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Diversity and Education at WPI



An Interactive Qualifying Project Report

submitted to the Faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree of Bachelor of Science by

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April 30, 2015
Approved by:
Professor Suzanne LePage (CE), Co-Advisor
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This report represents the work of one or more WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review.

Abstract

The purpose of this project was to create a set of resources to help international students transitioning from their native country to their second home, WPI. In the first year, international students experience common problems, such as a language barrier, different education system and cultural shock. During our study, the team conducted four focus group meetings to confirm initial background research. As a result, the team developed guidelines that can be beneficial for the WPI community.

Acknowledgements

The completion of this project would not have been possible without the help of many individuals. We would like to thank our advisors, Professor Suzanne LePage and Professor Fred Looft for their continued support and guidance throughout this project. Moreover, we want to thank Laura Hanlan for her help on research strategies and focus groups. We also want to thank Mr. Tom Thomsen and Colleen Callahan-Panday for their initial advice on our project. Furthermore, we want to thank all the participants of our focus group meetings for their input and willingness to contribute to this project.

Our team is a diverse crew, which was comprised of four students with different academic and cultural backgrounds from Worcester Polytechnic Institute (WPI), and they were from China and Thailand pursuing Bachelor degrees in Mathematics, Computer Science, Electrical and Computer Engineering. Working as a cross-functional team provided a unique and educational experience.

Executive Summary

China, South Korea, and India make up of 49% of all the international students in the United States. The number of Chinese students tops the list with over 235,000 students. In 2014, over 886,052 international students studying in the United States contributed \$26.8 billion to the American economy. At Worcester Polytechnic Institute (WPI), the percentage of enrolled international students has increased from 19.8% of the total student population in 2012 to 21.6% in 2014.

A number of services on WPI's campus are provided for international students; however, these services are underutilized, as many students are unaware of their existence. Also, the International House, the Writing Center, and the Student Development and Counseling Center provide a limited scope of assistance to international students, but they still encounter a number of challenges. These challenges are, but not limited to, financial issues, academic challenges, and cultural and social adjustment- all of which do not have straightforward solutions. Thus, with the increasing number of international students, the importance of improving the services and increasing the availability of assistance is addressed in this project.

The increase in the number of international students in both the country and WPI suggests the cultural blending of international and domestic students and the importance of services provided to international students. Further, diversity in education promotes personal growth, encourages critical thinking, and helps students communicate effectively with people of various backgrounds. Unique experiences from each international student will also enrich the culture of the university. In fact, these international students share their cultural values and rituals through cultural events on campus.

To maximize intercultural education, many educational institutions look for ways to connect international students to the American cultures. To understand intercultural education and the impact of cultural problems on international students, the team looked at Maslow's Hierarchy of Needs. Maslow's Hierarchy of Needs consists of five steps: physiological, safety, belonging, esteem, and self-actualization. Many students are not satisfied with the food, which is part of the first step of Maslow's Hierarchy of needs. Moreover, new international students in the United States live far away from their old support network. Consequently, many experience cultural shock and try to deal with problems on their own. International students, who are afraid to make mistakes, likely stay in their comfort zone and participate less in social activities. Thus, students do not feel safe and the second step of Maslow's Hierarchy of Needs is not met.

Other international student challenges include lacking inspiration in social engagements, financial pressures, and social barriers. To understand the solutions to social and financial problems, the team conducted significant background and interview research. For example, the team researched general international student background and investigated services that WPI provides specifically for international students. As a benchmark for WPI services, the team researched the services provided by other universities. The team also read about focus groups and then conducted multiple focus groups to gather data on cultural interactions, perceptions and issues that international students have at WPI. Finally, the team used the data collected to come up with solutions and recommendations to assist the international students in adapting to the WPI and American lifestyle.

From thorough analysis and interpretation of results obtained from focus groups, the team was able to summarize that international students are usually more eager to find their comfort zone via being in a group of people speaking same languages or having similar cultural background. From an academic perspective, we learned that faculty members and American students perceive international students as hardworking and with a strong background in math, science and engineering. From the international student focus group, some Asian students have a difficult time getting used to the transition from semesters to quarters. Other common issue for Asian international students is also language barrier, but not a major problem for the European, South American and African international students because these countries use English as their native language. Further, due to language barriers and shyness, some international students are afraid to ask for help. When they encounter difficulties, they think they cannot communicate well with professors or teaching assistants. Nevertheless, by interacting with international students from all over the world, American students and faculty can get updated with current events, happening outside the United States, and hear views that differ from those presented in American local news channel.

This paper reports a number of recommendations for WPI to enhance the international students' experience at the institution, based on both the team's personal experience and background research. For example, to encourage students who are afraid to ask for help, the team advises WPI to develop a "pair up" program for freshmen and new international students where American students are paired up with international students to help them practice verbal communication. This will also encourage students to expand their social circle. The team also recommends a manual and website where they include essential academic resources on

campus, how to write a good report and how to collaborate well in a team. The manual and the website should be available both in PDF and video version.

In the end, the international student body itself is not homogeneous, but rather a diverse group. Thus, when the team continued developing their solutions, they paid more attention to satisfy students who are from different cultural backgrounds and experiences.

As we reflect on this project, we recognized that our project has many stakeholders and would make WPI a more attractive university to international students if the key points in our recommendation were implemented. We were able to work efficiently towards making progress on our project and get feedback from these stakeholders.

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Chapter 1 Introduction

During the school year 2013 to 2014, there were 819,644 international students studying in the United States, a 7.2% increase compared to the previous year. The number of international students indicates that the increasing population of international students is becoming a widespread reality. Such phenomenon necessitates better services and assistance to the international students. With an international student population of more than 450 undergraduate students and over 650 graduate students from over 70 countries, Worcester Polytechnic Institute (WPI), located in Worcester, Massachusetts, is the embodiment of the diversity that characterizes the United States. Although there are many offices, such as the International House, the Writing Center, and the Student Development and Counseling Center (SDCC), offering special services to international students, all these departments are working separately to support the international students in a relatively limited number of aspects and these services are not familiar to international students. For example, the International House provides many services such as visa and immigration services, English as a Second Language Program (ESL), social security card processing, career issues, temporary housing, amongst others. However, it is necessary to improve international student services for other aspects, such as financial advice, support for academic challenges, and cultural and social adjustment support.

A racially and ethnically diverse student body has significant benefits for the university community. For example, international students are the key to diversity as they bring all kinds of experiences from their own country to the university. Diversity also promotes personal growth, encourages critical thinking, and helps students learn to communicate effectively with people of varied backgrounds. These values enrich other students' educational experience in countless ways, and helps other students develop a deeper understanding of the whole world. Furthermore, an international student will not only bring their culture, but also their individual experiences.

The goal of our project was to create a set of resources that support international students with needed information and resources. Our results include recommendations from WPI students and faculty on the team's potential solution. Our final project report and presentation will also serve as a tool for new incoming international students to learn about American culture, how to adapt to a project-curriculum, and how to seek help at WPI. Moreover, the final presentation of this project will help WPI faculty members and American students better understand the needs and various cultural norms of international students, and

facilitate interactions with each other more efficiently to create a harmonious academic environment.

This project will focus on undergraduate international students' lives, provide them with tips and advice to fit in the community better and sustain and enhance their college lives based on the previous experiences from international student alumni. The more WPI feels like home to international students the less the cultural gap and the happier it will be to live and study in Worcester. Good international student service would build a strong foundation for incoming and prospective students since it may be their first time abroad.

Better services could also potentially increase satisfaction of parents. With this project, faculty will know how to keep a closer interaction with international students and provide helpful guidance. We anticipate that faculty and other staff on campus will help to ensure the delivery of this project's intention to sustain WPI students' happiness on campus. Help from people all around will cherish undergraduate experience and privileges for international students. With the advice in hand, international students will be more confident in achieving their academic goals and help increase the education level of WPI.

Chapter 2 Background

This chapter takes a closer look at the international students' impact on the United States society and addresses more details on the common issues that the international students face, such as academic challenges, language limitations, culture shock, social barriers, and financial pressure. In addition, the team will talk about the importance of service satisfaction of international students and the main method used in this study.

2.1 Impact of International Students in the United States

The impact and challenges of globalization on the American universities has been well documented. Various global processes cause direct effects in U.S. economy and education including the increasing exchange of students and scholars. According to 2014 Association of International Educators' findings, whose original name was National Association of Foreign Student Advisers (NAFSA), the total international student enrollment at colleges and universities in the United States was 886,052, and their families at universities and colleges across the country contributed \$26.8 billion to the American economy¹. Figure 2.1 illustrates that the increase in population of international students produces rapid growth in economic impact of international students.

International Students' Impact in the U.S.

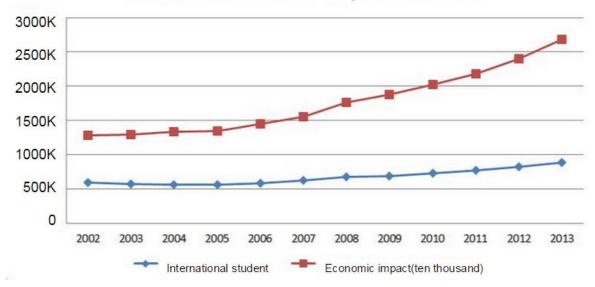


Figure 2.1 International Students' Impact in the U.S.²

Overall, students from China, India, and South Korea make up 49 percent of all the international students in the United States (Figure 2.2). China tops the list with over 235,000 students.³

\boldsymbol{c}	TOP DI	ACES OF	OPICIN of	International	Studente

Rank	Place of Origin WORLD TOTAL	2012/13 819,644	2013/14 886,052	% of Total 100.0	% Change 8.1
1	China		_	31.0	16.5
2	India	235,597 96,754	274,439 102,673	11.6	6.1
	South Korea				
3		70,627	68,047	7.7	-3.7
4 5 6	Saudi Arabia	44,566	53,919	6.1	21.0
5	Canada	27,357	28,304	3.2	3.5
	Taiwan	21,867	21,266	2.4	-2.7
7 8	Japan	19,568	19,334	2.2	-1.2
8	Vietnam	16,098	16,579	1.9	3.0
9	Mexico	14,199	14,779	1.7	4.1
10	Brazil	10,868	13,286	1.5	22.2
11	Turkey	11,278	10,821	1.2	-4.1
12	Iran	8,744	10,194	1.2	16.6
13	United Kingdom	9,467	10,191	1.2	7.6
14	Germany	9,819	10,160	1.1	3.5
15	France	8,297	8,302	0.9	0.1
16	Nepal	8,920	8,155	0.9	-8.6
17	Hong Kong	8,026	8,104	0.9	1.0
18	Nigeria	7,316	7,921	0.9	8.3
19	Indonesia	7,670	7,920	0.9	3.3
20	Thailand	7,314	7,341	0.8	0.4
21	Kuwait	5,115	7,288	0.8	42.5
22	Colombia	6,543	7,083	0.8	8.3
23	Venezuela	6,158	7,022	0.8	14.0
24	Malaysia	6,791	6,822	0.8	0.5
25	Spain	5,033	5,350	0.6	6.3

Figure 2.2 Top Places of Origin of International Students⁴

International students not only contribute to the economic value, but also build bridges between the United States and other countries by bringing global perspectives into the U.S. classrooms and research labs. As the population of international students increases, the racial, ethnic and religious composition within the American society becomes more diverse. Colleges and universities are preparing for ways to support their graduates to interact in a global society as culturally competent individuals.

2.2 International Students at WPI

Worcester Polytechnic Institute (WPI) is a typical American university, located in Worcester, Massachusetts, which welcomes international students. According to WPI 2014 Fact

Book, international enrollment increased from 1101 students in 2012 to 1307 students in 2014. The percentage of enrolled international students has increased from 19.8% in 2012 to 21.6% in 2014⁵ as shown in Figure 2.3.

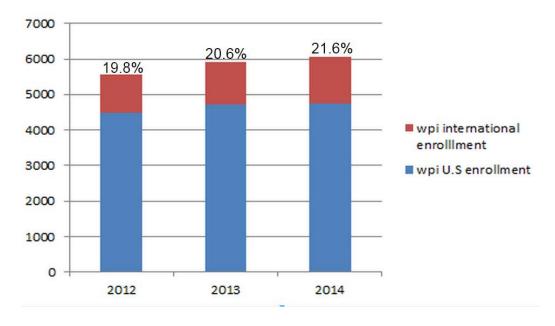


Figure 2.3 Enrollment Chart of WPI

With more and more incoming international students, WPI is becoming a more diverse university than before. International students bring their own culture to the campus and enrich WPI diversity. For example, there are some international festivals of different cultures held on campus, such as the Lunar New Year celebration sponsored by the Vietnamese Student Association and Spring Festival and Dragon Night held by the Chinese Student Association. These activities are all open to the public with purchased tickets.

International students also enrich diversity by bringing their personal ideas and experiences to the university. The diversity growth has high value to the university's culture and education. The diverse cultures and perspectives that international students bring to the WPI campus are invaluable resources for domestic students. In an enriched diverse environment, students have the opportunity to deal with challenges by thinking more critically, helping others and communicating effectively with people from various backgrounds. These impacts can, in turn, promote students' personal development⁶.

Even though diversity interconnects people from all different cultures, international students suffer from academic challenges, language limitations, cultural shocks, social barriers, and financial pressures. As mentioned in the article *International Student in English-speaking*

Universities, understanding international student adjustment issues has global implications for intercultural education⁷. To address these issues, many universities and colleges look for ways to help the international students' adaptation become easier, such as an orientation exclusively for international students to make the connection with the American cultures smoother. Nevertheless, there are still challenges, due to the lack of tools or serious concerns for international students.

2.3 Maslow's Hierarchy of Needs

According to Maslow's *Hierarchy of Needs*⁸, people are motivated to fulfill basic needs before moving on to other, more advanced needs. Five steps in Maslow's Hierarchy of Needs are shown in Figure 2.4. Needs that are at the bottom of the hierarchy are basic physical requirements including the need for food, water, sleep and warmth. Once these needs are satisfied, students can move on to next level of needs, such as safety and security.

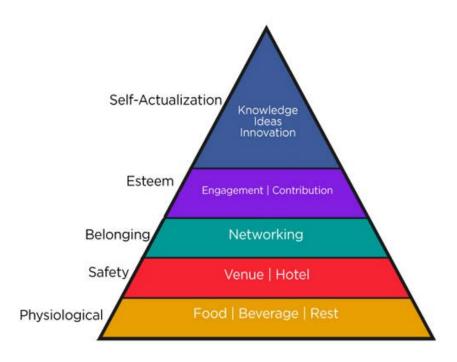


Figure 2.4 Maslow's Hierarchy of Needs⁹

For international students at WPI, it is important that they feel comfortable with the food and the environment. Unfortunately, as noted later in this project, many international students are not satisfied with the food at the dining hall. Moreover, Worcester can get very

cold in the winter, and some international students have never encountered such bad weather condition before they come to WPI. These issues need to be studied in this project. Furthermore, as Maslow stated, "If the physiological needs are relatively well gratified, there then emerges a new set of needs, which we may categorize roughly as safety needs" 10. International students coming to the United States are separated from their family and friends. As a result, many have to go through culture shock and try to deal with problems on their own. Since they are afraid to make mistakes, they tend to stay in their comfort zone and participate less in social activities. Thus, the safety issue also needs to be addressed in this project.

2.4 Academic Challenges

Academic challenges are a vital topic in our project. Adjusting to learning in the United States can be very different from what the international students experience in their native countries.

2.4.1 Different Learning Approaches

First and foremost, native and international students (especially Asian students) have significant differences in learning approaches. There are two types of educational models, "Teacher-Centered approach" and "Learner-Centered approach" ¹¹. International students are usually familiar with the Teacher-Centered approach, where they receive knowledge from their instructors, and then memorize and absorb all the information that is being presented. In United States' classrooms, the educational style is more Learner-Centered which emphasizes "cooperative, participatory, [and] interactive" learning approaches between the instructor and students. The students are encouraged to ask questions during lectures and to interact with instructors outside the classroom. Therefore, the transition from Teacher-Centered approach to Learner-Centered approach requiring critical thinking on the presented information becomes an issue for some international students. International students are accustomed to textbook memorization and reliance on their professors instead of learning how to solve problems on their own ¹².

In addition, the various forms of assignments may cause a tough challenge for international students¹³, since the students in the United States would likely be graded on tests, papers, research, projects, presentations and class participation etc. Some international students who prefer doing homework in the Teacher-Centered way may find it complicated to do research and cite sources.

2.4.2 Unfamiliarity with How to Avoid Plagiarism

Intellectual property is a very serious matter in the United States. An academic form of stealing intellectual property is usually referred as plagiarism¹⁴. However, many international students have never heard of the term plagiarism¹⁵. In addition, the rules on plagiarism vary from country to country; sometimes, international students do not consider properly crediting the source, resulting in deliberate punishment in the United States.

Even though there is a presentation on plagiarism at the international orientation, new students usually do not take into the account the seriousness of plagiarism in the United States. Wanting to succeed in academic careers to please their professors and parents, international students look for shortcuts when overwhelmed from last minute assignments, such as going online and copying a paragraph or an excerpt from an unknown source and citing it as one's own work without giving credit. Due to the pressure, some international students seek help from stealing others' ideas and works, which is a violation of intellectual property in the U.S. In their native home, international students would have no violations due to the rules in different counties. When University of St. Thomas's director of International Students Services, Lori Friedman empathizes with plagiarism, "Plagiarism is a new word, intellectual property is a new word and idea [...] What [Americans] might call cheating, [international students] might call it sharing," she respects others' cultures and implies cultural inequality¹⁶.

To help prevent plagiarism, many institutions offer help through a writing center, which would polish unclear written works. Similarly to WPI, the University of St. Thomas operates a writing center that welcomes non-native speakers for improvement on written works.

2.4.3 Communication between Professors and Students

Due to language limitations, international students may find it difficult to fully understand what professors and other students are saying and thus cannot engage as actively as local students can in class discussions¹⁷. Moreover, the difficulties in reading also increase the workload burden for international students. On the other hand, professors may also find it difficult to understand international students' needs.

The different relationship between professors and students may also cause conflicts. For example, Asian assessment systems require students to regard their professors as people with the authority and knowledge to teach, and students only need to accept and learn about the

information given by professors. However, in the United States, professors, who are more open-minded, always have open discussions during lectures, but international students are less likely to express their opinion unless being asked, which would potentially generate a gap between international students and professors¹⁸.

2.5 Other Challenges

Besides academic challenges, there are some other challenges that international students also suffer from, such as social engagement, culture shock and financial barrier.

2.5.1 Lacking Motivation in Social Engagement

The American curriculum motivates every student to participate actively in both classes and extracurricular activities. With activities outside of regular classes, students demonstrate the balance between their academics and social life and their potential to become a strong candidate for graduate school and employment. As the College Board points out, "what potential students do with their time outside of school reveals important personal dimensions that statistics can't show," they value necessity for social engagement, time-management skills, and students' ability to prioritize¹⁹. International students signify commitment to learning the subject matter for success instead of extra-curricular activities, which seems to be different than that of American students' perspectives.

Some international students and parents stereotype class grades as the attention grabber that will attract people to value them highly. Being under the pressure to do well academically, some international students choose to alleviate the pressure by not participating in any kind of activity that would obstruct them from achieving good grades. As Mr. Toyokawa observes, "a large cultural disparity in terms of language, educational systems, and communication style, [....] Asian students in general, tend to experience more difficulty in social interactions and adjustment on American campuses than their European counterparts," he perceives the struggle of Asian students during the transition and pleads more attention on them²⁰. Due to the difficulties of a new environment, international students, who experience these problems, demonstrate less ability to engage in time-consuming extra-curriculum activities regularly.

In addition, most parents send their children to the United States for educational purposes, not the extracurricular activities. Some international students are lacking passion in their major fields, since they do not think about setting themselves well-thought-out goals and objectives, which act as a source of motivation. It is usually the parents instead of the students themselves that choose the major, so the students are not able to develop a true interest in what they are studying. This leads to the difficulties in becoming entirely involved in educational activities²¹.

2.5.2 Culture Shock and Social Barrier

Culture shock was first introduced by anthropologist Kalervo Oberg in the late 1950s. According to Oberg, culture shock is defined as "the anxiety, helplessness and frustration caused by the loss of well-known cultural signs and symbol"²². Nowadays, we can also refer it as "cross-cultural adjustment", "culture learning" and "cultural adjustment stress"²³. When the international students first come to the United States, they need to adjust themselves to the American culture. Although they may be fascinated in the beginning, the students become frustrated after a short experience with different lifestyle, language, custom and diet. Then, there is a gradual adjustment period and a final acceptance period where they finally adjust to the new environment.

Due to language limitation, shyness and culture shock, most international students cannot actively participate in social life, both on and off campus. Some timid international students who do not speak fluent English find it difficult to follow up in a small conversation. Culture gap also pushes some international students into an awkward position in conversation, thus social barriers have been created²⁴.

2.5.3 Financial Pressure

An issue that cannot be ignored when studying the international students' lives is financial pressure. In fact, international students have to pay much more tuition and fees compared to local students and they are not eligible for most of the scholarships that are available for American students. In such cases, especially for the international students who do not get any financial aids or scholarship, they face additional financial burden. Most scholarships offered by American universities are only offered to some eligible U.S. citizens.

Facing the high living expense and tuition²⁵, international students cannot avoid financial burden²⁶.

2.6 Universities and Colleges' International Student Services

Common issues faced by international students can be found everywhere across the United States. To address these issues, universities' international offices organize an international student's orientation exclusively for first year students. General programs of the orientation include but not limited to introductions to academic honesty, academic advising information sessions and more²⁷.

At the University of Wisconsin, Madison, the international office has a distinct Building Relationships in Diverse Global Environments (BRIDGE) program, which connects international students to native students during their freshmen year to help them with initial adjustment to the new culture²⁸. Harvard University's international office even states the difference between American culture and other cultures. For example, in the United States, parents and children sleep in separate rooms, while in other cultures, parents share the room with children. They also list out phases in each cultural shock so that the international students are reminded of the possibilities of other cultural shocks.

Moreover, Dartmouth College introduces International Friendship Family Program to interact with U.S. families so that the international students and U.S. families can learn about another culture. They also have International Student Mentor Program (ISM), so the international students can have a more positive experience during their first year. They also publish The Dartmouth International Magazine/Newsletter. It publishes a lot of good information and many articles of interest to international students, scholars, faculty, and Dartmouth alumni abroad, as well as the greater Dartmouth community.

On the other hand, Purdue University offers online assistance in writing called the Purdue Online Writing Lab (OWL) to all students. OWL includes a section specifically for English as a Second Language (ESL) student, illustrating their awareness for the international population. There are also helpful tips on job search writing and scientific writing that raise the confidence of getting jobs for international students and writing scientific research and papers professionally.

These colleges, including WPI, exhibit the intense anxiety and solicitude for international students and hope for them to excel academically and live happily. Consequently, they provide some solutions to existing problems. However, there is no perfect solution. Focus groups that

target the struggling subjects would assist in finding out the common problems of international students and bringing on the latent solutions.

2.7 Focus Groups

Focus groups were originally called "focus interviews" or "group depth interviews". According to Mary Marczak and Meg Sewell, a focus group could be defined as a group of interacting individuals having some common interest or characteristics, brought together by a moderator, who uses the group and its interaction as a way to gain information about a specific or focused issue²⁹.

Relative to our project, we proposed using focus groups a primary method to collect data and information. Although focus groups could provide us with lots of useful information, there are also some disadvantages of using a focus group:

- The small sample size illustrates the groups might not be a good representation of the larger population.
- Group discussions could be difficult to control, so time could be lost to irrelevant topics.
- Respondents could experience peer pressure to give similar answers to the moderator's
 questions, so they may not express their honest and personal opinions about the topic
 at hand.
- The moderator's skill in phrasing questions along with the setting can affect responses and skew results³⁰.

Focus group method will appear later in the methodology chapter.

2.8 Summary

This chapter illustrates the importance of embracing diversity at WPI, the problems that international students encounter in the United States, and some solutions to these problems used by other universities. Maslow's Hierarchy of Needs is also introduced. The goal of the project is to help international students fit into the WPI community and adjust to the academic environment at WPI. In order to accomplish this goal, the team conducted focus group meetings, interviewed faculty members to gather information, and made recommendations based on the gathered information.

Chapter 3 Methodology

The purpose of this chapter is to provide an understanding of the methods and relevant research approaches adopted in our project and a timeline that the team followed to achieve our project goal. As mentioned in the previous chapter, the project goal was to create a set of resources that contain all the important information and resources for international students. The basic schedule we followed to achieve this goal is shown below in Table 3.1.

Table 3.1: Project Schedule

Week 1	Interview staff members of different offices (See Appendix A for more details), work on methodology chapter, submit an Institutional Review Board (IRB) form, research good services for international students
Week 2	Recruit focus group members and schedule three focus group meetings
Week 3	Hold the focus groups and document results
Week 4	Analyze the data and develop tentative solutions to the existing problems
Week 5	Reconvene the focus group to hear feedbacks and improve the tentative solutions, incorporate comments and any additional data and observations into final report.
Week 6	Finish up project report and final presentation

3.1 Research Philosophy

Two widely used research philosophies are positivism and interpretivism. These two philosophies are applied to the project accordingly for different purposes.

Interpretivism values the human's experience of the society by methods, for instance interview values interpretivism is more than statistical analysis.³¹ The team proposed to conduct focus groups, which include interview and observation processes to adapt interpretivism.

On the other hand, positivism adheres to the view that only factual knowledge gained through observation, and the result of researching should come from a trustworthy measurement.³² For instance, statistical analysis values positivism more than interpretivism. The team included statistical analysis from quantifiable observations to provide concrete data when addressing issues regarding international students and corresponding solutions.

3.2 Approaches

To make sure the project goal was met at the end of six weeks' timeline, the team took several steps to approach its goal, including information collection, conducting focus group and developing recommendations.

3.2.1 Information Collection

In order to ensure the appropriateness of the project, the team first proposed to contact WPI's International House and introduce this project to them. With advice and help from the International House, the team researched more information about what services WPI offers to international students. Then, the team visited different offices on campus and conducted a short individual questionnaire with their staff or sent emails to different offices with our queries.

The research questions were mostly about what services these offices offer to students and whether they have specific programs or services just for international students.

The team also investigated the best practice of programs and services that other American universities provide to international students through online research, phone calls, or visits to these universities. Subsequently, the team processed the information collected from different offices and student organizations on the WPI campus and listed programs and services that could be implemented on campus to assist international students.

Lists of Offices and Student Organizations in Possible Need of Contacts

George C. Gordon Library

International House

Chinese Student Association

Chinese Student Association

Chinese Students & Scholars

Office of WPI Police

Turkish Student Association

Office of Dining Services

Hellenic Student Association

Student Development and Counseling Center Vietnamese Student Association Hillel

Office of Academic Advising Indian Student Organization

Communication Across the Curriculum Office of Financial Aid
Career Development Center Student Activities Office

Appendix A reveals all the offices and organizations that the team interviewed with.

Afterward, the team moved on to information processing with a list of services for international students provided by each office and student organizations and the services for all the students.

3.2.2 Focus Group

We used focus groups as the key to discover problems and test out our solutions. Focus groups allowed us to investigate complex behaviors, to discover how different groups think and feel about the issues addressed in the introduction chapter, and to suggest potential solutions to identify problems and inform us on decision-making, strategic planning and resource allocation. This project required the understanding of ideas and feelings from different groups of people, which focus groups can help us obtain. Focus groups saved a significant amount of time compared to individual interviews and surveys.³³

3.2.2.1 Focus Group for Collecting Information

As for the focus group study in our project, the participants were: international students, American students, and faculty including professors, staffs of offices, and librarians. There was a separate focus group for each of these groups. Every focus group consisted of five to eight participants and each focus group meeting lasted about an hour. We carefully selected the focus group members who are the representatives of the entire population. To recruit focus

group participants, the team created flyers and sent email to the participants with the copy of the flyers (See Appendix B for examples of American and international students' flyer).

Table 3.2 provides the content of which groups of people selected as focus group participants and how to select individuals as members of the focus groups.

Table 3.2 Focus Group Members Selection Strategy

Participants	How to select focus group members
International Students	Send out email with a flyer and questions: what main issue did/do you have? Where are you from? After receiving responses, the team pick 5 to 8 international students with different issues and cultural background.
Faculty	To invite faculty, the team send out an email with questions: Would you be interested in helping international students? Do you have experience or interest stories with international students? Afterward, we select professors from different departments, and staffs from different offices, based on their response. The sample size should be approximately 5 to 8 people.
American Students	Invite American students on campus through flyer and email. The sample size should be 5 to 8 people

To conduct the focus group, we used the following process:

- 1. Confirm that anonymity will be preserved (participants' names will not be recorded)
- 2. Describe the ground rules
- 3. Reiterate the purpose of the research
- 4. Facilitate the group with the help of the International House staffs
- 5. Taking notes on responses, themes, enthusiasm, body language, mood of discussion of the participants of focus group.
- 6. Use the focus group attendance form to record attendance (see Appendix C)
- 7. Evaluators should keep the discussion moving and be prepared to ask probing follow-up questions suggested by the participants' responses
- 8. Keep the discussion focused on the topic being investigated
- 9. Attempt to bring everyone into the conversation³⁴

Table 3.3 shows the questions investigated in focus groups.

Table 3.3 Questions for Focus Groups

Participants	Questions
International students	 How was your experience when you first arrived at WPI? What initial problems did you have and how did you deal with them? What offices at WPI have you visited to assist with overcoming your problems? Was it effective? What issues are still a problem for you? How do you make friends with American students? Have you ever worked on a project with American students? If yes, could you tell us about your experience? Do you wish there were other resources to help you to overcome the problems? For example, a manual? What academic resources have you used to help you do assignments and projects? (professors, online resource, library) Please be specific. Do you have any advice for incoming international students?
Faculty	 How was your experiences interacting with international students? What are the advantages of having students who are from another country? What are the challenges of having students who are international students? What is the biggest difference between international students and American students? How would you help an international student if he/she come to you for help? Do you think there should be some new services available for international students? Could you think of one that can help them?
American students	 How do you make friends and meet people from other countries? Have you ever worked on a project teamed with international student? How was your experience? What did you learn from the experience? What values do you think the international students can bring to the WPI campus? What is the biggest difference between international students and American students? What are the advantages of having friends who are from another country? What are the challenges of having friends who are international students? Do you think international students often adapt to American culture or are there some issues that international students have or particular difficulties with or still hold their beliefs in their native culture?

After conducting the focus group, we summarized the meeting times, the locations, the participants and the contents. In addition, we contacted these participants asking if they were available for another focus group meeting and interested in continue to help us developing potential solutions to the common issues that international students have and to help increase the international students' satisfaction on campus services.

Then, we processed the data and information collected from the focus groups and analyzed the information to find out international students' needs.

Next, we moved on to research analysis, focusing on the services that the International House and other WPI offices do not provide to international students. We developed solutions to reduce the gap between what WPI provides and what international students need. For the offices and student organizations that do not provide services specifically for the international students, we considered our personal experience and our focus groups' responses to find out whether there were some possibilities that new services can be created to help international students. For the offices and student organizations that do provide service to help international students, we investigated ways to improve the existing service.

3.2.2.2 Focus Group for Feedback

In order to test our solutions to the common issues that the focus groups brought up, we conducted the final focus group meeting where we introduced our research results and provided the solutions to the participants. The purpose of this focus group meeting was to have international students, faculty members and American students meeting together to discuss on possible solutions and to identify the weaknesses in the solutions so that we could come up with a more satisfying one.

The participants of this focus group meeting were selected from the participants of the previous focus group meetings. Based on their responses, we selected one to two people from each focus group to join our final focus group meeting.

3.2.3 Develop Recommendations

We created a solution for the issues that we had found during our focus groups study. We discussed our solution during our second focus group meeting and are open to take any possible solutions from the focus group. With the guidance from our advisors, we decided whether to create a set of resource or a survival guide with academic resources, social resources, and financial resources, daily life information, and feedback from faculty and students for international students. In addition, we provided some suggestions to WPI community for developing additional services for international students in the future.

Afterward, our solution would be delivered to the international house in order to enact a regular policy of its own.

3.3 Data Constraints

Due to the given time for the project, focusing on specific areas would produce the greatest outcomes. Data collected focused on responses produced by the subjects and the additional comments that they made. Focus group data and gathered information illustrated the problems encountered by the international students and allowed us to choose what areas to focus on due to the data constraints produced by the response from the participants.

With focus groups, this project recorded perceptions, opinions, beliefs, and attitudes toward helping international students. With the data from the focus groups, careful analysis would guide the project to focus on what service WPI campus needed more to provide for international students. Afterward, a solution was created based on these responses to resolve conflicts created from international students, this project would alleviate the challenges in a new culture. If a solution had not arisen, future case studies could be a possible source to answer what the international students needed in order to achieve a successful outcome as an international student.

Chapter 4 Result and Analysis

In this chapter, we summarize and analyze the three focus group meetings and the interviews with different offices. In the summary of focus group meetings, we analyzed six topics, which were covered during the focus group process, including the ways of interacting with international students, advantages of having international students at WPI, challenges that international students have, advice for WPI, international students and faculty. For more information, Appendix D lists the summaries of all the focus group meetings.

For the summary of office and department interviews, we summed up the useful information in three themes, including services that international students are not familiar with, services for international students and additional useful information. For the detailed summaries, please refer to Appendix E.

4.1 Focus Group Meetings

In order to better interpret the information we collected from the focus groups. We used *Focus Group Attendance Forms* in Appendix C to document the basic information of the participants of our focus groups. The faculty focus group consisted of both male and female had a diverse background. They were from the Humanities and Arts Department, Math Department, Admissions Office and Gordon Library at WPI. The faculty focus group participants' age range was between 40 and 61. The majority of the international students' focus group were undergraduate students. This group contained students from Japan, Thailand, India and China. We asked them to rate their confidence in English from 1 to 5 at the beginning of the focus group meeting. Some of them are very confident in English at a level of 4 or 5, but one student is only rated at 2.

We summarized the focus group discussions into three themes. First, we are interested in how the faculty, American students and international students interact with each other. Second, we use Venn diagrams to display the focus group responses of what the advantages of having international students at WPI are. Third, we discuss the challenges that the international students at WPI encounter.

4.1.1 The Ways of Interacting with International Students

Referring back to methodology chapter, we discovered how different groups think and feel about international students by conducting focus groups. We used the gathered information from focus groups to make the Venn diagram shown in Figure 4.1. According to this diagram, the most common way for international students, American students and faculty to interact with each other is through classes and projects. During classes or academic projects, international students have a chance to work as a team and solve problems with American students. These classes and projects also provide opportunities for professors and international students to discuss problems. For more help on writing issues in these classes and projects, international students can see the writing tutors.

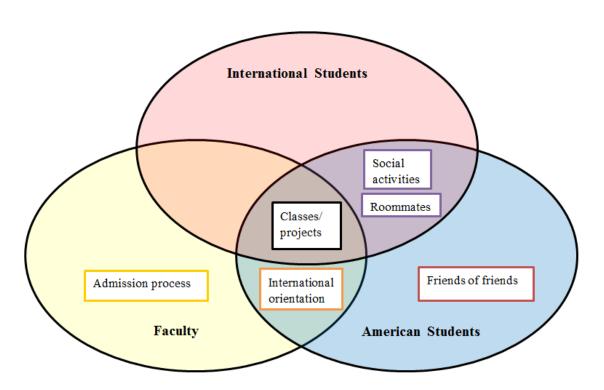


Figure 4.1. The ways of interacting with international students.

Faculty from the admission office also mentioned that the admission process involves lots of interaction with international students. Conversely, the international students in our focus group mostly come from Asia, so during the admission process, they had few chances to

interact with admissions staff. It is not feasible for international students to meet admission faculty, so they did not mention "admission process" during focus group meetings.

For interaction between international students and American students, besides classes and projects, participating in social activities also helps international students and American students become friends. For example, sport teams, clubs, Greek life and being roommates provide lots of opportunities to make friends. American students also talk about friends of friends, which international students did not mention. From this point, we find that American students may have a much larger network of friends than international students.

Another important point is that both faculty and American students talked about their interaction with international students during international orientation, but international students did not mention this kind of interaction. In this case, we find international students may focus on sticking with other international students during orientation. They may be more eager to find their 'comfort zone' via being in a group of people speaking same languages or having similar ethnicity or cultural background, instead of having interaction with the native students and faculty. Referring to Appendix D - *American Students Focus Group Summary*, one of the students in American student focus group confirmed, "While I join groups from different clubs, I tend to stay with people who have a similar background."

4.1.2. Advantages of Having International Students at WPI

According to our focus group meetings, international students bring an enormous contribution to WPI. International students, from more than seventy countries, enrich diversity of WPI and bring many fresh components and insights to WPI, including different cultural events and clubs, such as international month. Figure 4.2 shows the results from American students and faculty focus groups discussion. With international students at WPI, American students and international students learn new cultural values and different experiences from each other. As one of the faculty members in our focus group meeting said "there is definitely excitement in wanting to participate and engage with students who are from different cultures. Americans can learn more about other cultures. I am excited about meeting new peoplesomeone from a different culture or educational experience. American students learn more from international students, and now we have International Month, which is raising awareness."

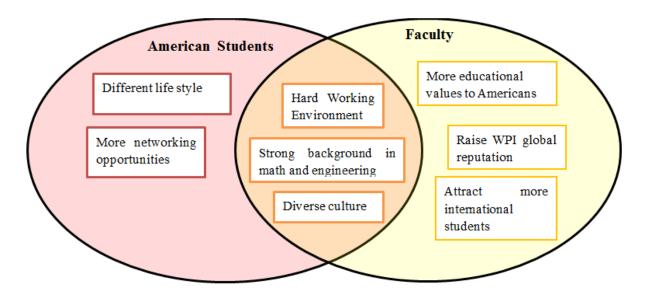


Figure 4.2 Advantages of having international students at WPI

Along with interacting with international students from all over the world, American students and faculty can also learn many things about what is going on outside the United States. They have the opportunity to directly experience other cultures and lifestyles. Some of the international students are from large cities. They bring more networking opportunities to WPI.

From academic perspective, faculty members and American students from our focus groups see international students as a hardworking group, which has strong background in math, science and engineering. One faculty member stated, "international students have a very strong academic background. They are diligent students and strong in mathematics. They are also optimistic." International students are also helpful in both on-campus and off-campus academic projects. Their strong background of math and science and different cultural values contribute tremendously during the course of the projects. The educational value that international students bring to WPI is invaluable, which also impacts WPI's global reputation thus making WPI a more attractive university to international students.

4.1.3 International Students' Challenges

Based on the information we gathered from the focus group meetings, when international students arrive WPI, they may find there are lots of challenges they need to overcome. Some of the issues they encountered at first are still a problem for them today. As shown in Figure 4.3, the most common issue for international students is language barrier. This is an important issue for Asian students but not a major problem for the European, South American and African international students. Because some of the students who are from Europe, Africa and South America speak English as their native language or there are many similarities between their native language and English, they adapt to the English-speaking environment much easier than Asian students.

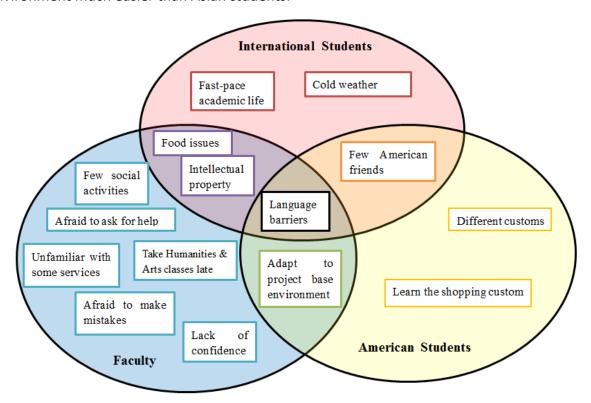


Figure 4.3 Challenges that international students have

However, there are many issues related to language barriers. Due to language barriers and shyness, some international students are afraid to ask for help both in academic life and in daily life. When they encounter some difficulties, they think they cannot communicate well with professors or teaching assistants. If they fail to express themselves in front of professors and teaching assistants, they will make a spectacle of themselves. In their daily life, because

some international students also have communication issues when they seek help, they are not familiar with some existing support services on campus.

International students study in different education systems before they come to the United States, for undergraduate or graduate study. For example, in different social environments, people's attitudes to copyright and the practice of laws for copyright are different. In major Asian countries, people do not take plagiarism as seriously as people do in many western countries. Plagiarism often occurs among students in middle school, high school and even college in Asia. Also, due to different education systems, in some countries, students do not have opportunities to get involved in project-based education before they step into colleges.

As a result, many of them feel uncomfortable to adapt to the project-based academic environment at WPI. WPI has a unique quarter system, which consists of four seven-week terms in one academic year. The education systems in Asian countries are commonly based on 20-week semesters. Some Asian students have a difficult time getting used to the transition from semesters to quarters. At WPI, they face even more challenges than American students at a semester college system do because they not only have to conquer the language barrier but also need to complete three or four courses in seven weeks. One student in international student focus group said, "Classes [at WPI] are at a faster pace. I went to international school in Thailand. 7-weeks term is hard for me to manage time and catch up with class material. In Asia, we do not have such a short term; instead, we have a long semester."

According to our focus group study, culture and custom differences sometimes act as a gap between international students and American students. One American student noticed, "culture difference may lead to intimidation. Hence, American students should be more aware of the cultural differences." Different customs may cause some misunderstanding. For example, some South American students are more likely to stand very close to the person they are talking with, but this makes some students from other countries uncomfortable. Because of different customs, language barriers and shyness, international students seem to have a small network of American friends and few international students taking active participation in social life.

Some other challenges are related to daily life. The cold weather here shocked many international students, especially those who came from warmer countries. One of the international students complained, "it is super cold during B and C Terms." International

students also need to learn new shopping customs in America that may be much different from their countries. When they first come here, they are eager to know about where, when and what they can shop for. However, in WPI, there are few services for helping international students with shopping issues. Last but not the least, the food issue has been mentioned during focus group meetings many times. All the concerns can be summarized into three aspects. Firstly, the limited materials may cause the repetition of food. Secondly, the way of cooking and the taste of food is another issue, since some international students do not like cheese or feel cakes are too sweet. The third reason is that the labels of the food are hard to understand for some international students.

4.1.4 Advice for International students

Referring to the Figure 4.4, American students and international students from the focus groups suggested that the international students use the campus services provided by the International House and the Writing Center and get familiar with all kinds of services that are available on campus. To adapt to the American tradition easier, the international students should live with American students during freshman year. An American student proposed another option, "[What about] an option of rooming international students together? For example, Chinese and Korean students live in a room so that they speak English when they are together." For further American students' responses, please refer to Appendix D, *American students Focus Group Summary*.

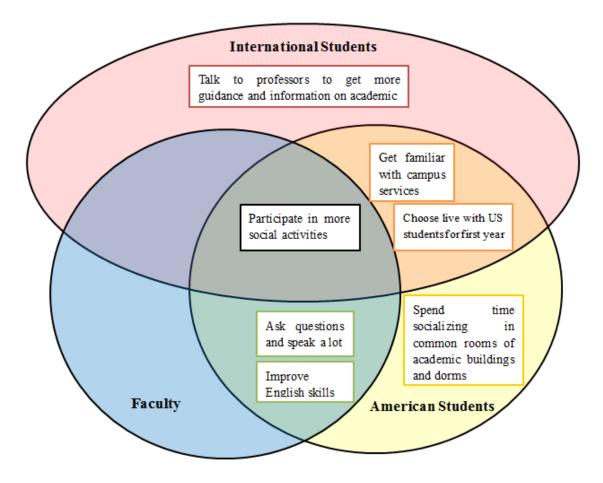


Figure 4.4 Advice to international students from focus groups

To better assist international students with cultural adjustment, American students suggested the international students visit common rooms in department buildings and dorms to start a conversation with people who may have things in common and discover more about different cultures. Similarly, American students and faculty encouraged them to use courage in asking many questions and speaking up when doing a project with native students. Another tip for international students is taking English classes as early as possible to improve writing and speaking skills. One international student mentioned that international students should go to professors and advisors' office hours to get more guidance and information on academic issues.

All of the three focus groups mentioned that international students should stick with people of similar background when they first arrive WPI and make more friends through clubs, sports teams and Greek Life.

4.1.5 Advice to WPI

In the faculty focus group meeting, as shown in Figure 4.5, setting up an international student's information desk in the Campus Center was a great idea. With the information desk set up, whenever international students have problem, they could go to the information desk to find out where they should go to seek help. Furthermore, the Campus Center is located in the heart of WPI's campus, and is therefore easily accessible to all students.

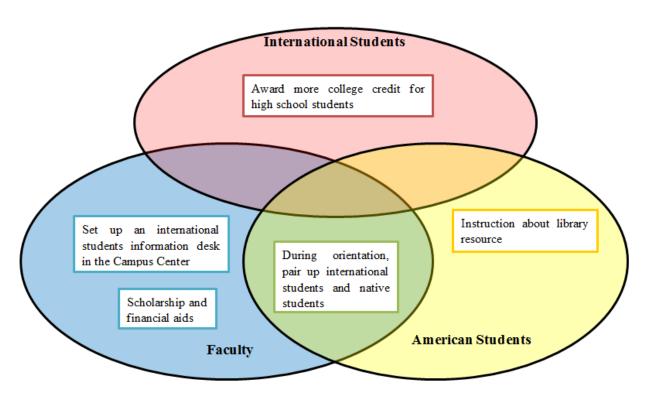


Figure 4.5 Advice to WPI from focus groups

Besides the problems with where to get help, international students also encountered a hard time with getting financial aid support. International students have difficulty reaching out to support networks to get financial help especially because they are far away from home.

Besides financial difficulty, international students also lack the accessibility to important instructions. Some international students did not know how to use the library. An American student pointed out that some international students and American students are not aware of the usefulness of library services. There were two possibilities; the orientation did not include a

session on how to use the library or the orientation had more information than what the students could take in at once. To increase the excitement of students during orientation and improve the program, pairing up international students and native students would produce a satisfactory result, so they can value each other's culture and customs and have confidence in studying and living at WPI.

As a student from the international student focus group pointed out, their strong academic foundation and their credits in Advanced Placement test, International Baccalaureate or A-Level exam should transfer to WPI credits. As a result, they can take more classes of interest in their major fields.

4.1.6 Advice to Faculty

A participant in the international focus group believed that some international students do not have a course selection experience. Therefore, it is not easy for them to pick a class on their own. Even though the Office of Academic Advising provides course selection assistance, international students often struggle with course selection because either students are unaware of such office or the service is uninformative. Thus, faculty's detailed guideline or syllabus to students before class starts would help the international students to understand the course expectations and allow them to switch to classes of their interest and ability. Due to the concern that some instructors have poor handwriting, international students suggested the introduction of class capture or PowerPoint in class.

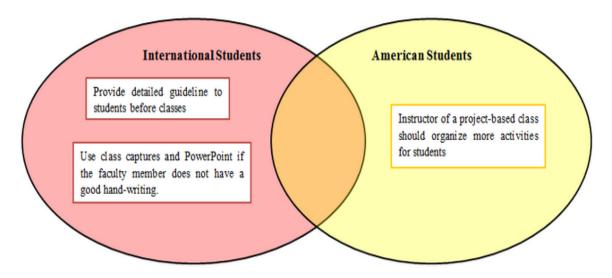


Figure 4.6 Advice to faculty from international students

On the other hand, if a class is project-based, it was suggested that the course instructor should organize activities for students so that they have time to get to know each other and find things they have in common. This helps international students to bond with native students and be able to communicate with others better.

4.2 Interview Summary and Analysis

As we mentioned in the methodology chapter, we interviewed different offices on campus. We summarized the topics into two subsections, including services that are available on campus and additional information. For detailed interview notes, please refer to Appendix E Interview Notes.

4.2.1 WPI Services

During the interviews, we learned that each office offers good amounts of services; however, only some of the services are familiar to international students. Table 4.1 demonstrates the services that are available on WPI's campus. There are many departments and offices that are aware of how diverse WPI is, and provide some services just for international students. We marked these services in the third column. For instance, there is a check mark under the For International Students column for the GoingGlobal service, because it is specifically designed to help international students. Nevertheless, among the services that offices provide to the entire campus, some of the services are not familiar to the international students. We marked these services in the last column. For example, the Office of Student Activities provides a list of "100 Fun Things To Do" on its website to all WPI students, but it is underutilized by international students. So there is a check mark in the Underutilized by International Students column.

Table 4.1 Services that are available on WPI's Campus

Offices Name	Services	For International Students	Underutilized by International Students
Office of	By following the website http://www.wpi.edu/offices/sao.html a student can simply find out what fun events are happening on our campus.		\checkmark
Student Activities	Students can find 100 fun things to do in Worcester. http://www.wpi.edu/offices/sao/thingstodo.html#shopping.		\checkmark
	Take charge of all the fraternities and sororities, Community Service.		
	Post Annual Events on website and email		
	Book: Directory of Foreign Firms operating in the United States.		\checkmark
Career Development Center	GoingGlobal: Access GoingGlobal on the Job Finder home page to see a list of companies that have filed H-1B petitions in past years.	\checkmark	\checkmark
	Career Search Database: Career Search is located in Job Finder, including international companies and companies in international countries.		\checkmark
	Provides resume and cover letter critiques		
	Organizes many activities and workshops on job search and interview strategies.		
	Students can schedule one-on-one appointment with Career Development Center faculty if they have any question about job finding.		
	International dinner - one of the biggest cultural events on campus. It has cultural activities, performances, and food from over 20 countries.		\checkmark
International Student Council	Food festival in the Campus Center - In the past, there were over 300 people visited in three hours.		\checkmark
	Midnight Breakfast happens twice per term. Food provided is from different countries each time, such as America, Europe, Russia and China.		\checkmark
	Organizes the International Orientation	\checkmark	
	Trips to places such as, ski mountain, New York City and Boston.		\checkmark

Table 4.1 (continued)

	Students can check their services on their website:		2/
	http://www.wpi.edu/offices/health.html.		V
	Diagnosis and treatment of illnesses		
	Massage Therapy & Physical Therapy		$\sqrt{}$
	Help international students with their immunization. All		
	international students need to fill an Immunization Record	$\sqrt{}$	
Health	form at their arrival, and they can also be vaccinated here.		
Center	There is a 24/7 phone number (508-334-8830). There is		2/
	always a physician there to help		V
	There are videos for helping international students get to		
	know about United States' health system, such as the	$\sqrt{}$	$\sqrt{}$
	insurance policy.		
	During the English as Second Language program, health		
	center staff go to the International House to answer	\checkmark	$\sqrt{}$
	international students' questions and concerns.		
	Their services can be found via website		
	(http://www.wpi.edu/offices/ih.html), Facebook page		
	(https://www.facebook.com/pages/WPI-International-		
	House/123170528114), and Twitter		
International	(<u>https://twitter.com/WPI_IHouse).</u>		
House	International House provides a tour for graduate students	2/	
nouse	around WPI when they first come here.	V	
	International House provides a two-hour information session	2/	
	for graduate students to introduce the International House	V	
	International House provides international students a		
	shopping trip to Wrentham Village Outlet at the beginning of	\checkmark	\checkmark
	the winter to buy winter clothes		

Table 4.1 (continued)

	During international orientation, librarians introduce the		
	library services in detail to international students and show	/	
	them some interesting books, videos and games available in	V	
	the library.		
	There is a library tour for interested international students.		
	Provides computers for general use, quiet study spaces, Class		
	of 1970 café, Tech Suites, Flexible Learning and Instruction		
	Place (FLIP), Service and information centers, and the Print		
	Center.		
	Students can borrow and renew books, request to borrow		
	items from other libraries if Gordon library doesn't own		
	them, use "My Account" to see the status of the interested		
	books.		
	Lend equipment including printers, DVD players headsets		
	and internet cables at the library Service and information		
	Center.		
	Library provides Tech Suites which are private work area		
Gordon	offers an opportunity for uses to consult in small groups and		
Library	work together on group project. To learn how to reserve a		
-1.010.1	Tech Suite, please check out the website		
	http://www.wpi.edu/academics/library/inlibrary/tech-		
	<u>suites.html</u>		
	There are many signs in different languages in the library,		
	such as the "Do Not Exit" sign, since some international	\checkmark	
	students do not know the emergency exit is used only in the		
	case of emergencies.		
	The library has classes for international graduate students to	\checkmark	\checkmark
	learn the rules of avoiding plagiarism in America.		·
	There are different kinds of guidelines on the library website		
	(http://www.wpi.edu/academics/library.html). It not only		
	includes general information about the library, but also contains information about how to choose and utilize		$\sqrt{}$
	different databases and access reference books when		
	students write papers or do research. For the general ways of helping with research, there are		
	many choices: chatting with the librarian online, emailing,		
	texting, phone calling and watching a tutorial or webinar on		$\sqrt{}$
	how to do research at any time of the day or night.		
Office of	There is a website called Design, where students can learn about the WPI curriculum, registration, and courses that are		
Academic	specifically designed for first-year students. A new version of		\checkmark
Advising	the Design website will be leased on May 6, 2015.		
Auvising	Assign a Faculty Advisor, Community Advisor, and a Resident		
	Advisor to each student		\checkmark
	Advisor to each student		

4.2.2 Additional information

During the interviews, besides the information about services that each office provides, we also collected some additional information from the staff of different offices, including some issues that they are concerned with and some important policies that international students need to understand. Although some recommendations are included in this section, they are from the interviews so we included this information in the results, as shown in Figure 4.7.

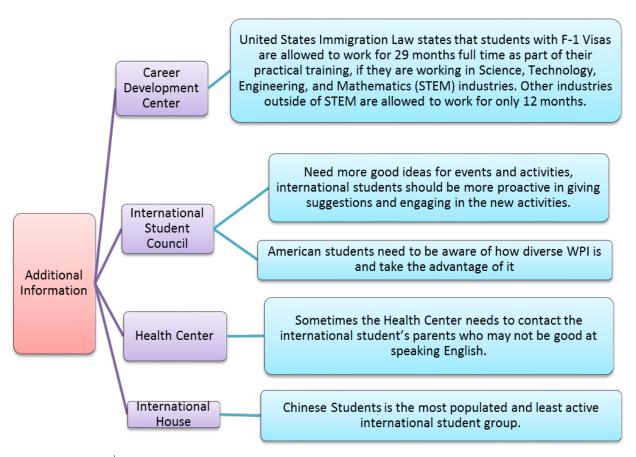


Figure 4.7 Additional information gathered from offices at WPI

Chapter 5 Discussion

There were other universities that provide plenty of good services to international students. In this chapter, we focus on two universities: University of Wisconsin-Madison and Duke University, since they not only provide comprehensive services but also build impressive websites to introduce their services. We will demonstrate the international services of these two universities, and then compare and contrast the international services in WPI and the other two universities.

5.1 International Students Services at the University of Wisconsin-Madison

The University of Wisconsin-Madison (UWM) a well-developed International Student Service website that has all the information that an international student needs, as shown in Figure 5.1.



Figure 5.1 International Students Service website main page

The "Guide for International student" page shown in Figure 5.2 includes information on getting an F-1 student visa, academics, employment option, and student life, etc. Students can get all the information by watching the video guide within 40 minutes. Students can also share

the guide with others by clicking "Share 'students' " button, which is convenient for sharing the information.



Figure 5.2 Webpage of Guide for International Students

Under the "Current Student" page shown in Figure 5.3, international students may find the information on travel, health, tuition payments, and driver's license in addition to information about student visa. With this information provided, current international students will feel more comfortable with different aspects in their daily life on and off campus.

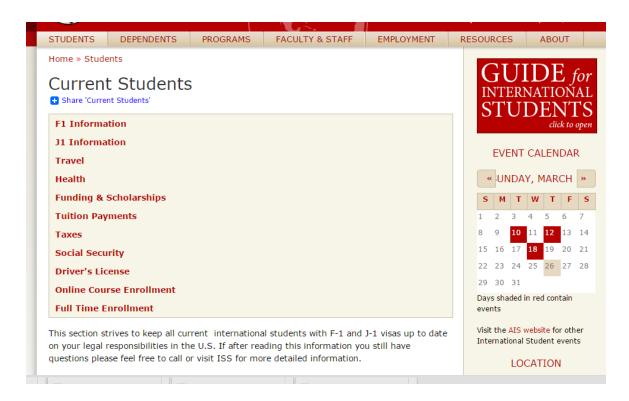


Figure 5.3 Webpage of Service for Current Students

5.2 International House Services at the Duke University

On the Duke University International House website, as shown in Figure 5.4, there is information about transportation, International House programs and services, and living essentials, such as banking, dining, shopping, and safety, etc.

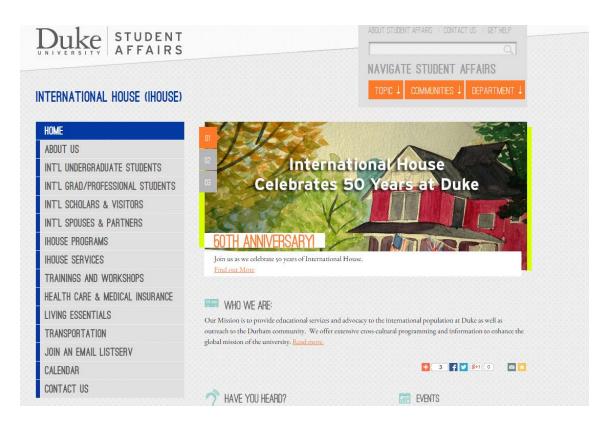


Figure 5.4 Duke University International House Website

Based on our research on Duke University's international student service, Duke University provides a number of programs for international students. We were interested in the Duke Language Partners program and International Friends Program. During the Duke Language Partners Program, non-native speakers will be matched with native speakers of various languages on the weekly basis. It is always easy to get access to the program application page and the program brochure with just a click. Duke University also provides cultural conversation clubs to international students.

In addition, Duke University's International House provides trips to the Social Security Office and Department of Motor Vehicles and a manual for transportation in both video and written format. There is also a Duke University YouTube channel for international students to check updated information.

^{*} For detailed information, please check out Duke University's International House website at http://studentaffairs.duke.edu/ihouse.

5.3 The International House Website

Comparing WPI with the other two universities above, we found that WPI's International House website provides limited resources than the other two universities discussed above, and there are less substantial contents of services on the WPI's International House website. We use sitemap, which is a table of content of a website accessible to search engines, to show how services embraced in their websites. Figure 5.5 is part of a sitemap, which shows the UWM's International Students Service website content. It is obvious that this website provides better navigation and visibility for the students. For example, under the 'Resource' page, there are links to Guide to International Students, Application and Forms and Social Security. This website also classify information for current students and new students based on their needs. Moreover, the little arrow means students can follow the topic and find more useful information.

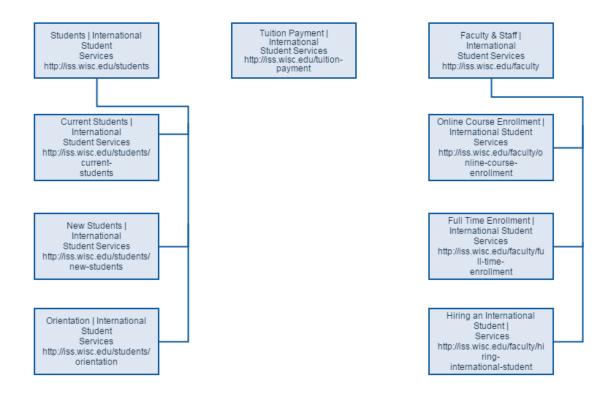


Figure 5.5 Sitemap of UWM's International Student Service website

The service on WPI International House website homepage mostly contains immigration information and ESL program as shown on the left side of Figure 5.6. When we click on "ongoing programs and essential services", as shown in Figure 5.7, there is more description on ESL program and the link to WPI International Student Council rather than information about

services that other departments and offices provide. This shows that WPI's International House does not have a very good connection with other offices. Moreover, there are minimal services related to daily life, such as health care and transportation.

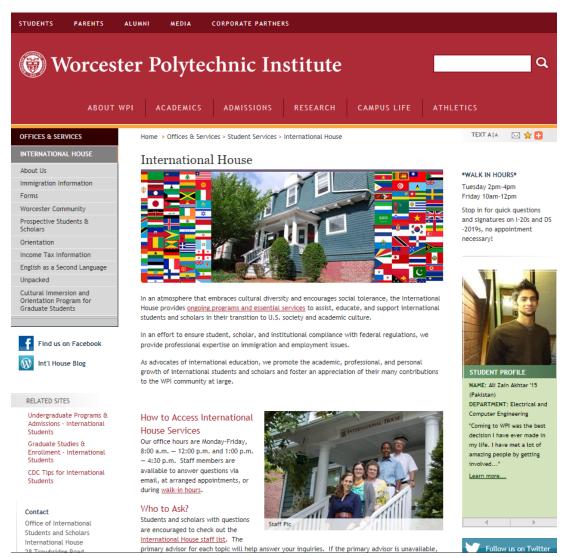


Figure 5.6 WPI International House Website

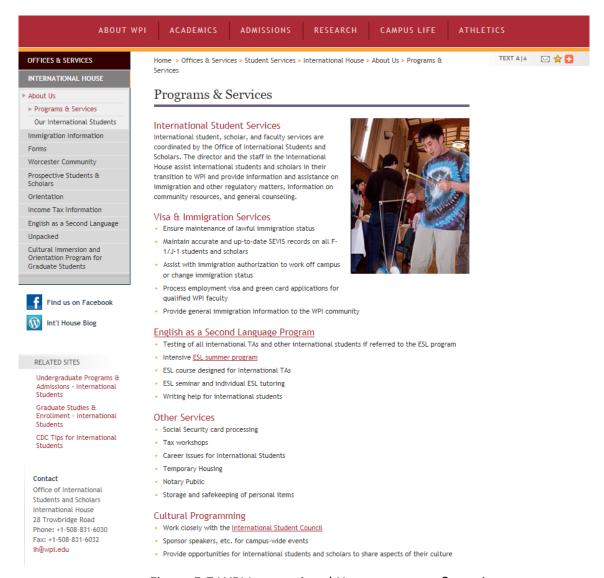


Figure 5.7 WPI International House program & services

Figure 5.8 shown below demonstrate part of the sitemap of WPI's International House website. The information that the website provides are mostly about introducing the International House, but not information on how to use services that are available to students. When international students want to know about the services of a university, the first resource they would use is the main page of the International House's website. However, it seems that students cannot get enough information from it. From our observation on the entire sitemap of WPI's International House website, there is no arrow where students can read for more information.

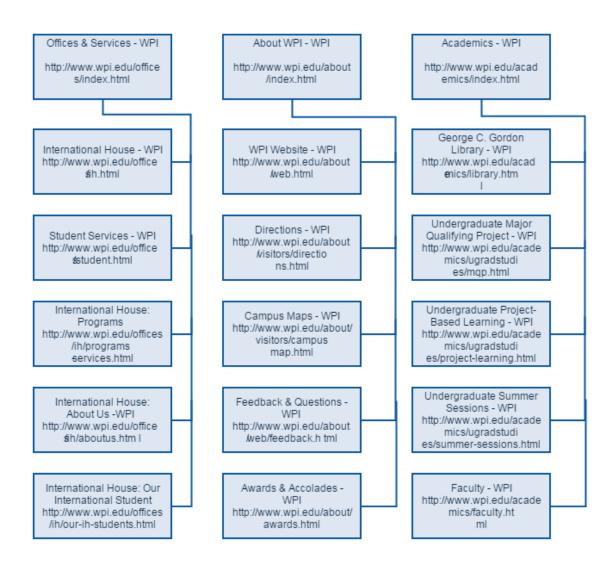


Figure 5.8 Sitemap of WPI's International House website

To solve this issue, besides adding more substantial content to all the services, WPI International House should have more bonding connection with the other departments and offices on campus, so they can enrich the services on the website. For example, the International House website should have a "Daily Life" segment, which includes "Health". By clicking on "Health", students can find more information about services that WPI Health Center provides.

Instead of reading pages on the website, students are more likely to watch a tutorial video to learn new information. A good demonstration of this idea is Duke University's International House website. On this website, students can easily find many videos about services of diverse categories, such as important information for arrival, tax return policy, and

transportation information. WPI's International House website include some of this information, however only in text. On the contrary, Duke University makes interesting and comprehensive videos for international students. Many students discover this way of showing information is useful and efficient. Instead of faculty making a speech, these videos utilize several interesting methods to introduce the services. For example, the U.S. Tax Return video uses freehand cartoon to show policies to keep the audiences' attention. However, on WPI's International House website, there are no videos. Videos entertain international student in a way that helps them learn new information. Therefore, WPI's International House should cooperate with other campus offices and provide videos or link to the videos to inform students about their services.

In addition, Duke Language Partners program and International Friends Program provide opportunities for international students to improve their language skills and get a better engagement into American culture; on the other hand, these programs also benefit native students, because they can learn different cultural values and expand their network of friends by making friends with international students. WPI's International House also has a similar program, but this program is currently only offered to graduated students. On this point, the team want to make a suggestion of a "Pair Up" program for incoming undergraduate students, which will be described in detail in the Recommendation chapter.

Chapter 6 Recommendations

For our final recommendations, the team combined three factors - the challenges collected from first three focus groups, the advice these three focus groups gave and feedback from the last focus group. Based on the results and analysis of the focus group meetings, interviews, and research on services that other American universities provide, we created the following tables to present our recommendations:

Table 6.1 Recommendations related to languages barriers

Languages barriers			
Afraid to ask for help	 For WPI: Pair up American students with freshmen or new international students for practicing English and making friends See note (A) on next page. For international students: Speak more, ask more, and know more, in order to feel more comfortable living and study at WPI. 		
For WPI: Provide a manual in both PDF and video version, ince the services that are available to international stude. Different offices and departments should make a vide international students introducing their services and use these services. The International House website should include the services of different departments and offices, include care, academic resources and transportation, etc. In international student manual should include instructions to use the library website.			

- (A) Start this program prior to international orientation. Focus the program on:
 - 1. International students who want to make American friends and improve English skills.
 - 2. American students, who want to make friends with international students, help their international friends to register for this activity and willing to learn other cultures. Participants should register with their interests and majors before start time. The International House can then pair international students and American students based on their interests and majors.

International students:

- Practice English skills with American partners
- Inform others about their culture
- Make more American friends
- Develop a better understanding of American custom

American students:

- Help international students improve their English skills
- Inform international students about American culture and customs
- Make more international friends
- Learn different cultural values

Rules:

- Face-to-face communication is encouraged at least once a week for an hour.
- Talk about experiences and learn from each other instead of playing video games or other non-communication activities.
- Be creative (go on hikes, walks, store visits, etc.)
- Introduce friends to each other and enlarge your networks of friends.

Table 6.2 Recommendations Related to Different Education Systems

Different Education Systems		
Hard to adapt to fast-paced academic life	 For WPI: The manual for international students should include all the academic resources on campus and some useful online resource. WPI should award more credit options for international students coming from other academic systems. For international students: Go to help sessions and office hours. Go to the Academic Resource Center to get help on homework and class materials. 	
Take Humanities and Arts class late	For WPI: • The International House should emphasize more on the importance of Humanities and Arts requirements during the international orientation.	
Unfamiliar with intellectual property	For WPI: • The manual should include guidance for intellectual property rules in the United States (APA, MLA citing) and tools that students can use to help them do citation.	
Hard to adapt to project- based environment	 For WPI: The manual should include some useful information about how to do project in a group and how to write project report including formatting rules or samples of good project report. The manual should include a section introducing the Great Problem Seminar in detail, such as different topics and expectations and encouraging international students to take this class in their first year. For international students: Go to writing center whenever need help in writing. The writing tutors are willing to help international students. Take a Great Problems Seminar class in their first Spring semester, which gives the international students the first semester to adapt to WPI campus before enrolling in a challenging project-based course. 	

Table 6.3 Recommendations Related to Different Customs

Different Customs		
Have few American friends	For WPI: • Pair up American students with international students to help students learn different customs. For detailed information on this recommendation, please refer to Note A from Table 6.1.	
	For international students: • Do not hesitate to expand your network of friends with American students.	
Less proactive in social life	 For international students: Go to Student Activity Fair and join clubs that you are interested in participating. Check out current activities on/off campus on WPI Student Activities Office website more often. Try the 100 Things To Do on the Student Activities Office website see note (B) below. 	
Lack of confidence and afraid to make mistakes	For international students: • Increase social activities	

⁽B) Student Activities Office Website: http://www.wpi.edu/offices/sao/thingstodo.html?shortURL=thingstodo&redirector=plus.wpi.edu

Table 6.4 Recommendations Related to Daily Life Issues

Daily Life Issues		
Unfamiliar with American shopping custom	For WPI: • The International House should organize more shopping trips to malls and shops including international food markets when international students first arrive WPI.	
Unaware of the cold weather	 For WPI: The International House should remind international students before they arrive WPI about weather condition in Worcester, and provide a list of useful items to buy during wintertime, such as winter boots, clothes, and scarves. Notify them to be more careful with slippery walkways or icy road conditions. The International House should advertise more on the shopping trip to Wrentham Village Outlet at the beginning of the winter and remind international students to buy winter clothes. 	
Food issues	 For WPI: The dining office should label the food more carefully and in more detail, such as ingredients and nutrient information. Thus, international students can understand easier. The dining office needs to supply more healthy food (avoiding overcooked food), the dessert should come in both diet and non-diet version (sweet cake and less sweeten cake). The dining office should translate some food related words to international students and document them in the manual. In the manual, there should be some recipes. Therefore, international students can cook with the material in Price Chopper. 	
Financial pressure	 For WPI: As the dollar gets stronger, WPI should increase the financial aid to international students who suffer from financial difficulties and provide scholarships to international students who have outstanding academic records. 	

Chapter 7 Conclusion

In seven weeks, we completed this challenging and remarkable project. First, we familiarized ourselves with the services that WPI provides to students by interviewing with different offices on campus and conducted focus group meetings to study the academic and daily life challenges of international students when studying at WPI. From these focus group meetings, we gathered advice for international students from the perspective of American students, faculty, and international students themselves. As a result, we provided some critical recommendations to WPI on international students' services, an international student manual, and the International House website design. We also created a set of resources that assist international students with both academic and daily life issues. These recommendations could help international students more easily adapt to WPI and gain confidence in living and studying at WPI.

At the beginning of this project, we set our goal of creating a tool that contains resources and information to help international students with their academic and daily life issues. However, as we collected more information from interviews and focus groups, we learned something that we did not expect. There are many services that are accessible to international students; however, many international students are not aware that these services exist. The international student body itself is not homogeneous but rather a diverse 'melting pot'. Thus, when we developed our solutions, we paid more attention to the heterogeneous nature of the student body to make sure to satisfy students from different cultural background and experiences.

As we reflect on this project, we recognize that our project has many stakeholders. We are confident that the information gathered from our study would help incoming international students feel comfortable in this new environment. We believe if our recommendations are implemented, it would make WPI a more attractive university to international students.

Appendix A - Contact Information of Different Offices

Table A1: Contact Information of Different Offices and Student Organizations

Department Name	Contact Information
Health Center	Regina Roberto Director, Department of Health Service Phone Number: 508-831-5520 Email: rroberto@wpi.edu
International Student Council (ISC)	Pedro Escuer Email: pjescuer@wpi.edu
Office of Academic Advising	Daniels Hall Phone: +1-508-831-5381 Email: academic-advising@wpi.edu
Career Development Center (CDC)	Career Development Center Project Center, Lower Level Phone: +1-508-831-5260 Email: cdc@wpi.edu
Student Activities Office	Rubin Campus Center, Room 327 Phone: (508) 831-5565 Email: SGAexecs@wpi.edu
George C. Gordon Library	Gordon Library Phone: +1-508-831-5410 Email: library-answers@wpi.edu
International House	Office of International Students and Scholars 28 Trowbridge Road Phone: +1-508-831-6030 Email: ih@wpi.edu
Dining Services Office	Morgan Hall Phone: +1-508-831-5253
Office of Financial Aid	Bartlett Center Phone: +1-508-831-5469 Email: finaid@wpi.edu

Appendix B - Sample Flyers

Join Us for International Students Focus Group



We are looking for

IT students to participate in a

Ciao one—hour focus group discussion.

Your opinions & experiences MATTER!

Please help us answer these questions:

- I What were the difficulties when you first came to WPI?
- 2 What campus services have you used to help you solve your problems?
- 3 What campus service, if provided, could help you adapt better?

When: April 3, 3-4pm

Where: AK 108 (By vending machine)



Please e-mail the Diversity and Education IQP group

at dmiqpd15@wpi.edu

with your main issues and nationality



Deadline: March 27, 11:59pm



Questions?

Please e-mail to the address above



ALL INFORMATION WILL BE CONFIDENTIAL. No one will be identified by name in any reports. No one's name will be shared with any other agency.

Figure 3.1. Flyer for international students

Join Us for American Students Focus Grouup



goddagaHola We are looking for students to participate in a one-hour focus group discussion.

Your opinions & experiences MATTER

Please help us answer these questions:

I How do you make friends and meet people from other countries?

2 What is the biggest difference between international students and native students?

3 Would you like to help international students adopt to American culture

When: March 30, 3-4pm

Where: AK/08 (By vending machine)

To Register for the Focus Group:

Please e-mail the Diversity and Education IQP group

at dmiqpd15@wpi.edu

🌟 Deadlìne: March 27, 11:59pm

Questions?

Please e-mail to the address above



ALL INFORMATION WILL BE CONFIDENTIAL. No one will be identified by name in any reports, No one's name will be shared with any other agency.

Figure 3.2. Flyer for American Students

Appendix C - Focus Group Attendance Forms

Table C1: Attendance Form for International Students

Nationality	Gender (F/M)	Undergraduate (U)/ Graduate (G)	Have you travelled outside of your home country before coming to WPI?(Y/N)	Rate how often do you speak English (1 to 5, 5 for high frequency)	Rate your confidence in English (1 to 5, 5 for high confidence)

Table C2: Attendance Form for Faculty

Name (Optional)	Gender (M/F)	Age (Optional)	Department

Table C3 Attendance Form for American Students

Gender(F/M)	Major	Undergraduate(U)/ Graduate (G)

American Students Focus Group Guide

When & Where: March 30th 3-4pm, AK108

Who will participate: 5-8 American Students

Who will conduct the sessions: Education and Diversity IQP Team

The purpose of this Focus Group:

- 1. Discuss students' experiences of interacting with international students from different culture background.
- 2. Collect information about American students' challenges/advantage when they interact with international students.
- 3. Discuss differences between international students and American students.
- 4. Discuss ways to improve interactions between American students and international students.

Discussion Questions:

- 1. How do you make friends and meet people from other countries?
- 2. Have you ever worked on a project teamed with international student? How was your experience? (What did you learn from the experience?)
- 3. What values do you think the international students can bring to the WPI campus? (Culture/ education values?)
- 4. What is the biggest difference between international students and American students? (Entertainment/family life/language?)
- 5. What are the advantages of having friends who are from another country?
- 6. What are the challenges of having friends who are international students?
- 7. Do you think international students often adapt to American culture or are there some issues that international students have or particular difficulties with or still hold their beliefs in their native culture? (What difficulties have you observed in international students as they try to adjust WPI, What the impact about international students bring to WPI)

Ground Rules:

- Maximum duration: 60 minutes, and when necessary, the focus group or interview will be halted to allow participants to take breaks.
- Only one person talks at a time.
- Facilitators need to hear everyone's ideas and opinions on all sides of any issues without any judgments.
- Facilitators need to respect the rights, dignity and worth of all people.

• Facilitators need to <u>guarantee</u> that women's and men's ideas to be equally represented and respected.

Confidentiality

- 1. Personal information that is revealed to them confidential will be protected. We cannot share the specific contents with outsider to know who participated in the study.
- 2. Facilitators will explain how confidentiality will be protected in the beginning of this focus group.

Faculty Focus Group Guide

When & Where: April 1st 1-2pm, AK218

Who will participate: 5-8 WPI faculty members

Who will conduct the sessions: Education and Diversity IQP Team

The purpose of this Focus Group:

1. Discuss faculty's experiences of interacting with international students.

- 2. Collect information about the challenges when they interact with international students.
- 3. Discuss recommendations in term of academic performance and daily life of international students.

Discussion Questions:

- 1. How were your experiences interacting with international students?
- 2. What are the advantages of having students who are from another country?
- 3. What are the challenges of having students who are international students?
- 4. What is the biggest difference between international students and American students?
- 5. How would you help an international student if he come to you for help?
- 6. Do you think there should be some new services available for international students? Could you think of one that can help them?

Ground Rules:

- Maximum duration: 60 minutes, and when necessary, the focus group or interview will be halted to allow participants to take breaks.
- Only one person talks at a time.
- Facilitators need to hear everyone's ideas and opinions on all sides of any issues without any judgments.
- Facilitators need to respect the rights, dignity and worth of all people.
- Facilitators need to guarantee that women's and men's ideas to be equally represented and respected.

Confidentiality

- 1. Personal information that is revealed to them confidential will be protected. We cannot share the specific contents with outsider to know who participated in the study.
- 2. Facilitators will explain how confidentiality will be protected in the beginning of this focus group.

International Students Focus Group Guide

When & Where: April 3rd 3-4pm, AK108

Who will participate: 5-8 International Students

Who will conduct the sessions: Education and Diversity IQP Team

The purpose of this Focus Group:

1. Discuss students' first year experiences

- 2. Collect information about students' challenges, if students already overcome these challenges. Collect information about how students deal with them.
- 3. Discuss existed resources at WPI, which can help international students.
- 4. Discuss services that can be developed to assist international students

Discussion Questions:

- 1. How was your experience when you first arrived at WPI?
- 2. What initial problems did you have and how did you deal with them?
- 3. What offices at WPI have you visited to assist with overcoming your problems? Was it effective?
- 4. What issues is still a problem for you?
- 5. How do you make friends with American students?
- 6. Have you ever worked on a project with American students? If yes, could you tell us about your experience?
- 7. Do you wish there were other resources to help you to overcome the problems? For example, a manual?
- 8. What academic resources have you used to help you do assignments and projects? (Professors, online resource, library) Please be specific.
- 9. Do you have any advice for incoming international students? What resources do you think WPI should provide you before your arrival?

Ground Rules:

- Maximum duration: 60 minutes, and when necessary, the focus group or interview will be halted to allow participants to take breaks.
- Only one person talks at a time.
- Facilitators need to hear everyone's ideas and opinions on all sides of any issues without any judgments.
- Facilitators need to respect the rights, dignity and worth of all people.
- Facilitators need to <u>guarantee</u> that women's and men's ideas to be equally represented and respected.

Confidentiality

- 1. Personal information that is revealed to them confidential will be protected. we cannot share the specific contents with outsider to know who participated in the study.
- 2. Facilitators will explain how confidentiality will be protected in the beginning of this focus group.

Final Focus Group Guide

When & Where: April 13th 3-4pm, AK108

Who will participate: 5-8 members from WPI community, including international student, American students and faculty members

Who will conduct the sessions: Diversity and Education IQP Team

The purpose of this Focus Group:

- 1. Share our study's result with all the focus group members.
- 2. Collect information of participants' feedbacks on our solutions.
- 3. Discuss recommendation in terms of potential solutions. Do you think our results reflect your experience? Is there anything we forget to mention?
- 4. What do you think the pros and cons of our solution?
- 5. In order to implement the solutions what do we need to do?
- 6. Do you think there are any other solutions that should be implemented?

Discussion Questions:

- 1. Do you think our results reflect your experience? Is there anything we forget to mention?
- 2. What do you think the pros and cons of our solution?
- 3. In order to implement the solutions what do we need to do?
- 4. Do you think there are any other solutions that should be implemented?

Ground Rules:

- Maximum duration: 60 minutes, and when necessary, the focus group or interview will be halted to allow participants to take breaks.
- Only one person talks at a time.
- Facilitators need to hear everyone's ideas and opinions on all sides of any issues without any judgments.
- Facilitators need to respect the rights, dignity and worth of all people.
- Facilitators need to <u>guarantee</u> that women's and men's ideas to be equally represented and respected.

Confidentiality

- 1. Personal information that is revealed to them confidential will be protected. We cannot share the specific contents with outsider to know who participated in the study.
- 2. Facilitators will explain how confidentiality will be protected in the beginning of this focus group.

Sample Acknowledge Form

Thank you for agreeing to participate in our focus group study. We are looking forward to hearing your opinion on international students.

- The purpose of this focus group study is to gather information regarding your interactions with international students.
- Your response may be recorded. All your information will be kept completely confidential (There may be some responses cited in quotes recorded in our final IQP report without associated names).
- We will also ask that each students **respect** each other's confidentiality
- You do not have to answer any question that you are uncomfortable with.

Signature:	-
Name:	
Date:/	

If you have any questions after the meeting, please contact us at: dmiqpd15@wpi.edu

Appendix D - Focus Groups Note Summaries

American Students Focus Group Summary

Date of Focus Group	March 30, 2015 3:00-4:00 PM
Location of Focus Group	AK108
Number of Participants	5 total – 3 men, 2 women
Category of Group	American students
Moderator Name	Advisor Suzanne LePage
Asst. Moderator Name	Yuchen Liu, Zitai Huang, Arin Kulvanit, Yuchen Guo

Responses to Questions

Responses to Questions	T
Brief Summary/Key Points ("+" means one more student mentioned) (black = positive, pink = negative)	Notable Comments
Theme #1: Making friends with international students	1) How do you make friends and meet people from other countries?
(Question:1,2,6,7,8)	A: (Writing center tutor): I do not think I will go out my way. I
Making friends through:	do not treat international students differently. I do not feel timid knowing people from other backgrounds. I joined sports teams and sorority to make friends.
• Greek life +, sports teams,	
clubs(including professional	B: (Hispanic background): While I join groups from different clubs, I tend to stay with people who have a similar background.
societies)+++	C: (SNAP driver): Similar to what student A said, I do not treat
• Living in dorm ++	international students differently. During freshman year, I met people at the dorm and was exposed to international students.
• Connection programs, such as	
orientation, and early arrival	D: (IQP student): I have the same feeling that international students should not be treated differently.
program	E: (Badminton club): In my freshman year, one of my roommates
• Friends of friends ++	was an international student, who came early because of the international orientation. I hang out a lot with international

Concerns:

- different customs
- language barriers cause communication problems
- hard to bond with international student at first because of different sense of humor

Suggestions:

- Stick with people who have similar background (Hispanic student)
- Go to common rooms in some department buildings (such as The Commons in Fullers Lab) and common room in dorms to meet more people

students. I also meet people from different clubs, such as the Badminton club.

2) How many international student friends did you have in freshman year and still maintain friendship with?

A: I joined Rival and connection programs for minority students during freshman year and remain friends with them.

B: I joined a professional society, and began the interaction with international students.

C: I am a senior. I treat international students the same. I maintain friends with people from freshman year.

"I treat them the same because of who they are."

D: I join sorority to meet people. I do not treat American students and international students differently.

E: I always say "hi" to all international students that I met in freshmen year, but I often talk more to people who are still around and those I see the most often.

6) What are the advantages of having friends who are from another country?

C: Making friends with the international students can help me learn their language and have an idea about what other international students are saying.

D: In my freshman year, I had a roommate from Brazil. We got along with each other.

E: I got involved in new things and people that I have never met before. I was introduced to badminton from an international student who I met in the club.

7) What are the challenges of having friends who are international students?

A: Sometimes customs can be an issue. This causes some awkward moments. I am a tutor at the Writing Center. I cannot figure out how to deal with international students in an hour to fix a 4-page paper at the first appointment, but I keep in mind that

they may do things differently. There is a language barrier, but I need to have them say something.

B: Some international students' writing is strong, but presentations are an issue. When we practice presentations, I am interested in seeing the results on how well the international students do.

C: Bonding with teammates. Not all international students understand American jokes.

D: Challenges are project based. Mostly, I see problems in presentation and misunderstanding in communication due to the language barrier.

8) What did you learn from having friends from another country?

B: Trouble being solved makes me more motivated in making more friends that are international. American students are more comfortable about being an international student when travelling outside of the United States.

D: Culture difference may lead to intimidation. Hence, American students should be more aware of the cultural differences.

A: In the future, if I meet anyone who is short in communicating, I will ask how confident he is with his English. I understand that it is hard to get something out from them if they are not strong in English. It is hard to fix everything at once. International students will improve [their English skills], but it takes time. In addition, people from different countries can succeed. Due to language barrier, some international students are weak in giving presentation.

E (SNAP driver): I found that some of the international students do not have the motivation to work, but I would not blame on the culture gap. It is more about overcoming challenges not the cultural gap.

C: Being able to work and communicate in a group with people from different country is what I learned.

Theme #2 Values that international students have (Question 3,11,12)

Advantages:

- hard working group +++
- good at math and science (engineering)
- make friends during projects

Challenges:

- communication---(language barrier)
- completing projects (writing part)++
- presentation issues+

Concerns:

- grocery shopping and living in place
- orientation (all the international students come a week early and stick together, American students are also isolated from international students)

3) Have you ever worked on a project teamed with international student? How was your experience? (What did you learn from the experience?)

A: I have a partner in a class. We do lab reports together, and start to learn about each other. International students are strong in math and science but not in writing and communication. We had some communication issues, and the team was not able to help the international student. International students may feel isolated and uncomfortable to engage in conversation. Sometimes, it is difficult to help them.

B: Some international students are lacking in English speaking skills.

C: I did IQP in Russia. International students were a big part of the team. During the course of the project, I made pretty good friends with the international students

D: In my German class, I helped students from Brazil and China. They have different humors, and most of the time writing was edited by the native speakers like me.

E: I worked on a project with an international student who is also my roommate. Language is a barrier. They have idea but not willing to express or too shy to share, but they fit very well with the team. They look at problems differently.

11) What do you think WPI can do for the international students?

A: WPI should help them learn how to do grocery shopping, help them managing living things in place. There should be a manual that would help international students manage social life so that they can concentrate on the academics.

E: Orientation can be good and bad to international students. They come to WPI a week early, so they are bounded to the international students more than the American students are.

B: I think that international students coming to WPI one week early is super helpful if they are peer mentored by the Americans.

D: When I was a junior in my high school, there was a good idea of keeping international students and American students in pairs. Pairing international students and native students can benefit both sides. In addition, WPI should definitely have writing class and presentation class for international students.

Advices for American students:

- ask international students questions about their confidence levels with English
- encourage international students to ask lots of questions
- encourage international students to speak louder
- make friends with international students during orientation +
- peer mentoring international students+

12) What can faculty do to help you, prevent or solve the issues of interacting with international students?

E: It would be helpful if professor could organize a field trip at the beginning of a class. This would provide the opportunity for students to bond and find something that they share in common.

B: Like what I experienced in Global Problem Seminar, professor held meeting with students, and interact with them.

Theme #3 Clash of cultures (Question 4,5,9,10)

Benefits of having international students on campus:

- for American students who have multicultural background, international students help them know their own culture
- cultural differences help on offcampus projects
- lifestyle differences
- bring lots of insights
- networking opportunity
- interesting experience in huge city
- cultural values are different +++

Concerns:

- international students are not homogeneous (case are different from person to person)
- whether or not they adopt

 American depends on where are
 they come from

4) What values do you think the international students can bring to the WPI campus? (Culture/ education values?)

A: International students are hardworking, (They work hard rather than hardly work),

B: Culture difference is a good thing, especially when I am doing an off campus IQP. It is helpful to have someone who is from a different culture in an off campus IQP, because they know what is the appropriate step to take. The person does not have to be Thai when they are in Thailand, it matters that the person has experience with multi-culture.

C: International students are generally hardworking. Hire international students who are hardworking than most of the staffs. Once a while, someone could be gone or quit the job. International students are polarized.

D: Different cultures would help in off campus projects, especially from students who experience one or more cultures.

E: I think having international students on our campus is the great part, because culture context can bring lots of insight and networking opportunities. Because some international students come from a huge city and they an international background, they might see things you may overlook. They have different life style and see things differently, especially when interacting in project works and presentations.

5) What is the biggest difference between international students and American students? (Entertainment/ family life/language?)

A: I do not know much difference between international students and native students.

B: Based on culture values, Spanish students are less sensitive to regional issues. They are more interactive and participating in informal meetings since some parts in their culture background are similar to that of the United States. They have a more relaxed culture and mannerism.

C: I cannot generate, because international student is not homogeneous.

- takes time to recognize what they like and what they don't like about American culture
- be aware of different customs/cultures
- different customs cause
 misunderstanding

Advices to international students:

- find the middle way where international students feel comfortable with both American culture and their native culture +
- take English class as early as possible to improve writing and speaking skills
- Stick with a group of people who has the same background when the international students first arrive WPI and make more friends outside that group when they feel more confident with socializing

D: Experiencing living with international students, I realize that culture values are different. It is hard to tell what manner is acceptable and what manner is not acceptable. The differences sometimes depend on the individual.'

E: Culture values can be very different in certain area. Acceptable or unacceptable manner different from case to case.

9) Do you think international students often adapt to American culture or are there some issues that international students have or particular difficulties with or still hold their beliefs in their native culture? (What difficulties have you observed in international students as they try to adjust WPI)

B: Depends on where they come from. It is hard to adjust, but not fully adopt American culture.

A: It is important to not lose their home country style and culture. Recognizing what they like about their home culture and American culture. Take time for the international students to figure out what they want to adopt and what they do not want.

10) Do you have any advice to international students and how would you do to help them adapt to WPI?

A: I think it is important to find a middle makes them feel comfortable. I suggest them to speak louder, to ask more questions, to not be afraid to speak. Moreover, being able to contribute is important. American student should also make the international students feel belong to the group.

B: For international students, try to understand American culture because freshmen are usually uncomfortable with the entire surrounding. Reach out of the comfort zone. They should also seek out international students groups, find people who have same experience, and take English class (to help improve their writing/presenting skills) to solve the language problem as early as possible.

C: One student has a good writing that tells a beautiful story. The student said

"Can you help make it look American?" The tutor said, "You don't want to make it look American, American writing style is

chopped and harsher." I think international students should go with an open mind, try new things, and meet new people. Find common ground between the American and you and find people with similar background.

D: Depend where they come from, if an international student completely adapt to the American culture he/she may lose some of his/her home diversity. International students can find what they like in both culture and find the middle way to make a connection to interact with people.

E: They may also need to join clubs and extra activities. It is good for them to get a large club that has 200-300 people, because it would be easy for international student to find friends who can match their interests. These big clubs tends to be easier to absorb international students. Moreover, participating in clubs necessarily designed for their culture may also helpful. Another thing is to go to common room in the CS department or the Pumpkin lounge in the ECE department, where they will find a lot of students of same major. They can talk a lot and make new friends there.

Faculty Focus Group Summary

Date of Focus Group	April 1st, 2015 1:00-2:00 PM
Location of Focus Group	AK218
Number of Participants	5 total – 2 men, 3 women (including Math professor, librarian, admission officer, History professor, ESL professor)
Category of Group	Faculty
Moderator Name	Yuchen Guo, Yuchen Liu
Asst. Moderator Name	Zitai Huang, Arin Kulvanit

Responses to Questions

Brief Summary/Key Points ("+/-" means one more faculty mentioned) (black positive, pink negative)	Notable Comments
Theme1: What are challenges and difference have been found during interaction between international students and American students (Question:1, 2, 4) American students • Shy to reach out for international students • Difficulties in working	1) What is your experience with international students? A: From my interaction with international students in classes. I learned that they struggle in speaking and writing English the most. They need more language instruction help. B: I have no idea what the international students' expectations for the library are. The library provides more services than what they actually use. I am interested in hearing some stories from different nationalities. They have different viewpoints on copyright and intellectual property laws.
with international students since some international students are not strong in writing. International students tend to do less work in the writing and it is not fair for everyone. • "Sometimes I just want to group them together	C: I have experience in the classroom as a professor, adviser and during academic program planning. International Students from American high schools and overseas are obviously different because of their backgrounds. D: Recruiting international students during admission and for tour guides on campus. There is one International student employed during senior year right now in the admission office. He has a very positive perspective. He does whatever he is asked to do.

and the Asian do the math and the American do the writing to balance it out"

International students

- Different kinds of Food
- Lack in language instruction
- Afraid to make mistakes and to ask for something they do not familiar with (People are happy to help)
- Not much social life on campus
- Financial Burden (when dollar gets strong)
- Do not get out of their comfort zone
- Have difficulties building their own support network
- Strong background in engineering (Math and Sciences)
- Asian and African are Diligent in academics and full of passion for learning
- Women more willing to participate than men
- Adventurous
- Europe and Latin
 American speak English well
- Asian parents tend to take a leap of faith in their children.

E: International students have a very strong academic background. They are diligent students and strong in mathematics. They are also optimistic. There are a lot more international students on campus and the clubs and organizations number increase as well. Greek life does not integrate international students so much. There is little bit of isolation and separation from native students.

2) What challenges do international students have?

A: Courses: International students need more explanation to understand what is going on. Some students have enough English skills, and do not take humanities courses. They come to meet me for instructions after class. They take humanities so late that their preparation for the project based work becomes difficult. Students who have AP credits would be able to take more English language courses. There should be more credits given to other education systems. (A Levels, and more) Any kind of new assessment and course credits would help them perform better. They also have some different kinds of roommate issues.

B: The international students need to study more on the language issues. I even have to use less idioms in my communication, so that the international students understand.

C: I do not see much of social life on campus coming from the international students. There is a Global Buddy Program under development to see more interactions between the American students and the international students. "The Americans can learn to broaden horizons more". One Vietnamese student is very unhappy about his life. He knows nobody. He complains about it to the barber. The barber told him to talk to people. The barber gave an example of a 70-year-old man whose grandchildren and their friends are afraid to ask girls for their numbers in a bar. The old man went to talk to the girls alone. He even got two of the girls' phone numbers!

D: International students are afraid to make mistakes. People will sympathize and want to help international students. "International students who struggle with English tend to be the last pick in project." They also have financial burden when the U.S. dollar gets stronger. There are no loans on education like in America. They are

- Weakness: Communication (Speaking) and writing
- Lack of confidence
- Take Humanities so late that they have difficulties in project works
- Have no idea how the library works here
- Lack of knowledge on copyright and intellectual property
- There are some resource on campus that international students are unfamiliar with
- Do not get out very much
- Asians tend to be more quiet and reserved.
- Asian parent tend to drop their child to more well-known schools

far away from home and they have no support networks. They have to create one by themselves.

E: Missing opportunities on both sides. Inter-fraternity Councils should organize events to join two different groups of students together not only for brothers and sisters. American students are reluctant to participate as well.

C: He has very socialized students in class who join Alpha Phi Omega and students who join sororities. They had potluck dinner one day for students in class. This suggests there are some international students who do get out to socialize. Everyone is willing to participate.

B: If there were meetings with introductions to new cultural rituals, they would motivate more initiation and participation. There are more people willing to participate in women connection meetings, due to these rituals. I went to some women connection events and I found there were lots of people who are international students.

4) What are the differences between International students and American students

A: Asian students tend to have the honeymoon period with food for about two weeks after that they experience culture shock of not adjusting to the foods. They complain thereafter and cannot adjust to it. Europeans and South Americans do not have this kind of problems as much.

B: English as Second Language students I talked with for one hour and remember them well. They instantly connect with me like a friend forever. Some European students' English is really good. Some people speak it so well that it is hard to identify where they are from.

C: Europe and Latin American have good English; African students are motivated and diligent; Asians tend to be more quiet and reserved. Students from Venezuela, Caribbean, and Saudi Arabia did their MQP in China. The Saudi Arabian experienced the cultural shock, for example the marriage process.

Some international students are not strong in writing. They do less work in that and it is not fair to everyone. C: Asian students have strength in Math and weakness in communication. They are also not confident sometimes. American students collaborates more. "Sometimes I just want to group them together and have the Asian do the math and the American do the writing to balance it out" D: Asian parents tend to take a leap of faith in their children. Admission processes in America and foreign university are different. The applications for international students are also more complicated. Asian parents tend to send their child to more wellknown schools E: I do not want to generalize, because I have encountered strong and weak students from different backgrounds.

Theme #2: Values International students bring to campus (Question:3)

- Cultural Rituals
- Much educational values to Americans
- Bring more festival such as International month
- Bring more excitement to WPI since they discover some new ideas
- Attract more international students.
- They are tied to the university and American's perspective and be able to utilize it back home
- "They bring impacts that they and we do not know about."

3) What are the advantages of having students who are from another country?

B: There are more to learn about things internationally. There is so much educational value from that.

A: There is definitely excitement in wanting to participate and engage with students who are from different cultures. Americans can learn more about other cultures. I am excited about meeting new people- someone from a different culture or educational experience. American students learn more from international students, and now we have International Month, which is raising awareness.

C: I teach a class in International Studies. 20 years ago. My students were 3-5% international and now it has increased to 15% or more.

D: International students come here to study. They are tied to the institution and the U.S.A. They offer perspective. They can share the pieces of the world they bring with them. The culture and diversity that the international students bring with them is important. International students are adventurous in seeking challenges. We learn through what they bring in the classroom. They bring impacts that they and we do not know about. They may do interesting things before coming to WPI. We have the opportunity to bring International students here.

E. They can do algebra.

Theme #3: Improvements on Campus (Question:5)

- International students information desk in Campus Center
- Greek Life with more international students group
- Resources for students on how to use the library (post instructions on the portal)
- Global Buddy Program
- More Scholarships for international students
- More options for credits for international students from different education systems (A levels from UK, and others from Asia) so they can take more classes as well.
 (We have placement tests for chemistry.)

Concerns:

- Asians do not like the food. They are in honeymoon period with the food for about 2 weeks.
- I do not have any friend (Vietnamese student at the barber shop)
- International students who struggle with English tend to be the last pick in project

5) Do you think there should be some new services available for international students?

A: We have information for large groups of faculty and students in different cultures. International students are not aware of the information we have. They may be shy to ask for more information.

B: Some of them have no experience in this kind of library. There should be something, so that they can be more aware of specific resources.

C: There should be more scholarships for international students.

There are more opportunities to apply for scholarships for

American citizens. Most of my conversations on scholarships with
the international students are short.

D: International students are uncomfortable asking for extra help and looking for existing resources. Online resources, informing international students about services, would be great tool for them. American students are shy to reach out to the international students also. International students have a burden when US Dollar gets stronger. Global Buddy Program should be a good idea. There are international students who are excited to meet new people and they want more information from the admission before they come.

E: Americans have more advantages in networking as they grow up. WPI can probably set up an information desk for international students in the campus center.

International Students Focus Group Summary

Date of Focus Group	April 3rd, 2015 3:00-4:00 PM
Location of Focus Group	AK108
Number of Participants	5 total – 4 men, 1 women (from Thailand, India, China, and Japan)
Category of Group	International students
Moderator Name	Yuchen Guo, Yuchen Liu
Asst. Moderator Name	Zitai Huang, Arin Kulvanit

Responses to Questions

Brief Summary/Key Points ("+" means one more international students mentioned) (black positive, pink negative)	Notable Comments
Theme #1: First year experience (Question:1,2,4 7) • love orientation + • build network of new friends • talk a lot with faculty + • find groups which has similar background • survival guide from Chinese Student Associate was really helpful • campus tour during the orientation is good • did not read important sign and instructions	1) How was your experience when you first arrived at WPI? A: I like it a lot. I love the orientation. We can get lots of information about WPI and make friends from other countries. I have a roommate who is an international student as well, and we get along well before American students came. B: I have been here for two years. India was a lot warmer. Indian people have different culture and beliefs. I talk a lot with faculty, international students, and American students. I respect their opinions. This respect makes it a good transition. I also connected with people via Facebook and email before I came here. C: I got lost and did not catch up with events so many times, because I did not read signs and follow instructions. I participated in the Olympic Game event during orientation, but skipped rest of the orientation. It was a lot of fun. My two roommates are American and they play video games all the time. D: It was great. I got a survival guide from the CSA (Chinese Student Association). It provides information about how to find apartments and how to pay bills for apartments. There should be a manual on how international students can get a credit card and

Initial problems:

- fast paced academic curriculum + (shorter term than what they are used to have, harder to manage time and catch up with professors' lectures)
- food + (1. material limited -> repetitive 2. culture shock, include the way of cooking, taste of dishes 3. the label of the food sometimes hard to understand)
- cold weather +
- hard to search for apartments
- hard to understand what professor is saying
- few American friends
- different expectations

What resources are helpful for international students:

- International House
- Professors and advisors +
- Writing Center
- Tutoring centers (MaSH, MTC)

other helpful tips. I have two roommates who are Chinese and American. My Actuarial Math Major advisor is helpful. He helps me choose courses. Joining clubs helps me to know American students. It is crazy but I love it. I think WPI is very good at housing services, and professors are very helpful in major fields.

E: I did campus tours and met international students during the orientation. I think campus tours are helpful.

2) What initial problems did you have and how did you deal with them?

A: Classes are at a faster pace. I went to international school in Thailand. 7-weeks term is hard for me to manage time and catch up with class material. In Asia, we do not have such a short term; instead, we have a long semester. The food is repetitive and boring, since the material for the dishes is limited in America. It is also super cold during B and C Terms.

B: It was a transition from summer in India to winter here. It was the first time I have seen snow. I searched for apartments 5-20 days before flying in. In the meantime, while I was waiting for an apartment, I slept at my friend's place. Before I came here, I never needed to worry about finding an apartment, since I could live on campus or at home. The food on campus gets repetitive and the labels on food are difficult for me to understand. I have to cook my own food sometimes. It is the first time I have ever cooked. In addition, I have to wash utensils and clean my apartment. Balancing between working and activities is also difficult. I sleep here in AK sometimes.

C: I took AP classes for credits, before I came here, so I took Calculus IV directly. However, I could not catch up with the professor, so I dropped it. Some mean professors gave me an NR. A year later, someone told me that we could use www.ratemyprofessor.com to read professors' reviews before registering for classes. (B does not know the website-ratemyprofessor.) The fast pace of study is also a big issue for me, since in Asia, we do not have 'term', we only have 'semester', which lasts about 18 weeks each.

D: Listening to English in the beginning was difficult. In addition, comments and instructions on bannerweb were difficult.

Americans have a different social life. They party on Friday.

E: I have difficulty connecting to the internet. School does not support Window's phone. I tried setting up routers in my own room. There were people who came in and told me it is illegal to set up routers.

4) What issues are still a problem for you?

B: I do not have an issue. I talk more to other people even with alumni who graduated four years ago.

C: Maybe I have very few American friends; however, since I am a CS major, my job is to write codes. I have no problems with having no American friends.

D: No issue.

E: Food is an issue, including the way of cooking and the taste of food, such as the cake always seems too sweet, and some of my friends cannot handle the taste of cheese here.

7) What academic resources have you used to help you do assignments and projects? (Professors, online resource, library) Please be specific.

B: I talked to the international house, advisor and everyone who could help.

C: I seek help from professors, advisors when I need to get an approval for overloading.

D: I went to talk to my advisors and he gave out food in office hours (John Abraham). He was also fun and helpful.

E: I seek help from writing center for writing improvement and at the register office to ask for advice about schedule. Theme #2: Interaction with American students (Question: 5, 6)

How to make friends with American students

- being roommates with American students
- classes/ project partner they help a lot in English reading and writing +
- clubs

5) How do you make friends with American students?

C: It is my choice not to participate. I know there are some opportunities to make friends with Americans, but I did not take them. I am majoring in CS, all I care about is coding.

D: It is a choice you can make before you come to WPI - choosing roommates. I am lucky that one of my freshman year roommates is American. I met more Americans during CS classes, where CS partners are assigned if I do not know anyone.

E: I meet them through classes and clubs.

6) Have you ever worked on a project with American students? If yes, could you tell us about your experience?

B: If one is good academically, communication is not a problem. I do not care about the nationality of students I am partnered up with, as long as they do the work.

C: During my chemistry lab (10-pages lab instructions), American teammates summarize the nonsense lab instructions for me. Then, I just read and follow the important parts. It saves a lot of my time.

D: They offer to help on the writing if they are not good with the project.

E: I have worked with American students via phone, text, and email. Readers prefer correct grammar for email, which I am not comfortable with doing.

Theme #3: Advice to international students, faculty members and WPI (Question:3, 8)

Advice for international students

- be familiar with all kind of services
- take advantage of the tutoring centers
- create a new group of friends

Advice for Faculty:

- more guideline on courses before each term starts
- class capture and PowerPoint
- translation of some important signs and instructions to different languages

Advice for WPI:

- spread information about on-campus services before international students arrive at WPI
- a manual will be helpful
- Provide more options for insurance so that the students can choose accordingly

3) Do you have any advice for international students?

A: They should promote all kinds of help sessions more. Some first year students are not aware of the help sessions. The MaSH and tutors are very important to international students.

B: There is no Indian Organization. It was difficult for me to come here alone in the first year. I am tired of traveling. There should be someone you could talk to help you and take you to campus. There should be a list of places to stay as well. There should be a manual that provides a list of things that international students are supposed to know. There should be an emphasis on setting a monthly budget and class's reviews.

C: Manuals that translate instructions would help.

D: A survival guide would help. I also agree with C.

E: Insurance in the U.S. is much more expensive. There should be some other possibilities.(need to describe more)

8) Do you wish there were other resources to help you to overcome the problems? For example, a manual? What can the professors do to help you?

B: I suggest the student to go talk to the professors. You will know what the professors are expecting in the class. The professor will also know you better. He has 300-400 students in the class and it is not possible for the professors to reach out to all the students. If the professor knows what your problem is, he would help you.

C: There should be more online guidelines (syllabus) before every classes, so that the students know what to expect and be able to switch courses in time.

D: I suggest international students to go talk to the professors who will tell them about where to get resources, how to get resources, and who would be good to talk to.

E: There should be class capture and PowerPoint for some courses, since some professors' handwriting or pronunciation is hard for some international students to understand.

FOCUS GROUP for Recommendation Summary

Date of Focus Group	April 13rd, 2015 3:00-4:00 PM
Location of Focus Group	AK108
Number of Participants	4 total – 3 men, 1 women (3 international students, 1 American student)
Category of Group	International Students & American students
Moderator Name	Yuchen Guo, Yuchen Liu
Asst. Moderator Name	Zitai Huang, Arin Kulvanit

Responses to Questions

Brief Summary/Key Points	Notable Comments
Feedback and recommendations: • A manual should be in different language and be available online in both PDF and video version. + • International students	1) Do you think our results reflect your experience? Is there anything we forget to mention? (Arin delivers a presentation on our result before the discussion) A (International student): There are two things I want to mention. First, a multi-language manual should be emailed in PDF format to the international students. There should be an e-mail list for all the international students. I think they have always sent me some mandatory forms to fill, but there is no information regarding fun activities. Secondly, for the dorm situation, I asked WPI to live with American roommates during my freshman year, but my American roommates always played video games and demonstrated a lack of interaction and communication.
can choose to live with American student or	B (International student): There should be a website available for helping international students more directly. There should be roommates who speak English well, regardless where they are from, in the same suite.
international students, who are willing to make friends with international students. International students can request to live	D (American students): That sounds good to me (referring to the presentation solution.) How do you plan to pair up international students with American students? It would help for the practice of idioms, Chinese, cultures during the international orientation. C (International student): There is an alias, but not anyone can send an email to that alias. There should be a help guide for the international students. We are a technological school, so it is very easy to create a website. An English conversation program exists for international students to practice their English-speaking skills three hours a week.

- with people with same interests.
- International students also have the opportunity to join in an English conversation program exists to practice their English-speaking skills three hours a week.
- Having the
 International House
 should send an email
 with information
 about the cold
 weather and how to
 prepare for it to every
 international club and
 have them share the
 information with
 incoming
 international students.
- The manual should inform the international students of the importance of taking Humanity and Arts class, especially the writing and English class to help

- C: I spoke with nobody during my freshman year, because I was in a single [room].
- D: Have you thought of an option of rooming international students together? For example, Chinese and Korean students live in a room so that they speak English when they are together. I never have roommate who are international students.
- B: The International House should send an email with information about the weather and how to prepare for the cold weather to every international club and have them share the information with incoming international students, since not all international students go to the International House. For example, Chinese students usually tend to go to the Chinese Student Association for help.

2) What do you think about the peer mentor program?

B: The English level of some mentors is not that high, so the new international students' English-speaking may not improve that much.

D (American students): I have no idea about some of these programs. I do not even know it exists.

3) What do you think we should do, in order to implement these solutions?

A: Some of the ideas are not working because you cannot change how Americans are. You live in a foreign country; however, it is possible to change how the international students are.

B: The idea of the manual is straightforward. It should also be available in other languages. The interactive video should also be available in other languages.

C: Some American concepts or customs can also be translated.

4) Do you think there are any other solutions that should be implemented?

A: Professors should send an email to all the students before class to let the international student be aware of what each humanities class is about.

C: I think not only international students suffer from humanities and arts classes. Native students also have problems with these classes. You should not focus much on this topic.

them improve their English as early as possible.+

- During the international orientation, international students should have one on one partner to practice phone conversation.
- During the international orientation, the International House should remind the student of the safety issues.
- Great Problem
 Seminar can help
 international students
 to get familiar with
 the project-based
 curriculum. When
 they pick GPS class,
 they should pick one
 based on their
 passion. The best
 GPS is Power the
 World, people are all

5) What do you think about the idea of having an information desk for international students in the Campus Center?

C: The information desk need people there to help instructing international students. If I am paid, I am willing to do those long hours. Long hours are hard, because some people have to stay there. Possibly, we can put flyers on the desk, name card of International House's officers, OPT (Optional Practical Training) information, and tax information.

6) Is there anything you want to add for solutions to language barrier issues?

C: I feel like a lot of students prefer to email others rather than call, even though calling is faster way for communication. That is a problem. I feel international students need one on one partner on practicing phone conversation. I was panicked to answer the phone when I just start working at the International House. Students do not really want to talk on phone because it is so hard to understand.

A: I agree on what student C said. I have to put on headphones to hear well during an interview.

C: The Global Buddy program should include a calling activity to help international students practice English.

7) What do you think about the safety issues in the library? Some students mentioned their laptops get stolen while they are in the library.

B: You should tell them America is a safer place. However, safer does not mean one hundred percent safe.

C: International Orientation can include safety perspective and remind the student of the safety.

8) How are your experiences in the Great Problem Seminar?

B: I was told that the leadership helps a lot. In GPS class, when you are not in a good team, it sucks a lot. If we encourage students to come to GPS and they do not have good teammates, it sucks. Honestly, after taking the class, I have mixed feelings. I prefer talking to the international students teaching assistant when I have problems. When you pick which GPS you want to take, you should pick on your passion. I was told that the best GPS is *Power the World*, people are all happy about that class.

D: There should be more writing and presentation courses.

happy about that class. +

 The manual should include an etiquette section. +

Food issues:

- Some food is unhealthy.
- They cook food in very weird ways. For example, the Indian rice is different.
- The food quality is not very good, for example, food overcooked and partly uncooked, too much soy sauce, and unwashed vegetables.
- Apple looks good on the outside, but bad inside.

C: There are many topics in computer science.

D: There was lots of useful information in my last focus group. You should use unbiased opinions.

9) How about the food problem?

D: The food is unhealthy, and they should make sure they wash the food.

B: They cooked food in very weird ways. For example, the Indian rice is different. There is poor food quality: food overcooked and partly uncooked, too much soy sauce, raw mushroom and vegetables. Apple looks good on the outside, but bad inside. The sushi was bad. The rice was not cooked well. I am from Japan, sometimes I feel like I got offended.

C: I feel the same with Dragon Dynasty.

B: Food is also the problems for American students. Even though some Americans eat raw broccoli and mushroom in salad, the chefs should make sure to wash it well.

They should cook rice and pasta properly. Other food is alright. Manual should list simple plates' recipes. The campus center should encourage people to eat fruits more. The fruits in the campus center are not facing customers. It is hard to see where the fruits are. They encourage people to eat chips more.

A: It is possible to hire international students to cook or we could hire a chef from China.

D: I am sure the school is on the limited budget for food. Food is going to be bad no matter what.

10) Is there anything else you want to mention?

C: There is something else I want to mention besides food. My friends who have visited the International House before believe that Janice is mean. I ask them why they think Janice is mean. They told me that when they were near reception area at the International House, they said "hey" to Janice. My word of advice is you should not say "hey" to an old woman.

A: I have a friend who said "SWIPE FOR HIM" instead of "please swipe him in" which was rude to the cashier.

B: The manual can include an etiquette section.

Note: In our last focus group meeting, the focus group lacks a faculty participant. In order to get feedback on the pending results and recommendation from the faculty, the team interviewed the Director of the International House, Mr. Thomsen. According to him, a program of pairing up international students and native students, such as Global Buddy Program, has two challenges. First, there should be more resources on what needs to be done. Second, the timing for the program is challenging. He felt that this program should be an on-going activity.

Some of the solutions the team came up with have already been instated in the *International Student Handbook*. Moreover, the team proposed to him that the manual for international students should be in different languages. He indicated, "the language barriers not only appear in communication, but also in the reading. If a new student could not comprehend English in the manual, there is no way for the students to pass their first course at WPI".

In term of providing more trips to nearby supermarkets, Mr. Thomsen commented that 98 percent of the incoming international students live on campus, so the International House focuses on the necessary for living but not food shopping. Referring to providing help to international students on the Humanities and Arts requirements, Mr. Thomsen stated that the Design website provided by the Academic Advising Office for incoming students has been redone. This new website is designed for first year students to help them select courses. The International House will address more on the Design website during the international student orientation this year.

Based on his suggests and concerns, the team made changes to the final recommendations.

Appendix E - Interview Notes

Date: 3-17-2015 11:00AM-11:30AM Location: Office of Student Activities

With: Christine Kobza

Assistant Director, Community Service and Greek Life

Phone Number 508-831-4915

Email: ckobza@wpi.edu

Information we learned:

When a student come to WPI, he or she is automatically being considered as a member of WPI community. One important thing for international students to know is to Get Involved. The Student Activities Office provides opportunities to all students to join, play, learn, volunteer, lead and explore. By following the Student Activities Office's website, http://www.wpi.edu/offices/sao/get-involved.html international students can check out fun events going on right now, learn about different clubs and organizations on campus, find out opportunities to do community service, and discover ways to improve leadership skills.

Current Events

By following the website https://orgsync.com/36989/files, a student can simply find out what fun events are happening on our campus.

Students can also find 100 fun things to do in Worcester.

http://www.wpi.edu/offices/sao/thingstodo.html#shopping

Community Service Office

At the Community Service Office, student can find opportunities to volunteer at different organizations and contribute to our society. Students can volunteer on a weekly basis or help with a one-time event. If a student is interested in volunteering at local organizations, he or she can fill out the Interest Form at the website: http://www.wpi.edu/offices/sao/interest-form.html The WPI Community Service Van provides transportation for any WPI student volunteering at community service organizations within a 10-mile radius of the city of Worcester. It is available seven days a week, from 8 a.m. to 7 p.m. Any student can send a request for this service at least 72 hours in advance of one's desired pickup time, by submitting a request form:

https://orgsync.com/login/worcester-polytechnic-

<u>institute?redirect_to=%2F29444%2Fforms%2F33005</u> or print it out and bring it to the Community Service Center on the 3rd floor of the Campus Center.

Date: 3-23-2015 11:00AM-11:50AM

Location: Gordon Library

With: Lynne Riley

Research and Instruction Librarian

Phone number: 508-831-5468

Email: Iriley@wpi.edu

Q: What are the services that the library provides to WPI students?

A: Interlibrary Loan (ILLiad) service allows current WPI students, faculty, and staff to request items (except the textbook) from other libraries free of charge. ILLiad is the library system used to process interlibrary loan requests. Also, from off campus, all WPI faculty, students, and staff can access electronic resources with their WPI username and password.

Students can borrow and renew the library materials, not just textbooks or reference books, but also DVDs(such as Chinese films), videos, fun books (such as novels), and games at the third floor of library.

For graduate students, there is a course on academic honesty, where the students can learn about the rules of citation and plagiarism.

During the final week, library will provide special treats like tea, coffee and snacks to the students.

There are different kinds of guides on library website not only include the general information about library, but also the information about how to choose and utilize different database and how to access reference books when students write papers or do researches.

For the general help of research, there are many choices including chat with librarian online, by emailing, texting, calling or watching an online tutorial or webinar anytime of the day or night.

Q: Is there any special service for international students?

A: Each year, there is an international students fair at the beginning of A term, the staff from every departments participate, the librarians serves as an important participants, they introduce the library in details to international students and may show some interesting books, videos and games on their booth. Moreover there may be a tour around library for interested students.

Also, there are many signs in different languages in the library, such as "do not exit", since some international students do not know emergency exit is only used for emergency situations.

Q: If there is any issue that you, as a librarian, concern about?

A: Library is a "relatively safe" building, since library is open to the public with no identification check. The personal belongs may get stolen sometimes, so there could be signs to remind international student to take care of their belongings in the future.

Date: 3-17-2015 11:00AM-11:10AM Location: Career Development Center

With: Amanda Dionne Career Counselor

Phone Number 508-831-5260 Email: andionne@wpi.edu

This is the information we collected from Amanda:

Job Search Process for International Students

There are many international students who want to work in the United States after graduation. U.S. Immigration Law states that students with F-1 Visas are allowed to work for 29 months full time as part of their practical training, if they are working in Science, Technology, Engineering, and Mathematics (STEM) industries. Other industries outside of STEM allow one to work for only 12 months. This illustrate the benefits of going to an engineering school, such as WPI.

International students tend to choose one of the following six options:

- 1. Work with an American-based organization
- 2. Work with a multinational corporation
- 3. Work in the public or private sector in their home country
- 4. Work in the public or private sector of another country
- 5. Decide not to work right away and instead continue in school for another degree
- 6. Return home to their own country after graduation

CDC provides the following services:

- One-on-one appointment
- Resume and cover letter critiques
- Job search and interviewing assistance
- GoingGlobal: Access GoingGlobal on the Job Finder home page to see a list of companies that have filed H-1B petitions, a requirement needed for companies to hire international students with H-1B Visa, in the last year.
- Career Search Database: Career Search is located in Job Finder, including international companies, such as Hewlett Packard and Chevron and companies that exist only in international countries that are located outside of the United States.
- Book: Directory of Foreign Firms operating in the U.S.
- CDC website

Date: 3-23-2015 3:00PM-4:00PM Location: International House

With: Tom Hartvig Thomsen Director of International House Phone number: 508-831-6030 Email: hartvig@wpi.edu

With: Colleen Callahan-Panday

Associate Director

Email: ccallahan@wpi.edu

Q: What are some of the most valuable services the International House offer to the international students?

A: The services provided by the International House can be found on its website and Facebook page (lots of useful information, including how to get a driver's license and how to get a student Visa). In addition, different kinds of weekly workshop would be notified via email weekly. Some special services, such as a tour for graduate students around WPI when they first come here, and a two-hour session for graduates to introduce them the International House

Q: How do you see the differences in students from different backgrounds' needs?

A: There are definitely differences between international students of different cultures. Due to a small population, student from Europe find it hard to communicate with people, but they seem to have more experiences than Asian students because they travel outside of their home country more and have more of social experience. On the other hand, Asian students have more trouble with writing a check and accepting the food here. So, when they do projects that require a lot of writing with American students, they are likely to shift the responsibility of writing to American students. In addition, due to language limitation and culture shock, sometimes, it is hard to fully understand the sense of humor in a different country.

Q: Have you ever had an internal assessment? Will anything be different in the future? Can you provide us the annual report for the last couple of years?

A: International House has two internal assessments every year; one happens after international student orientation, another happens in the middle of D term on both undergraduate and graduate students. They usually get around 40% feedbacks among all the international students whose the International House has the contact information. (Mr. Thomson pointed out that we need to consider the differences between undergraduate and graduate students. For example, there is an orientation for undergraduate students every year but not one for graduate students.

Q: What are the most difficult or awkward issues international students have to deal with? Can you talk about how the International House can help them?

A: The difficult or awkward issues international students have are roommate issues, communication, living style and plagiarism. In term of roommate issue, the International House suggests the student talk with his/her roommate. Moreover, some international students do not contribute to the writing when working on a project.

Q: Would you like to join our focus group meeting for more detailed discussion on helping international students better engaged socially and academically? A: Sure.

Q: Do you have any closing thoughts, recommendations, issues we have not thought of?

A: We do not understand why Chinese students are the most populated yet the least active international student group. International House needs help on spreading words for activity involvements of the Chinese students.

Time: 3-26-2015, 4:00PM-4:40PM

Location: AK218

With: Pedro Jose Escuer,

President of International Student Council

Email: pjescuer@wpi.edu

Q: What services do ISC (International Student Council) offer?

A: There are four main services that ISC offer to international students.

- 1. The international orientation
- 2. Trips to places such as, ski field, New York City and Boston
- 3. Midnight breakfast, two per term, foods are from different countries each time, such as America, Europe, Russia and China.
- 4. Two regular program during each term
 - International dinner one of the biggest events on campus with cultural performances and food from over 20 countries.
 - Food festival in campus center over 300 people visited in 3 hour last time.

Q: What are the problems you have as the president of ISC?

A: I'm continuing look for good ideas for events and activities. Some students come to ISC with an idea, which is really interesting. But when I try to get more in-depth and make the event happen, the student who provided the idea backs out and no longer engages.

Q: Is there anything that bothers you about being here at WPI and working as a president of the ISC?

A: I feel that most American students do not know how diverse WPI is and how much they could be benefited from that.

Q: Will there be any new things/ how will ISC help international students in the future?

A: There will definitely be more events about American Culture, where international students can learn American culture and be more engaged with American students. And we already started planning an event for Halloween.

O: Has anyone complained about ISC?

A: We have not received much complains about ISC, but ISC has five staff. Four of them are from Pakistan. This is not diverse and people want to see a more diverse ISC.

Q: Do you have any thoughts or advice for our IQP?

A: Yes, I want to let you know that the international students of WPI are a very diverse group with members from over 70 countries, so when you come up with solutions, make sure that it is suitable for all.

Date: 4-3-2015 11:00AM -11:40AM

Location: Health Center

With: Regina Roberto

Director, Department of Health Service

Phone Number: 508-831-5520 Email: rroberto@wpi.edu

Q: What services do you offer specifically for international students?

A: All of our services are listed on our website http://www.wpi.edu/offices/health.html. We have videos for helping international students to get to know more about the U.S. health system, such as the insurance policy.

Basically, what we do is similar to what a family doctor does, such as diagnosis and treatment of illnesses. We also help international students with their immunization. All international students need to fill an Immunization Record form at their arrival, and they can also be vaccinated here.

Moreover, we have 24/7 phone number (508-334-8830), there is always a physician here to help you.

During the English as a Second Language program, we send our staff to the International House to answer international students' questions and concerns.

We also attend international student orientation to introduce our office.

Q: Do you have any special or impressive experience with international students?

A: Sometimes we need to communicate with international students' parents and they may not be good at speaking English. It is great to have people who speak other languages on campus to help us translate.

Date: 4-9-2015 2:00PM-2:50PM

Location: Bartlett Center

With: Chelsea Adams

Associate Director, Office of Financial Aid

Email: cadams@wpi.edu

Q: What services do you offer particularly to international students?

A: WPI offers both need-based and merit-based scholarships to incoming students. Need-based aid may consist of federal, state, and/or institutional (WPI) funds, while merit-based scholarships are offered directly by WPI.

International students can apply for the need-based scholarships during their application to the WPI. This scholarship is called international scholarship. Since WPI has limited funds available specifically for talented international students, only a portion of the admitted international students is awarded each year. The awards vary in amount, but typically range from \$5,000 to \$25,000. These awards are renewed each year and provided to the students who remain in good academic standing. WPI does not guarantee to meet applicants' full financial need.

Merit-based scholarship is automatically considered for all applicants including international students. There is no additional application required. These academic merit scholarships vary in amounts, but typically range between \$12,500 and \$25,000, and are renewable for four years.

Q: Do you have any particular experience with international students that we can talk about?

A: I cannot think of any at this time, since students usually do not interact with us after they finish their application for WPI.

Date: 4-15-2015 11:00 AM

Location: Office of Academic Advising

With: Tally Reeverts

Advisor for Academic Support and Transitional Resources

Phone Number 508-8315381 Email: treeverts@wpi.edu

Q: What is the mission of your office?

A: In our office, we have two peer advisors, working on relationship between student and faculty advisor, help student prepare to see the faculty advisor. We also have the following services.

- Assist students in the development of meaningful educational plans, which are compatible with their life goals.
- Help students accept responsibility for their own education.
- Recommend appropriate resources to answer questions or solve problems related to academic, career, and personal matters.
- Provide support to and act as a resource for students, faculty advisors and staff.
- A website called Design where you can learn more about the WPI curriculum, registration, and courses that are specifically designed for first-year students, and a new version of the website will come out on May 6, 2015.

Q: Have you thought about accepting more AP credit?

A: The faculties of each department decide whether credit is decided, we don't decide it.

Q: What do you think is the most challenging for international student?

A: In my opinion, connecting socially is difficult for them, beyond that, traditional issues, general speaking I have not seen anybody struggling too hard to get involved. For transfer students, especially from other countries like China, they have to pay to company to translate their transcript in to English. Also, some very basic things are different between countries. For example, we are using more credit card, money order and check than cash, and students from other countries sometimes don't know how to get a money order.

Q: I know there is a non-native writing class, that maybe good for international student, but not all international student knows about it, what's your opinion on this?

A: I think they talk about it during the international student orientation. Esther F. Boucher-Yip is pushing those classes, you can ask here about more information. If you want to put it in a

manual, I won't say this class is for international student, it depend on their comfortable of English, if they are nerves, they can take this one, or if their English is good, they can take the one with native students.

Q: Do you have any advice for the incoming international students?

A: I say go to events, join a club, have fun with you CA, RA and get involved.

Q: Are students happy after they come for help?

A: I have not been here for too long to see them struggle. Most people are fitting in well here.

Q: Do you have any advice for our project?

A: I know Colleen Callahan-Panday from the International House, she is working with senior on Chinese name pronunciation, If you want to get information for faculty you can go to her. Also, there is something to think about when you put together the manual. When you made the decision to come here after you have put the money down, you should think about when you first come here, what you had felt nervous about.

Date: 3-23-2015 1:00PM - 2:00PM

Location: International House

With: Tom Thomsen

Director of International House Phone number: 508-831-6030 Email: hartvig@wpi.edu

Q: We have seen programs that paring up international students and native students in other universities, for example, the Language Partner program in Duke which is matches non-native speakers with native speakers of various languages for weekly conversation exchange, what do you think about implementing it at WPI?

A: I think pair up grogram needs more resources, and the timing for the program is a hard part. Therefore, it should be a more on going thing.

Q: Our recommendation for WPI is to create a manual including a list of services that are available on campus; the manual should be translated into different languages and available in both PDF and video version. We are wondering how do you think about it?

A: I think that information is all in the (international student manual), also I think language barriers appear during communicate, but not in reading. If an incoming student cannot read the manual in English, how should the student pass his/her first course at WPI?

Q: For issues due to different custom, we are thinking that the manual should include information on different student organizations and clubs on campus.

A: Again, I think all the stuff are list in our website.

Q: We know that you offer trips to the supermarket like Walmart, do you think offer trips to some Asian supermarket like Mekong in the future?

A: There are 98% percent of international incoming student live on campus, so we focus on the necessary for living but not on food shopping.

Q: Do you have any additional thoughts or suggests on our recommendations?

A: When you make the recommendations, I wondering how many students said that, there is a trip to Wrentham Village at the beginning of winter for student to buy winter cloth.

A: Once you are done with the project, give me a copy of the report, and there are difference between undergraduate and graduate student so please specificity you project is for undergraduate students.

A: I know that the Design website for incoming students has been redone. We will address more on the placement test this year.

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