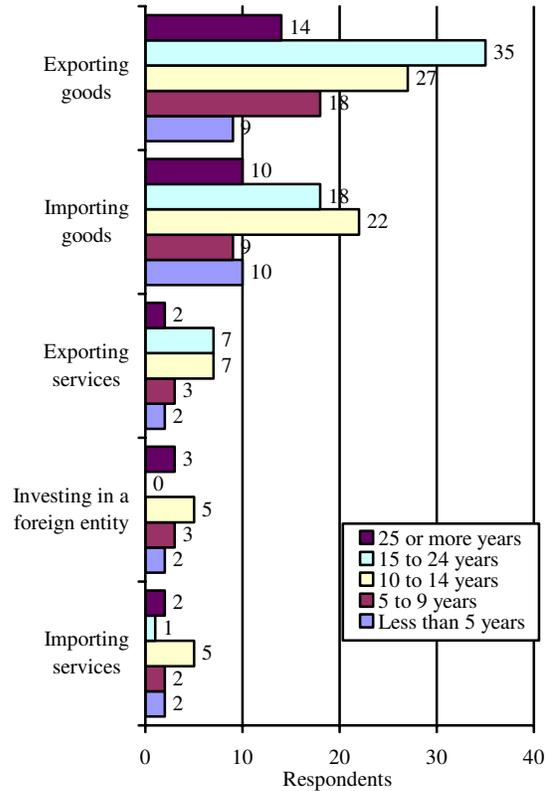


Figure 2. Experience in International Business Activities



International Business Employment

The 294 respondents represented businesses of all sizes: 42 percent were businesses with 20 to 49 employees, 23 percent were businesses with 100 to 249 employees and 18 percent were businesses with 50 to 99 employees (according to the original sources for the business records). Small businesses (with fewer than 100 employees) represented 62 percent of the respondents.

Table 1. Employment Size of Respondents

Employment	Respondents	Distribution
Less than 20	6	2.0%
20-49	124	42.2%
50-99	56	19.0%
100-249	69	23.5%
250-499	24	8.2%
500 or more	14	4.8%
Unknown	1	0.3%
Total	294	100.0%

Respondents indicated whether they had employees holding professional occupations related to international business activities. Of the 294 respondents, 184 respondents (or 63 percent of all respondents) had no employees directly involved in any international business activities, 100 respondents employed one or more people, and 10 did not answer the question.

The 184 respondents who indicated no international business employees were asked to stop completing questions and to return the survey.

The 100 businesses that employed one or more people in professional occupations involving international business activities – defined as being “most active” in international business activities – represented 34 percent of all respondents. About 82 percent of these respondents were manufacturers and 45 percent were small businesses (with fewer than 100 employees overall).

Another perspective is that two out of three responding companies involved in international business (i.e. 100 out of 147 respondents) were “most active” in international business and had

one or more professionals directly employed in international business areas.

The remainder of the results summarizes the responses of the 100 respondents who were “most active” in international business by employing one or more professionals in an international business-related occupation.

Unless otherwise specified, the following tables and charts show the number of respondents, out of the 100 respondents most active in international business.

Businesses employing 1 or 2 people made up the largest group of respondents (33 respondents), followed by those that employed 3 to 5 people (29 respondents) and those that employed 10 or more people (27 respondents) in these professional international business-related positions.

Figure 3. International Business Employment

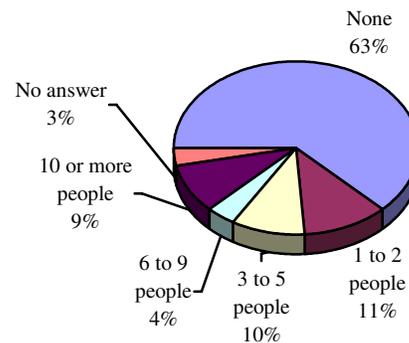
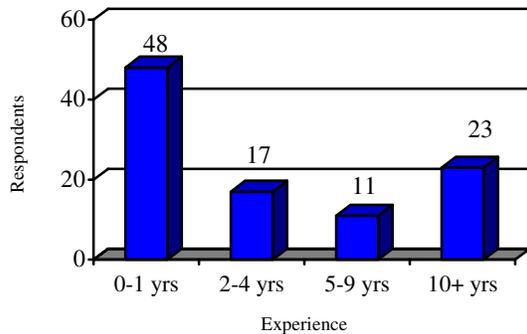


Table 2. International Business Employment by Overall Employment Size

Total Employment	Int'l Business Employment			
	1-2	3-5	6-9	10+
Less than 20	0	0	0	0
20-49	15	14	3	0
50-99	8	5	1	2
100-249	6	9	3	11
250-499	3	0	3	5
500 or more	1	1	1	8
Unknown	0	0	0	1

Almost half of respondents (48 percent) who employed professionals in jobs related to international businesses activity had most recently filled such a job within the past year. In contrast, for about one-quarter of international business respondents, it had been 10 or more years since the last hire.

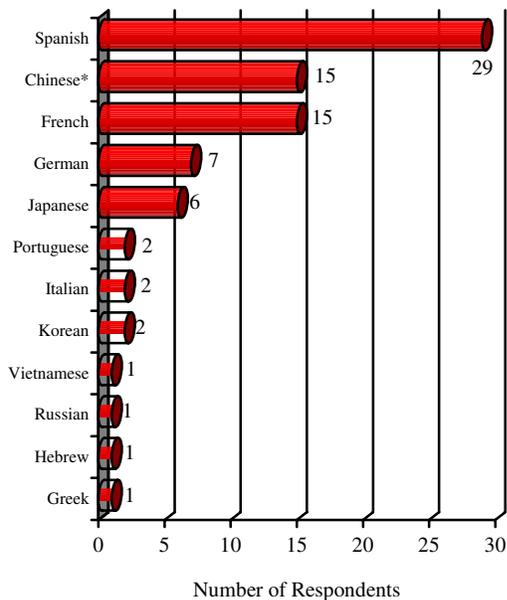
Figure 4. Time Period of Most Recent Hire of International Business Professionals



International Business Skills

Companies most frequently required or desired that their employees know Spanish (29 respondents), followed by Chinese (15 respondents) and French (15 respondents).

Figure 5. Foreign Language Skills



*Includes five respondents who specified Mandarin and one specified Cantonese.

Respondents rated the need (on a three-point scale ranging from “Essential” to “Not Needed”) for new or current employees to have 30 different KSAs, mostly in international business. (See Appendix for the complete list of KSAs.)

The five most frequently mentioned essential skills needed for hire were general skills: writing skills, teamwork, computer software skills, presentation skills and project leadership, as shown in Table 3.

The next five most important skills needed for hire were related to international business skills and were essential for hire for about one-quarter of respondents. These skills involved direct sales (exporting, distributorships), importing and sourcing or purchasing strategies, global sales contracts and negotiation, global transportation/logistics, and strategic planning.

Table 3. Top 10 Essential Skills Needed for Hire

Skill	Respondents
29. Writing skills	47
28. Teamwork	44
26. Computer software skills (e.g., MS Office, database management)	43
30. Presentation skills	38
27. Project leadership	35
7. Direct Sales: exporting, distributorships	27
8. Importing and sourcing or purchasing strategies	24
12. Global sales contracts (e.g., INCOTERMS), contract negotiation	21
15. Global transportation and logistics (e.g., storage, shipping)	20
5. Strategic planning	19

Essential skills for which companies were willing to train their employees were more practical-type international business skills such as export and import-related skills (documentation, CE Mark), cultural differences, and country or region specific knowledge, as shown in Table 4.

International business knowledge areas that were essential to a position and in which companies were willing to provide or support training included global sales contracts and contract negotiation, global transportation and logistics, export financing tools and programs and global customer services.

Respondents tended to have a greater willingness to provide training for some international business skills areas as needed by employees, rather than requiring such skills as a condition for employment.

Table 4. Essential Skills for Which Companies Are Willing to Train

Skill	Respondents
16. Other export, import skills (e.g., CE Mark, documents, NAICS/HS)	45
22. Cultural differences (e.g., cross-cultural communications, customs)	43
24. Country/region-specific knowledge	41
12. Global sales contracts (e.g., INCOTERMS), contract negotiation	40
15. Global transportation and logistics	40
10. Export financing (e.g., Ex-Im Bank, SBA, letters of credit)	39
4. Foreign exchange market, exchange rate regimes	39
17. Global customer services	38
9. Corporate finance	38
18. Legal areas	36

Respondents most frequently mentioned areas listed under international economics (trade theory, political risks, bilateral and multilateral trade agreements and foreign exchange markets) as least needed KSAs. Other KSAs that were not needed were areas such as advertising and marketing and production. (See Table 5.)

Table 5. Least Needed (“Not Needed”) Skills

Skill	Respondents
3. Political risks, differences in political economies	42
1. International trade theory	42
6. Joint ventures, foreign investment, branches	40
14. Other global business (e.g., R&D, human resources)	40
2. Bi- or multi-lateral trade agreements	32
18. Legal areas	31
13. Global advertising and marketing	28
10. Export financing (e.g., Ex-Im Bank, SBA, letters of credit)	27
11. Global production	27
4. Foreign exchange market, exchange rate regimes	26

Interestingly, three areas – foreign exchange market/exchange rate regimes, export financing and legal areas – appeared on both the Top 10 “Not Needed” KSAs list and one of the Top 10

Essential list (either Needed for Hire or Willing to Train). This mixed result may indicate that expertise and knowledge of these international economics areas may vary by company operations.

These survey findings have real implications for job-seekers and providers of essential job-related KSAs, in terms of general education requirements and of specific international business skill areas.

International Business Background

Companies were asked to indicate whether employees promoted internally tended to have the required international business skills background, and to identify all applicable situations. The responses showed that absence of international business skills was not always a problem for promotion into international business jobs, and that other KSAs and experience were more critical.

When companies promoted current employees into professional occupations – whether entry-level, experienced or management – related to international business, just over one-quarter of these employees “usually” had the needed international business background.

Table 6. International Business Skills of Promoted Employees

Promoted Employees	Number of Respondents		
	Usually	Sometimes	Rarely
Entry-level	22	22	43
Experienced	24	36	24
Management	23	36	24

Most commonly promoted entry-level employees “rarely” had international business skills (43 respondents) and experienced and management employees “sometimes” had these skills (36 respondents).

However, when companies hired new employees into professional occupations related to international business, most commonly, experienced (38 respondents) and management employees (39 respondents) “usually” had the needed international business skills.

This suggests that these employees were specifically hired for their international business KSAs and experience.

New entry-level employees “rarely” possessed these skills (37 respondents), similar to promoted employees.

Table 7. International Business Skills of New Employees

New Employees	Number of Respondents		
	Usually	Sometimes	Rarely
Entry-level	22	21	37
Experienced	38	28	16
Management	39	24	18

Businesses were also asked about their academic or language requirements for employees. Most frequently, for entry-level positions, respondents did not have any minimum international business academic and language requirements (44 respondents), although a good number required a Bachelor’s degree in these areas (27 respondents). (See Table 8.)

Table 8. International Business Skills Required by Employee Level

	Assoc. or Cert.	B.A., B.S.	M.A., Ph.D.	Foreign language	No minimum
Entry-level	16	27	3	12	44
Experienced	8	40	8	27	31
Management	3	41	14	22	32

Respondents had similar responses for experienced and management professional occupations related to international business, with a stronger need for a Bachelor’s degree (40 and 41 respondents, respectively) than a second language (27 and 22 respondents, respectively). In contrast, many (31 and 32 respondents, respectively) also stated that they had no such requirements for experienced and management-level positions.

International Business Skills Training

The survey instrument included the following definitions. Job-specific training was “training specific to a job, but generally not leading to professional certification and typically focusing on practical skills”. Professional qualification training was “training leading to professional certification, including training required to maintain a professional license”. Finally, continuing education (for credit) was “training leading to a degree program, typically at a four-year college or university”.

The businesses were asked about eligibility for training (new or current employees) and the types of training for which employees were eligible. Current employees were much more likely to be eligible for training than new employees for job-specific training (79 percent of respondents for current employees, versus 58 percent of respondents for new employees). Most respondents permitted job-specific training to new and current employees.

Respondents were also more likely to permit current employees than new employees to attend professional qualification and continuing education training as shown in Table 9 below. While the investment by a company in a new hire accounts for expectations of certain KSAs, current employees already reflect substantial human resource investment in terms of experience and on-the-job training by the company.

Eligibility for second language training was similar for both new and current employees, but was also permitted by the fewest businesses across all types of training.

Table 9. Eligibility for Training

Eligibility for Training	Number of Respondents	
	New employees	Current employees
Job-specific training	58	79
Professional qualification	38	54
Continuing education	41	57
Second language training	32	41

Respondents reported that training mainly occurred in a classroom, rather than online. An in-house training unit (36 respondents) was the most frequent training provider, followed by educational institutions (31 respondents) and private external vendors (27 respondents).

Relatively few respondents reported experience with online training compared to classroom training. However, the responses may merely reflect that online methods and related technology are far less prevalent and accessible than classroom methods.

Table 10. Mode and Vendor for Training

	Classroom	Online
In-house training unit	36	6
Private external vendor	27	7
Educational institution	31	10
Other	5	2

Training-Related Expenditures

Companies were more likely to fully pay for or reimburse tuition and fees for international business-related professional development when job-specific training was involved (57 respondents), as shown in Table 11.

Table 11. Reimbursement or Payment of Training-Related Tuition or Fees

	Full	Part	None
Job-specific training	57	15	8
Professional qualification	41	16	15
Continuing education	47	17	14
Second language training	39	14	18

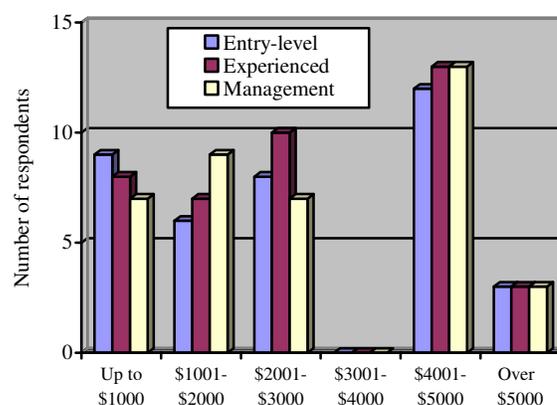
More than 40 percent of the respondents fully covered the costs of continuing education (47 respondents) and professional qualification training (41 respondents). Further, 39 respondents reimbursed second language training in full. Two companies also added that they provided partial reimbursements only, at the rate of 67 percent and 75 percent of tuition and fees related to any training.

Companies were asked to state the maximum annual amount of company-paid or company-reimbursed tuition or training fees, per employee by position, whether entry-level, experienced or

management. Only about 40 percent of respondents specified their training allowances.

Maximum annual reimbursements ranged substantially – from less than \$1,000 to more than \$5,000 per employee. Based on the responses, it did not appear that the amount of reimbursement of tuition or fees was linked to the experience level of the employee but more likely varied by company-related factors. (See Figure 6.)

Figure 6. Maximum Annual Reimbursement of Employee-Training Costs Per Employee



In an attempt to gauge expectations regarding future international business developments and the related training needs, companies were asked about their financial commitment to training for their staff over the next five years.

Forty-two businesses expected to increase their spending on job-specific training and 35 businesses expected to increase their spending on continuing education. Fewer businesses expected to increase their expenditures in continuing education and second language training (27 and 24 respondents, respectively). About 40 respondents said that their budget would remain the same for each type of training.

Table 12. Five-Year Forecast for Training Budget by Type of Training

	Up	Same	Down
Job-specific training	42	39	2
Continuing education	27	43	2
Professional qualification	35	40	2
Second language training	24	41	2

Final Thoughts

Minnesota businesses responding to the survey are globally active in business and are hiring employees directly into international business-related jobs. These businesses continue to require strong general workforce skills, such as presentation skills, team leadership skills and writing skills, especially when hiring. Some international business skills are also essential for hire for some respondents.

The results suggest that businesses probably tend to hire employees with strong basic skills and, as the need arises, are willing to provide the international skill enhancement opportunities to their employees and to cover most or all of training-related costs.

Businesses are recognizing the importance of training their employees in international business areas. It is especially important to note that about half of respondents intend to increase their job-specific training budgets during the next five years.

The survey identified some key international business KSAs that businesses considered essential. Many companies further noted that they were willing to provide training.

Organizations involved in training may find it helpful to explore some of the areas identified in this analysis through an alternative format such as focus groups or one-on-one interviews with companies. Research on business needs for KSAs in specific industries may also yield interesting results.

The survey results may be helpful to training organizations and educational institutions in fine-tuning existing programs and developing new programs in international business areas, including second languages, whether for continuing education, job-specific training or professional qualification programs.

Related DEED Resources

The Minnesota Department of Employment and Economic Development provides several services related to topics discussed in this report.

More detailed information on occupations in Minnesota – such as data on employment, wages and industry demand by specific occupational groups – is available from the Labor Market Information office (www.deed.state.mn.us/lmi/tools.htm). Publications further analyzing demand for particular careers and skills are also available (www.deed.state.mn.us/lmi/publications.htm).

The Minnesota Trade Office periodically sponsors education and training programs on the exporting process, exporting tools and techniques, and industry-, country- or region-specific seminars (www.exportminnesota.com/exporttraining.htm). The Calendar of Events also includes information on trade missions.

The Analysis and Evaluation office collaborated with Minnesota Technology, Inc. on a study that examined the Minnesota global business experience and its impact on the state's economy. The issue brief *Gearing Up and Going Global: Experiences of Minnesota Businesses* presents results from a survey that asked Minnesota businesses about their global business practices, such as exporting, importing and outsourcing abroad (www.deed.state.mn.us/facts/global.htm).

Workforce Competitiveness: Business Needs for International Knowledge, Skills & Abilities

Appendix

Complete Table of Responses Regarding the Need for 30 Listed Knowledge, Skills and Abilities (KSA)

Some of the KSAs were derived from chapter and section headings typically found in standard international business textbooks. Respondents were asked to rate their for these KSAs on a scale of 1 (Essential) to 3 (Not Needed). If respondents rated an area as essential, respondents were further asked to state whether it was a requirement for hire or whether the company was willing to provide training.

Knowledge, Skills and Abilities	1 (Essential)		2	3 (Not Needed)
	Needed for hire	Willing to train		
Background on international economics				
1. International trade theory	13	20	16	42
2. Bilateral, multilateral trade agreements (e.g. NAFTA, EU, WTO)	16	25	17	32
3. Political risks, differences in political economies between countries	8	23	17	42
4. Foreign exchange market, exchange rate regimes	11	39	14	26
Background on international business				
5. Strategic planning	19	34	13	22
6. Joint ventures, foreign investment, branches	11	27	11	40
7. Direct Sales: exporting, distributorships	27	33	15	18
8. Importing and sourcing or purchasing strategies	24	31	13	24
9. Corporate finance (e.g., accounting, taxation, financial management)	15	38	13	24
10. Export financing (e.g., Ex-Im Bank, SBA, letters of credit)	15	39	9	27
11. Global production (e.g., materials management, ISO certification)	18	30	16	27
12. Global sales contracts (e.g., INCOTERMS), contract negotiation	21	40	11	19
13. Global advertising and marketing (e.g., trade leads)	16	35	10	28
14. Other global business (e.g., R&D, human resources)	8	24	19	40
15. Global transportation and logistics (e.g., storage, shipping)	20	40	15	17
16. Other export, import skills (e.g., CE Mark, documents, NAICS/HS)	11	45	15	20
17. Global customer services, including after-sales	12	38	17	22
Other related business areas				
18. Legal areas (e.g., intellectual property rights, distributor agreements)	9	36	13	31
19. Export control laws, regulatory compliance, licensing, inspections	18	33	16	24
20. Import control laws, regulatory compliance, inspections	16	33	17	24
21. Business ethics (e.g., corporate responsibility, fair labor practices)	17	36	15	22
22. Cultural differences (e.g., cross-cultural communications, customs)	14	43	13	20
23. Market research methods (e.g., techniques, sources, reports)	15	35	16	23
24. Country- or region-specific knowledge	10	41	18	18
25. Background checks on foreign companies (e.g., due diligence, credit)	10	35	20	23
Other General Areas				
26. Computer software skills (e.g., MS Office, database management)	43	30	8	11
27. Project leadership	35	30	12	13
28. Teamwork	44	26	10	10
29. Writing skills	47	25	7	11
30. Presentation skills	38	32	8	11
31. Other, please specify:	4	3	4	5

Note: Shading in the ratings columns indicates the ten most frequently chosen responses.

Endnotes

¹ Ho-Kim, T. *Gearing Up, Going Global: Experiences of Minnesota Businesses*, Minnesota Department of Employment and Economic Development, 2005.

² Based on DEED estimates of Minnesota exports of services, derived from U.S. exports of services and state production shares of services (because official state-level data are not available). State-level exports of agricultural commodities are estimated by the U.S. Department of Agriculture.

³ Preliminary data for 2003. *Operations of U.S. Affiliates of Foreign Companies*. U.S. Bureau of Economic Analysis, U.S. Department of Commerce.

⁴ The Analysis and Evaluation Office in the Information and Marketing Division of DEED collaborated with Dr. Roger Prestwich, Director of the International Business Program of the College of Management at Metropolitan State University in Minneapolis. Other individuals from DEED and MNSCU also provided valuable feedback.

⁵ Levy, F. and R. J. Murnane, "U.S. Earnings Levels And Earnings Inequality: A Review Of Recent Trends And Proposed Explanations", *Journal of Economic Literature*, 1992 is a review of the research on the broader notion of wage returns to education

⁶ Baily, T. and G. Kienzl and D. E. Marcotte, "The Return to a Sub-Baccalaureate Education: The Effects of Schooling, Credentials and Program of Study on Economic Outcomes", U.S. Department of Education, 2002 uses U.S. empirical data from 1990 through 2000. This paper also reviews other older empirical studies.

⁷ Lloyd-Reason, L. and T. Mughan, "Competing Effectively in International Markets: Identifying Need, Sharing Best Practice and Adding Value to the Eastern Region through Skills and Knowledge Transfer", Anglia Polytechnic University, 2003. The total number of respondents is not clear but it appears that the responses are mainly based on interview with about 75 companies, although an initial survey by mail was sent to 1,200 companies.

⁸ The business leaders mainly emphasized general workforce or soft skills such as work ethic, basic skills, oral communication, initiative and attendance as most lacking among their employees. Programs relating to general workforce skills, business programs and applied technologies in electronics, computer-assisted drafting and manufacturing were most valued.

⁹ The New Mexico Association of Community Colleges commissioned the study in 2000, which was conducted by Research & Polling, a private company and sponsored by the Technology Advisory Council, a group composed of local prominent technology companies and organizations.

¹⁰ ESI International, a private business consulting company that provides business analysis, project management and contracted training, conducted a survey on business analysis competency of 1,000 organizations nationwide in 2004.

¹¹ The survey was conducted in September 2005 and the instrument was posted online on the agency's website www.corda.ca.

¹² The research method of sending the surveys by mail to companies, rather than direct interviews, was used because of resource constraints and to permit reaching the widest possible pool of companies by industry and geographic location in a reasonable amount of time. The questions in the survey instrument were designed to quickly generate answers (such as making a choice from a list of responses rather than extensive open-ended writing). As a result, limited explanations were provided for the responses.

¹³ This seems to be a relatively low proportion of respondents involved in international business activities given the targeted pool of businesses. The *Minnesota Directory of Manufacturers*, the major source for the business records, is a well-established and reliable database. It is possible that the low share was due to addressing the survey to human resources staff. However, because the majority of the questions addressed hiring decisions and skills needed in the organization, human resources staff appeared to be the most appropriate addressee.