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Gaining an Employment Edge:

The Impact of Study Abroad
on 21st Century Skills &
Career Prospects in the
United States

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INTRODUCTION

In the growing body of research on study abroad activities and their outcomes, there is a common thread on developing intercultural competence (Deardorff, 2009). The study abroad research literature shows that although there has been growing research on study abroad outcomes and a push for global competence, there is no clear, measurable consensus on what skills are needed to be globally competent, and what study abroad experiences should be teaching students in order to produce globally competent graduates (Edelstein, 2014). Outside of the study abroad field, a body of research defines the critical skills needed for employment in today's workforce. Surveys of U.S. employers carried out by the Partnership for 21st Century Skills in 2008, the National Association of Colleges and Employers (NACE) in 2009, and the American Management Association (AMA) in 2010 created a foundational understanding of what skills today's employers seek in potential candidates (Hodge and Lear, 2011). In 2012, the National Academy of Sciences worked to streamline and categorize the work done on 21st century skills, establishing a baseline for further research (Pellegrino and Hilton, 2012).

This study investigates the connection between study abroad programs and the development of skills that contribute to employment and career development in today's workforce. In recent years the value of study abroad has been scrutinized from an employment and student outcomes perspective, and this study aims to contribute to the conversation by providing hard evidence on the role of study abroad in employment outcomes. Conducted as part of IIE's *Generation Study Abroad*[®] initiative, this national study of study abroad alumni surveyed a broad sample of over 4,500 alumni of U.S. higher education institutions who participated in study abroad between 1999/00 and 2016/17. In a departure from much of the research on this topic, we also interviewed a segment of respondents to gain a more nuanced understanding of the links between study abroad and employability, with a particular focus on the aspects of study abroad programs that contribute to positive employment outcomes. In an increasingly global economy, making the connection between study abroad and employability benefits a wide range of stakeholders, including higher education staff and faculty implementing and promoting study abroad opportunities; students considering study abroad opportunities and career paths; employers in all fields looking for well-rounded and equipped candidates; and job seekers looking for ways to develop their skills and prove their value in today's workforce. This study of skill development and employability through study abroad aims to help colleges and universities establish global competency goals in line with workforce skills, as well as provide insights into developing study abroad programs to intentionally support the achievement of these essential workforce skills.

KEY FINDINGS

Study abroad has an overall positive impact on the development of a wide range of 21st century job skills. Of the 15 skills surveyed, the largest portion of respondents reported developing a broad range of cognitive, intrapersonal, and interpersonal skills to a *significant* degree through study abroad, namely: intercultural skills, curiosity, flexibility & adaptability, confidence, self-awareness, interpersonal skills, communication, problem solving, language, tolerance for ambiguity, and course or major-related knowledge. Teamwork, leadership, and work ethic were also reportedly developed or improved, but less significantly. The only skill area that was not developed or improved through study abroad was technical or software skills, with respondents largely noting that these skills were mostly developed through the academic programs on their home campus and were not a focus of their study abroad programs.

Study abroad expands career possibilities. Studying abroad gave interviewees both a broader understanding of career possibilities, and the confidence to pursue these career paths. The survey data and the information gleaned from interviews suggest that studying abroad had unintended benefits in terms of not only developing skills and shifting attitudes, but also opening career pathways and opportunities that had been either previously unknown or

simply unconsidered. It also helped participants feel more ambitious and less tentative in their careers, in addition to opening up unanticipated career pathways.

The skills gained through study abroad have a long-term impact on career progression and promotion. More than half of survey respondents reported that they believe their study abroad experience contributed to a job offer at some point. It is notable that almost half felt that study abroad did not contribute to a job offer or were not sure. These findings are not surprising, given that others have noted a disconnect in both students and employers linking skill gains to study abroad (Thompson, 2004). However, interviewees that talked about having career prospects in mind when choosing to study abroad were better able to articulate both the skill development and career impact they gained through the experience. Furthermore, among interviewees who were not sure or who did *not* believe that studying abroad contributed to a job offer, most still believe that the skills gained through study abroad had proven relevant and useful throughout their careers, particularly as they were promoted to management-level positions where communication, interpersonal skills, and the ability to understand and work with difference were key criteria for promotion.

Longer periods of study abroad have a high impact on subsequent job offers and the development of most skills. Short term programs are most effective at developing teamwork skills. The strongest impact of length on skill development was seen in foreign language ($r=0.35$, $p<0.01$) and communication ($r=0.22$, $p<0.01$) skills. Among alumni who studied abroad for one academic year, 68 percent reported study abroad contributing to a job offer at some point, compared to just 43 percent of alumni who went abroad for fewer than eight weeks. At the same time, teamwork was more highly developed through short term programs, which tend to be more structured and team oriented than longer term programs where students might pursue more independent experiences.

STEM majors highly value the gains made in skills outside of their majors during study abroad. Physical and Life Science was the only major field in which studying abroad outside of one's major was common; it was more popular for science majors to go on a program with either an interdisciplinary/general (28 percent) or foreign language (24 percent) focus than a science focus (21 percent). Science majors that went on a program outside of the sciences mostly reported their study abroad contributed to a job offer (47 percent), whereas those who went on a science focused experience mostly reported not being sure if the experience contributed to a job offer (48 percent), and only 28 percent reported it contributing to a job offer. STEM majors described academic programs at home as more insular and viewed study abroad as an opportunity to gain "soft" skills that others in their field lack.

Choosing a less familiar destination was positively associated with skill development and sense of career impact. Interviewees who described wanting to choose a "different" location, often meaning a country or region they had not previously visited or a location they viewed as less traveled or culturally similar to the United States, were more likely to describe a clear impact on skill development and career utility.

Student intentionality and highly structured programs contribute to skill development. Having career prospects in mind prior to choosing to study abroad had an overall positive impact on the ability of those interviewed to articulate their skill development and the impact it had on their career. These respondents were also much more likely to have studied abroad in more highly structured programs. Participating in highly structured study abroad programs, particularly those that incorporated group projects and activities, emerged as a common factor among those reporting significant gains in collaborative, interpersonal, teamwork, and leadership skills during their study abroad.

IDENTIFYING 21st CENTURY WORKFORCE SKILLS

According to the OECD (2016), "skills have become the global currency of the 21st century." Many kinds of skills are important for the workforce, including technical or "hard" skills as well as "soft" skills. Research finds that employers generally value soft skills in new employees as much or more than they value technical skills (Alston, Cromartie, Wakefield, and English, 2009; Crawford, Lang, Fink, Dalton, and Fielitz, 2011; Harder, Andenoro,

Roberts, Stedman, Newberry, Parker, and Rodriguez, 2015; Jogan and Herring, 2007; Robinson, Garton, and Terry, 2007; Robinson, Garton, and Vaughn, 2007).

For this study, a list of soft and hard skills was developed that builds on competencies identified in prior U.S. and European research as most desired by 21st century employers, including: NACE’s Career Readiness and Competencies; The Professional Value of ERASMUS (VALERA) Study; Memo[®] Factors of Employability / The Erasmus Impact Study; Faktaa – Facts and Figures: Hidden Competencies; American Management Development Competency Model; and the Robles study: Executive Perceptions of the Top 10 Soft Skills Needed in Today’s Workplace.

Figure 1: 21st Century Workforce Skills

Communication skills	The ability to convey ideas to others through verbal and written means, using clear and effective language that accounts for the audience.
Confidence	The ability to make decisions based on one’s own convictions and to trust in one’s own competence.
Course or major-related knowledge	Proficiency in one’s chosen academic major or course content.
Curiosity	The openness to new experiences and desire to learn.
Flexibility/Adaptability	The ability to adjust one’s own behavior to changing circumstances and to work in ambiguous environments. This skill includes the ability to learn and be teachable.
Intercultural skills	The ability to understand and respect different cultural contexts and viewpoints. Includes an openness to new ideas and ways of thinking.
Interpersonal skills	Having a positive attitude to get along with others that includes social awareness, the ability to listen, and display good etiquette.
Language skills	The ability to communicate in spoken and written form in a language other than English.
Leadership	The ability to leverage the strengths of others to achieve common goals, and use interpersonal skills to coach and develop others. The ability to assess and manage one’s own emotions and those of others; use empathetic skills to guide and motivate; and organize, prioritize, and delegate work.
Problem-solving skills	The ability to identify work-related problems; analyze problems in a systematic but timely manner; draw correct and realistic conclusions based on data and information; and accurately assess root cause before moving to solutions.
Self-awareness	The ability to self-reflect and understand one’s own strengths and weaknesses.
Teamwork	The ability to collaborate with a diverse team, work within a team structure, and negotiate and manage conflict.
Technical/computer software skills	The ability to select and use appropriate technology to accomplish a given task, or apply computing skills to solve problems.
Tolerance for ambiguity	The ability to be comfortable with uncertainty, unpredictability, conflicting directions, and multiple demands. In essence, tolerance for ambiguity is manifest in a person’s ability to operate effectively in an uncertain environment.
Work ethic	Demonstrate personal accountability and effective work habits, e.g., punctuality, working productively with others, and time workload managements, and understand the impact of non-verbal communication on professional work image. The individual demonstrates integrity and ethical behavior, acts responsibly with the interests of the larger community in mind, and is able to learn from his/her mistakes.

Through data analysis, we further refined the skills measured in the survey by clustering them into three domains drawn from the National Academy of Sciences (Pellegrino and Hilton, 2012). The three domains include **cognitive competencies**, encompassing skills related to cognitive processes and strategies, knowledge and creativity;

intrapersonal competencies including intellectual openness, work ethic and positive self-evaluation; and **interpersonal competencies** encompassing teamwork and leadership skills. (See Appendix for further details on the National Academy skills framework.)

METHODOLOGY

Using a mixed methods approach, this research provides a comprehensive picture and nuanced analyses of the impact of study abroad programs on skill development and employability in today's workforce. The study consisted of a national survey of study abroad alumni to measure the impact of study abroad programs on employment outcomes, as well as in-depth interviews to gain a deeper understanding of *how* study abroad contributes to employment outcomes.

The survey was administered to alumni of study abroad programs from U.S. higher education institutions who participated in a study abroad program from 1999/00 onward. This timeframe was selected to focus the research on modern-day employment skills. To reach a broad respondent pool, IIE partnered with six leading education associations and study abroad organizations to distribute the online survey: American Association of Collegiate Registrars and Admissions Officers (AACRAO), American Institute for Foreign Study (AIFS), Council on International Educational Exchange (CIEE), IES Abroad, International Student Exchange Programs (ISEP), and National Association of Colleges and Employers (NACE). The survey was distributed widely from April through June 2017 to study abroad alumni, organizations and higher education institutions throughout the United States and was promoted through social media and other online platforms. A total of 4,565 valid survey responses were received and included in the descriptive statistical analysis.

In analyzing the survey data, cross-tabulations and Spearman rank correlation tests were used to measure the degree of association between a variety of ordinal variables collected from the survey. For the purposes of this study, a statistically significant correlation has a p-value of <0.05. Additionally, significantly high or low values within a set of data were determined as values falling above or below one standard deviation of the mean, or with z-scores falling above or below 1.

For the qualitative component of the study, thirty interviewees were selected from among the survey respondents who volunteered to participate in a follow-up interview. The number of interviews was determined to be sufficient to provide in-depth insights to supplement the more comprehensive survey data. Interview participants were selected to reflect a broad diversity of respondents by study abroad type, personal characteristics, and career profile. One-hour telephone interviews were conducted in July and August 2017 and were recorded and transcribed for coding and analysis.

As with all research, there are limitations to this study design. Data collection took place over a limited time period and participants were asked to reflect back on their past experiences, rather than a longitudinal study that tracked students before, during, and after their study abroad experiences and progression through the workforce. Secondly, participants self-selected to participate in the study and their perceptions were self-reported, leading to possible bias in the data. Lastly, this study was conducted based on a cross-section of study abroad alumni without a comparison control group of students who had not studied abroad.

Throughout this research, study abroad program characteristics, such as duration, destination regions, and academic majors are aligned with the *Open Doors*® U.S. Study Abroad Survey¹ to allow for comparisons between this survey's findings and the available national-level trends in U.S. study abroad.

¹ *Open Doors*® is conducted by IIE with support from the U.S. Department of State, Bureau of Educational and Cultural Affairs.

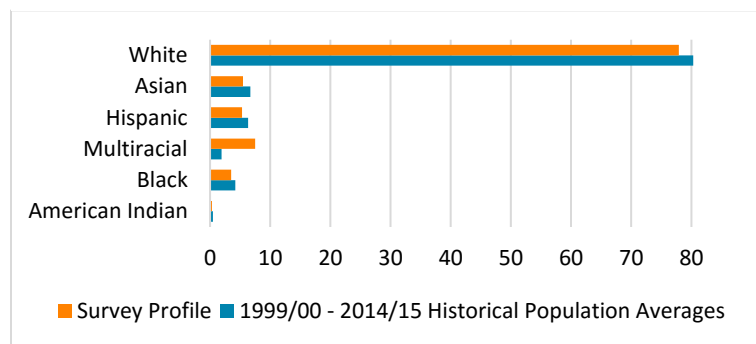
PROFILE OF RESPONDENTS

Throughout data collection, efforts were made to reach a broad pool of study abroad alumni in order to achieve diverse participation that represented the profile of study abroad students overall. The section outlines the profile of respondents, with comparisons to *Open Doors* statistics when available.

Demographics of Survey Respondents

The survey participants are largely representative of the overall U.S. study abroad population averaged from 1999/00 to 2014/15². Female respondents make up 79 percent of the survey sample, compared to 20 percent

Figure 2: Survey Profile: Racial or Ethnic Identity



male respondents, and just over 1 percent³ who selected another gender identity.

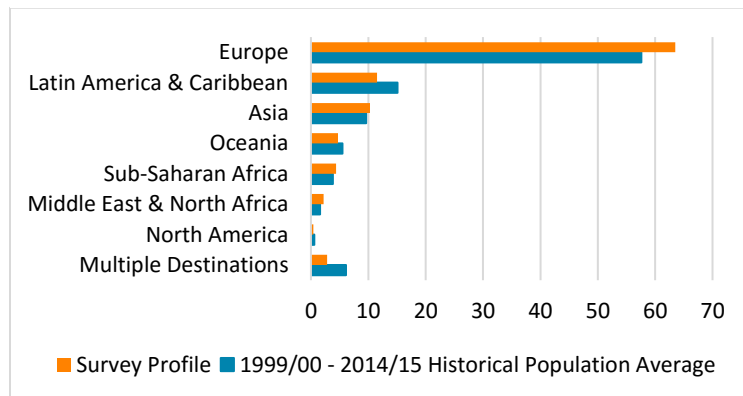
While females are somewhat overrepresented in the sample, the high proportion of female respondents is in line with historical study abroad trends. According to *Open Doors*, female students have consistently made up about two-thirds of U.S. study abroad over the past 15 years. Additionally, 19 percent of survey respondents reported being first-generation college students.

Academic and Study Abroad Program Characteristics

Destination

The study destinations of survey respondents largely mirror national-level trends for most world regions, with slightly higher proportions of respondents studying in Europe (Fig. 3). Among survey respondents, 64 percent studied in Europe, compared to 58 percent nationally from 1999/00 to 2014/15. Respondents who studied in Latin America and the Caribbean were slightly underrepresented compared to national patterns: 12 percent of respondents studied in the region, compared to 15 percent overall.

Figure 3: Survey Profile, Destinations



Respondents traveled to other world regions in proportion with overall study abroad patterns.

Duration

The survey respondents are much more likely to have studied abroad on mid-length or long-term programs than is the overall study abroad population.

² While study abroad alumni from the 2015/16 and 2016/17 academic years participated in this study, national-level data on study abroad participation for these years was not yet available at the time this report was published.

³ Proportions may not sum to 100.0 due to rounding.

- Among survey participants, most (62 percent) studied on mid-length programs of one semester or one or two quarters, compared to 40 percent of the overall study abroad population from 1999/00 through 2014/15.
- Likewise, respondents' participation in long-term study abroad of one academic or calendar year was significantly higher than in the overall population – 15 percent versus 5 percent overall.
- Short term study abroad, including summer programs and programs of eight weeks or less during the academic year, made up just 21 percent of respondents, compared to 51 percent in the overall study abroad population.

While the survey sample does not mirror the study abroad population in terms of duration, there was a statistically significant number of responses for each category. In addition, the higher representation of long-term experiences enabled analyses of the impact of study abroad length on careers.

Major

Survey respondents represent a broad range of major fields of study on their home campuses. Notably, 30 percent of respondents indicated more than one major, and 10 percent indicated majors in multiple disciplines.

- Social Sciences and History was the leading major field among respondents, representing 32 percent of majors. Foreign Languages, Literatures and Linguistics were the next most popular major fields, accounting for 17 percent, followed by Science, Technology, Engineering and Math (STEM) fields, which represented 14 percent, and Business and Management at 11 percent.
- The fields of Humanities, Communications and Journalism, Fine and Applied Arts, Education, and Legal Studies and Law Enforcement each accounted for less than 10 percent of majors.

When comparing to national level trends of all U.S. study abroad students from 1999/00 through 2014/15, survey respondents are more likely to have majored in Social Sciences and History (32 percent in the survey sample, compared to 21 percent overall), as well as Foreign Languages and Literature (17 percent compared to 7 percent). Notably, survey respondents are less likely to have majored in STEM and business, which each average 19 percent of the U.S. study abroad population from 1999/00-2014/15.

Study Abroad Academic Focus

It was most common for survey participants to indicate a focus in the same field as their major.

- Mirroring the respondents' majors, Social Sciences and History was the most common academic focus of participants' study abroad programs, representing 28 percent, and Foreign Languages, Literatures and Linguistics followed at 25 percent.
- All other fields represented less than 10 percent of study abroad participants, with Multi/Interdisciplinary and Liberal Arts and Sciences representing the next highest focus at 9 percent, followed by STEM fields at 9 percent, and Business and Management at 8 percent.
- The only major in which an academic focus in the participant's major was not the most common was in Physical and Life Sciences. Multiple/Interdisciplinary and Liberal Arts and Sciences was the most common study abroad focus among survey participants who majored in Science at home. Among Science majors, the second most common academic focus during study abroad was Foreign Languages, Literature and Linguistics. A focus in Physical and Life Sciences was the third most common selection, representing just 21 percent of Physical and Life Sciences majors.

Career Profile of Survey Participants

While survey respondents represent a broad range of industries, years of experience, and salary ranges, the respondent pool skews towards those who are beginning to build their careers and therefore have work experience and salaries at the lower end of the range (Fig. 4). Among survey respondents, 57 percent have five or fewer years of professional work experience and 52 percent make less than \$50,000 per year. This is likely due to the survey's focus on recent study abroad alumni who have studied abroad since 1999/00. Respondents largely

Figure 4: Survey Profile, Career Data

Years of Work Experience	
Less than a year	14.0%
1 to 2 years	17.6%
3 to 5 years	25.0%
6 to 9 years	20.4%
10 to 15 years	19.6%
16 to 19 years	3.4%
Total Responses	100%
Current Industry	
Public Service	53.2%
Business	18.8%
STEM	16.5%
Arts & Leisure	6.2%
Manufacturing	3.0%
Infrastructure	2.3%
Total Responses	100%
Annual Salary	
<\$10,000	8.7%
\$10,000-\$29,999	12.2%
\$30,000-\$49,999	30.9%
\$50,000-\$79,999	28.3%
\$80,000-\$99,999	7.3%
>\$100,000	7.0%
Prefer not to say	5.5%
Total Responses	100%

work in public sector careers, accounting for 53 percent of respondents, with education professionals making up the largest segment of respondents at 42 percent.

Profile of Interview Participants

A subset of survey respondents was selected to participate in an interview to more deeply explore the connection between study abroad and employment. Thirty interviews were conducted with study abroad alumni representing diverse personal characteristics, study abroad activity, and careers. Due to the low number of survey respondents who studied abroad at the graduate level (4 percent), the interviews focused solely on undergraduate study abroad experiences.

The interview sample was 70 percent women and 30 percent men. The race/ethnicity of interview participants included 17 who identified as White, non-Hispanic (57 percent), four as Hispanic or Latino, three as Asian, three as Black or African American, and three as two or more races or ethnicities. Of the 30 interviewees, 20 percent studied abroad between 1999/00 and 2004/05, 40 percent studied abroad between 2005/06 and 2010/11, and 40 percent studied abroad between 2011/12 to 2016/17. Seven indicated they were first-generation college students

Interviewees from a variety of undergraduate major fields were included in the sample. The largest segments were those with STEM-related majors, who accounted for 9 interviews (30 percent),

followed by interdisciplinary or dual majors, who accounted for 7 interviews (23 percent). The remaining interview subjects represented majors in Business and Management, Social Sciences and History, Humanities, Fine and Applied Arts, Foreign Languages and Literatures, and Communication and Journalism.

Of the 30 interviewees, three studied abroad on multiple occasions, discussing both experiences in the interviews. As such, these experiences were coded and analyzed separately, with a total of 18 experiences in Western Europe, five in Latin America & Caribbean, and the remaining 10 distributed evenly between Central & Eastern Europe, Sub-Saharan Africa, Oceania, and the Middle East & North Africa. Study abroad length was also fairly evenly represented, with 12 short-term study abroad experiences, 13 mid-length experiences, and eight long-term experiences.

Due to the overrepresentation of the education sector in survey respondents' careers, most interviews were purposely conducted with those outside the education sector to enable robust representation of other careers in the study's findings. Eight interviewees held current positions in business, seven in public service (four within education), six in STEM-related fields, three in infrastructure-related industries, two in the manufacturing sector, and one in arts & leisure. Finally, the study was interested in exploring reasons why respondents were either not sure or did not believe studying abroad contributed to a job offer. As such, six interviewees that did not believe study abroad contributed to a job offer were interviewed, as well as 10 who were not sure.

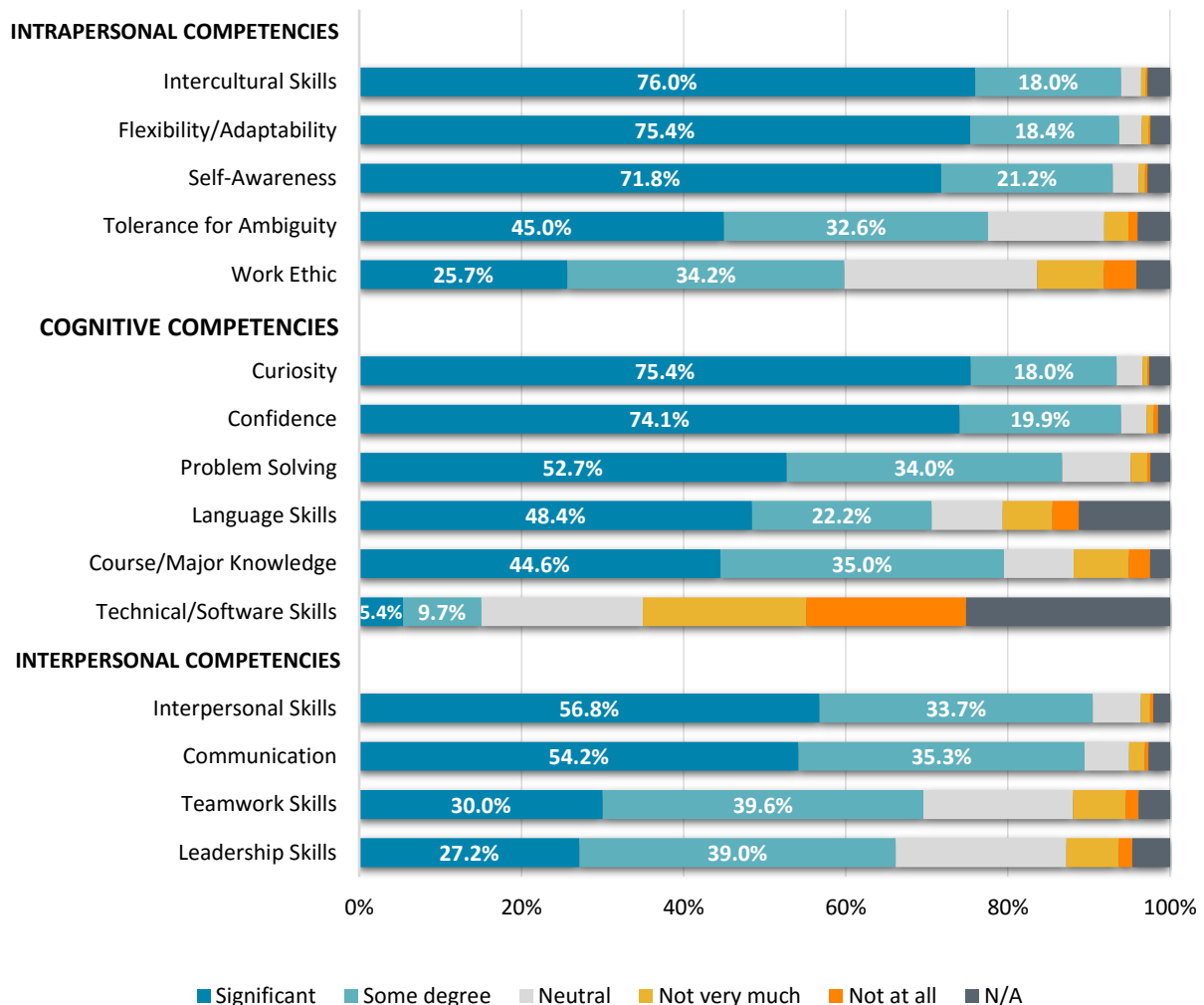
SKILL DEVELOPMENT & CAREER IMPACT

Developing Skills through Study Abroad

Study abroad participants can and do make positive gains in nearly all key skills desired for employment in today's workforce, not only the intercultural skills that have been the principal focus of many studies to date. A majority of survey respondents reported positive skill gains from studying abroad in 14 of the 15 skills surveyed, spanning cognitive, intrapersonal, and interpersonal domains. The most significant gains were reported in skills within the intrapersonal and cognitive competency domains.

A majority of respondents reported that their study abroad experience helped develop or improve intercultural skills, curiosity, flexibility & adaptability, confidence, and self-awareness to a significant degree. About half of respondents felt that study abroad helped increase their interpersonal skills, communication, problem solving, language skills, tolerance for ambiguity, and course or major-related knowledge to a significant degree.

Figure 5: Reported skill development or improvement through study abroad



Study abroad participants also improved their teamwork, leadership, and work ethic, but to a lesser degree than other skills. In exploring the reasons behind the lower level of skill development in these areas, study abroad alumni felt that undergraduate education and study abroad programs focus more on individual learning and

development rather than developing teamwork or leadership. Indeed, others have noted that interest in developing leadership experience at college is often a deterrent for students to study abroad because student leadership positions are campus-based (Gundersen, 2014). Participating in highly structured study abroad programs, particularly those that incorporated group projects and activities, emerged as a common factor among those reporting significant gains in collaborative, interpersonal, teamwork, and leadership skills during their study abroad.

In terms of work ethic, several interviewees talked about not being focused on doing “work” while abroad, but more so on exploration. Many indicated that they already developed a strong work ethic through academic or work experiences prior to studying abroad. Notably, interviewees who intended to develop or improve language skills were more likely to report developing work ethic during study abroad. Similarly, interviewees that studied abroad with career prospects in mind, regardless of their major at the time or current industry, were also more likely to report developing work ethic through study abroad.

The only area in which most respondents did not report at least some degree of development or improvement was in technical or computer software skills, with most respondents indicating that they did not develop this skill because it was not applicable to their study abroad experience.

Short- and Long-Term Career Impacts of Study Abroad

The Role of Study Abroad in Job Interviews and Employment Offers

While the survey data show that most (78 percent) have discussed study abroad in a job interview, the interview findings indicate that many employers do not systematically ask about study abroad experiences during job interviews, leaving it to the interviewee to incorporate their study abroad experiences into the interview. Those more advanced in their careers more consistently linked study abroad to career growth and reported being hired or *promoted* based on their international experiences. This finding held true across all majors and industries.

According to study participants, the likelihood of questions about study abroad arising during job interviews seems

“The [study abroad] was on the education portion of my resume at the time, coming straight out of undergraduate, and they were impressed that I studied abroad, and relayed how much it impacted them, because they had done a similar experience and thought that it was a good way of rounding somebody out and to give them more life experience.”

Physical & Life Sciences Major • Semester in Greece, 2005/06 • Current Industry: Infrastructure

“[The employer] definitely wanted to know how I handled living in a different environment and they were mostly interested in how my interpersonal skills were [developed] when I was abroad... They were also interested in what other skills that I gained from it, like resiliency and tolerance and understanding.”

Humanities Major • Short-Term in Haiti, 1999/00
• Current Industry: STEM

to depend on whether the individual or team conducting the interview was personally interested in the destination, the experience, or the related skill development. Some interviewees talked about study abroad being a point of personal connection with employers, even if studying abroad or having an international experience was not an explicit requirement or preference for the job. Others talked about employers having an interest in language skills gained, or how having experience traveling in other countries and interacting with other cultures may be an advantage. Employers across industries were interested in learning about job candidates’ resiliency, adaptability, and capacity to handle cultural and personal differences. Many also mentioned that employers were interested in knowing why the interviewee decided to study abroad, and generally what skills were gained from it. These types of open ended questions appeared to benefit

those that had studied abroad with at least a basic concept of professional or personal development in mind, as they were able to articulate in more detail their responses to such questions.

Across majors, professional industries, and study abroad duration, interviewees felt that the challenges and lessons learned during study abroad were some of their most meaningful experiences they had to convey their strengths in overcoming obstacles to potential employers during interviews. These interviewees described raising their study abroad in an interview, rather than the topic being introduced by the employer. This was most often done in response to behavioral interview questions, such as those asking about difficult situations or challenges they have faced. Study participants responded to these questions by drawing upon their study abroad experiences.

"I manage cross functional teams at work... So figuring out and kind of getting to know them as people and understanding what makes them work the way they do helps me to create a better end product."

Fine & Applied Arts Major • Short-Term in Japan, 2008/09 • Current Industry: Infrastructure

Furthermore, among interviewees who were not sure or who did *not* believe that studying abroad contributed to a job offer, most still believe that the skills gained through study abroad had proven relevant and useful throughout their careers. This was especially true as study participants were promoted to management-level positions where communication, interpersonal skills, and the ability to understand and work with difference were key hiring criteria. Taken together, these findings suggest that study abroad programs with clearly articulated career-related goals can help students identify the transferable skills they expect to learn prior to study abroad, which can help them articulate how they learned those skills to employers later on.

Using Skills on the Job

Study participants reported using skills developed during study abroad in their current work environments. Some interviewees related specific skills used daily, but most talked about general dispositions and awareness they gained through study abroad as being useful to them in their careers. Interviewees frequently talked about the importance of being able to work both with clients and colleagues not only from different countries, but

"...I had a 3.9 GPA, I interviewed for five different internship positions and I couldn't land a single internship. I studied abroad for a year, I came back to the states, and the first two internships I interviewed for I got offers from both ... And my whole interview ... all they did was ask me about my time abroad."

Business Major • Academic Year in Turkey, 2010/11 • Current Industry: Manufacturing

More than half of survey respondents reported that they believe their study abroad experience contributed to a job offer at some point. It is notable that almost half felt that study abroad did not contribute to a job offer or were not sure. These findings are not surprising, given that others have noted a disconnect in both students and employers linking skill gains to study abroad (Thompson, 2004). However, interviewees that talked about having career prospects in mind when choosing to study abroad were better able to articulate both the skill development and career impact they gained through the experience.

"People in a medical setting are going to see some pretty awful things sometimes, and it can be very stressful, and so being able to appreciate the variety of human experience in that setting is really helpful... instead of immediately jumping to conclusions or [thinking], 'this is just how things are done' or 'this is just how people are,' but being able to stop and just say, 'well, people are all the same and people are very different at the same time, so how can we make this make sense so this person isn't just crazy? Their behavior makes sense. Let's just figure this out.'"

Physical Sciences Major • Short-Term in Iceland, 2004/05 • Current Industry: STEM

different backgrounds more generally, and their study abroad experience serving them well in this regard. Beyond simply getting along, interviewees talked about the value of diversity in opinion and the need to understand others to most effectively accomplish tasks. Others viewed study abroad as allowing them to be more ambitious and less tentative in their career choices. This was particularly evident among those who had less international exposure prior to studying abroad. Studying abroad seemed to give interviewees both a broader understanding of career possibilities, and the confidence to pursue these career paths. Just 24 percent of survey respondents indicated that their current position requires international experience, and of this group, under 5 percent studied abroad with the primary motivation of improving career prospects. About 27 percent of those in positions that require international experience went abroad with the primary motivation of improving language skills. The most popular motivation to study abroad among the survey sample as a whole and this sub-segment was the desire for a cultural experience. This survey data and the information gleaned from interviews suggest that studying abroad had unintended benefits in terms of not only developing skills and shifting attitudes, but also opening career pathways and opportunities that had been either previously unknown or simply unconsidered.

“I think it's given me a lot of confidence in moving and taking positions that I want. And so, I think that kind of has been more beneficial than anything, that I haven't been really scared of anything – I'm not scared of the unknown at all.”

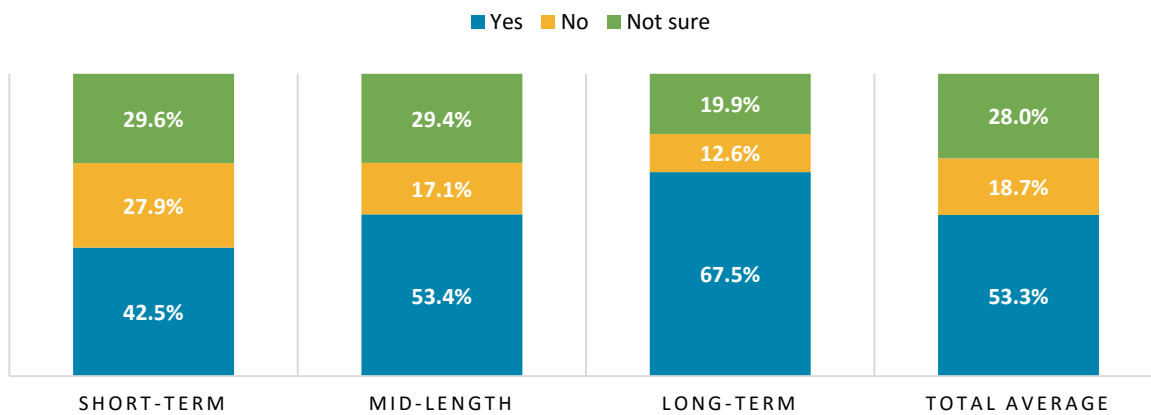
Engineering Major • Semester in Sweden, 2000/01 • Current Industry: Infrastructure

Is a Longer Term Abroad Always Better?

A longer study abroad program length did have a significantly positive effect on the development of most (11 of 15) of the skills in the survey, and those who studied abroad for longer terms were also more likely to report their experience as contributing to a job offer at some point. However, a few skills were unaffected by length, including curiosity, leadership, and work ethic, and the development of teamwork was actually negatively affected by length, suggesting this skill is an area of strength for shorter term programs.

In terms of career impact, a majority of respondents among all study abroad lengths believe their education abroad experience contributed to receiving a job offer at some point in time. However, as shown in Figure 6 below, the proportion that responded positively to this question increased from 43 percent to 53 percent among those who studied abroad on short-term and mid-length programs respectively, and to 67 percent among those who studied abroad long-term. Likewise, the proportion of respondents who did not feel that study abroad contributed to a job offer at any point decreased with study abroad length, from 28 percent among short-term respondents to 13 percent among long-term respondents.

Figure 6: Belief that study abroad experience contributed to a job offer, by study abroad length



The skill most notably impacted by a longer study abroad duration was language skill ($r=0.345$, $p<0.001$). Study participants noted that a longer time abroad allowed time to substantially improve their foreign language skills and even those who studied abroad for a long term commented that being abroad longer would have been more beneficial for language development. The other skills with a positive association between study abroad length and skill development (all at $p<0.01$) are: communication skills ($r=0.22$), flexibility and adaptability ($r=0.142$), self-awareness ($r=0.139$), intercultural skills ($r=0.135$), interpersonal skills ($r=0.114$), confidence ($r=0.109$), course or major-related knowledge ($r=0.103$), problem solving skills ($r=0.095$), tolerance for ambiguity ($r=0.089$), and technical & computer software skills ($r=0.049$). The development of curiosity was rated as very high across all study abroad durations by 73 to 77 percent of respondents and did not increase for longer durations of study abroad.

Work ethic, teamwork, and leadership skills – along with technical and software skills – were the lowest rated skills overall and did not follow the positive trend with program length. The development of teamwork actually trends significantly negatively ($r=-0.079$, $p<0.001$) with a longer study abroad duration. These findings suggest a need to better structure study abroad programs to improve the development of work ethic, teamwork, and leadership – all skills that are vital in today’s workforce. With the exception of gains in foreign language skills during longer term study abroad programs, most interviewees did not view their study abroad programs as too short to make sufficient gains in other skill areas. Notably, study participants viewed components of program structure as having a greater potential impact on skill development than program duration. (See section on program structure on p. 18 for more information.) Taken together, these findings suggest that different types of study abroad programs lead to different employability outcomes and should therefore be offered and undertaken in a deliberate manner to align with the student’s intended employment outcomes.

Academic Focus at Home and Abroad

Most respondents reported that the academic focus of their education abroad experience was within the same broad field as their degree major at the time. Having an academic focus that matched the student’s major at the time of studying abroad had a significantly positive effect on developing technical skills ($r=0.095$, $p<0.001$), course or major-related knowledge ($r=0.256$, $p<0.001$), and work ethic ($r=0.046$, $p=0.003$). It is easily understandable that

“Generally, in the sciences communication isn’t really emphasized, especially intercultural communication. That’s not something I would be able to learn in the classroom. It’s something that I was able to learn through my experience studying abroad.”

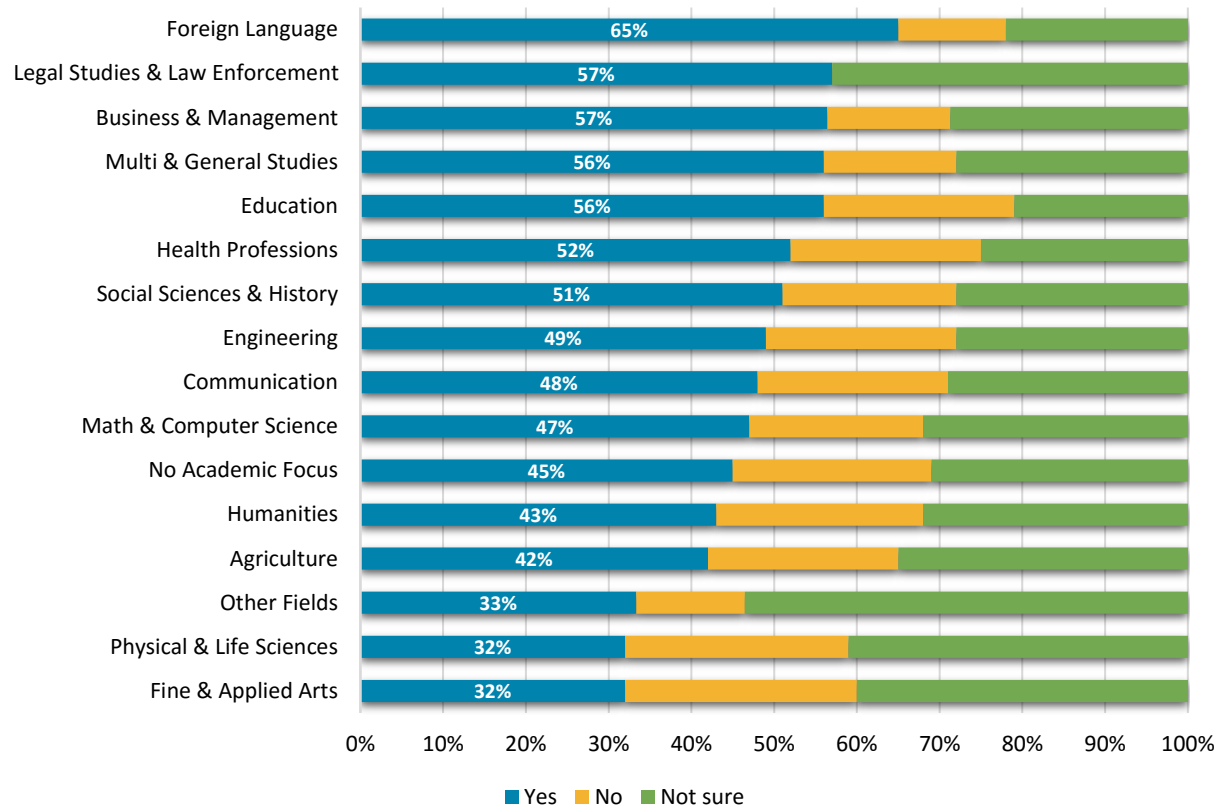
Environmental Science Major • Short-Term in Ghana, 2013/14 • Current Industry: Education

the ability to focus on your major while abroad would have a positive impact on the development of these skills in particular. However, interviews also revealed that it is these skills that respondents were able to develop to a significant degree on their home campus as well. Generally, these skills were not the biggest areas of impact from study abroad.

The only major that had more respondents participating in study abroad programs with an academic focus different from their major on their home campus was among Physical and Life Sciences majors. These majors mostly undertook a study abroad experience with a foreign language focus, or multiple and general studies. As shown in *figure 7*, respondents on programs with an academic focus in these two areas were much more likely to report a belief that study abroad contributed to a job offer than study abroad programs with a Physical and Life Sciences focus (of which most were also Physical and Life Sciences majors). Many interviewees with STEM majors described study abroad as an opportunity to explore different fields and practice skills that their academic programs at home largely did not address. These interviewees often described study abroad as one of the only opportunities during their undergraduate studies to develop skills like flexibility, written and verbal communication, interpersonal skills, and intercultural skills. It is also these kinds of “soft” skills that respondents working in STEM fields commented using and valuing most from their study abroad experiences, often mentioning

that technical skills were developed well at their home campus, but the skills developed during study abroad have given them an edge in their careers.

Figure 7: Belief that study abroad experience contributed to a job offer, by study abroad academic focus



Study Abroad Program Characteristics and Employment Outcomes

Generally, the destination choice did not have a significant impact on the ability to develop or improve skills during study abroad, nor on the likelihood that study abroad contributed to a job offer. However, interview data revealed that a strong sense of wanting to go somewhere “different” was positively associated with skill development and sense of career impact.

Additionally, survey and interview data revealed slightly different learning catalysts and outcomes from European destinations than other destinations. Finally, respondents showed positive skill gains from studying in destinations linguistically and culturally similar to the United States, but less so when the motivation to do so was due primarily to the influence of friends.

A common theme that came out of the interviews was a tendency for those that had less international exposure before studying abroad to study in culturally similar destinations. This was true irrespective of academic major. This theme also came through in frequent

“Growing up, learning about other cultures and understanding about other cultures, I heard all the fun stories that [my dad] had. I wanted to have my own set of stories and experiences, and that’s what motivated me personally to travel. At that point I had already been to Europe a couple of times. I think that’s probably what pointed me to Latin America. It certainly was not a popular destination. Everybody I knew was going to Spain or Prague at the time.”

Agriculture Major • Academic Year in Mexico & Costa Rica, 2002/03 • Current Industry: STEM

comments about wanting to go to a “different” destination; the meaning of “different” varied depending on the participant’s prior international exposure. For example, an alum who had been to the UK previously wanted to travel outside of Europe and another with family in Latin America wanted to explore Europe during her study abroad program. Regardless of the destinations, the skills these alumni developed, such as intercultural competence, and the ways they developed them were often similar.

“...So that’s how I picked Europe... I kind of wanted to see as many places as I could. But also the reason why I kind of liked Germany was because... I thought it was so cliché to go to Italy or France... And I guess I kind of wanted to do something a little bit more different.”

Math Major • Academic Year in Germany, 2012/13 • Current Industry: PhD student

Both survey and interview data revealed a few notable differences between European destinations and other destinations. Those who studied in Western Europe largely reported skill gains through independence and figuring things out on their own, while courses and organized activities were more likely to be noted as a catalyst for skill development by interviewees that studied in other regions, where students may be kept together as a group in structured programs, as these are typically non-traditional destinations. This inclination towards greater independence helps to explain the lagging development of skills that might develop in more group-oriented or collaborative environments, including teamwork, leadership, and work ethic. The desire for independent

travel also frequently came up as a motivating factor in choosing Europe as a destination in the first place, explaining why this was often mentioned as a catalyst for skill development, and suggesting that team-based skill development may not have been the focus of either the program, student, or both.

Even those studying abroad in destinations that were culturally and linguistically similar to home reported developing skills. However, these respondents were less inclined to report developing intercultural skills and, not surprisingly, language skills. Some interviewees that studied abroad in English-speaking destinations expressed a regret for the lack of language learning opportunity in their destination choice, although they still reported improving other skills and having valuable developmental experiences.

The Impact of Program Structure

While interviewees largely reported positive gains from their study abroad experience regardless of the program structure, those who went on more structured programs tended to be more motivated by personal or professional development, and also more consistently able to articulate the skill and career impacts gained through their experience. The concept of intentionality was closely associated with both structured programs and skill development.

Interviewees who talked about participating in highly structured programs were more likely to have career prospects in mind, compared to those who described their programs as more loosely structured. Having at least a vague concept of career benefit was also correlated with a tendency to choose a destination and program where the development of language abilities was possible. Having an explicit focus on language development led to more significant language improvement, regardless of the study abroad length. In turn, there also tended to be more improvement reported in other skill areas outside of the specific language abilities.

“...the language skills and being able to prove those and just having an experience – I think most people, particularly employers, look at abroad experiences positively because... having an experience abroad for most people, I think, shows a level of independence and also shows a willingness to step outside your comfort zone and perhaps even challenge your own assumptions.”

Business Major • Semester in France, 2011/12 • Current Industry: Business

“I always wanted to go into medicine and was always interested in international medicine. So, I really knew I needed experience in that realm... Because you can't be taking care of patients and come at them with a completely wrong baseline assumption about what their life is like or where they're coming from.”

Humanities Major ■ Short-Term in Haiti,
1999/00 ■ Current Industry: STEM

When discussing job searches after studying abroad, interviewees who had studied abroad on more highly structured programs were more likely to talk about the career utility of the skills they developed. They also more directly connected their career advancement to study abroad than those on more loosely structured programs. While some interviewees that had been on loosely structured programs reported not discussing study abroad at all in any interviews, this was not the case for any of the interviewees that had been on more highly structured programs. There was a clearer ability to connect the experience to skill development, leading these respondents to discuss the impact of study abroad even if the employer did not ask about it specifically.

Intentionality in choosing to study abroad for some sense of professional benefit seemed to impact the likelihood of choosing a more highly structured program, and the ability to articulate gains from the experience. Those that considered career prospects when deciding to study abroad came from a variety of majors, not only the Social Science and Business majors most traditionally represented in study abroad. Additionally, not all of those in majors traditionally represented in study abroad had career prospects in mind.

RECOMMENDATIONS

This study sought to understand the connection between study abroad experiences and the development of skills that are relevant to the workforce. Overall, the findings indicate that study abroad has a positive impact on the development of many employment-related skills, but that some skills, such as leadership, teamwork, and work ethic are better developed in shorter, more structured study abroad programs, while other skills such as foreign language are better developed in long-term study abroad programs. Notably, most participants in this study indicated that the development of employment skills was not an intended outcome of their study abroad programs, a finding which holds across study abroad program type, destination, and duration. However, among those who intentionally sought to develop work-related skills through study abroad, they reported more positive employment outcomes, suggesting that intentional goal setting and reflection on skill development contributes to a higher impact of study abroad experiences on subsequent employment.

In light of the findings of this study, the following are recommendations for U.S. higher education institutions and study abroad providers:

Coach students on how to communicate effectively the skills learned through study abroad to employers. The survey findings indicate that many employers do not ask about study abroad experiences during interviews. Those study participants who took the initiative to raise their study abroad experiences during job interviews reported a stronger connection between study abroad and employment offers, suggesting that students can benefit from interview coaching or training on how to communicate the value of their study abroad experiences to employers.

Integrate clear employment-related learning outcomes into the design of study abroad programs. While some respondents reported feeling uncertain about how to convey their study abroad learnings to prospective employers, nearly all participants reported *using* these skills on the job. To help address this gap, Study Abroad and Career Services offices should work collaboratively to infuse explicit career-oriented learning goals when designing study abroad programs, as well as help students to explicitly identify the transferrable skills they hope to gain through study abroad. These goals should be incorporated into all kinds of study abroad programs, including short-term and long-term programs, those that are classroom-based and experiential programs such as internships.

Leverage the strength of short-term study abroad programs in developing teamwork skills. When considering study abroad length, a longer time spent abroad does have a positive impact, especially for foreign language development, but short-term programs are also beneficial, particularly when more highly structured. Shorter term programs may be a preference for students that either do not have time to study abroad longer, or for students who may benefit most from the development of skills like teamwork, leadership, or work ethic. To enable the development of a range of employment-related skills, a variety of program types with different work-related learning objectives should be offered to students, including study abroad programs of varying duration, programs that emphasize independent learning or teamwork skills, and both classroom-based and experiential opportunities such as internships and volunteering.

Encourage students to study somewhere that is culturally or linguistically “different” than what they already know. When working with students to choose study abroad destinations and programs, consider their prior international exposure, and encourage them to push the envelope accordingly. Immersion in a culture that one is not familiar with already or that is linguistically or culturally different from home can have powerful career impacts. Students studying in unfamiliar destinations acquire greater intercultural skills and report more positive career impacts than students who study in more familiar destinations.

Increase STEM students’ participation in study abroad. STEM majors in the study noted that study abroad provided them a high value in being able to develop “soft” skills that were largely not addressed by their programs at home. STEM students reported especially high study abroad gains in skills such as oral and written communication, interpersonal skills, flexibility, adaptability, and intercultural skills. Many of the students noted that these skills set them apart from other job candidates in their field and gave them an edge in the job market.

CONCLUSION

Across U.S. higher education, there is a strong emphasis on preparing U.S. students to secure jobs after graduation in order to ensure their own economic prosperity and to contribute to the economic development of their communities, states, and the country as a whole. Study abroad provides a unique opportunity for students to gain work-related skills in a global context. This study has found that study abroad contributes to the development of transferrable skills and positive employment gains in different ways depending on program characteristics, study destinations, and the intentionality of students in leveraging study abroad experiences for employment. Most notably, the ability to understand differences between cultures and individuals emerged as a skill that contributes to individuals’ career progression. Within the context of today’s global economy, most students will move into jobs where they work for or do business with international companies, as well as work with diverse colleagues. Accordingly, the work-related skills gained through study abroad can be powerful tools for career success.

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APPENDIX

Figure 8: 21st Century Skill Clusters, adapted from research by the National Academy of Sciences (2012)

<u>Domain</u>	<u>Cluster</u>	<u>Terms Used for 21st Century Skills</u>
COGNITIVE COMPETENCIES	<i>Cognitive Processes & Strategies</i>	Critical thinking, problem solving, analysis, reasoning/ argumentation, interpretation, decision making, adaptive learning, executive function
	<i>Knowledge</i>	Information literacy (research using evidence & recognizing bias in sources), information & communications technology literacy, oral & written communication, active listening
	<i>Creativity</i>	Creativity, innovation
INTRAPERSONAL COMPETENCIES	<i>Intellectual Openness</i>	Flexibility, adaptability, artistic & cultural appreciation, personal & social responsibility (including cultural awareness & competence), appreciation for diversity, continuous learning, intellectual interest & curiosity
	<i>Work Ethic/Conscientiousness</i>	Initiative, self-direction, responsibility, perseverance, productivity, grit, Type 1 self-regulation (metacognitive skills, including forethought, performance, & self-reflection), professionalism/ ethics, integrity, citizenship, career orientation
	<i>Positive Core Self-Evaluation</i>	Type 2 self-regulation (self-monitoring, self-evaluation, self-reinforcement), physical & psychological health
INTERPERSONAL COMPETENCIES	<i>Teamwork & Collaboration</i>	Communication, collaboration, teamwork, cooperation, coordination, interpersonal skills, empathy/perspective taking, trust, service orientation, conflict resolution, negotiation
	<i>Leadership</i>	Leadership, responsibility, assertive communication, self-presentation, social influence with others