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Developing a Globally Competitive Workforce Through Study Abroad

The Value of Study Abroad Skills in the U.S. Job Market

SEPTEMBER 2020





ABOUT

NAFSA: Association of International Educators (NAFSA) is the world's largest nonprofit association dedicated to international education and exchange, working to advance policies and practices that ensure a more interconnected, peaceful world today and for generations to come.

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Emsi is a leading provider of labor market data to professionals in higher education, economic development, workforce development, talent acquisition, and site selection. Emsi data are used to solve a variety of problems: align programs with regional needs, equip students with career visions, understand regional economic and workforce activity, and find and hire the right talent. Emsi serves clients across the U.S., UK, and Canada.

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The opinions and recommendations expressed in this report are those of Emsi. These views should not be construed as representing the official policies of NAFSA. Furthermore, any errors in this report are the responsibility of Emsi and not of any of the above-mentioned individuals.

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Introduction

NAFSA: Association of International Educators (NAFSA) believes that international education advances learning and scholarship, fosters understanding and respect among people of diverse backgrounds and perspectives, and is essential for developing globally competent individuals. Its work is guided by a <u>strategic plan</u>, which is developed and refreshed periodically by NAFSA's Board of Directors and highlights the association's vision, mission, and values. Moreover, the strategic plan guides the association in developing services, programs, and products to serve its members around the organization's three strategic focus areas: influencing public policy, creating and disseminating knowledge, and maintaining a strong organization.

Essential to NAFSA's ability to serve its membership is an up-to-date understanding of how U.S. colleges and universities can adapt their study abroad offerings to suit an ever-changing workforce and constantly evolving employer requirements. An efficient labor market requires a seamless flow of skilled individuals between postsecondary educational institutions and businesses that need labor. Workforce misalignment occurs when the needs of employers are different from the skills taught in the academic programs. Causes of this misalignment include:

- Employer training becomes highly specialized and/or more comprehensive,
- Educational programs do not always evolve in step with economic trends in a specific region,
- Insufficient communication between business and academia, and
- Businesses adjust hiring requirements as economic conditions shift.

To gain better insight into economic conditions and workforce trends, NAFSA partnered with Emsi, a labor market analytics firm serving higher education, economic and workforce development, talent acquisition, and site selection. In this report, Emsi provides an overview of study abroad in the U.S. and identifies the skills acquired by students participating in study abroad. Emsi categorizes those skills as either "soft skills" and "global skills" and evaluates the skills' prevalence in U.S. job postings and professional profiles. Finally, Emsi provides a deeper analysis of professional profiles, with regards to U.S. students who have had an international education experience. The results can be used to shape study abroad programs and inform students of in-demand skills for a competitive labor market, and on a larger scale, highlight the value of study abroad to the United States. All data were collected prior to the novel coronavirus disease 2019 (COVID-19) economic disruption that began in early 2020.

THE CURRENT STATE OF STUDY ABROAD

The most recent <u>Open Doors</u> report by the Institute of International Education provides a comprehensive summary of U.S. students studying abroad. During the 2017-18 academic year, 341,751 U.S. students studied abroad for credit. The largest U.S. higher education institutions have the greatest number of students who study abroad. However, the highest-ranking institutions, in terms of the percentage of undergraduates participating in study abroad, are small colleges and universities, where many students study abroad on multiple occasions. Europe is the top destination for U.S. students of color are increasingly studying abroad but are still underrepresented with respect to the diversity of the U.S. higher education community as a whole. More than half of all study abroad students are STEM (science, technology, engineering, and math), business, and social sciences majors. However, STEM students are underrepresented among study abroad participants in comparison to all U.S. conferred bachelor's degrees. Short-term programs, defined as shorter than eight weeks, are more popular than full semester or academic year programs, with almost 60% of students studying abroad during the summer or for less than eight weeks during the academic year.

🕑 Key Takeaways

SKILLS ACQUIRED THROUGH STUDY ABROAD

- Students acquire and develop skills during their study abroad experiences that our research shows are valued by employers, making students more competitive in the labor market.
- Students acquire and develop communication, leadership, problem solving, and time management skills during study abroad. These so-called "soft skills" are necessary in many industries and occupations.
- Students acquire and develop cultural awareness, foreign language proficiency, and a better understanding of diversity during study abroad. These global skills are sought by employers.

VALUE OF STUDY ABROAD TO EMPLOYERS

- More than 31 million unique job postings in 2019 included a mention of the key soft and global skills associated with study abroad.
- In U.S. job postings, employers associate the key skills acquired and developed in study abroad with management, leadership, customer service, sales, and business operations.

- Employers place a higher value on filling positions requiring the key soft skills than on positions that do not require those skills.
- Employers spend more time searching for acceptable candidates for positions that require key soft skills compared to all positions posted online.
- Employers are more likely to request the key soft skills than the key global skills.
- Communication, leadership, and problem-solving are the most requested soft skills in U.S. job postings.
- Teaching, mentorship, and foreign language proficiency are the most often cited global skills requested compared to all U.S. job postings.

VALUE OF STUDY ABROAD TO JOB SEEKERS

- The skills students acquire and develop in study abroad go beyond their academic coursework and the experiences of a different culture. Data show that study abroad is also important for career success in the labor market, including for entry level positions.
- The skills acquired and developed in study abroad are highly valued in the labor market, particularly for management positions. Yet these skills are often not included in the profiles of job seekers who studied abroad as undergraduates. Job seekers with study abroad experience should more carefully craft their professional profiles and resumes to address this disconnect.
- Professional profiles and resumes more often associate leadership, management, customer service, and sales skills with the key soft skills acquired and developed during studying abroad than the key global skills they acquired.
- Profiles that include key soft skills are more likely to be business majors relative to all U.S. profiles.
- Leadership is the most often mentioned key soft skill in job seeker profiles.
- Profiles that include key soft skills are more likely to be employed as presidents and CEOs when compared to all U.S. profiles, as well as many business administrators and managers.
- The profiles that include key global skills are more likely to be education and business majors compared to all U.S. profiles.
- The skills mentioned in the profiles of job seekers with study abroad experience match the skills appearing in the key skills section of job profiles, evidence that employers and job seekers both value the key soft and global skills associated with study abroad.

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😌 U.S. Students Who Study Abroad

In academic year (AY) 2017-18, about 342,000 U.S. students studied abroad for credit, and an estimated one in 10 U.S. undergraduates studied abroad before graduating.¹ Europe is the top region for U.S. students studying abroad for academic credit, with the U.K., Italy, and Spain as the top three destinations. The largest U.S. higher education institutions have the greatest number of students who study abroad. However, in terms of the percentage of U.S. undergraduates participating in study abroad, the highest ranking institutions are small colleges and universities (<7,000 students), where many students study abroad on multiple occasions.

New York University, Texas A&M University, and the University of Texas at Austin are the three largest U.S. higher education institutions awarding credit for study abroad (see Figure 1). Each has a total student population in excess of 50,000 students² and are among the 25 largest educational institutions in the

Figure 1: Top 15 U.S. Institutions Awarding Credit for Study Abroad

New York University, Texas A&M University, and the University of Texas at Austin are the three largest U.S. institutions awarding credit for study abroad.



Data reflects AY 2017-18. Source: Institute of International Education.

¹Institute of International Education (2019).

² College Navigator from the Integrated Postsecondary Education Data System of the National Center for Education Statistics (2019).

country. Only San Diego State University, ranked 5th, and the University of Georgia, ranked 13th have significantly smaller student populations (about 35,000 and 37,000, respectively) and are not among the 25 largest educational institutions in the U.S.

Another method of assessing the value of study abroad to an institution is its student participation rate in such programs and courses. Centenary College of Louisiana, State University of New York Maritime College, and Elon University (NC) have the highest percentages of their undergraduates participating in study abroad, according to three Carnegie classifications (see Figure 2). More than 100% of the undergraduates at each of the three institutions participate in study abroad, an indication that many students at these institutions are studying abroad on multiple occasions throughout their undergraduate educations. At these institutions, study abroad is a means to attract new students and can be a major component in their on-campus student culture.

Figure 2: Top 5 U.S. Institutions by Carnegie Classification of Undergraduates Participating in Study Abroad

Centenary College of Louisiana, State University of New York Maritime College, and Elon University have the highest portions of their undergraduates participating in study abroad, according to three Carnegie classifications.



Data reflects AY 2017-18. The institutions' classifications are based on the 2018 Carnegie Classification of Higher Education. Estimates of undergraduate participation rates can exceed 100% due to factors such as students studying abroad more than once, student attrition, and varying cohort sizes from year to year. Source: Institute of International Education.



Most often, a study abroad experience takes place during a short-term program, defined as a summer program or eight weeks or less in duration.³ As shown in Figure 3, 39% of U.S. students who studied abroad in AY 2017-18 did so for a summer term, and 30% of students studied abroad for one semester. About one in five students studied abroad for eight weeks or less. When compared to a decade ago (AY 2007-08), about the same percentage of students studied abroad for a summer term (38%) or one semester (36%), but only one in 10 students studied abroad for eight weeks or less. There are a number of reasons why short-term study abroad programs have become more popular, including the need for students to fit an international experience into an increasingly busy academic career, an increase in non-traditional study abroad participants who work or have families, and potential financial constraints of students and their families.⁴

U.S. students' experiences abroad extend beyond potentially learning a new language. About one-quarter of all study abroad students are in STEM (science, technology, engineering, and math) programs. As shown in Figure 4, STEM majors account for 26% of all fields of study participating in study abroad (AY 2017-18). However, this is still smaller than the percentage of all conferred U.S. STEM bachelor's degrees (35%). These results indicate that there will likely be a continued expansion in the number of U.S. STEM students who study abroad. More business and management and social sciences students are also studying abroad compared to foreign language and international studies students.

Finally, the population of U.S. study abroad students has also continued to become more diverse.⁵ About 30% of study abroad students in AY 2017-18 identified as a member of a racial or ethnic minority group, compared to about 23% in AY 2012-13 and 18% in AY 2007-08. Increasing access to study abroad has

Figure 3: Detailed Duration of U.S. Study Abroad

About 70% of U.S. students who study abroad do so for a summer term or one semester, whereas only 2% of U.S. students participate in study abroad a full academic year.



Data reflects academic year 2017-18. All other durations include two quarters (0.2%), a calendar year (0.1%), and other (0.3%). Source: Institute of International Education.



³ Institute of International Education (2019).

⁴ Bandyopadhyay & Bandyopadhyay (2015) and Donnelly-Smith (2009).

⁵ Institute of International Education (2019).

created opportunities for underserved populations but students of color are still underrepresented in study abroad when compared to the diversity of U.S. higher education enrollment as a whole.

Skills Acquired Through Study Abroad

U.S. college and university graduates need to be equipped with the skills to work collaboratively with their co-workers, who may be located in the United States or all over the world. Furthermore, a postsecondary

Figure 4: U.S. Study Abroad Students by Field of Study

STEM majors represent 26% of all fields of study participating in study abroad (AY 2017-18), a 2% increase from the prior year. However, STEM majors represent 35% of all conferred bachelor's degrees in the U.S. (AY 2017-18).

FIELD	O OF STUDY	AY 2016-17	AY 2017-18	% TOTAL (AY 2017-18)	% CHANGE	% U.S. BACH CONFERRED (AY 2017-18)
8 38	Science, Technology, Engineering, and Math (STEM)*	85,786	87,451	26%	+2%	35%
ô	Business and Management	68,757	71,139	21%	+4%	19%
<u>(</u>)	Social Sciences	57,081	58,581	17%	+3%	8%
⊕	Foreign Language and International Studies	24,189	24,225	7%	0%	1%
•	Fine and Applied Arts	21,044	23,307	7%	+11%	4%
	Communications and Journalism	18,633	18,796	6%	+1%	5%
00 9	Humanities**	11,978	12,303	4%	+3%	6%
Ś	Education	10,980	11,278	3%	+3%	4%
<u>ক</u> াহ	Legal Studies and Law Enforcement	5,324	5,126	2%	-4%	3%
Othe	r or Undeclared Fields of Study	28,947	29,391	9%	+2%	15%
Total		332,727	341,751	100%	+3%	100%

* STEM includes agriculture and natural resources, architecture, biological and biomedical sciences, computer and information sciences, engineering and engineering technologies, health professions, mathematics and statistics, and physical sciences and science technologies. ** Humanities include area and group studies, English language and literature, liberal arts and sciences, philosophy and religious studies, and theology.

Source: Institute of International Education. U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey.



education may prepare U.S. graduates with the technical skills they need in their job roles, but an understanding and appreciation of other parts of the world, different religions, cultures, and points of view are essential elements of a well-rounded employee.⁶ This section focuses on the skills developed and gained in study abroad, which were the focus of Emsi's search of job postings and professional profiles.

According to a search of Emsi's Job Posting Analytics database, few job postings specifically require or request candidates to have study abroad experience. Employers place the highest value on students' academic majors when hiring.⁷ However, published studies show that U.S. employers value the global and soft skills students gain in study abroad and that studying abroad can have a very positive impact on the employability of U.S. students.⁸ As such, Emsi in collaboration with NAFSA concluded that the best approach to assess the value of study abroad is through a series of keyword searches of Emsi's databases, the results of which are presented in the following two sections.

The keywords, detailed on the next page, are the skills students acquire and develop through study abroad. They are classified into two types: soft skills and global skills. Soft skills are necessary in many industries and occupations, sometimes refered to as common skills, and differ from hard skills, qualifications, or certifications, which are specific to a particular industry or occupation. The keywords classified as global skills are more widely recognized as related to students' experiences in study abroad.

The skills were compiled by Emsi with NAFSA's recommendations from a variety of external sources and a literature review of international education and study abroad (see Appendix). Soft skills such as communication, problem solving, and teamwork were chosen because of their prevalence in U.S. job postings and importance to employers. According to the National Association of Colleges and Employers (NACE) 2019 Job Outlook report, more than 80% of employers seek proof of written communication skills on a candidate's resume. Furthermore, problem-solving skills and the ability to work in a team are also highly sought-after attributes for new candidates, requested by 80% of surveyed employers. In another study, 70% of students who studied abroad reported significant skill development in adaptability, curiosity, and confidence, and 70% reported at least some degree of skill development in problem solving, teamwork, and a tolerance for ambiguity.^o These skills, too, were included as soft skills in the analysis.

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⁶ Daniel, et al. (2014).

⁷ National Association of Colleges and Employers (2018).

⁸ Christian et al. (2017) and Trooboff et al. (2007).

⁹ Daniel, et al. (2014).

Adaptability	Curiosity	Managing Uncertainty	Resilience
Agility	Decision-Making	Networking	Respect for Difference
Collaboration	Empathy	Open-Mindedness	Self-Awareness
Communication	Independence	Organization	Sociability
Confidence	Initiative	Personal Responsibility	Tactfulness
Creative Thinking	Interpersonal Communication	Prioritization	Teamwork
Creativity	Leadership	Problem Solving	Time Management
Critical Thinking	Learn Quickly	Remote Collaboration	Tolerance for Ambiguity
GLOBAL SKIL	L KEYWORDS		
Cross-Cultural Communication	Diversity	Global Context	Intercultural Skills
Cross-Cultural Skills	Foreign Language	Global Perspective	Intercultural Understanding
Cultural Awareness	Global Awareness	Intercultural Communication	
Culturally Sensitive	Global Competence	Intercultural Sensitivity	

Value of Study Abroad to Employers

Emsi measures the value of study abroad to employers in terms of job postings. These postings, housed in Emsi's Job Postings Analytics database, are online advertisements for jobs, posted by companies to attract job candidates. Analyzing job postings for information on the labor market can yield valuable insight, such as the skills that employers are requesting, the companies that are posting for jobs, where those jobs are located, and greater detail about the types of positions that are in demand. It can be helpful to think of job postings as a measure of the intentions of jobs recruiters.

The prevalence of the key soft skills and global skills in the job postings is an indication of what is currently in demand by U.S. employers, including their emerging needs. Thus, by extension, an analysis of the postings can reveal the value of study abroad in the labor market.

The following tables and figures summarize the soft skills and global skills searches of U.S. job postings from January 2019 to December 2019, prior to the COVID-19 economic disruption.

SOFT SKILLS GAINED IN STUDY ABROAD AND SIGNIFICANCE FOR EMPLOYERS

- Employers posted over 31 million unique job postings in 2019 included a mention of the key soft skills associated with study abroad.
- Employers spend more time searching for acceptable candidates for positions requiring key soft skills than they do for the average U.S. job posting.
- In U.S. job postings, employers associate the key soft skills acquired and developed in study abroad with management, leadership, customer service, and sales.
- New York City, as a job location, is somewhat overrepresented among soft skill postings relative to all postings in the U.S., indicating that the city provides greater job opportunities for graduates with study abroad experience seeking employment.
- Job postings that include key soft skills are more likely to be for project managers, sales managers, and software engineers.

Figure 5: Most Represented Keywords in Soft Skills Postings

These are the soft skills keywords most often requested by employers in online job postings. Communication, leadership, and problem solving are the most represented soft skills keywords, found in about 66% of all soft skills postings.

35%	Prioritization	4%	Interpersonal Communication	2%
19%	Decisiveness & Decision-Making	4%	Tactfulness	1%
12%	Critical Thinking	3%	Learn Quickly	1%
6%	Independence	2%	Curiosity	1%
5%	Creativity	2%	Empathy	1%
	19% 12% 6%	 19% Decisiveness & Decision-Making 12% Critical Thinking 6% Independence 	19%Decisiveness & Decision-Making4%12%Critical Thinking3%6%Independence2%	19%Decisiveness & Decision-Making4%Tactfulness12%Critical Thinking3%Learn Quickly6%Independence2%Curiosity

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Figure 6: Summary Information of Soft Skills Postings

31.1 M	5:1	35 days
Unique Postings 153.7 million Total Postings	Posting Intensity National Average: 4 : 1	Median Posting Duration National Average: 31 days

- The ratio of total to unique postings (posting intensity) for jobs that require key soft skills is 5 to 1, meaning that for every 5 postings there is 1 unique job posting.
- The posting intensity for all U.S. job postings is 4 to 1, meaning that employers are putting above average effort toward hiring for soft skills. These results indicate that jobs that require the soft skills students acquire and develop in study abroad are more valued by employers than jobs that do not require those skills.
- The median posting duration for the positions that require the key study abroad soft skills is slightly longer than the national average (35 days), meaning employers have had a harder time finding candidates with the right skills to fill these positions compared to all U.S. job postings (31 days).

The following data show the largest percent differences between soft skills postings and all U.S. job postings by category. Values in parentheses are the rank of the city, job title, or company among all soft skills postings, and values with a "+" or "-" represent an overrepresentation or underrepresentation of soft skills postings, respectively. Missing values mean soft skills postings are similar to all U.S. job postings.

Top Cities		Top Job Titles		Top Companies		
New York City (1)	+0.7%	Retail Sales Associates (1)	+0.5%	Teach for America, Inc. (1)	+0.6%	
San Francisco (3)	+0.4%	Sales Managers (6)	+0.5%	Oracle Corporation (2)	+0.5%	
Chicago (2)	+0.3%	Customer Service Reps. (2)	+0.4%	Dollar General Corporation (3)	+0.5%	
Washington, DC (4)	+0.3%	Software Engineers (5)	+0.4%	CVS Health Corporation (6)	+0.3%	
Seattle (8)	+0.2%	Project Managers (11)	+0.3%	Anthem, Inc. (4)	+0.2%	
		Truck Drivers (8)	-5.3%	HealthCare Employment Network (30)	-0.6%	

Source: Emsi Job Posting Analytics January 2019 to December 2019.

Figure 7: Top Industries in Soft Skills Postings

Using the Bureau of Labor Statistics' classification system of industries, about one-third of soft skill postings are from companies in Professional, Scientific, & Technical Services (Professional Services), Administrative & Support & Waste Management & Remediation Services (Administrative Services), and Retail Trade. Businesses in the Professional Services industry largely employ lawyers, accountants, software developers, and a variety of administrative positions. Companies in the Administrative Services industry perform activities including office administration, the hiring and placing of personnel, document preparation, and similar office services.



Figure 8: Most Requested Skills in Soft Skills Postings Compared to U.S. Job Postings

The soft skills keywords are found among the skills requested by employers, which includes additional proficiencies and qualifications. The skills below represent the top 10 skills most often included in those postings, regardless of whether they are a key study abroad skill (green) or not (gray). Management, for example, is not a key soft skill as defined in this report, but it appeared in 32% of the soft skills postings. The skill was even more prevalent than the top key soft skill (Communications, in green below) and was highly overrepresented compared to all U.S. job postings (19%). Communications, leadership, and problem solving are key soft skills and among the 10 most requested skills in the soft skills postings dataset. Results indicate that the soft skills students acquire and develop by studying abroad are well suited for management positions in the workplace.



Source: Emsi Job Posting Analytics January 2019 to December 2019.

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GLOBAL SKILLS GAINED IN STUDY ABROAD AND SIGNIFICANCE FOR EMPLOYERS

- In U.S. job postings, employers associate the key global skills acquired and developed through study abroad with teaching, mentorship, management, leadership, and business operations.
- Locations of job postings based in Washington, DC, Charlotte, NC, and Austin, TX are overrepresented among the global skills postings relative to all postings in the U.S., indicating that those cities provide greater job opportunities for study abroad students seeking employment.
- Many of the postings' job titles are education-related, indicating that the global skills students acquire and develop in study abroad are well suited for these types of positions.

Figure 9: Most Represented Keywords in Global Skills Postings

The keywords in the global skills search are drawn from the skills requested by employers, as well as in other sections of the job postings. Among all keywords in the global skills search, cultural awareness, foreign language skills, and diversity are most represented and found in about 60% of all global skills postings.

Cultural Awareness	30%	Culturally Sensitive	14%	Cross-Cultural Communication	3%
Foreign Language	18%	Global Perspective	11%	Global Awareness	2%
Diversity	15%	Intercultural Communication	3%	Intercultural Skills	1%

Source: Emsi Job Posting Analytics January 2019 to December 2019.

Figure 10: Summary Information of Global Skills Postings

357,536	4:1
Unique Postings	Posting Intensity
1.5 million Total Postings	National Average: 4 : 1

26 days Median Posting Duration National Average: 31 days

- The ratio of total to unique postings is 4 to 1, meaning that for every 4 postings there is 1 unique job posting for global skills, and employers are putting average effort toward hiring.
- Registered nurses, the 5th-highest ranked job title in global skills postings, have a 9 to 1 posting intensity compared to a 4 to 1 posting intensity in all U.S. job postings. These results indicate that the global skills students acquire and develop by studying abroad are highly valued by employers posting for registered nurses.
- The median posting duration for global skills is 26 days, which is shorter than the U.S. average of 31 days. Job postings for various kinds of teachers and registered nurses are among the top posted for positions and have a 15-day posting duration. This indicates that job seekers who possess key global skills are likely to get hired faster than those without those skills.

The following data show the largest percent differences between global skills postings and all U.S. job postings by category. Values in parentheses are the rank of the city, job title, or company among all global skills postings, and values with a "+" or "-" represent an overrepresentation or underrepresentation of global skills postings, respectively.

Top Cities		Top Job Titles		Top Companies		
Washington, DC (2) +1.3%		English Teachers (1) +9.7%		EF Education First, Inc. (1)	+23.1%	
Charlotte (4)	+0.8%	Tutors (2)	+6.1%	Wal-Mart, Inc. (2)	+2.2%	
San Francisco (3)	+0.7%	English Instructors (3)	+4.8%	Freeman (3)	+1.7%	
Austin (5)	+0.7%	Instructors (4)	+4.2%	PricewaterhouseCoopers (4)	+1.0%	
New York City (1)	+0.6%	Foreign Language Teachers (6)	+1.8%	Varsity Tutors LLC (5)	+0.9%	
Atlanta (11)	-0.2%	Retail Sales Assoc. (50)	-1.4%	Anthem, Inc. (27)	-0.2%	

Source: Emsi Job Posting Analytics January 2019 to December 2019.

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Figure 11: Top Industries in Global Skills Postings

Using the Bureau of Labor Statistics classification system of industries, the largest percentage of global skill postings (28%) are from Administrative & Support & Waste Management & Remediation Services. Businesses in the industry perform activities including office administration, the hiring and placing of personnel, document preparation, and similar clerical services.



Figure 12: Most Requested Skills in Global Skills Postings Compared to all U.S. Job Postings

The global skills keywords are found among the skills requested by employers, which includes additional proficiencies and qualifications. The skills below represent the top 10 skills included in those postings regardless of whether they are a key study abroad skill (green) or not (gray). Teaching, which includes K-12 and postsecondary level, is not a key global skill, but it appears in 38% of global skills postings, which is highly overrepresented compared to all U.S. job postings (4%). Foreign language proficiency is the only key global skill among the 10 most requested skills in global skills postings. Results indicate that the global skills students acquire and develop by studying abroad are highly correlated to management positions in the workplace, as well as teaching and mentorship.



Source: Emsi Job Posting Analytics January 2019 to December 2019.

Q Value of Study Abroad to Job Seekers

Emsi measures the value of study abroad to students entering the job market by analyzing online professional profiles and resumes. Emsi's Profile Analytics dataset contains more than 100 million profiles of distinct individuals in the U.S. workforce, gathered from publicly available information on the web, third-party resume databases and job boards, as well as other sources. Each profile contains information unique to each individual, such as job title, company, skills, and education information. For NAFSA and the educational institutions the association supports, it is important to know how the soft and global skills associated with study abroad are valued by people in the workforce and how those skills have shaped people's career paths. The following tables and figures summarize the soft skills and global skills search of U.S. profiles, posted prior to the COVID-19 economic disruption.

SOFT SKILLS GAINED THROUGH STUDY ABROAD

- The profiles that include key soft skills are more likely to be employed as presidents and CEOs when compared to all U.S. profiles, as well as many business administrators and managers.
- Job seekers more often associate the skills of leadership, management, customer service, and sales with the key soft skills acquired and developed during studying abroad than the key global skills they acquired.
- Leadership is the most often mentioned key soft skill in job seeker profiles.
- The city of Atlanta is slightly overrepresented in the profiles, indicating that this location has provided more job opportunities for profiles with soft skills in comparison to all U.S. profiles.
- Individuals with key soft skills included on their profiles are more likely to be employed as administrators and managers, indicating that the soft skills students acquire and develop by studying abroad are a good fit for these types of positions.
- Profiles that include key soft skills are more likely to be business majors relative to all U.S. profiles.

E Figure 13: Most Represented Soft Skill Keywords in Online Profiles

The keywords in the soft skills search are drawn from the reported skills included in the profiles, as well as in other sections. Among all keywords in the soft skills search, leadership, time management, and teamwork are most represented and found in about 80% of all soft skills profiles.

Leadership	57%	Curiosity	3%	Creative Thinking	1%
Time Management	14%	Critical Thinking	2%	Independence	<1%
Teamwork	9%	Decisiveness & Decision-Making	2%	Creativity	<1%

Source: Emsi Profile Analytics.



Figure 14: Summary Information of Soft Skills in Online Profiles

Top Cities		Profiles Updated Since 2010	Top Job Titles	
Atlanta (6)	+0.3%	en	General Managers (2)	+0.4%
San Francisco (3)	+0.2%	UNITED STATES	Presidents (3)	+0.3%
Dallas (7)	+0.2%	Swasbington D.C.	Teachers (4)	+0.3%
Minneapolis (12)	+0.2%	Profiles	Chief Executive Officers (6)	+0.2%
Chicago (4)	+0.2%	1350.000 950.000 350.000 MEXICO	Customer Service Reps. (5)	+0.2%
Brooklyn Borough, NY (31)	-0.1%	The following data show the largest percent differences between soft skills profiles and all U.S. profiles by category. Values in parentheses are the rank of the city, job title, institution, or program among all soft skills profiles, and values with a "+" or "-" represent an overrepresentation or underrepresentation of soft skills profiles, respectively. Missing values mean soft skills profiles are similar to all	(31)	-0.4%

43.8 million

Top Institutions		Top Programs		
University of Phoenix (46)	+0.7%	Business Administration, Management, and Operations (1)	+5.0%	
Pennsylvania State University (22)	+0.2%	Communication and Media Studies (2)	+1.9%	
DeVry University (8)	+0.2%	Marketing (3)	+1.5%	
Arizona State University (1)	+0.2%	General Education (4)	+1.2%	
University of Minnesota (44)	+0.2%	General Psychology (5)	+1.0%	

U.S. profiles, and there are no underrepresented institution and

program values of importance in soft skills profiles.

Source: Emsi Profile Analytics.

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• NAFSA: Association of International Educators

Figure 15: Most Mentioned Soft Skills in Online Profiles Compared to all U.S. Profiles

The soft skills keywords were drawn from the reported skills included in the profiles, which includes additional skills and qualifications. The skills below represent the top 10 skills included in those profiles, regardless of whether they are a key study abroad soft skill (green) or not (gray). Leadership, for example, is the only key soft skill among the 10 most mentioned skills. It appears in 61% of soft skills profiles, which is highly overrepresented compared to all U.S. profiles (21%). Results indicate that the soft skills students acquire and develop by studying abroad are well suited for leadership and management positions in the workplace.





.11

GLOBAL SKILLS GAINED THROUGH STUDY ABROAD

- The cities of Washington, DC and New York, NY are overrepresented in the data, indicating that these locations have provided more job opportunities for profiles with global skills in comparison to all U.S. profiles.
- Most job titles in the profiles are related to education, indicating that the global skills students acquire and develop by studying abroad are a good fit for these types of positions.
- The profiles that include key global skills are more likely to be education and business majors compared to all U.S. profiles.

Figure 16: Most Represented Global Skill Keywords in Online Profiles

The keywords in the global skills search are drawn from the reported skills in the profiles, as well as in other sections. Among all keywords in the global skills search, foreign language, cross-cultural communication, and intercultural communication are most represented and found in about 75% of all global skills profiles.

Foreign Language	33%	Diversity	10%	Intercultural Skills	1%
Cross-cultural communication	21%	Cultural Awareness	7%	Global Perspective	1%
Intercultural communication	21%	Culturally Sensitive	3%	Intercultural Sensitivity	1%

Source: Emsi Profile Analytics.

Figure 17: Summary Information of Global Skills in Online Profiles

Los Angeles

Profiles 24,000 16,000 9.000

Washington, DC (2)	+2.4%
New York City (1)	+2.4%
San Francisco (3)	+1.4%
Seattle (7)	+1.0%
Boston (6)	+0.8%

Top Cities

0.5 million

Profiles Updated Since 2010

Top Job Titles English Teachers (1) +1.8% Foreign Language +1.5% Teachers (2) New York **UNITED STATES** Washington D.C Interpreters (4) +0.9% Spanish Teachers (5) +0.6%

CUB/

English Instructors (9)

Business Owners (6)

+0.5%

-2.1%

Las Vegas (37) -0.2%

The following data show the largest percent differences between global skills profiles and all U.S. profiles by category. Values in parentheses are the rank of the city, job title, institution, or program among all global skills profiles, and values with a "+" or "-" represent an overrepresentation or underrepresentation of global skills profiles, respectively. There are no underrepresented institution and program values of importance in global skills profiles.

VEXICO

Top Institutions

Top Programs

New York University (2)	+1.0%	General Education (2)	+8.2%
Columbia University (3)	+0.9%	Business Administration, Management, and Operations (1)	+5.5%
Georgetown University (12)	+0.9%	Communication and Media Studies (3)	+4.4%
University of Washington (4)	+0.8%	Romance Languages, Literatures, and Linguistics (6)	+3.9%
American University (15)	+0.7%	General English Language and Literature (5)	+3.9%

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Figure 18: Most Mentioned Global Skills in Online Profiles Compared to all U.S. Profiles

The global skills keywords were chosen to focus on the skills section of profiles, which includes additional skills and qualifications. The skills below represent the top 10 skills included in those profiles, regardless of whether they are key study abroad global skill or not. Management, for example, is not a key soft skill, shown below in gray. The skill appears in 51% of global skills profiles, which is highly overrepresented compared to all U.S. profiles (26%). Foreign language and intercultural communication are key global skills (in green) and among the 10 most requested skills in global skills postings. Results indicate that the global skills students acquire and develop by studying abroad are well suited for management and leadership positions in the workplace.



Our Undergraduate Study Abroad and Employment

This section of the analysis queries Emsi's Profile Analytics dataset, emphasizing degree completion not keyword searches. The data include all U.S. professional profiles reporting a graduation date from a U.S. institution and a study abroad completion date from a non-U.S. institution within 0-2 years prior to the person's U.S. institution's graduation date. The time parameters capture students studying abroad from the summer of their sophomore year to their senior year of undergraduate studies. The results highlight students who study abroad and self-report that data on their professional profiles and resumes. Figures 19 and 20 summarize undergraduate study abroad profiles, posted prior to the COVID-19 economic disruption.

- Study abroad alumni are working at the top companies in the U.S., including Amazon, Microsoft, Ernst & Young, and Intel, in greater numbers than those without study abroad experience.
- New York, NY is overrepresented in the data, indicating that the location has provided more job opportunities for undergraduate study abroad profiles in comparison to all U.S. profiles.
- The University of Southern California is the top-ranked institution among the undergraduate study abroad profiles and the most overrepresented university when compared to all U.S. profiles.
- Software engineer is the most overrepresented job title among the undergraduate study abroad profiles when compared to all U.S. profiles, which corresponds with the most overrepresented companies.

Figure 19: Summary Information of Undergraduate Study Abroad in Online Profiles

Top Cities		Top Institutions	Top Job Titles	Fitles	
New York City (1)	+4.2%	University of Southern California (1)	+0.6%	Software Engineers (1)	+1.0%
San Francisco (2)	+2.1%	Columbia University (4)	+0.5%	Graduate Assistants (4)	+0.4%
Washington, DC (4)	+1.3%	Georgetown University (16)	+0.5%	Research Assistants (11)	+0.4%
Boston (5)	+1.3%	George Washington University (8)	+0.5%	Teaching Assistants (17)	+0.3%
Los Angeles (3)	+0.9%	New York University (2)	+0.4%	Business Analysts (13)	+0.3%
Las Vegas (36)	-0.2%	University of Phoenix (3)	-0.1%	Business Owners (2)	-1.5%

14.9 million

Profiles Updated Since 2010

The following data show the largest percent differences between undergraduate profiles and all U.S. profiles by category. Values in parentheses are the rank of the city, institution, or job title among all undergraduate profiles, and values with a "+" or "-" represent an overrepresentation or underrepresentation of undergraduate profiles, respectively. There are no underrepresented company values of importance in undergraduate profiles.

Top Companies					
Amazon.com, Inc. (1)	+0.4%	PricewaterhouseCoopers LLP (11)	+0.2%		
Google, Inc. (2)	+0.4%	Facebook, Inc. (14)	+0.2%		
Deloitte LLP (4)	+0.3%	Apple, Inc. (7)	+0.2%		
Microsoft Corporation (5)	+0.2%	Intel Corporation (15)	+0.2%		
Ernst & Young LLP (8)	+0.2%	University of California (13)	+0.1%		
Wal-Mart Stores, Inc. (9)	-0.1%				

Source: Emsi Profile Analytics.

Provide an Approximate Study Abroad Profiles Compared to all U.S. Profiles

Management skills appear in 47% of undergraduate study abroad profiles, which is highly overrepresented compared to all U.S. profiles (26%). Leadership and time management are key soft skills (in green) and the only keywords found among the 15 most requested skills in undergraduate study abroad profiles. Results indicate that the skills undergraduates acquire and develop by studying abroad are well suited for management positions in the workplace.



Source: Emsi Profile Analytics.

NAFSA: Association of International Educators



The skills students acquire and develop by studying abroad go beyond their academic coursework and the experience of a different culture: the acquired skills are also important for career success, as shown by the job postings and professional profiles in this report. These results provide clarity to students opting to study abroad, employers seeking to hire candidates with skills acquired through study abroad, and administrators interested in showcasing the value of study abroad. Therefore, we offer the following recommendations:

U.S. colleges and universities should:

- Promote and maintain high quality study abroad programs to enhance students' future *employability*, in addition to the academic and personal value gained from the experience.
- Guide students to highlight specific study abroad experiences, along with the soft and global skills acquired through these experiences, in online job profiles and resumes. These skills are highly valued in the labor market, particularly for management positions.
- Integrate international and cross-cultural topics across all curricula to better prepare all students to enter a diverse, globally aware working environment.
- Ensure programs and course offerings align with the shifting demands of employers recruiting a global workforce.

Employers should:

- Hire individuals with study abroad experience, as these skills promote success in managerial roles.
- Connect with career centers at U.S. colleges and universities to better identify recent graduates with key soft and global skills.
- Articulate clearly within their recruitment efforts the importance placed on soft and global skills acquired through study abroad.
- Train human resources staff to identify and value international experiences as contributing to soft and global skills.



REFERENCES

- Anderson, C. L., Christian, J. J., Hindbjorgen, K., Jambor-Smith, C., Johnson, M., & Woolf, M. (eds.). (2015). *Career integration: Reviewing the impact of experience abroad on employment.* CAPA International Education and University of Minnesota, Learning Abroad Center. Retrieved from <u>https://umabroad.umn.edu/sites/default/files/2017_CareerIntegration__No2_0.pdf</u>
- Bandyopadhyay, S., & Bandyopadhyay, K. (2015). Factors influencing student participation in college study abroad programs. *Journal of International Education Research (JIER)*, 11(2). 87-94. Retrieved from <u>https://search-proquest-com.neill-lib.idm.oclc.org/docview/1673824797?accountid=40274</u>
- British Council, Booz Allen Hamilton (Firm) and Ipsos (Firm). (2013). Culture at work: The value of intercultural skills in the workplace. Retrieved from

https://www.britishcouncil.org/sites/default/files/culture-at-work-report-v2.pdf

- Crossman, J. E., & Clarke, M. (2010). International experience and graduate employability: Stakeholder perceptions on the connection. *Higher education*, *59*(5), 599-613.
- College Navigator from the Integrated Postsecondary Education Data System (IPEDS) of the National Center for Education Statistics (NCES). (2019). Retrieved from <u>https://nces.ed.gov/collegenavigator</u>
- Daniel, S., Xie F., & Kedia, B. (2014, April 11-13). 2014 U.S. business needs for employees with international expertise [Paper presentation]. Internationalization of U.S. Education in the 21st Century: The Future of International and Foreign Language Studies, Williamsburg, VA. Retrieved from<u>http://globalsupport.tamu.edu/Footer-Links/Resources-Center/Global-Publication/2014-US-Business-Needs-for-Employees-with-Internat.aspx</u>

- Donnelly-Smith, L. (2009). Global learning through short-term study abroad. *Peer Review, 11*(4). Retrieved from https://www.aacu.org/peerreview/2009/fall/donnelly-smith
- Farrugia, C. & Sanger, J. (2017). Gaining an employment edge: The impact of study abroad in 21st century skills and career prospects in the United States. *The Impact of Study*. Retrieved from <u>https://www.iie.org/Research-and-Insights/Publications/Gaining-an-employment-edge---The-</u> Impact-of-Study-Abroad
- Institute of International Education. (2019). Open doors: Report on international educational exchange. Retrieved from <u>http://www.iie.org/opendoors</u>
- Molony, J., Sowter, B., & Potts, D. (2011). QS global employer survey report 2011: How employers value an international study experience. QS *Global Employer Survey Report 2011*. Retrieved from https://content.qs.com/qs/qs-global-employer-survey-2011.pdf
- National Association of Colleges and Employers. (2018). Job outlook 2019. Retrieved from <u>https://www.odu.edu/content/dam/odu/offices/cmc/docs/nace/2019-nace-job-outlook-</u> <u>survey.pdf</u>
- Rhodes, T. L. (2008). VALUE: Valid assessment of learning in undergraduate education. *New Directions* for Institutional Research, 2008(S1), 59-70. Retrieved from <u>https://www.aacu.org/value/rubrics/global-learning</u>
- Relyea, C., Cocchiara, F. K., & Studdard, N. L. (2008). The effect of perceived value in the decision to participate in study abroad programs. *Journal of Teaching in International Business*, *19*(4). 346-361. Retrieved from https://eric.ed.gov/?id=EJ837639
- Trooboff, S., Berg, M. V., & Rayman, J. (2007). Employer attitudes toward study abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad, 15*(1). Retrieved from <u>https://files.eric.ed.gov/fulltext/EJ878375.pdf</u>

- U.S. Department of Education, International Affairs Office. (2020). Global and cultural competency. Retrieved from <u>https://sites.ed.gov/international/global-and-cultural-competency</u>
- U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey. (2019). *Bachelor's degrees conferred by postsecondary institutions, by field of study: Selected years, 1970-71 through 2017-18*. Retrieved from <u>https://nces.ed.gov/programs/digest/2019menu_tables.asp</u>

METHODOLOGY

Job Postings

Emsi measures the value of study abroad to employers in terms of job postings. These postings are online advertisements for jobs, posted by companies to attract applicants. Analyzing job postings for information on the labor market can yield valuable insight, such as skills that employers are requesting, the companies that are posting jobs, where those jobs are located, and greater specificity in the types of positions. In addition, job postings have virtually no lag time, as they can be collected from sites soon after being posted. However, not all jobs are posted online, and in some cases, companies post far more positions than they intend to hire in an effort to cast a broad net for talent. Many factors can influence the number of postings that appear on the web for a particular job or company, including:

- Fluctuating prices of job postings,
- Compiling waiting lists of potential hires should positions become vacant,
- Hiring new employees immediately or in six months,
- Postings left online after positions have been filled, and
- Duplicate postings for a given position.

Emsi job postings are gathered by scraping over 100,000 websites, including company career sites, national and local job boards, and job posting aggregators. Over 1.5 million companies are represented in the data. Job postings are assessed for likely duplicates using a machine learning algorithm, which determines whether two postings are duplicates based on text similarity, job title, company name, and location. Job postings posted more than six weeks apart are not considered potential duplicates, and duplicate jobs openings posted in separate cities are not deduplicated and appear as multiple postings. Each job posting is further enriched with value-add processes including:

- Job title and company standardization,
- Skill extraction and tagging,
- Occupation and industry code determination and assignment,¹⁰ and
- Education and experience determination.

Further explanation about Emsi's skill extraction and tagging is required, seeing that the soft skills and global skills keywords were chosen to focus on the skills section of job postings. Skills data are extracted using the text of the posting. Emsi takes the text of the posting and looks for sequences of words that indicate skills, distinguishing between common skills, hard skills, and qualifications. Common skills are necessary in many industries and occupations, whereas hard skills are specific, learnable, measurable, and often industry-specific or occupation-specific abilities related to a position. Qualifications are certifications

¹⁰ Occupations are coded using the Standard Occupational Classification (SOC) system, used by U.S. federal government agencies to collect occupational data, enabling comparison of occupations across data sets. Industries are coded using the North American Industry Classification System (NAICS), developed for use by federal statistical agencies in Canada, Mexico, and the U.S., which classifies business establishments by type of economic activity.

by a third-party entity (school, government, industry, etc.) that acknowledges a body of skills and abilities. The soft skills and global skills keywords are most related to common skills.

Professional Profiles

Emsi measures the value of study abroad to job seekers in terms of online profiles and resumes. Traditional labor market information (LMI), sourced from publicly available data, shows us, for example, how many software engineers are employed in the U.S. However, using LMI, it is a challenge to understand more about the people who successfully find jobs as, in this example, software engineers. Where do software engineers receive their degrees? Are they employed by certain types of companies? What kinds of skills do software engineers include in their online profiles and resumes? For NAFSA and the educational institutions the association supports, it is important to know how the soft and global skills associated with study abroad are valued by people in the workforce and how those skills have shaped people's career paths.

To assist in answering these questions, Emsi turns to Profile Analytics. The dataset contains more than 100 million profiles of distinct individuals in the U.S. workforce. Each profile contains information unique to each individual, such as job title, company, skills, and education information. Emsi's Profile Analytics dataset is gathered from publicly available information on the web, third-party resume databases and job boards, the recruiting industry, opt-in data from employers and applicant tracking systems, sales and marketing databases, and various consumer/identity databases. As with job postings, machine learning algorithms are used to deduplicate profiles and enrich the raw data contained in each profile – job titles and company names are standardized, skills are extracted, and education information is standardized.

Further explanation about Emsi's skill extraction and tagging is required, seeing that the soft skills and global skills keywords were chosen to focus on the skills section of profiles. Skills data are extracted using the text of the profile. Emsi takes the text of the profile and looks for sequences of words that indicate skills, distinguishing between common skills, hard skills, and qualifications. Common skills are necessary in many industries and occupations, whereas hard skills are specific, learnable, measurable, and often industry-specific or occupation-specific abilities related to a position. Qualifications are certifications by a third-party entity (school, government, industry, etc.) that acknowledges a body of skills and abilities. The soft skills and global skills keywords are most related to common skills.