



**Asia-Pacific
Economic Cooperation**

*Measuring Students' Intercultural Adaptability and
Constructive Interaction in Other Societies*

In-House Case Study on How Well Students at the Georgia Institute of
Technology Interact Constructively in Other Societies

APEC Human Resources Development Working Group

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Measuring Students' Intercultural Adaptability and Constructive Interaction in Other Societies

In-House Case Study on How Well Students at the Georgia Institute of Technology Interact Constructively in Other Societies

In Support Of APEC's Strategic Plan for English and Other Languages

Preface

The Georgia Institute of Technology analyzed pre- and post-work abroad surveys on the importance of preparation in knowledge, attitudes, skills and abilities; an analysis of supervisor feedback on international internship students; and focus groups of students who have completed international internships and their employers. This data was compared with ongoing data of International Plan (IP) degree students (must complete two terms abroad) at Georgia Tech, as well as with the results of other surveys (Cooperative Institutional Research Program [CIPR], National Survey of Student Engagement [NSSE]) used to determine student attitudes as entering freshmen vs. graduates with/without international experience and their level of intercultural development.

Students who have studied/worked abroad distinguish themselves from other students in their greater desire to influence the political structure, participate in community action programs, improve their understanding of other cultures, influence social values, be involved in cleaning the environment, become a community leader, and develop a meaningful philosophy of life.

In progress from “ethnocentric” (denial of cultural differences, defense of “us vs. them,” minimization of cultural differences) stages to “ethnorelative” stages (acceptance of cultural differences in context, adaptation and empathy to other cultures, integration, and true bicultural or multicultural understanding) our research shows: 48.4% of males in the IP had reached the level of “minimization,” vs. 38.7% not in the IP. For IP females 54.3% had reached “minimization,” vs. 51.2% not in the IP.

Students reported that work abroad was more valuable than study abroad and indicated that their personal growth from this experience included the ability to collaborate professionally—and also to do so with persons in the host economy's workplace environment—to understand the impact of his/her professional practice on society and culture, to understand the role of his/her discipline in solving global problems, and to understand the host culture's beliefs and values within a global and comparative context.

While most students demonstrated a significant jump in their foreign language skills, some expressed difficulty in certain contexts to avoid English, especially where it was the primary workplace language. Employers indicated that work abroad and foreign language/intercultural competency is highly valued and are factors in hiring and promotion. At the same time there a disconnect appears between the company executives and Human Resources (HR) representatives in valuing these qualifications, although HR acknowledges the applicant's demonstration of initiative, which improves their application.

The small focus groups revealed that foreign language acquisition was not a major factor in the success of their experience. No demographics for the students in the survey were produced, but there is clearly a need to provide demographic information in order to substantiate the correlation between language acquisition and the development stage of the

Intercultural Development Inventory (IDI). From comments by students both in and out of the focus groups, those who spent more time immersed in the language valued the use of their foreign language skills much higher and indicated a strong desire to use them on a lifelong basis.

Of further interest are a collection of Georgia Tech work abroad alumni testimonials, a comprehensive report (2008-09) on the Georgia Tech International Plan, and work abroad highlights for 2008-2009. These materials can be accessed from <http://www.modlangs.gatech.edu/news-events/APECsurveyresults.php>

We wish to thank the individuals who contributed to the completion of this report, including Caroline Noyes, Assistant Director at Office of Assessment at the Georgia Institute of Technology, and Jay Austin, APEC support staff at the US Department of Education.

Findings

The results of the study are represented in the following tables on the Work Abroad Survey, the Study Abroad Survey, and the Intercultural Development Inventory. Following these tables are the Work Abroad Focus Group Summary, the Employer Focus Group Summary, and a copy of the Work Abroad Student Evaluation Form used to obtain data.

NOTE: For the importance and preparation items (for work and study abroad surveys), the scales are as follows:

- 5 = Very well prepared/Extremely important
- 4 = Well prepared/Very important
- 3 = Prepared/Important
- 2 = Somewhat prepared/Somewhat important
- 1 = Not prepared/Not important

- * p < .05
- ** p < .01
- *** p < .001

Work Abroad Survey

Eighty students completed both the pre- and post-work abroad survey. Students who completed a work abroad term rated many of their skills significantly higher than those who did not (compared to their level of skill prior to the work experience).

Significant Increases from Work Abroad Survey:

	Pre-Survey	Post-Survey	Significance
Ability to carry out projects independently	3.61	4.11	***

Ability to use computing technology in discipline-specific analysis and design	3.15	3.51	*
Ability to analyze and interpret data	2.95	3.85	***
Ability to think critically and logically	3.67	4.03	**
Ability to practice your discipline in different cultural settings	3.57	3.94	**
Ability to professionally collaborate with persons in your host economy's workplace environment	3.51	3.81	*
Right now, I have the skills and experiences necessary to practice professionally in my discipline	19% (exactly true)	32.5% (exactly true)	***
Within the next five years I will travel abroad for non-academic or non-work related reasons	61.7% (exactly true)	77.5% (exactly true)	*

Significant Decreases from Work Abroad Survey:

	Pre-Survey	Post-Survey	Significance
Ability to communicate in your host economy's language in a professional setting (professional/technical fluency)	4.20	3.16	***
Ability to design a system, component, or process to meet desired needs	3.62	3.27	*
In the next five years I plan to work in a position in a foreign economy (4 point scale)	3.19	2.92	*

Semester Study Abroad Survey

Ninety students completed both the pre- and post-semester study abroad survey. Students who completed a semester study abroad program rated many skills significantly higher than those who did not (compared to their level of skill prior to the study abroad experience).

Significant Increases from Study Abroad Survey:

	Pre-Survey	Post-Survey	Significance
Ability to function on multi-disciplinary or cross-functional teams	3.42	3.83	*
Ability to carry out projects independently	3.94	4.25	*
Ability to practice your discipline in different social or cultural settings	3.35	3.87	*
Ability to professionally collaborate with persons in your host economy's workplace environment	2.98	3.42	*
Understanding of the impact your professional	3.06	3.42	*

practice has on society and culture			
An understanding of the role of your discipline in solving global problems	3.14	3.54	*
An understanding of your host culture's beliefs and values within a global and comparative context	3.29	3.74	**
Self-efficacy scale (a 10-item scale used to measure feelings about one's ability to perform in ways that achieve one's goals)	3.46	3.60	***

Significant Decreases from Study Abroad Survey:

	Pre-Survey	Post-Survey	Significance
Importance: Ability to communicate in a foreign language in a social settings (conversational fluency)	3.77	3.50	*
Importance: Ability to communicate in a foreign language in a professional setting (professional/technical fluency)	3.45	2.95	**

Intercultural Development Inventory (IDI)

The survey was given to incoming freshmen either in the GT 1000 Freshman Seminar (Fall 2005) or at new student orientation (Summer 2006-2007). The survey was given again to students as they neared graduation. A total of 316 students have completed both the freshman and senior surveys to date. At this point, the students have been categorized into five different groups:

- Never abroad (control group)
- Study Abroad (Faculty-led, short term programs)
- Semester Abroad (either study or work)
- Attempted IP (Enrolled in IP, but graduated without designation)
- Graduated IP (Enrolled and completed IP requirements)

The results demonstrate that students who spend at least a semester abroad (either work or study) post significant gains in their IDI scores compared with those who go on short-term study abroad programs or those who have no international co-curricular experiences.

We have begun to explore the impact of taking a foreign language on the IDI results, but we do not have anything conclusive at this point. So far, the results do not seem to indicate that there is an impact on IDI development from foreign language study, but this is preliminary data.

Following is a table of the preliminary data:

Experience Group	Survey	Mean	Std. Error	N
No Experience (Control)	Pre-survey	86.583	.853	227
	Post-survey	85.576	.980	
Faculty Lead Study Abroad	Pre-survey	85.400	2.058	39
	Post-survey	86.390	2.364	
Experience Abroad (sem.)	Pre-survey	85.694	3.565	13
	Post-survey	92.862	4.095	
Attempted IP	Pre-survey	86.689	2.874	20
	Post-survey	92.552	3.301	
IP Graduate	Pre-survey	84.921	3.118	17
	Post-survey	92.270	3.581	

Work Abroad Focus Group Summary

Office of Assessment
Georgia Institute of Technology
March 2010

As a component of the evaluation of international education programs at the Georgia Institute of Technology, four focus groups were conducted in November 2009 and February 2010 with students who had participated in Georgia Tech work abroad programs. The focus group discussion revolved around student perceptions of the contribution of their international work experience to their ability to navigate cultural differences in both the workplace and the larger society.

Purpose and Methods

The primary purpose of this focus group was to obtain feedback from students who had completed international work experiences on:

- Perceptions of their preparation by Georgia Tech for their work abroad experience
- Perceptions of the importance of foreign language abilities
- Perceptions of how their work abroad experience influenced their understanding of global competence
- Perceptions of international work experience and the understanding of work culture

Twenty students who had completed at least one international work experience participated in the focus groups. The students represented majors in Aerospace Engineering, Architecture, Biology, Biomedical Engineering, Civil Engineering, Computational Media, Economics, Global Economics and Modern Languages, Industrial Engineering, and Mechanical Engineering. The work abroad experiences occurred in Australia, Brazil, China, Finland, Germany, Guatemala, Ireland, Japan, and Turkey. In order to better understand the experiences of students working in “critical language areas,” two focus groups were designed to focus exclusively on students working in Japan, China, Russia, Korea, and Arabic-speaking countries.

At the beginning of each session, participants were instructed that participation was voluntary and individual comments would be anonymous. Students were also told that the focus group discussion was not intended to serve as an evaluation of the Office of Professional Practice or any staff member associated with the work abroad program. A theme route was used to guide and keep the discussion within the established parameters. Each focus group lasted approximately one hour. Quotations are edited for readability, and the assignment of gender indicators to quotations made at random.

Focus Group Findings

Georgia Tech preparation prior to going abroad

The students mentioned a number of different ways in which Georgia Tech prepared them to work abroad. Some students discussed the mandatory meetings where the discussion focused on culture shock, intercultural communication methods, safety training, and culturally-specific information concerning cuisine, eating behaviors, common modes of transportation, traditions, habits, work, and the like. For another student, the Georgia Tech environment prepared him for working abroad by fostering the ability to “know how to work really hard

and get stuff done,” while for other students the international diversity of the Georgia Tech student body allowed them to get to know students from other countries through programs such as the Association Internationale des Étudiants en Sciences Économiques et Commerciales (AIESEC) and the International Association for the Exchange of Students for Technical Experience (IAESTE). As one student said, simply having international friends enabled him to learn about different cultures:

- *When you interact with Chinese or Korean friends ... the way that they interact with you and their perception of others, like the school, their missions, their family history ... you get some perspective from that.*

Advisors and faculty members also provided valuable information and support which allowed students to have a successful international internship experience. This kind of support ranged from helping the student find an internship placement that would be a good fit for the student’s goals to providing the student with the language and materials necessary to work in a highly-regulated environment:

- *I’d just go into [a faculty member’s] office, and he would walk me through the process. He would tell me about what students before me had done and what kinds of goals I’m trying to accomplish and what companies would be able to sort of mold themselves to my goal. And through his experience from past students that worked [at the company] he said, “You know what? On paper, it may not look like the right one, but trust me. It’s going to be great for you.” And it turned out he was absolutely right.*
- *My linguistic classes definitely helped. I had to get one of my Japanese teachers to write a recommendation for me, and I also wanted to talk to them about the program I was trying to apply to. It was really good being able to discuss it with them.*
- *A lot of the technical German that I needed in the workplace was really, really difficult to learn had I not had [Language for Business and Technology (LBAT) training]. I had had enough German, but during the LBAT (since I had pretty much taken a lot of that stuff), I had time to explore other things. My professor just gave me a whole bunch of technical biology term books, so when I got there I had read up on what the embryo laws are in Germany and what my rights and responsibilities were and without having that I would not have known the legal terms or the technical terms of what I could actually do and not do and be safe and make sure everyone else was safe.*

Language skills are another significant way that Georgia Tech prepares students for international experiences, and learning the language of the host economy was seen as an important element of preparing for an international internship. While some participating students were native or heritage speakers of their host economy’s language, most students took at least one semester of language coursework before going abroad. For a student traveling to China, two years of language instruction wasn’t “enough to speak fluently or be confident, but it was enough to get there and build that confidence and be able to interact with people.” In addition to providing instruction in vocabulary, grammar, and pronunciation, the courses also provided an introduction to the culture that students found helpful. As one student who completed only one semester of German before working in Germany stated:

- *I know what I got out of [the elementary language course] was really helpful for stepping into a German environment socially and culturally, even some of the workplace things. And from [intermediate courses], I think I would have been*

infinitely more prepared if I'd managed to take just a second level because we've done a lot more basic things like how you talk to doctors, how you handle yourself in different situations, what's different about going out for drinks in Germany than it is here.

Interestingly, of the twenty students in the focus groups, only two took advantage of the Language for Business and Technology (LBAT) offerings, with one taking an LBAT course in a different language than her work abroad language. Of the seven students who worked in either Japan or China, none took the Japanese or Chinese LBAT, although one student was interested in taking the Japanese LBAT but the timing of the internship made participating in the LBAT course impossible. In some cases, students wished that they had taken an LBAT course, but for other students, such a course was deemed unnecessary:

- *Why I wanted to take the LBAT is that you go to China and then you have extensive intensive language courses while there, so you have time to practice it in culturally-specific places and then you're intensively learning it. [But] I was working on other stuff. I didn't have time to intensively study the language while being there. So I feel like I could have gotten more out of cultural and language studies if I had been able to take a class while there.*
- *It was more fun trying to learn [a language incidentally] and then asking the taxi drivers what everything meant. Then you're kind of like a child because you were saying it all wrong. You have no idea what you're saying, but you learn every day. I took German I and German II here at Georgia Tech and when I went there I thought, "I know enough German to get around." And then the first day I was there I had to find trains and everything and I asked somebody a question and he fired on his German and I could not understand a single word ... [But] after three months, I started to understand the people.*
- *I don't think the LBAT is going to teach me engineering vocabulary.*

Perceptions of the importance of language ability

While most students reported that they spoke English at their workplace, once they stepped outside of the office, nobody spoke English. Students working in both Europe and Asia experienced this phenomenon; however, it was more pronounced for students working in Asian economies:

- *It is beneficial if you know the language. It wasn't important for the internship. So if you go to work and you come back, and at work they were all speaking in English, but if you want to travel, go around, ask people for something, then you must know the language.*
- *Most of the people that I interacted with, they spoke English. I was in a manufacturing plant, so the only people that didn't were the operators on the floor. And I would usually get one of my co-workers to come and translate for me if I need to tell them anything.*
- *But if you go off on the street or if you want to go order food or something like that or talk with people outside of the college, then you'd have to learn Chinese and that's where I got to practice a lot.*
- *I'll reiterate that the most like language-learning, culture-learning experience I had was when I went out to one of the smaller—it was still a rather large town, but a smaller town where I didn't run into people who spoke English or the people I did run*

into spoke very, very limited English. They could kind of get by if they needed to, but it was easier for me to speak in Chinese. When you get to that transition, you're starting to really learn.

One factor affecting the students' ability to speak the host language in the workplace was the desire of those native to the culture to practice their English. One student noted that "we were in the most educationally affluent area in China, so everyone had been taking ten or twelve or fifteen years of English and whether they had the experience or not, they want to get the experience so it's very easy to speak English." Another student noted:

- *As a foreign English-speaking person, everybody there wants to speak English to you to practice their English, so my Chinese did not develop a whole lot more than what I already know from taking the class here.*
- *Like in Japan—in Japan and China—In Japan, they incorporate English words into the language, just pronounced differently. And in China a lot of the street signs they have English, and it's true that if you go to China, if you just go to speak in the streets, chances are they're not going to understand you, but then if you go to the business side or if you go on the college side, everyone speaks English.*

Speaking the language was, however, important in helping students negotiate a cultural divide. As one student said, "I noted that if you try to speak in German, even if your German is not perfect, they just get into that comfort zone where they will be more willing to help you." Sometimes, however, it was important for students to seek out and find expatriate communities where they could have what one student called a "genuine relaxed and fluent English conversation":

- *I went to this bookstore that had mostly "expats" that were living in Sujo and staying there, and I made some friends, other American friends, who were there just to teach English, and they were there for a year. So I would go and hang out with them in the evenings and hang out with...my Chinese colleagues during the day.*
- *There was an expat barbeque every Sunday at Enoshima Beach, and it was actually very refreshing. It was a rare experience to actually sit and have a genuine relaxed fluent English conversation. [With my] Japanese friends—as fluent as they may be, I'll always run across a word that I want or some sort of idiom or some slang they don't know. But to actually sit with another American and just talk ... is a wonderful, relaxing, and liberating experience. I needed to let that out every now and then, so those weekend barbeques were great.*
- *We went to a lot of English concerts, too. But I think I went to go look for it because the past times I visited China it was always with my parents and it would always be with my relatives and I'd see the Chinese view of China. But going to Beijing this time as a foreigner, as a person from America, it was just really different seeing the actual American culture or the foreign culture there, and seeing it as a real bubble within China.*
- *One of the coolest things I saw in any of the expat areas is that you see [something like] someone from Africa and a German talking in Chinese as a lingual common. [Another student: "It happened in Japan, too."] That was awesome.*
- *Most of my close social group was in the company, but I also had an extensive outer group that had nothing to do with the company, but I think the reason that is because I was near the city, so you see more foreigners. Plus I think that in Japan, there are seriously defined groups—those that actively seek out the foreign community and*

those that don't. And if I were to go to an international party—if I was hanging out in Shibuya, that's in Tokyo, or otherwise was in a position to meet other Japanese that have put themselves in the position to meet other foreigners—then it was way easier to actually communicate with them and become friends because they had already traversed those boundaries with other foreigners.

International work experience and “global competence”

While fewer than five of the students had participated in both work abroad and study abroad, they indicated that their work abroad experiences provided them with greater access to the economy's culture. According to these students, their study abroad experience involved more time spent speaking English with other students than their work abroad experience, where they spent more time interacting with members of the local community. When specifically asked to compare their study abroad and work abroad experiences in terms of which experience got them more in touch with the culture of the economy, some students responded:

- *Definitely work abroad. Part of it is because I'm by myself and I'm surrounded by Chinese people kind of 24/7; whereas, on the study abroad if you go out, you basically take along some of your friends, Georgia Tech, your professor ... It was just more hand-holding.*
- *I would say my work abroad experience did a lot more—I was forced to be more culturally sensitive and learn more and I had to be more adaptable. [Studying abroad] in Germany, everybody speaks English, and you know the language fairly well so you think, “Oh, this is fun. I'm here for two months. We can just do whatever.” But [working abroad] in China, you had to do stuff, you had deadlines you had to meet. You had to meet with Chinese companies and the Chinese government, and you had your own boss ... You had to make sure things got done. I think that my work abroad experience probably was more influential in making me more globally competent.*
- *With work abroad you immerse yourself in that culture. With study abroad, most of the time, you're with a group from your college and you stay with them so you don't get the culture aspect as much.*
- *The only support system I had was my company, and my company was very different from my professor ... I felt like I could call my professor for certain things, but with the company, I have to be a little bit professional.*

While work abroad experiences allowed for greater immersion in the host culture, some students saw the benefit of using a study abroad experience to ease into the cultural immersion:

- *I think this summer was the first time I'd actually been out of the United States at all. So going and being practically by myself and everything I did was a little bit intimidating and so I think for me I would have preferred to do a study abroad first, but I wouldn't give up my work abroad experience at all. If you have to do only one or the other, I would say work abroad, but I'm relatively introverted and new things make me kind of nervous, so I would have liked to have done something a little more structured first.*

The students saw international experience as key to developing global competence, and offered a variety of different definitions of the phrase. As one student said, “global

competence is having patience” while for other students, global competence was manifested through displays of sensitivity towards members of the different culture:

- *[Global competence is] being able to go to a different economy and understand the culture and being able to learn about the culture and being open but you don't offend anyone so you can work with the people there.*
- *You don't want to come imposing yourself and your ideas. You want to be sensitive—that's what it is—sensitive to how other people think and how they do things and just being able to operate smoothly with people from other places in the world.*
- *I think global competence is an understanding that there are differences around the world between economies, and people, and cities. Being open to hearing what other people think.*

For other students, global competence involved the ability to anticipate and reflect on differences between the home economy and the host economy while learning from the inevitable cultural gaffes:

- *It's kind of like watching before you take a step, like figuring out how people interact but not making a bunch of assumptions about how you're used to doing things and thinking that they'll be normal there. You just see these things that are very, very strange to you and stepping back inside of yourself and saying, "Well, I'm not from here. Things here are totally different, and I need to be aware of that." Being ready to do that and able to do that quickly and able to not make a fool of yourself in the meantime before that happen—those kinds of general skills are probably very important.*
- *I think it's identifying the factors that are going to be different regardless of how many cultures you actually see and expecting to see differences. I think it's global competency to me, knowing that there are factors that are different and then assessing things from that kind of perspective and going, "Okay, this, this may be different. This may be the same." And being able to modularize it and go, "Okay, if I look for this, this is fine. And having that kind of mental checklist a little bit so you know not to offend anyone else and know not to be offended in someone else's actions as well. Just to recognize that it's different, but it can work.*
- *I feel like you can learn about [other backgrounds in non-immersive ways] (read a book about how China's culture is different from American culture, the customs, etc.), but when you're actually placed in a situation where you make a mistake, you realize, "Oh, the next time when I speak to this person I should be more patient or more understanding or just more something."*

For still other students, cultural competence was more of a physical manifestation than a world-view. For these students, a culturally competent person is confident that he or she can handle cultural differences, and is willing to actively engage with all aspects of the culture:

- *Just having an awareness of [cultural differences is important] so that when you work with people—whether it's here or in your own economy—that are from another economy or you go outside the US, it's not like, "Oh my gosh, this is too much for me to handle."*
- *I think a lot of it is being able and willing to adapt to the situation you're in, because if you're not willing to try different foods and different activities and just isolate*

yourself while you're there, then people that you work with are going to see you as very standoffish and they're not going to want to make the effort to include you if you're not willing to step up. Whether you've been there or not or if you've studied the culture or not, once you're thrown into it, you can either run with it or you can freak out and go lock yourself in your room immediately after work every day.

- *If you can form a genuine friendship with a person from the other culture, then you have attained global competence at least with that culture. I don't think you can truly understand and accept a culture unless you actually have made a friend from that culture.*
- *And so for me, global competence is not being able to say this is how Japan does it, this is how Germany does it, this is how some economy in Africa does it, but being able to adapt easily or to understand easier regardless of where you go. Being able to adapt or at least to understand another culture, whether it be company culture or any kind of culture, [is an important skill].*

International work experience and understanding work culture

Students' understanding of the differences in work culture between their host economy and the US were affected by a number of moderator variables. For example, as in the US, different corporate divisions had different work environments. So, a student working in a research lab of a particular company had a very different work environment than did a peer working at the corporate headquarters of the same company. Similarly, the work environment was, to a certain extent, determined by the size of the company, with larger companies more hierarchical in organizational structure and smaller companies more flat in organizational structure. As one student said, "I think it depends on the place you work more than the economy. I think these global competences are one part of the economy's culture, and the other part is the company's culture."

Students working in China and Japan identified some workplace differences associated with working in a collectivist culture compared with working in individualist culture. A societal trait of deference was displayed in a number of ways, including in the tradition of gift-giving, where one student noted that "you always take gifts when you go to a meeting with high-level people." Deference was also seen by a student working in China, who described his perception of Chinese workers being less inclined than their American counterparts to take initiative or to be self-directed in the workplace:

- *Their culture is more collectivist instead of more focused on individual, so you relate to your superiors as you just have to do what they say. That's just how it is and they don't expect you to take your own approach to solving something. People there want to look good in front of their superiors but here people take a much more individualistic approach. If somebody sees something wrong or something, we'd say, "Hey, this is what I think. I think we need to look at this more," but you wouldn't do that there. So that took a little while to get used to.*

Students working in Japan noted that for Japanese employees, their work ethos was such that work was a central element of one's life. For example, employees worked well into the evening without pay in order to not leave work before their boss. These students found that the expectation of the primacy of work for employees in Japanese corporations made them less appealing than US corporations:

- *The company I worked for is very traditionally Japanese even though it's pretty much a copycat of the American company, AT&T. The reason why I'm probably not going to work there in the future is because the Japanese mindset is that work is usually more important than anything else in the world. So people work there. Their co-workers are their best friends and usually like the salaried men, they think that your co-workers are more important than your family, or your wife, and everything. So relationships can get pretty sour. But also since they think that work is the most important thing, when you work for a company, you work for it for the rest of your life. That's traditionally what happens. And the Japanese are very traditional. They confine to the norms. So if that's what everyone else is doing, that's what you should be doing.*
- *Another tradition is you don't leave until your boss leaves. So people usually work about 11 to 13 hours every day, and that's normal, even though work officially ends at 6:00—there's even a bell that signals that work is over. People don't leave until about 11:00 p.m. and they don't get paid for that. From 6:00 to overtime, they don't get paid, and the only time they do get paid is when they get a compensation at the end of the year, usually about three months worth of salary, just a bonus, and that assuming that you work 12 or 13 hours a day. The problem if I worked there is that they'll think I'm going to do the same thing, but I'm not going to do that.*
- *During the last six months [of a year-long stay], they enacted this new policy where you had to petition for overtime because people spent so much time after hours working and the company was actually—at least where I worked—paying for the overtime. And so now to save money, they want to see why you're there. I saw significantly fewer people staying after because they weren't actually getting approved for staying late ... Though the system is changing, if I were to go back there, I'd rather be an expat for an American company. I don't think I'd want to work for a Japanese company if I'm to be held to those expectations. I wouldn't recommend someone who has a [Western] individualistic mindset to try to work in a very collective market.*

A student working in China also described the nature of indirect communication strategies that he encountered:

- *They don't like negatives. If you ask them to do something and they can't do it, they won't say no; they won't do it. They'll rephrase the question or they'll just drop little hints, trying to let you know that that's not something that they can do because to just say no to you is like losing face ... They have a word for no, but they don't really use it because it's not a good thing, which is kind of interesting.*

For another student working in China, there was the awareness that the very presence of an American in a Chinese workplace altered the dynamic within that environment, making it difficult for her to experience the distinct workplace culture:

- *[The Chinese are] extremely interested in learning how to emulate American school systems and probably the same of American businesses and like that. So in a lot of cases I felt like I couldn't really totally understand the way that they would do business in China because whenever I was there like observing, there would be almost a mock sort of thing going on where they were trying to be slightly more American than me.*

Students working in Europe also noticed some differences between the European work environment and the US work environment. A key perceived difference between European and American workplaces was the more relaxed atmosphere of European companies. As one student said, “We would have beer on Fridays in our meeting. In the team meeting, we would walk in and there would be beer in tubs on the table ... It was definitely not anything like any of the jobs or anything that I’ve seen or heard about in the United States.” Other students who worked in Germany differed in their interpretation of how relaxed the workplace was, relative to US workplaces:

- *Well, for one thing, American companies have a very strict time regulation as far as I’ve seen. You have to be on time here and you should leave by [a certain time] and then it doesn’t matter what kind of work you’re doing. You’re coming here for eight hours every day. And Germany was, “We don’t care if you come at 8:00 in the morning or at 11:30 as long as you are working, giving in your own number of hours, and you know that you are doing your work.” The complete company environment was very casual and very relaxed, which helped a lot because if you need help in your project or if you need to ask something, it was like just asking like a friend because there was a lot of outside work activities. You could just go to anybody and ask them anything. It was very nice.*
- *I had a co-op with the same company for all four terms and so I did my first three terms with their American facility and then went and worked [in the German office], and [the German office] was a lot more structured because [in the US office], it’s a manufacturing environment, and only people who work on the manufacturing floor are actually on the bell schedule. Everyone in the office is a lot more flexible. People have a whole variety of start and end times. People take lunch at random times and have meetings. And in Germany in my office, it was a pretty flexible start time, but still everyone took morning break at the same time. Office people, everyone, you have the same morning break. You have the same afternoon break. I think I saw people in my office actually work overtime twice all summer; whereas, people here were working overtime all the time, trying to get caught up to do things. And so it was really different to see just how the office interaction was so different. And in Germany, they get six weeks of vacation every year and so I think there were only two weeks out of the whole summer when everyone was actually in my office at one time. So that was just something that was different. If you live in Germany, you have six weeks of vacation.*

Students working in both Europe and Asia noted that the work environment in those cultures tended to blend personal and the professional relationships:

- *As far as the professional or more personal, the whole job setting was definitely more personal. It was kind of hard to make a line between personal and professional ... so that was kind of hard to work with. [Europe]*
- *I feel like maybe it would be interesting to compare us because we worked at a college, so we had the college casual stuff on top of everything ... but I would call it more like co-dependent in the sense that your family life kind of bleeds into your work life. Like my boss’s wife would come and then bring in food and then chat with everyone, and they’d talk. [Asia]*
- *They do a lot of dinners and things like that, that are not business focused ... they’re just for people to get to know each other. If you’re going to be working, having a partnership or doing anything with a Chinese company, they’re going to want to get*

to know you, how many kids you have, how old your parents are and where they're from, and all that kind of stuff. They want to know a bunch about you, so you go and you do that kind of stuff. The American culture, Western to an extent, is more like, "We just want to get down to business. We want to talk. This is what we need to address. This is what we need to get done." [Asia]

- *Usually those you work with are your best friends. They go out after a big project and order tons of food and drink a lot, but I don't like drinking, so I didn't go out with them too often. And that actually soured my relationship with them. [Asia]*

Cultural "bumps"

Students encountered a number of cultural bumps or missteps while they were living and working abroad. For some students, the cultural encounter involved different work styles while for others, communication styles caused students to pause and reflect on to whom and how they were saying things:

- *People that I was working with would procrastinate and that would kind of annoy me and the other Americans that were working with us, and we just had to get over that and try to push that person to not procrastinate to get it done in time.*
- *I guess one of the biggest ones was when I was at work—I had to gauge my behavior very, very carefully because I had a supervisor who was fluent in English so he and I would be able to just talk normally. But everyone else, if I so much as tried to talk to them, they had this way of trying to smile through their teeth and just get through it. And I would get through that and then I would learn that if it was not entirely work-related entirely and if it was in English, then I might as well be pointing a gun at them. I had to gauge when it was appropriate to behave in certain ways throughout the day. Depending on whom I was talking about, who I was talking to, and when I was doing it, I had to elicit different parts of my personality to get through that experience effectively.*
- *I had to create at least three different personalities just to get through the day. I'd talk to a friend; I'd be all casual. Then I'd suddenly have to talk to an older person or have to be polite again and I'd mix my polite and casual. And then you have to learn to speak honorific. Then you have to learn how to speak humble. It was a mess.*
- *In China they're a lot more formal, so I would always have to remember to call them "Mister" last name. In the US, it was always first name. So that was probably the one thing I have to remember.*

Among the focus group participants, particularly among the students who went to China and Japan, there were students who were of various ethnic backgrounds. Caucasian students described standing out within these very visually and culturally homogenous populations:

- *China and Japan are very, very racially homogenous, to a point that's really kind of mind blowing for someone from America. Being the white guy, people stare at you. They all stare at you. Everyone stares at you everywhere. Some of them run up to you and want to take a picture with you all the time.*

For students who were of Chinese or Japanese decent, traveling through China and Japan presented its own set of culture bumps:

- *They kind of just talked at you like you already knew the entire language. There are just some things that you don't know because you don't encounter it in everyday conversation.*
- *I was with another intern whose Japanese is really good and he's married to a Japanese woman. He's from Seattle and he's old, he's white, and so we'd go to the store and he'd talk to the store person and then the store person would respond. He'd kind of turn to me and then he'd start saying stuff and just kind of expected me to understand what they were saying, but [my friend was] actually better than I am.*

Conclusion

As a result of good advising, relevant mandatory information sessions, and language skill development, students felt well prepared for their international work experience. Opportunities to get involved with internationally diverse campus organizations also provided good preparation for international work experience.

Language preparation was seen to be important, but the majority of students indicated that they used English in the workplace and it wasn't until they got out into the wider community that they had to rely on their language skills. Traveling to more remote areas of the economy gave students greater opportunities to speak the language and to learn the language in more depth. Particularly for students working in Asia, the highly educated residents of the cities pressed the students to accommodate their desire to practice their English skills.

The students indicated that the opportunity to have international work experience allowed them to become better and more deeply involved in the host culture than did study abroad experiences. With study abroad, students affiliated mainly with other expats while students who were working abroad were forced to interact more with members of the host economy. International internships also gave students a better understanding of different work cultures. Even though the language spoken in the workplace was frequently English, students—particularly those working in Asian economies—encountered workplace cultures that were sometimes very different from their American counterparts. For some students working in Asia, the cultural differences of the workplace were significant enough to make them prefer to work for an American company. While students working in Asia were struck by the Asian work ethos, students working in Europe found the corporate culture to be generally more relaxed and less regulated than American corporate culture.

Even though the students were well prepared for their experiences, there were certain cultural bumps that occurred, which the students reported navigating through without much difficulty. For both Caucasian and Asian heritage students, international internships in Asia carried significant opportunities for unexpected and surprising cultural encounters. Students sometimes sought out interactions with other expats in order to have what one student called a “relaxed” conversation. For another student, conversations and friendships with Japanese citizens were easier with those who had considerable experience with international visitors.

This set of focus groups provides evidence that Georgia Tech students who have international internships are well prepared for that experience and gain valuable insights into both the culture of the city and employer where they work as a result of this experience. The focus groups also indicate possible areas for further exploration, including the differential experiences of students working in different regions of the world, and a better understanding

of how students' off-work excursions influence their cultural understanding and language skills. These focus groups will be conducted during the 2010–2011 academic year.

Employer Focus Group Summary

Office of Assessment
Georgia Institute of Technology
January 2010

As a component of the evaluation of international education programs at the Georgia Institute of Technology, a focus group was conducted in September 2009 with representatives of three multinational corporations who were attending the Georgia Tech Career Fair. The focus group discussion revolved around perceptions of the value of international work experience in the hiring process for multinational companies.

Purpose and Methods

The primary purpose of this focus group was to obtain feedback from company representatives who were at the initial stage of the hiring process when considering a potential new hire.

- Perceptions of the desired technical skills and soft-skills of new hires.
- Perceptions of the role that work experiences play in their hiring decisions.
- Perceptions of the role that international study/work/travel experiences play in their hiring decisions.
- Perceptions of the importance of foreign language ability.
- Awareness of and perceived value of the Georgia Tech International Plan.

Approximately 21 representatives of multinational corporations who were attending the 2009 Georgia Tech Career Fair were asked to participate in the focus group. A total of five participants representing three companies attended the session. The multinational companies represented the sectors of automobile manufacturing, oil and gas equipment, and integrated oil and gas production. At the beginning of the session, attendees were instructed that their participation was voluntary and that individual comments would be anonymous. A theme route was used to guide and keep the discussion within the established parameters. The focus group lasted approximately an hour.

Focus Group Findings

Skill expectations of employers

When evaluating prospective employees, employers are looking for both technical and soft skills. Participants state that ability in technical skills is determined through coursework, grades, and relevant work experience while ability in the soft skills such as initiative, creative thinking, and leadership skills, become more apparent during the interview process. The focus group participants recruit at a number of universities, and the general consensus is that while graduates of Georgia Tech have the technical skills, an additional strength of Georgia Tech graduates is that recruiters see on résumés “a lot more involvement outside of just the schoolwork.” As one representative says, “usually Georgia Tech students are involved in something hands-on or are involved in some outside activity, which sets them apart.” Participants indicate that their companies utilize cross-functional groups and that good communication skills are a requirement for all employees. There was also discussion about the need for entry-level employees to understand that that corporate culture is different from the college culture. One participant describes the challenge of being able to prioritize

assignments and responsibilities and having the self-awareness and the initiative to seek guidance from a manager when necessary:

- *It will change throughout the day what your priorities are. It's important to be able to prioritize and to recognize the fact that, "I'm halfway through the day, and my manager's already given me four other things," and not to have to completely stop and freeze up, but to be able to recognize, "Okay, I need to get back with that manager" and say, "I need to reprioritize, can you assist me?" It's important to be able to recognize what one's limits are and not being stopped by that, but to continue on and ask for help.*

Additionally, companies are looking for employees with effective problem-solving skills that enable them to correctly identify the problem *and* identify possible solutions for that problem, and Georgia Tech graduates are especially praised for their ability to present solutions, not just problems. Participants credit this ability to the problem-solving orientation of the curriculum. As one participant says:

- *I'm not paying you the money we do to tell me something is broken. What I want you to tell me is why it broke, what three things I can do to get through the short term problem, or what two things I can do to make this go away in the long term, and then have a discussion about which of those solutions is the right one. So it's kind of in this taking initiative piece, but it's really about bringing solutions, not bringing problems.*

Leadership skills are also highly valued by the participants, and these skills can be developed through foreign study, foreign or domestic work experience, and through leadership positions in campus organizations. As one participant states:

- *If I see a résumé with nothing, just a college degree and a 3.7 GPA and no other skills, that's a flat-out no. That's a red flag because they clearly didn't do anything else. If they only study, study, study, then it is better that they apply for a research job than a field job. They need to be able to have that leadership role. If they have a crew reporting to them, there's safety that they have to take control of, equipment, so they need to be able to multitask.*

The role of work experience in the hiring process

Ultimately, the combination of technical material in the classroom and work experience makes an applicant appealing to a company:

- *I think the co-op and internship program is a key thing. I think that's always been pretty strong here and that does make a big difference. So that's what you look for on the résumés a lot of times. Generally, those folks that have gone out and looked for that kind of work and if they've got good grades as well, they're going to be a pretty good candidate.*

Participants discussed how work experience plays out in the interview process. During the interview process, they are listening for how students describe their reactions to situations in the past, and how they solved various problems they encountered. As one participant says, "how they behaved in those circumstances is a good indicator of how they'll behave in the future." Importantly, Georgia Tech students have a good reputation regarding their work

ethic. In describing Georgia Tech students who have participated in co-ops with the corporation, one representative states:

- *They come very prepared to work. I don't think any of them that I've seen have sat back and waited for work to be given to them. They are ready to work when they get there and aren't scared by it; they are almost excited by it. They take it on as a challenge, and one thing that I've heard them say is that it's nice to actually see that the things that they are learning in the classroom are not just items in a book.*

All of the corporations use simulations in the interview process, and the ability to assess the situation presented and think creatively about a response is affected by the kinds of experiences that students have had.

Interestingly, while work experience in general is valued (not just work experience that is directly related to the company's business), the representatives do know which companies are good training grounds and are likely to actively recruit students who have had internships or co-ops with those competitors.

The role of international experience in the hiring process

All three of the companies hire US students, and all have international employment opportunities for their employees but, because of industry differences and company culture, the amount of time between hiring a person and placing them internationally varies from two to ten years. While none of the three companies hire US citizens for direct international placement, they do hire international students to work in their native economy. Thus, a Georgia Tech student who is an Indian citizen might be hired for initial placement in an Indian plant, while a student who is a US citizen would be hired for a US placement. As one representative said:

- *As part of our screening/selection criterion, the international experience is very positive in the extent that we find international students from the home economy at places like Georgia Tech; we're really interested in hiring [these students] on the payroll of the home economy.*

In terms of importance to the hiring process, however, there is agreement across representatives that while work experience is the primary consideration (regardless of international placement schedules), all three companies are interested in hiring students with international exposure. International work or study experience is, however, more highly valued than is international travel experience because work and study are seen as providing students with a more thorough exposure to the culture, and provide more opportunities for students to engage in intercultural problem solving than do travel-only experiences. In the opinion of the group, international work or study experiences provide an excellent opportunity for prospective employees to demonstrate how they solved problems relating to language and cultural differences.

While the group agrees on the value of international exposure, there is some disagreement about the relative merits of international work per se. One representative indicates that international work experience not directly related to the company's interests is valued no more highly than is domestic work experience not directly related to the company's interests. For another representative, international work experience is potentially more valuable than

domestic work experience because international work experience demonstrates to prospective employers the student's degree of motivation:

- *To be motivated to be able to even get the internship internationally—it's a challenge for the student to be able to even acquire that. They have to learn another language to be able to go over and be able to walk around in a city and exist, and understand meeting notes and be able to exist in a meeting, as far as for us. So to be able to even get to the point of "I went international," shows to me that they are a very motivated-type person and can learn quickly as well. So that's one thing that we pick up on. Besides the fact that they did the international experience, they were planning and motivated [before that].*

Additionally, international work experience provides students with a broader perspective that extends past the classroom and the domestic work culture:

- *That sort of experience of working internationally gives people the understanding that there are several different ways to see something, and it's not just what you initially thought or was taught or had seen; now you see something else. And that sort of opens up the possibility that there's even more that you haven't already experienced or seen that you can work around something and see from different angles.*

There was also discussion about the value of foreign language experience in hiring considerations, and the consensus is that while foreign language proficiency is a benefit and demonstrates a degree of well-roundedness, for two of the three companies English is the lingua franca of the business; hence language skills are a plus but not a requirement. In fact, one representative said that their corporate culture is one where language immersion programs like Berlitz are used before an international posting. Another participant noted that while the company values international experience and foreign language skills, because employees do not have international placements until they have been with the company between five and ten years, the "return on investment" of foreign language coursework and proficiency is not immediate. For some companies, however, language fluency is a significant advantage:

- *If I'm glancing down a résumé, the first thing I'm going to look for is good work experience. Then I would probably consider overseas assignments. Now if it's something [where a foreign language is necessary], then that's going to come straight to the top. That's really important in our environment. That would definitely give him a leg up in being considered for a position in our plant.*

Regarding foreign language fluency, the representatives emphasize that prospective employees should provide companies with an accurate representation of their foreign language proficiency. They note that for prospects who make it to the on-site interview round, interviewers based in foreign economies are likely to test the prospect's language proficiency during the interview.

The International Plan

The participants were uniformly unaware of the International Plan, although once they learned about it, they expressed enthusiasm. One participant pointedly noted that employers should receive better information about the International Plan so they can talk with

interviewing students about it, and encourage students who are at the very beginning of their career explorations to participate in it:

- *I'm not sure if most employers know about this program. And if they're made aware of it, at least they can put two and two together that this is something that takes a considerable amount of time.*
- *So clearly there's an information gap, if you take the three companies here not knowing anything about it or not much about it ... I think that could be a very valuable program and so if it's happening now, we need to know about it. If it's going to happen more, we need to know about that as well. Know that it exists.*

The participants were unaware of the components of the International Plan but they were very excited about its potential value for students and for companies hiring those students. The companies are hiring employees for initial placement in the United States, and employees are working with colleagues around the world, thus they need to have the ability to effectively understand and interact with international colleagues. The sense among participants was that the International Plan would provide a valuable set of experiences and perspective for effective intercultural communication:

- *I think that an experience like that would also be valuable to somebody working in the United States. Even working here, you're working with people from different economies who have been all over who are working beside you and who you need to communicate with over the phone, over a conference call.*
- *We're hiring for the states to start with. But the idea is that you will go international at some point. Maybe you spend your time in the United States and then you move into an international position as a high level manager, so having not just a work experience but also some education in the global economy and comparative cultures and things like that would be really valuable. It seems like a well rounded program.*

From the participants' perspective, the International Plan provides students with the opportunity to demonstrate their willingness to put in a lot of work in meeting the requirements, and the combined experiences of travel, language, and educational knowledge would be of considerable interest to an employer:

- *It shows initiative on the part of the student more than anything. It sounds like they have to put in lot of work. It's not "take this one study abroad and come back."*
- *I think, for us, if we were to see somebody who would have studied overseas and had that kind of experience, they would come straight to the top.*

Ultimately, the representatives are looking for prospective employees who are "well rounded":

- *We encourage students, if they have done a co-op or internship for a couple of quarters, to study abroad or get some other unique experience that will distinguish them ... [We want them] to explore a little bit more, to give them some different perspective in the international option.*

Conclusion

According to the participants, work experience is the most highly valued experience considered when evaluating prospective employees. Work experiences, whether directly

related to the company's interest or not, provides prospective employees with an understanding of the work world and with examples of problem-solving experiences that can be discussed and used during the interview process. International work experience, while a positive addition to a résumé, is not seen as a requirement for a position with any of the multinational companies represented at the focus group.

The participants emphasized that while none of their companies hire US citizens for immediate international placement, all three consider international study or international work experience to be valuable employee qualifications. International work and international study experience provide students with valuable opportunities to broaden their understanding of cultural differences and to develop effective problem-solving strategies related to negotiating those cultural differences. There was consensus that international exposure is beneficial because while employees are based in the United States, they are interacting with other employees around the world. For these representatives, foreign language skills are seen as a component of a "well-rounded" employee, but are not a requirement in the hiring process. In fact, the representatives indicated that prospective employees should make sure that they represent their language skills accurately.

While none of the representatives were aware of the International Plan and its components, all were enthusiastic about its potential relevance to prospective employees. There was a sense among the representatives that the combination of international study and/or work, foreign language development, and academic study related to international relations and global economics would produce the sought after "well-rounded" element that employers are looking for. All indicated that employers should be briefed on this program and that students who completed the rigorous requirements of this program would be highly sought after by their companies.

Georgia Institute of Technology
Division of Professional Practice

WORK ABROAD PROGRAM
STUDENT PERFORMANCE EVALUATION FORM

Student's Name: _____ Student's
 Major: _____

Dates Worked (MM/DD/YY): _____ to _____

Work Term #: _____ Pay Rate: _____ Wk/mo/currency:

Name of Employer: _____

Address of Employer:

City: _____ State: _____ ZIP Code:

Economy: _____

Supervisor's Name: _____

Supervisor's Phone Number: _____

***Instructions:** Please have the student's immediate supervisor evaluate the student objectively, comparing the student's current work term performance with other terms at a similar academic and work experience level. It is highly desirable that the supervisor review the completed evaluation with the student. After completion, please return the form as soon as possible to the address at the end of this form. Thank you for your assistance.*

Please rate the student's performance in each of the following areas:

	Outstanding	Good	Acceptable	Marginal	Unacceptable
Attendance					
Punctuality					
Time management					
Dependability					
Judgment					
Relations with others					
Attitude/Application to work/learning					
Productivity					
Overall quality of work					

For each of the following knowledge, skills, or abilities concerning the student you supervise, first indicate how **important** they are to the area in which she/he works. Next, for each item, please indicate the extent to which you found the student to be prepared relative to what your firm expects.

	Importance					Preparation					
	Extremely important	Very important	Important	Somewhat important	Not important	Much more than expected	More than expected	About what we expect	Less than expected	Much less than expected	Unable to rate
Ability to function on multi-disciplinary or cross-functional teams											
Understanding of professional and ethical responsibility											
Effective oral communication skills											
Effective written communication skills											
Ability to apply knowledge of mathematics											
Ability to apply knowledge of science											
Ability to apply knowledge of their specific educational field											
Ability to communicate in the language of the economy											
Knowledge of contemporary issues in the discipline											
Ability to identify and formulate discipline-specific problems											
Ability to develop viable solutions to discipline-specific problems											
Ability to design and conduct experiments											
Ability to analyze and interpret data											
Ability to design a system, component or process to											

meet desired needs											
Ability to use techniques, skills and modern tools in the profession											
Understanding of the impact of discipline-specific solutions in a global and societal context											
Recognizing the need for and having the ability to engage in lifelong learning											
Product development or design from a business perspective											
Environmental aspects of professional practice within the discipline											

To what degree was the student's work assignment related to their major of study?

**Not At All Related
Related**

Very Highly

1	2	3	4	5	6	7	8	9	10

To what extent did the student meet the work objectives as outlined in the work assignment record completed at the beginning of the semester?

Fully Met

Partially Met

Not Met

If the student's work objectives were partially or not met, which ones were not completed?

Please give **specific examples** of the student's strengths and how these were exhibited on the job.

Please give **specific examples** of the student's areas in need of improvement and how these were exhibited on the job.

Is the student's academic program oriented to the needs of your organization? ___Yes ___No

What changes, if any, would you suggest to the academic curriculum of the student's major?

Are there any significant contributions from the student this work term that you would like to note?

Is this the student's final work term with your organization? ___Yes ___No

If yes, would you consider employing this student on a full-time basis upon graduation?

___ Yes ___ No

Student's Signature: _____ Date:

(Signature does not indicate agreement with the evaluation, only that it has been reviewed)

Supervisor's Signature: _____ Date:

***Thank you for completing this form.
Please return to:
The Division of Professional Practice
Georgia Tech
Atlanta, GA 30332-0260***