Establishing IQP Partner Relationships in Prague

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Professor Robert Kinicki

Establishing IQP Partner Relationships in Prague

An Interactive Qualifying Project

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Report Submitted to:

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Abstract

While in Prague, this project team researched potential sponsor organizations to establish relationships in Prague and grow the number of project opportunities available to future Prague IQP students. The team interviewed 8 center directors from other WPI global project centers to develop criteria for suitable partners. The team discovered potential organizations through interviews with 2 intermediate contacts in Prague, online research, and personal observations, narrowing their list based on the criteria from the center directors. The team developed an informational presentation about the IQP and delivered it at 7 meetings with representatives from potential WPI partners. The team initiated new relationships which will positively impact future project activity at the Prague center.

Executive Summary

Introduction and Background

The concept of "theory and practice" was a guiding principle in the creation of Worcester Polytechnic Institute (WPI) in 1865. This motto motivated the development of the WPI Plan in 1970, which enables students to develop their classroom skills and apply that knowledge to projects around the world (The WPI Plan, n.d.). A distinctive element of the WPI Plan is the Interactive Qualifying Project (IQP), an interdisciplinary project in which students "solve a problem or need that lies at the intersection of science and society" (Interactive Qualifying Project, n.d.). WPI's Global School maintains project centers across the globe, which Figure E.1 displays, where students can travel to complete such projects.

Figure E.1: Map of WPI Global Project Centers

As WPI's student body and interest in international travel increases, the Global School is constantly working to expand the number of project centers available for student travel. The newly established Prague Project Center conducted its first projects remotely in 2020. As the center is in its infancy, it has not established many relationships with organizations in Prague for conducting future projects. Figure E.2 compares the growing student population to the increasing number of project centers.

Prague, the capital and largest city in the Czech Republic, is rich in culture and history. In contrast with other major European cities, Prague escaped World War II with very little damage (Falvey, 2011). Since many historical buildings from a diverse range of architectural styles are still standing today, Prague has become a major tourist destination. In 2019, the city welcomed over 8 million tourists, of which approximately 80% were international visitors. This substantial amount of tourism heavily supports Prague's strong economy.
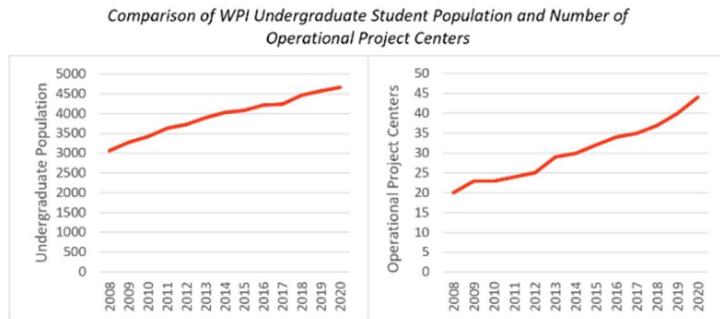

Figure E.2: Comparison of WPI Undergraduate Student Population and Number of Operational Project Centers Since 2008 (WPI Institutional Research, n.d.)

Within Prague one can find many different types of organizations which have served as IQP partners in other project centers. One type of sponsor entity is Non-Government Organizations (NGOs). NGOs are entities that work independently from the government in order to address certain social issues. Another common type of partner organization is a museum, of which there are many in Prague. The most prominent museum is the National Museum, which manages over forty buildings in Prague and throughout the Czech Republic.

The goal of this project was to identify, inform, and establish relationships with potential partner organizations which will produce a reasonable number of projects assisting the WPI Prague Project Center in expanding opportunities available to WPI students. To accomplish this goal, the team developed three objectives: determine a set of criteria for suitable sponsors, identify potential partner organizations, and inform entity representatives of IQP details and establish relationships with organizations.

This project assisted three major stakeholder groups. The first group is the citizens of Prague who will benefit from the work of future projects. The second group of stakeholders is future WPI students who wish to complete their IQP in Prague. Finally, WPI itself is a major stakeholder in the project. The success of the Global Projects Program affects the reputation of the

university. Successful completion of this project will aid WPI in expanding the number of global opportunities available to its growing student body.

Methodologies

Figure E.3 displays an overview of the team's methodology. To achieve the first project objective, the first method involved conducting interviews with eight center directors from global project centers.
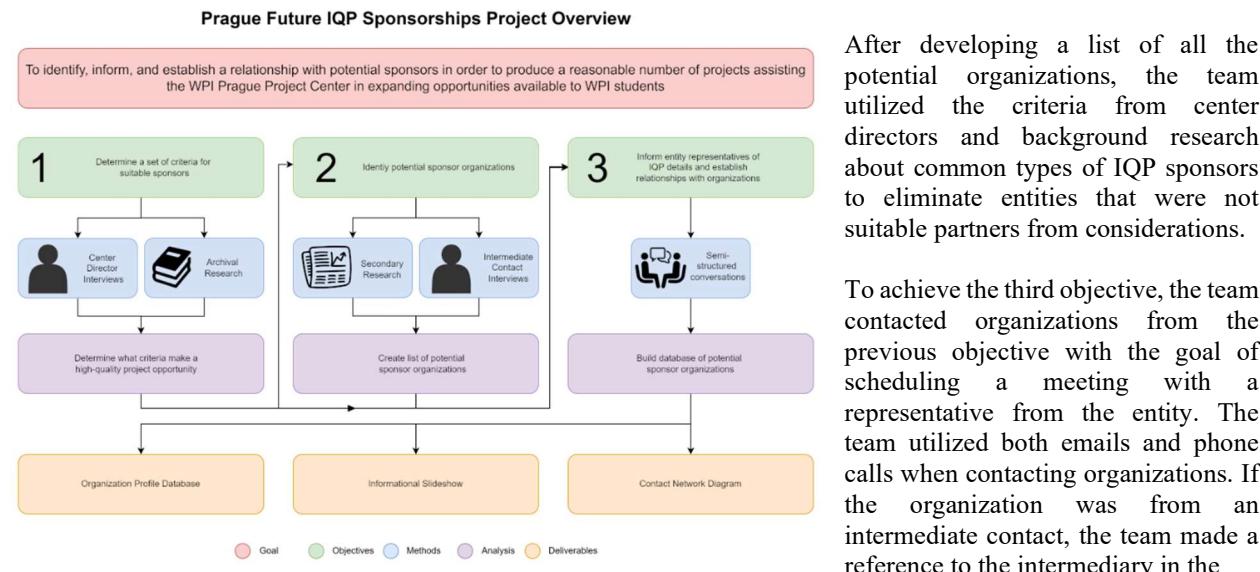

Figure E.3: Prague Future IQP Sponsorships Project Overview

The team selected some locations which share a similar history to the Czech Republic, and other locations dissimilar to the Czech Republic in order to gain a broader understanding of the characteristics of a suitable project sponsor. Additionally, the team reviewed three establishment IQP reports in which teams helped to establish new project centers. After generating transcripts from the center director interviews, the team used inductive coding to develop of set of criteria for suitable sponsors based on how many interviews and reports mentioned a criterion.

To complete their second objective, the team conducted interviews with intermediate contacts connected to potential sponsor organizations. The team first interviewed Ms. Eva Illnerova who was a tour guide for the Prague IQP students during their orientation in the city. The team also interviewed

Professor Marie Keller, a co-director of the Prague Project Center, who has traveled to the city yearly since 2001 to study puppetry.

To supplement these interviews, the team identified potential partner entities through personal connections. Finally, the team performed online research to identify additional organizations. This online research focused on the discovery of NGOs in Prague because the interviews did not uncover many of these types of organizations.

After developing a list of all the potential organizations, the team utilized the criteria from center directors and background research about common types of IQP sponsors to eliminate entities that were not suitable partners from considerations.

To achieve the third objective, the team contacted organizations from the previous objective with the goal of scheduling a meeting with a representative from the entity. The team utilized both emails and phone calls when contacting organizations. If the organization was from an intermediate contact, the team made a reference to the intermediary in the email.

To explain the IQP in greater detail to entity representatives, the team developed an informational PowerPoint slide show. The presentation covered basic details about the IQP, provided examples of past projects with relevance to the organization, explained the benefits to and responsibilities of partner organizations, established elements of a good project, and illustrated a projected timeline if they were to partner with WPI. Table E.1 summarizes when the team held meetings with organizations and how many team members were present.

Meeting Date	Organization	Number of Team Members in Attendence
18-Nov-21	Zoo Praha	4
19-Nov-21	CIEE Prague	2
23-Nov-21	PostBellum	2
30-Nov-21	Association for Private Agriculture of Czech Republic	3
30-Nov-21	The National Museum	3
2-Dec-21	PRAGL	2
3-Dec-21	Nova Skola	2

Table E.1: Meetings Held with Potential Sponsors

There was an eighth organization interested in learning more about the IQP, but due to a scheduling conflict,

the team was unable to meet with them. Instead, the team facilitated the scheduling of a virtual meeting between a representative from the organization and Professor Deskins, a co-director of the Prague Project Center.

Results

The team's coding analysis yielded nine criteria from the transcripts and establishment IQP reports. Figure E.4 displays the set of nine criteria. Professor Hersh provided a quote illustrating the importance of the criteria time commitment and project direction: "…without the sponsors commitment of time and thought, the project can go off the rails…" Professor Christopher highlighted the relevance of an educational component stating, "Students have to grow in some way, in the process… the academic experience has to be worthwhile."
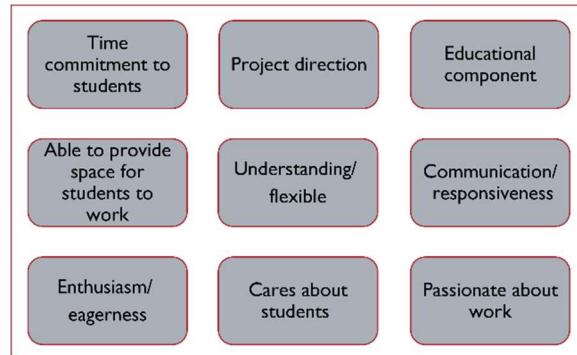

Figure E.4: Set of Criteria of Suitable Sponsors

To identify potential partner organizations, the team conducted two interviews with intermediary contacts, developed personal connections with local organizations, and performed online research through the Web. Table E.2 displays a summary of all the organizations that the team identified as potential partners in alphabetical order. The list contains a total of 36 organizations including past and potential partnering entities. The team omitted several organizations due to a lack of previous projects with similar entities or inadequate project potential based on the criteria from

center directors. For example, the team judged a few organizations to be too commercially oriented to fit as a suitable IQP partner. The team initially discovered 47 entities but narrowed the list down to 36. One of the organizations, Abaceda, was a current sponsor during this report, therefore the team contacted 35 of the entities listed in Table E.2.

Organization Name	
Abaceda	Meta
Academy of Performing Arts in Prague	Multicultural Centre of Prague
Association for Integration and Migration	National Agriculture Museum
Association for Private Farming of the Czech Republic	National Museum
Brevnovsky Pivovar	National Technical Museum
Buchty a Loutky	National Theater Institute
Centre for Integration of Foreigners	Nová Škola
CIEE Prague	Organization to Aid Refugees
Counseling Centre for Integration	People in Need Foundation
Czech Red Cross Prague 1	PostBellum
Czech Tourism	PRAGL
InBáze	Puppets in Prague
Innovation Week	Slovo 21
Jesus's Grandchildren	Society of Young Agrarians of the Czech Republic
La Strada	Staropramen
Library of Vaclav Havel	The Strahov Monastic Brewery
Lobkowicz Breweries	The Tap Tap
Medical Rescue Service of Prague	Zoo Praha

Table E.2: List of Identified Potential Partner Organizations

The team collected brief descriptions of the entities' mission and purpose, contact information, and URLs to previous IQP reports relevant to the organization. They stored this information in an Organization Profile Database. Table E.3 displays a portion of this database.

Organizations in purple are previous or current sponsors with the Prague Center. The organizations shown in gray were not currently interested in learning

Type	Organization	Website	Description	Connection	Address
Potential	People in Need Foundation	https://www.peopleinneed.net/who-we-are/about-us	Humanitarian non-profit	No Prior Relationship	Šafaříkova 635/24, 120 00 Praha 2
Interested	PostBellum	https://www.memoryofnations.eu/en	Archive of historical documents/ first-hand	Ms. Illnerova	Španělská 1073/10 120 00 Praha 2
Interested	PRAGL	https://www.pragl.glass/main-page	Glassblowing workshop and museum	Personal	Malé náměstí 7 Praha 1, 110 00
Past	Puppets in Prague	https://www.puppetsinprague.eu/	Teaching Puppetry	Professor Keller	Not Listed
Not currently interested	Slovo 21	https://www.slovo21.cz/	Promotes multicultural society and cohabitation	No Prior Relationship	Blanická 2028/15, 120 00 Praha 2
Potential	Society of Young Agrarians of the Czech Republic	http://www.smacr.cz/en/	Protect young agriculture community	No Prior Relationship	Plaská 622/3 150 00 Praha 5
Potential	Staropramen	https://www.centrumstaropramen.cz/#kontakt	Brewery	No Prior Relationship	Pivovarská 9, 150 00 Prague 5
Potential	The Strahov Monastic Brewery	https://www.klasterni-pivovar.cz/contact	Brewery	No Prior Relationship	Strahovské nádvoří 301, 118 00 Prague 1
Not currently interested	The Tap Tap	https://www.thetaptap.cz/#!partneri	Disabled Musicians	Ms. Illnerova	Na Pankráci 13, 140 00 Prague 4
Agreed	Zoo Praha	https://www.zoopraha.cz/en	Zoo	No Prior Relationship	U Trojského zámku 120/3, 171 00 Praha 7

Table E.3: Organization Profile Database Sample

more about the IQP. Most of these entities stated that they did not have the capacity to partner with WPI. Organizations in blue either did not respond at all or

did not give a definitive answer whether they were interested in learning more about the IQP program. Organizations shown in orange expressed interest. The organizations shown in green, Zoo Praha and CIEE, informally agreed to be a project partner next year.

The Contact Network Diagram provides a visual representation of the Organization Profile Database. The diagram is shown in Figure E.5.
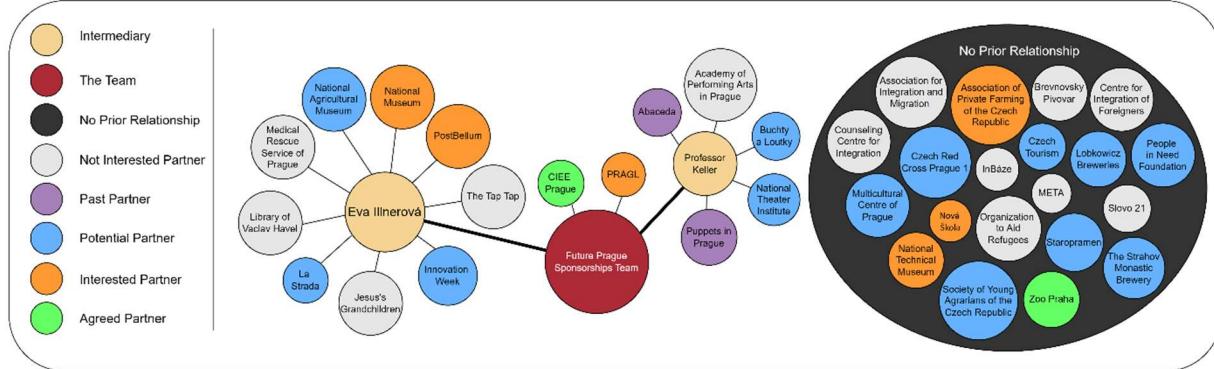

Figure E.5: Contact Network Diagram

The contact information database in conjunction with the contact network diagram from objective three offers to the Prague Project Center site directors all the information necessary to continue establishing relations with the organizations involved.

Table E.4 details the response counts and counts of organizations interested in learning more about the IQP program. The team organized these counts by the source of contact information for each organization. Out of 35 entities, the team receive a response from 19 organizations resulting in a 54% response rate. From the 19 organizations that responded, 8 were interested in learning more about the IQP.

Contact Source	Contacts Provided	Organizations which responded	Response rate	Interested Organizations	Interest rate	Meetings held
Ms. Illnerova	9	4	44%	2	50%	2
Prof. Keller	4	1	25%	0	0%	0
No Prior Relationship	20	12	60%	4	33%	3
Personal Connections	2	2	100%	2	100%	2
Total	35	19	54%	8	42%	7
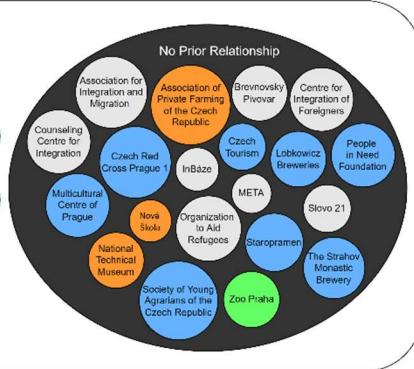
Table E.4: Organization Response Counts by Contact Source

Recommendations

The team has several recommendations for future students who complete similar projects. There are now a number of IQP reports that future teams can review in lieu of interviewing center directors to develop an understanding of the components that go into a suitable project partner. This will allow future teams to begin researching and contacting potential sponsor organizations earlier in the seven-week project period enabling them to contact a greater number of entities.

In addition, the team recommends that future teams be open-minded and willing to pursue any potential leads. The team found Ms. Illnerova, one of the team's intermediate contact interviewees, by chance and she proved to be a vital resource to the team. Furthermore, the team's personal observations and connections led to the identification of two potential project sponsors. Future teams should be attentive to discovering potential partners through their own experiences while at the project location.

Finally, the team recommends that the Department of Integrative and Global Studies (DIGS) conduct an annual gathering of center directors to share their knowledges and experience with one another in order to improve every project center.

Conclusion

The research, results, and deliverables from this project served to help the Prague center directors in expanding the Prague Project Center. The team established relationships with eight organizations in Prague, two of which informally agreeing to sponsor a project in 2022. As Professor Foo said in her interview with the team, "What we're doing is building relationships." The project's deliverables, an informational presentation, the Organization Profile Database, and the Contact Network Diagram will assist Professors Deskins and Keller in securing future project partners for the coming years, the sustainability of the Prague Project Center, and enabling future WPI students to experience the city of Prague while simultaneously having a positive impact on the city through their project work

Executive Summary References

Falvey, C. (2011, December 13). *The bombing of Prague from a new perspective*. Radio Prague International. https://english.radio.cz/bombing-prague-a-new-perspective-8558194

Interactive Qualifying Project. (n.d.). WPI. Retrieved September 17, 2021, from https://www.wpi.edu/academics/undergraduate/interactive-qualifying-project

The WPI Plan. (n.d.). WPI. Retrieved September 17, 2021, from https://www.wpi.edu/project-based-learning/wpi-plan

WPI Institutional Research. (n.d.). Retrieved October 4, 2021, from https://public.tableau.com/app/profile/wpi.institutional.research/viz/Enrollment_15718046316670/Enrollment

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1.0 Introduction

By creating a learning environment centered on the concept of student projects, Worcester Polytechnic Institute (WPI) prepare students "for the demands and rewards of fulfilling careers and lives" (Creating the WPI Plan, n.d.). This educational philosophy of project-based learning is a part of the university's educational model: the WPI Plan. Another essential objective of the WPI Plan is to teach students how to tackle real-world problems effectively. WPI graduates are well-prepared to join the workforce after participating in the project experiences at WPI as working in teams is commonplace in the workforce. The WPI Plan focuses on project work through a curriculum that enables students to apply their classroom learning to community-based projects which challenge them from a "proficiency, social, and global perspective" (The WPI Plan, n.d.). The elements of the WPI Plan come together in the Interactive Qualifying Project that all undergraduate students must complete as a graduation requirement.

The Interactive Qualifying Project (IQP) experience immerses students in projects "at the intersection of science and society" around the globe (Interactive Qualifying Project, n.d.). The IQP places students in interdisciplinary teams that address problems with real-world impact. Working in diverse groups, WPI students can tackle issues from many perspectives and learn to work with different personalities. While options exist for students to remain on campus for the IQP requirement, students interested in traveling abroad during their time at WPI typically travel for this requirement. The Global Projects Program, nested within WPI's Global School, currently maintains 45 off-campus project centers that enable students to complete projects around the globe. Figure 1.1 shows a map with all the project centers available to WPI students.

Figure 1.1: Map of WPI Global Project Centers

In addition, the Global School continually looks for opportunities to expand the IQP program

and establish new project centers in various locations around the world (Project Center

Directory, n.d.).

Students at WPI project centers complete projects with sponsors with whom the center

director has a working relationship. A sponsor can be a company, organization, NGO, or

government agency. When establishing a new project center, the Global School analyzes the

location to assess organizations willing to partner with WPI as an IQP sponsor. In 2020, WPI

established the Prague Project Center. As this site is still in its infancy, the center directors of the

Prague site can benefit from utilizing strategies from previous IQPs. Often referred to as

"establishment IQPs," these project reports include material to evaluate the feasibility of a

Project Center and identify potential partner organizations. This project performed a similar role

of establishing connections with potential project partners and strived to select project

opportunities through a methodical and rigorous process.

The sponsor of this project was Professor Aaron Deskins. He is a member of WPI faculty and a co-director of the Prague project center site. He was also the driving force in the creation of the center. Unfortunately, due to the global COVID-19 pandemic, Professor Deskins was unable to travel to Prague and forge relationships with sponsoring organizations. This project aimed to identify, inform, and establish a relationship with potential sponsors in order to produce projects assisting the WPI Prague Project Center in expanding opportunities available to students. To achieve this goal, the team focused on accomplishing three objectives:

1. Determine a set of criteria for suitable sponsors.
2. Identify potential sponsor organizations.
3. Inform entity representatives of IQP details and establish relationships with organizations.

To accomplish these three objectives, the team conducted interviews, online research, and meetings with potential IQP sponsors. The information gained in interviews helped to identify organizations that could make suitable partner organizations and came from both center directors and intermediate contacts. The team developed a Contact Network Diagram allowing anyone to track how the team found potential sponsor organizations and their contact information. The team created an Organization Profile Database to display the organizations the team identified, their interest level, and their contact information. The work of this project will help the Prague Project Center in enabling future WPI students to experience the wonderful city of Prague while also having a positive impact on the city through their project work.

2.0 Background

This chapter begins with a brief introduction to WPI and the significance of the Interactive Qualifying Project as a graduation requirement before explaining the role of the project center and how to establish a new project center. Next, a history of Prague and the Czech Republic provides a background on areas of interest that our project analyzes further. Finally, this chapter provides information on similar projects WPI students completed in Hangzhou, Honolulu, and Reykjavik. This background knowledge clarifies the importance of an establishment IQP and its key role in locating potential sponsors for the Prague Project Center.

2.1 Interactive Qualifying Project

2.1.1 History of WPI and the IQP

In 1865, the founders of Worcester Polytechnic Institute established the university on the principles of 'Theory and Practice,' meaning that not only is it important to learn concepts in the classroom, but students need to apply that knowledge to real-world problems. After much discussion and debate, WPI adopted a new educational model focused on "applying your classroom experiences in projects that challenge you from a proficiency, social, and global perspective" in the mid to late 1960s (The WPI Plan, n.d.). This educational model, titled the WPI Plan, has been in place for over 50 years. Through The WPI Plan, students get an opportunity to do three large-scale projects during their undergraduate career. One of these projects, the Interactive Qualifying Project (IQP), is an opportunity for students to experience the "intersection of science and society" (Interactive Qualifying Project, n.d.). While students can complete their IQP on WPI's campus, there are many off-campus project opportunities specifically within the Global Program. Off-campus project centers exist in several US states and

numerous countries around the world. This project involves students doing the equivalent work of three academic courses focused on a real-world societal problem using scientific methodologies. Students that chose an off-campus IQP begin their experience by completing the ID2050 course. The course teaches students cultural information about the location they are travelling to complete their work, social research methodologies, and how to write a project proposal.

2.1.2 The Role of the Project Center

Today, WPI maintains over 40 project centers that allow students to participate in an IQP (Project Center Directory, n.d.). The project center acts as a connecting entity that coordinates students with project sponsors in the project center location. The project center directors and the sponsors work together to identify a local and often human-centric problem for students to address. A typical project center has one to two advisors and anywhere from twelve to twenty-eight students. Students typically work in groups of four under the advisors to complete a project with a local sponsor.

2.1.3 Establishing a New Project Center

As the student body grows and as interest in global travel increases, the Global Projects Program at WPI is creating new project centers around the world. The graphs in Figure 2.1 show this correlation. The most recently created project center is the Prague Project Center, within the Czech capital city of Prague. Students working on the first Prague projects worked remotely with the Prague Project Center in 2020 as a result of the COVID-19 pandemic, which makes our cohort of twelve students the first group of WPI students to physically travel to Prague to complete the IQP. When establishing a new project center, it is integral to have a strong

understanding of the history and contemporary issues within the project center location in order to produce projects that are relevant and meaningful.
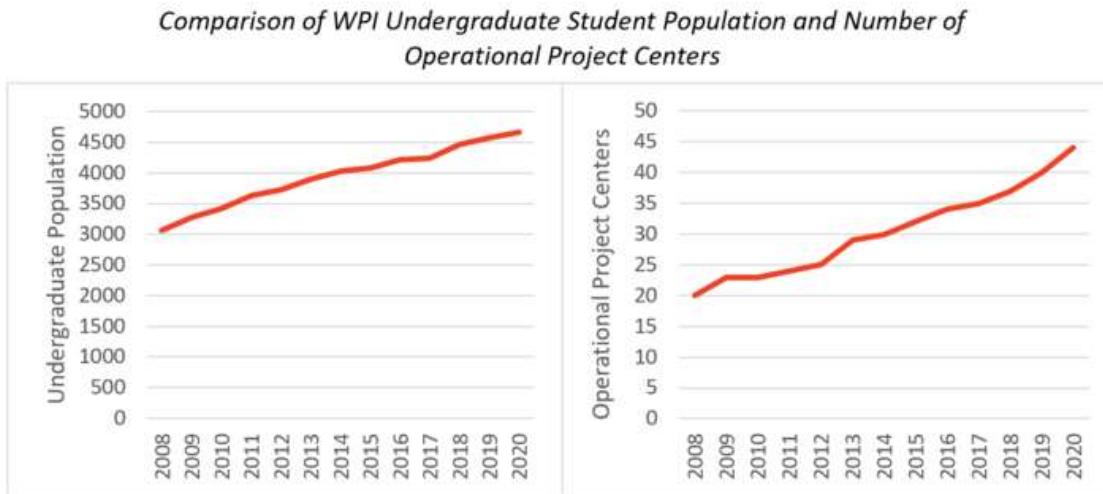
Figure 2.1: Comparison of WPI Undergraduate Student Population and Number of Operational Project Centers Since 2008 (WPI Institutional Research, n.d.)

2.2 History and Background of Prague and the Czech Republic

2.2.1 Prague in WWII

After successfully annexing Austria in 1938, Hitler turned his sights to the Sudetenland. This territory is a region of Czechoslovakia with a large population of people of German origin. The map on Figure 2.2 provides a visual of the Sudetenland. Following the annexation, Germans in Czechoslovakia often behaved as political agitators, through demonstrations and protests, as an offensive tactic (Britanica, 2021).

Czechoslovakia, aligned with France and the Soviet Union, was mainly reliant on the military support of France. Although the Soviet Union was willing to work with Great Britain and France to defend Czechoslovakia, Great Britain was unwilling to "preserve Czech sovereignty over the Sudeten Germans without first clearly ascertaining the latter's wishes" (Britanica, 2021).

Figure 2.2: German Annexation of the Sudetenland During WWII (Britanica, 2020)

Running out of opportunities to avoid war, British Prime Minister Neville Chamberlain proposed a meeting without representatives from Czechoslovakia to settle the dispute over the Sudetenland. The meeting was a four-power conference consisting of France, Germany, Italy, and the United Kingdom. The meeting took place on September 29, 1938, and Italian dictator Benito Mussolini submitted a written plan that the four powers accepted as the Munich Agreement. The Germans planned to occupy the Sudetenland by October 10th, meaning Czechoslovakia had to resist Germany without allies or surrender (Trevor-Roper, 1948). The annexation of the Sudetenland left the remaining territories of Czechoslovakia weakened and under Axis control for much of WWII. Miraculously, Prague escaped the war with minor physical damage when compared to other European cities. There were only two major incidents affecting the city in the last year of the war. The first of these bombings was due to a

navigational error from a group of American B-17 bombers, killing 701 citizens and destroying 93 buildings (Falvey, 2011). The second major bombing was a targeted strike from British forces on the industry in the north-eastern region of Prague. The bombing took place on a Sunday when workers were not in the factories to minimize civilian casualties (Falvey, 2011). Prague faced a relatively low number of bombings, and because of this, many historical buildings from several centuries survived, unlike many other European cities which experienced complete devastation.

2.2.2 Velvet Revolution

The fall of communism began with the decline of the Soviet Union as a result of costs incurred by the Soviet invasion of Afghanistan; at the same time, independence movements were growing in the Soviet Socialist Republics (The Fall of the Soviet Union | CES at UNC, n.d.) The fall of communism in other parts of Eastern Europe, such as in Poland and East Germany, precipitated the fall of communism in Czechoslovakia as a wave of anti-communism spread throughout Eastern Europe. On November 17, 1989, a group of Czech students held a peaceful demonstration in Prague, sanctioned by the communist government, to commemorate the death of a student 50 years prior at the hands of the Nazis. The students went to the grave of Karel Hynek Mácha, a Czech poet, before moving onto the center of Prague. When some of the demonstrators began chanting anti-communist slogans, police dispersed the protest (History Matters, 2019). Reports of a student's death began to spread across Czechoslovakia (Merriman & Winter, 2006). Rumors emerged that the death was a result of the actions of the security forces that dispersed the protest.

The alleged viciousness of the police's actions outraged the public, and more civil disobedience occurred. The people of Prague would pretend to attend theater performances when in reality, the theaters became gathering locations to plan protests without the police disrupting

their gatherings. Theater workers throughout the country also began to express their support for a strike by being vocal during protests and supporting college students to join the cause (How Theater Professionals Helped Stage the Velvet Revolution, n.d.). In Prague on November 19, citizens, led by Václav Havel, gathered in the Magic Lantern Theater and formed the Civic Forum (Merriman & Winter, 2006). Meanwhile, the Public Against Violence movement, which shared similarities with the Civic Forum, formed in Bratislava. Bratislava at that time was the major city within the Slovak region of Czechoslovakia and is now the capital of Slovakia. By November 20, there were over two hundred thousand demonstrators in Prague. Pressure on the communist government was mounting.

On November 24, 1989, a meeting of the Czechoslovak Communist Party Central Committee dismissed several senior leaders. Another communist, Karel Urbánek, replaced the current Communist Party leader, Miloš Jakeš, after his resignation. Following the reconfiguration of the communist government, the public remained unsatisfied and continued protesting, as Jakeš' replacement was yet another communist (History Matters, 2019)2. Just a few days later, on November 29, the communist parliament accepted the formation of a new federal cabinet and constitutional revisions negotiated by the Civic Forum. By December 10, Communist president Gustáv Husák announced a new coalition government before resigning. The communist parliament elected Havel as president to lead the compromise government. By June 1990, The Civic Forum and Public Against Violence dealt a final blow to communism in Czechoslovakia when Havel won the first post-communist, democratic elections. This series of events known today as the Velvet Revolution lasted several months. Figure 2.3 depicts a timeline our team created to summarize the key events surrounding the Velvet Revolution.

Figure 2.3: Velvet Revolution Timeline

2.2.3 The Velvet Divorce

Once the Velvet Revolution began, locals in Bohemia and Moravia expressed a more negative sentiment towards communism than did those living in Slovakia. The Velvet Divorce, the dissolution of Czechoslovakia into the Czech Republic and Slovakia, began with the economic and developmental differences between the present-day Czech Republic and Slovakia dating back to the time of the Austro-Hungarian Empire (Kopeèek et al., 2017). As shown in Figure 2.4, the country now known as the Czech Republic was much more industrial than the region that would become Slovakia.

The residents in Slovakia were generally more resistant to the privatization of state property. A grammatical conflict, known as the Hyphen War, arose when the time came to rename the Czechoslovak Socialist Republic. This was a precursor to the fundamentally different ideologies held by Czech and Slovak politicians due to disparities in income between the two regions. A formal agreement for the dissolution of Czechoslovakia came in 1992.

Figure 2.4: Czechoslovakia Before the Events of the Velvet Divorce

2.3 Prague in the Modern Era

2.3.1 How Czech Values Changed with the Fall of Communism

Since the democratization of the Czech Republic, beliefs about distributive justice began to shift from being dominantly egalitarian to meritocratic. This process has continued through recent years. Distributive justice refers to how a community or society should distribute its scarce resources to individuals with competing needs (Roemer, 1998). A study by Smith & Matějů examined these changing beliefs and characterized the transformation as the "crystallization of beliefs of distributive justice" (Smith & Matějů, 2012). Over time, norms of distributive justice have shifted from being predominantly egalitarian to predominantly meritocratic (Smith & Matějů, 2012). However, the study suggests that the egalitarian ideology is still more universal than expected after the fall of communism. The study's findings indicate that the people of Prague may be less enthusiastic about meritocratic ideals influencing government policies many more years after the fall of communism than those living in countries

such as the United States. These views are evident when considering the Czech Republic's high level of income equality. Understanding how Czech citizens think about distributive justice is crucial to understanding how Czech society views and interprets various social problems.

2.3.2 The Economy

The Czech Republic has a strong economy, with a Gross Domestic Product (GDP) per capita measure of 23 thousand USD, higher than neighboring Poland, Hungary, and Slovakia (Timelines Explorer, n.d.). This is partially due to the emergence of a large tourist industry in the country, with many international visitors. The cultural, economic, and political transformation that occurred as a result of democratization in Prague throughout the 1990s led to the modernization of the city and Prague becoming a major tourist destination (Carter et al., 2020). Additionally, the Czech Republic's joining of the European Union (EU) in 2004 eliminated border checks for tourists coming from other EU nations, further bolstering tourism in Prague. In 2019, over 8 million tourists visited Prague, and approximately 80% of those tourists were international visitors (World Tourism Organization (UNWTO), 2019). The majority of visitors to the historic city come from Germany and Russia, as shown in Figure 2.5. The city's historic center, also known as The Royal Way, is one of the most popular destinations for tourists. Figure 2.6 highlights the ten most popular locations for visitors of The Royal Way.
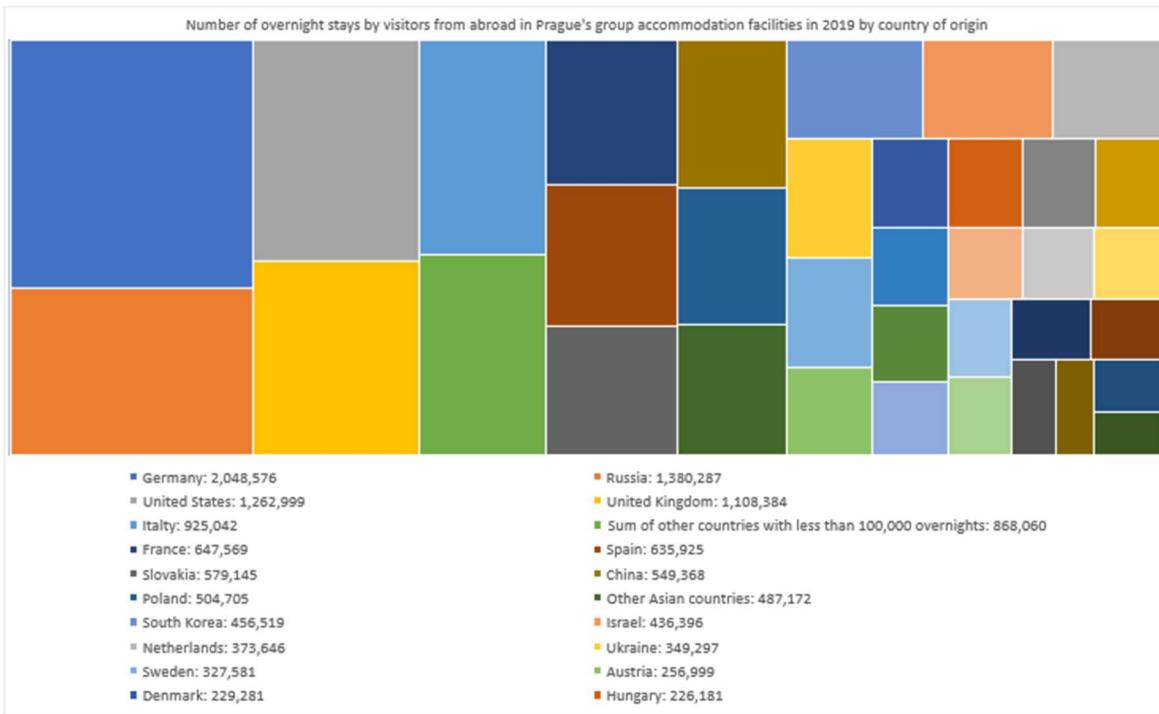
Figure 2.5: Overnight Visitors in Prague by Country, 2019 (Tourism - 2019, n.d.)
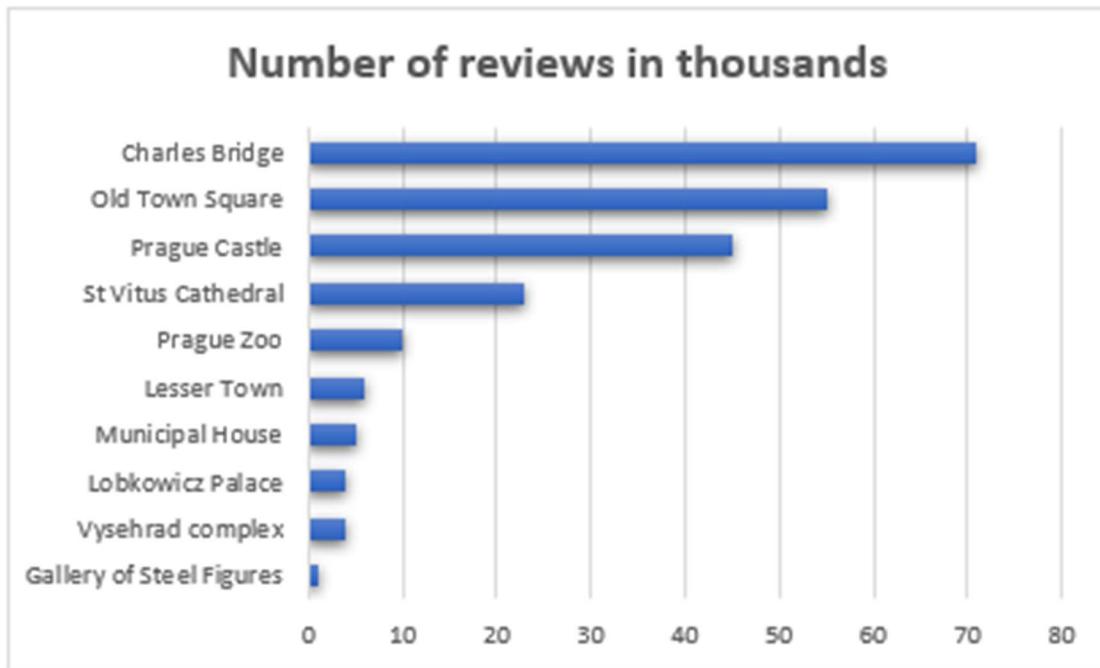
Figure 2.6: Most Popular Tourist Destinations in Prague (TripAdvisor, 2020)

Although Prague is a popular tourist destination, the only revenue the city retains is real-estate taxes and local overnighting fees (World Tourism Organization (UNWTO), 2019). The only taxes retained by municipalities within the Czech Republic is real estate taxes. While the tourism industry is beneficial to Prague's economy as a whole, it does not provide a significant amount of revenue to the city compared to its total expenditures. Popular businesses, restaurants, and shops receive the majority of benefits from tourism.

The Czech Republic exhibits one of the highest levels of income equality in the world, except in certain regions, such as Ústecký, where a legacy of heavy industry and lack of investment has led to a stagnation in economic growth and where its citizens are more likely to experience poverty (Hnízdilová & Adamec, 2020). The Czech News Agency reports that the ongoing COVID-19 pandemic has deepened the inequalities that already exist ("News," 2021). Additionally, the pandemic has caused an increase in the incidence of domestic violence ("News," 2021). A strong background in the economic, cultural, and societal aspects of Prague facilitates identifying promising categories to pursue project opportunities.

2.4 Identifying Areas to Pursue Project Opportunities in Prague

2.4.1 Social Issues

There are many notable social issues in the Czech Republic including: homelessness, gender inequality, domestic violence, ethnic discrimination, housing debt, air pollution, climate change, and a high rate of incarceration (De Pauw et al., 2021; "News," 2021; Vusilović et al., 2021). Research in Prague determined which issues might benefit from IQP research collaborations.

2.4.2 Opportunities Involving Czech Art and Culture

Art has played an important role throughout Czech history; puppetry saved the Czech language (M. Keller, personal communication, August 26, 2021). The theaters and their actors played a major role in the Velvet Revolution, Czechoslovakia's nonviolent overthrow of the communist government. After the fall of communism, the new democratic government developed policies to restore public culture to replace the previous communist government-enforced culture. A major influence in these policies was President Havel, a playwright. There was a general sense of regaining control of art from the communist regime, but since then, art and culture have shifted away from anti-communism and towards a more politically neutral position (Vojtíšková & Lorencová, 2015).

In addition to art being an important part of Czech history, many past IQP projects based on art and culture have been successfully completed across many project centers. One such project occurred at the Tirana, Albania Project Center in 2018. Collaborating with students at the University of Arts in Tirana, the team investigated how they might use public art to increase public trust in the government (Fox et al., 2018). A lack of trust in the government is a result of Albania being a former communist country, similar to the Czech Republic. After developing a series of art pop-ups and workshops, the team found that the serious fun their exhibits generated helped to build trust (Fox et al., 2018).

Another successful IQP from the past happened at the Venice, Italy Project Center in 2007. Sponsored by the non-profit organization PreserVenice, the team worked to document previously undocumented public art they found on Venetian lagoon islands, laying the foundation for the sponsor organization to restore and maintain these new objects (Kent et al., 2007). These are only two examples of the copious number of IQP projects related to art or

culture. To exemplify the scope of interest, a search of the Digital WPI repository with the keyword "art" yields results of 2,394 IQP reports.

2.4.3 Sponsor Opportunities

The Czech Republic offers numerous opportunities for the Prague Project Center to flourish, but the number of sponsors and projects affects the growth and sustainability of a site. The two previous sections explored various areas of opportunity for projects in Prague. Since this was only preliminary research, it was important to conduct more research into these areas in order to consider as many options as possible. The team also researched the entities that lie within these areas of opportunity because the project's goal is to identify not just project opportunities but potential partner organizations.

2.4.3.1 Non-Government Organizations

Non-Government Organizations (NGOs) are entities that are generally independent of a government, non-profit, and address major social issues in countries. The United Nations (UN) formulated this term to contrast "between international government organizations and private organizations" in 1945 (NGOs (Nongovernmental Organizations), 2020). The UN and other world organizations contribute to NGO funding, which relies heavily "on donations from governments, foundations, corporations, and individuals" (NGOs (Nongovernmental Organizations), 2020). Historically, these organizations find it appealing to serve as WPI IQP sponsors since students provide research and execution of projects with a return on investment often exceeding initial costs (Sponsor a Student Project, n.d.). PresserVenice, a non-profit organization focused on preserving and restoring public art in Venice, sponsored The PreserVENICE: Preserving Venetian Public Art project (Kent et al., 2007; PreserVenice, n.d.).

Another example is Ashoka Romania, an international NGO, serving as the sponsor for Assessing and Promoting Intersectional Approaches Among the Ashoka Fellows, a project that a WPI IQP team completed at the Tirana Project Center (Allegrezza et al., 2021). The Ashoka organization supports "social entrepreneurs" who solve complex social problems with their innovations (About Ashoka, n.d.).

NGOs "act as a mechanism for cooperation among private national groups" and tackle a variety of problems such as "economic, cultural, humanitarian, and technical" (Law, 2018). These objectives drive NGOs' actions and can provide a consistent source of fulfilling projects for student IQPs (Mirońska & Zaborek, 2019). Having NGOs as project sponsors can enhance both the local community and the real-world experience of a student group.

Some NGOs use certain methodologies, such as inciting demonstrations and riots, to convey their agenda (NGOs, Political Protest, and Civil Society, 2017). These organizations do not fully reflect the mission of the IQP and are not suitable sponsors. Further, it is unlikely that any entity could solve a major problem like homelessness in under seven weeks with one project. Broader concerns take time to resolve. However, WPI experience shows that allowing teams to append previous projects year after year addressing the same general problem can yield significant change. This is evident in the La Makana y el Publico Museum in Cuenca, Ecuador, where groups from January 2021 and March 2021 assisted a small museum in the midst of the COVID-19 pandemic (Casserly et al., 2021; Mihaleva et al., 2021). NGO sponsors hold the potential to supply an IQP center with projects that will last for many years and give students ample opportunities to satisfy WPI's learning philosophy.

2.4.3.2 Museums

Art is deeply related to the culture and nationalism of the Czech Republic. Museums house "distinctive artistic tradition" and keep a sense of "unity over time" (Carrier, 2012). Unlike in the United States and England, museums in the Czech Republic do not narrate their history but convey their complex national identity (Carrier, 2012). Artists and writers living in the Prague region over different time periods define this identity. These traditions "may be especially important for nations which" recently enjoy political independence as public and private citizens donate to museums (Carrier, 2012). IQP project opportunities do not have to address a major social issue but can strive to positively impact the surrounding community. Before looking into project opportunities revolving around communities, we must first ask if members of the community are welcome to IQP involvement.

Many museums within Prague provide a plethora of potential opportunities. Museums preserve history but struggle to stay relevant and sufficiently popular to survive, as the profits made through ticket sales do not cover operational costs. Although Prague experiences a large amount of tourism, not all visitors enter the culturally rich institutions located throughout the city. One potential project problem is "that there is no full-scale accessible guide to the museums" (Carrier, 2012). These issues are examples of project opportunities for students to confront through the IQP process. Similar to NGOs, museums receive funding from the government and donations, so project sponsorship is an enticing chance for low to no cost student research.

2.5 Previous Establishment IQP Case Studies

Previous WPI IQP teams documented their own search for sponsor opportunities to expand project centers around the world. Reviewing these three reports as case studies, the team

compared methodologies and summarized the positive outcomes for specific strategies. Commonalities between the cases include developing criteria of a suitable sponsor through center director interviews, developing informational material to define IQP logistics, and ranked suggestions for specific potential sponsor organizations. These commonalities provided a basis for the team's own research.

2.5.1 Case Study 1: Expanding Recruitment at the Hangzhou Project Center

Within this project, a team of students at the Hangzhou Project Center (HZPC) in China identified entities as potential sponsors, developed criteria for the most suitable sponsors, and produced a list of recommended organizations using their criteria. The students used a weighting system to rank potential sponsors on suitability. The project team assessed sponsors within each category to produce a numerical value for their suitability as project sponsors. While defining "key criteria in a successful IQP sponsorship," they found that the role of a sponsor was a common organization misconception (Miller et al., 2021). Outcomes from this HZPC IQP include marketing materials such as a tri-fold brochure, a website, and a PowerPoint presentation that covers general IQP logistics, sponsor expectations, previous projects, and contact information of the students and center directors. The HZPC team gathered the resources to create these materials through one-on-one interviews with WPI faculty involved in marketing and business. The IQP group utilized interviews with WPI project center directors to develop their criteria for suitable project sponsors and with Chinese organizations to deliver their sales pitches. The team's project used a similar interview methodology to establish criteria for suitable sponsors and conduct semi-structured interviews with organizations in Prague to present IQP logistics.

2.5.2 Case Study 2: Identifying Community Development Opportunities for the Hawai'i Project Center

In 2021, the Hawai'i Project Center relocated from Hilo to Honolulu on the island of Oahu "due to its bustling, urban environment that offers great potential for student projects" (Bragaw et al., 2021). An IQP team strengthened the project center by identifying suitable sponsors and analyzing challenges Oahu's communities were facing for project opportunities. Like the Hangzhou report, this team began developing criteria for potential sponsors through interviews with project center directors who coordinate IQPs at locations similar to Hawai'i. The team suggested that future IQP groups should conduct interviews with WPI center directors before going abroad since in-person interviews are a valuable methodology to gain information. By examining their interviews, the Hawai'i team developed a measurement for sponsor suitability based on the most common aspects of a sponsor that the center directors mentioned. As the IQP team began searching on the web for organizations, project center directors stated that "phone call or face-to-face communication is more successful" than sales pitch emails since organizations may be too busy to distinguish the credibility of the students (Bragaw et al., 2021). This IQP group suggested that future teams should utilize criteria to determine the most suitable organizations for sponsorship and potentially establish connections with universities.

2.5.3 Case Study 3: Investigating the Feasibility of a Project Center in Reykjavik

In 2018, a WPI student team investigated the "Feasibility of a WPI Project Center in Iceland" (Zellerbach et al., 2018). This was the first year that WPI based a project center in Reykjavík, Iceland. The group outlined necessary characteristics for a prosperous project center and approached "ten organizations interested in student projects" (Zellerbach et al., 2018). The students analyzed past IQP reports and "highlighted the various techniques past student teams

used to assess sponsor opportunities and student logistics" (Zellerbach et al., 2018). In addition, the team members conducted in-person interviews with successful, long-standing project center directors. Unlike the Hawai'i and Hangzhou projects, the Iceland team did not rank sponsors but produced a checklist of criteria for suitable sponsors. In their initial search for organizations, the group members found networking to be a vital method in approaching entities and gaining useful contact information. The Icelandic IQP team found the language barrier and culture were detrimental to the response rate from entities. Once the team met in person with organizations, they were quite successful in using a presentation to explain the logistics of the IQP process. After interviews, the team analyzed their results and produced a profile for each organization summarizing in-person and online interactions, potential project opportunities, and contact information. Based on their research, the Icelandic team deduced that organizations with goals aligning to the educational mission of the IQP provide creative projects benefiting both the students and the local community.

2.5.4 Case Studies Summary

These preliminary case studies served to highlight various approaches and ideas from previous IQP project groups with similar goals and objectives. The insights from these reports guided the development of this project's methodology. Additionally, while in Prague this project further analyzed these reports to gain a deeper understanding of effective approaches for contacting potential project sponsors.

3.0 Methodology

This project aimed to identify, inform, and establish a relationship with potential sponsors in order to produce a reasonable number of projects assisting the WPI Prague Project Center in expanding opportunities available to WPI students. To achieve this goal, the team focused on accomplishing three objectives:

1. Determine a set of criteria for suitable sponsors.

2. Identify potential sponsor organizations.

3. Inform entity representatives of IQP details and identify organizations with high interest levels.

Figure 3.1 provides a visual representation that serves as a roadmap that connects the project objectives through the associated methods and analyses described in this chapter.
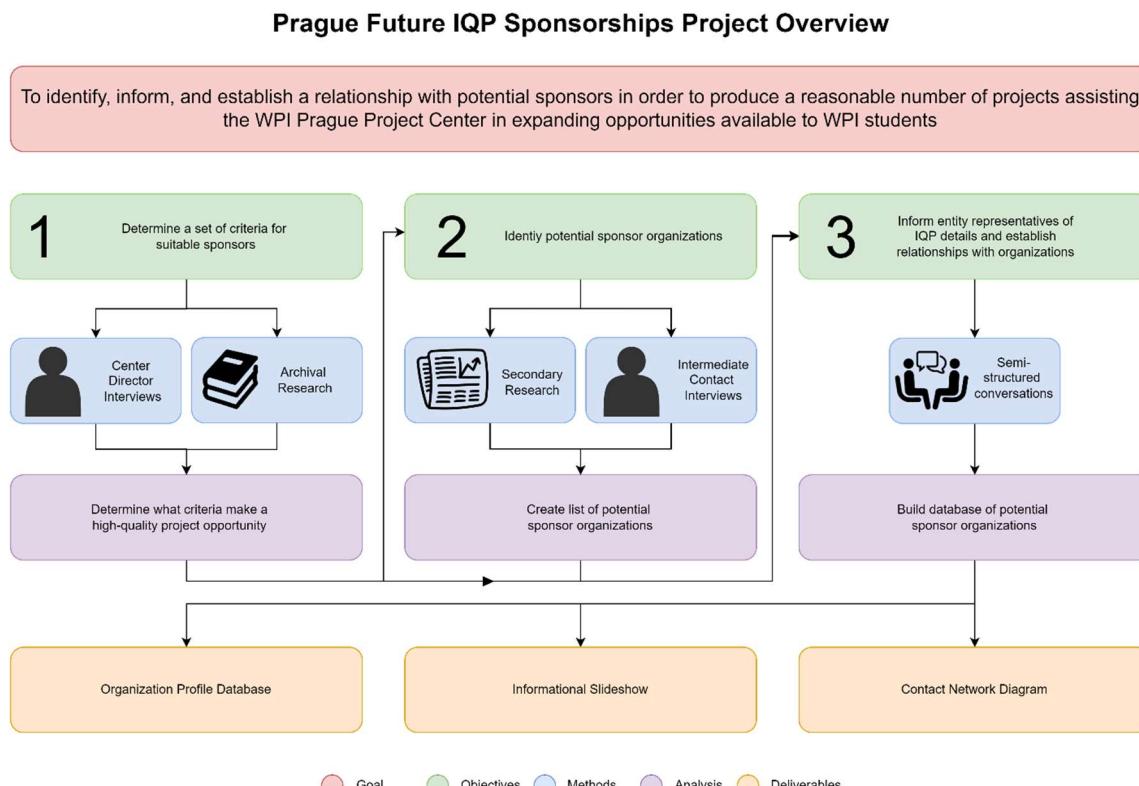
Figure 3.1: Prague Future IQP Sponsorships Project Overview

The following sections detail how the execution of the objectives aided WPI's Global Experience Office (GEO) in continuing its mission of providing projects in domestic and international locations in which students work on projects that can have a positive impact on communities around the world. In addition, the chapter outlines the approach to data collection and analysis.

3.1 Objective One: Determine a set of criteria for suitable IQP partners

To identify high-quality future project opportunities, the first step was to determine generic criteria that constitute a suitable IQP project partner. The team reviewed three previous IQP reports, which focused on new center establishment, as case studies to extract partner criteria and identify questions for project center director interviews. The three reports that the team reviewed were: Expanding Recruitment at the Hangzhou Project Center, Identifying Community Development Opportunities for the Hawai'i Project Center, and Investigating the Feasibility of a Project Center in Reykjavík.

One limitation in achieving this objective was that every project center is unique and vital criteria for one location may not be as crucial in another location. However, there are project center locations in places with a similar history to the Czech Republic, such as Albania which also had a communist government in the past. Therefore, the team interviewed site directors from project centers in locations similar to Prague in a variety of aspects including the economy, geography, and government. However, the team did not limit themselves to only centers like Prague. Interviews with center directors from locations dissimilar to Prague further strengthened the teams understanding of project sponsors overall because there were commonalities between suitable sponsors and high-quality projects regardless of the center's location.

The group conducted semi-structured interviews with eight WPI project center directors to uncover the most-valued criteria in a project sponsor. The first step in each interview was gaining consent to record the audio of the interview. Table 3.1 provides information detailing the interviewee center directors, date of interview, and location of project centers.

Date of interview	Center Director	Location of Project Center
25-Oct-21	Professor Golding	London, England Nantucket, Massachusetts
26-Oct-21	Professor Sakulich	Panama City, Panama Reykjavik, Iceland
26-Oct-21	Professor Christopher	Tirana, Albania
27-Oct-21	Professor Nikitina	Moscow, Russia
28-Oct-21	Professor Burnham	Zurich, Switzerland
29-Oct-21	Professor Foo Professor Dimassa	Berlin, Germany
2-Nov-21	Professor Hersch	Tirana, Albania

Table 3.1: Interviews Held with Center Directors

These interviews provided unique insights from project directors about what constitutes a good project, their processes for contacting organizations, and strategies for developing a network of project partners. One key insight moving forward was to use the term "partner" instead of "sponsor" to avoid any negative connotations that WPI requires organizations to pay money for the students to work. High-quality projects and suitable sponsors build the foundation of a long-lasting and meaningful project center. Appendix A contains the questions the team asked each center director in the interviews.

The team organized questions into multiple connected groups. Initial questions referred to the respondent's time at WPI and as a center director. The next set of questions ascertained what criteria describe a suitable sponsor. The following set of questions defined techniques to contact and identify potential partners. The final section included questions asking the center directors to reflect on any lessons they learned and to provide final suggestions to the team for success. Since

every center director gave consent to record, the team generated transcripts including

paraphrases and quotes from each interview. Appendices B through H contain the transcripts of

each center director interview. Some center directors asked to review any quotations or

paraphrased statements included in the report before publishing.

The group utilized open coding to generate key criteria for project sponsors according to

the center directors (Saldaña, 2008). Open coding involved the induction of criteria based on the

responses given in each interview. Inductive coding was preferable to deductive coding in this

case, which would have required the group to generate categories beforehand. Open coding,

while more difficult to perform, ensured that the team did not omit any important criteria.

The next step in data analysis was to develop a frequency chart to determine important

criteria that the site directors mentioned. Frequency analysis utilized the criteria reported by the

previous case studies of past IQP reports from the background chapter and the transcripts from

the interviews conducted. The team's frequency analysis documents the number of mentions a

criterion has across the center director interviews and the case studies. If five different center

directors mentioned a criterion such as "eagerness" at least once in the respective interviews, and

two case studies also mentioned that criterion, then the overall frequency of eagerness would be

seven, no matter the number of times a center director mentioned a criterion within one

interview. This investigation considered the results from the frequency counts while assessing

potential partners. In addition, the team collected numerous quotes from each interview which

highlight the different characteristics seen in the frequency chart. This report discusses each

criterion in detail along with these quotes in the results section.

3.2 Objective Two: Identify potential partner organizations

To acquire new sponsor organizations for the Prague Project Center, the team began by developing a list of potential partner entities. To develop this list the team conducted interviews with intermediate contacts, formed personal connections, and preformed secondary research.

3.2.1 Intermediary Contact Interviews

The team conducted interviews with intermediate contacts familiar with Prague. The interviewees included: Ms. Eva Illnerova, a certified Prague tour guide and Professor Keller, who visits the city every year and is a co-director for the Prague project center. These interviews enabled the team to establish an initial network of contacts, further expanding the list of potential sponsor organizations. One result from objective one was that direct referrals to organizations are more successful than reaching out to organizations with no prior link to the team. The team conducted interviews both in person and online via Zoom. For both interviews, all four members of the team were present and had a role in the process. The team conducted the in-person interview at a café, while the team members during the Zoom interview were in a closed environment.

The first component of each interview was that the interview leader read a consent form, describing how the interview was fully voluntary and asked to record audio and transcribe the meeting. After obtaining consent, the team gave a brief description of the project goal to the interviewee. Then, another member of the team provided a few examples of sponsor organizations and project reports from other project center locations. The team chose three previous IQP projects which related to the Czech Republic, but also captured the essence of the diverse types of organizations where students work. One project focused on restoring public art in Venice, Italy. This project tied to the strong artistic culture of the Czech Republic. Another

project worked with a non-governmental organization that restores cultural heritage from damages of war and neglect. The background chapter explained the relation between this project example and the Czech Republic through the impacts of WWII and Communist rule. After presenting all the necessary background information, a third group member asked questions focused on identifying contacts and potential partner organizations in Prague. Appendix I contains the list of questions the team asked to the intermediate contact. The last member of the team kept notes on the interview.

3.2.2 Personal Connections

In addition to intermediate contacts the team utilized personal connections to identify organizations. While exploring Prague and interacting with local Czech businesses and organizations, the team was vigilant not to miss any potential project opportunities. If a team member discovered an organization that appeared to match the criteria of a good sponsor, the team contacted the entity to schedule a meeting.

3.2.3 Secondary Research

In addition to intermediate contact interviews and personal connections, the team conducted secondary research primarily through WWW (World Wide Web) searches for potential sponsor organizations within Prague. The entities may work outside the city limits but have some physical presence in Prague, such as an office. The background chapter described Prague as full of artistic culture with some specific areas of social challenges. The team used this background information while deciding what previous IQP projects to explain to the intermediate contacts during interviews in order to gauge their insight on any potential sponsor organizations relevant to the research. Within secondary research, the team collected contact information, brief descriptions of the entities' work, and relevant previous or potential projects.

3.2.4 Omitting Organizations

The team determined which organizations would make feasible partners based on both background research and the criteria of suitable sponsors developed through objective one. The team researched each organization and assessed if they matched the criteria center directors mentioned, and if they were a type of partner organization discovered in background research, such as NGOs and educational institutions. If an organization did not match the criteria, the team removed the organization from the list of potential partner organizations to contact.

3.3 Objective Three: Inform entity representatives of IQP details and establish relationships with organizations

This investigation divided objective three into two distinct sections. The team began by reaching out to all organizations classified as potential partners following the filtering process of objective two. Once organizations responded to the team indicating interest in learning more about the IQP program, the team attempted to schedule meetings with representatives to further explain the program and develop a relationship.

3.3.1 Reaching Out to Organizations

The first phase of addressing objective three was to contact the set of organizations from objective two via emails introducing the team members and the premise of the project. Appendix J contains the email template used for contacting organizations. The team wrote the emails in English and translated them into Czech, to account for the recipient not being a native English speaker. In the email, the team made a request to have a meeting with the organization to discuss more details in-person or via Zoom, depending on availability, proximity to Prague, and COVID-19 guidelines. If the organization was from an intermediate contact interview, the team

mentioned the reference entity in the email. Furthermore, the email provided a brief explanation of the IQP, including example projects relevant to the organization, that the team further expanded on in the meetings with entity representatives.

If the organization responded to the team rejecting a meeting, the team marked the organization as currently uninterested in the network diagram and did not contact them further. If the team did not receive a timely response from an organization, they found from objective two, the team followed up with a second email. If the team could identify a phone number, they also called the entity to get a clearer answer regarding the organization's decision. This was very helpful because several organizations indicated they saw the email but were waiting to discuss with colleagues before responding. If the organization responded with interest, the team moved forward to schedule a meeting.

3.3.2 Meetings with Interested Organizations

Table 3.2 displays the dates of the meetings, the organization, and the number of team members in attendance. All team members participated in the first meeting with Zoo Praha to familiarize themselves with the process. At least two team members attended the following meetings as other members of the team continued to contact potential partner entities.

Meeting Date	Organization	Number of Team Members in Attendance
18-Nov-21	Zoo Praha	4
19-Nov-21	CIEE Prague	2
23-Nov-21	PostBellum	2
30-Nov-21	Association for Private Agriculture of Czech Republic	3
30-Nov-21	The National Museum	3
2-Dec-21	PRAGL	2
3-Dec-21	Nova Skola	2

Table 3.2: Meetings Held with Potential Sponsors

Meetings with potential partners began with pleasantries and casual conversations before moving further into the technical details of a partnership. In order to present the background

information about the IQP and the relationship between students and partnering organizations, the team developed an informational PowerPoint presentation for these meetings. Appendix K contains the slides shown in this presentation. The team drew much of the information in the presentation from the center director interviews during which the team uncovered key characteristics of a successful IQP sponsor and project.

As a reference for the organization's representatives during the presentation, the team handed out printed copies of the presentation, which the team had translated into Czech. Appendix L contains the handout which served to minimize any misunderstandings as a result of a language barrier between the team and non-native English speakers. The team encouraged the representatives to ask questions throughout the presentation.

The PowerPoint presentation began with a brief introduction of the team members before covering relevant information about the relationship between sponsors and WPI. The background began with an overview of WPI, the GEO and its current global reach, and an explanation of what the IQP typically entails. Once the team outlined the premise of the project, the next component of the presentation included three examples of past projects that were relevant to the current organization to help the representative visualize a practical application of partnering their organization with WPI. The following sections of the presentation addressed the technicalities of a partnership with WPI: how students prepared for the project, the responsibilities of the partners, the difference between an internship and an IQP, the projected timeline for the following year, and closed with the expected outcomes for the partnering organization and students. In the conclusion of the presentation, the team invited the representative and the organization to attend the final presentations, provided additional contact information, thanked them for their time, and opened the floor for questions.

Following the presentation, the team began a conversation to address any additional questions, comments, or concerns. The final discussion of the meeting focused on explaining the timeline for the Prague Project Center with the current calendar of projects running from October to December of the following year. If the organization expressed interest following the presentation and meeting, the team discussed the next steps in the process. This involved connecting the center director with the representative of the organization via email.

3.4 Methodology Summary

The goal of this project was to establish relationships with potential project partners in Prague to assist the Project Center in providing projects to future students. First, the team conducted interviews with center directors from other Project Center locations to develop an understanding of the criteria of suitable project sponsors. To identify potential partner organizations, the team conducted interviews with two intermediate contacts. The team used online research to supplement these interviews to further expand the list of potential sponsor organizations. Then, the team began reaching out to the organizations to see if they were interested in meeting to discuss the possibility of a partnership with WPI. The team developed an informational PowerPoint presentation about IQP sponsorship which they presented in seven meetings with potential partner organizations. These meetings served to roughly assess the organization's interest level.

4.0 Results & Analysis

This chapter describes the results from the team's work organized by the project's objective. The chapter begins with an analysis of the information taken from the seven center director interviews. The next section covers the list of potential organizations following conversations with intermediate contacts, secondary research, and personal connections in Prague. The final section reviews the relationship between the team and each contacted organization, response rates, and summaries of meetings held with interested organizations,

4.1 Objective One Results: Determine a set of criteria for suitable IQP partners

After conducting seven semi-structured interviews with eight project center directors, the team generated transcripts for each interview. Table 4.1 shows the date of each interview as well as the project center location of each director.

Date of interview	Center Director	Location of Project Center
25-Oct-21	Professor Golding	London, England Nantucket, Massachusetts
26-Oct-21	Professor Sakulich	Panama City, Panama Reykjavik, Iceland
26-Oct-21	Professor Christopher	Tirana, Albania
27-Oct-21	Professor Nikitina	Moscow, Russia
28-Oct-21	Professor Burnham	Zurich, Switzerland
29-Oct-21	Professor Foo Professor Dimassa	Berlin, Germany
2-Nov-21	Professor Hersch	Tirana, Albania

Table 4.1: Center Locations and Dates of Interviews

Next, the team conducted a frequency analysis to count the number of interviews which mention a particular criterion. In addition to the seven interviews, the frequency analysis encompassed the three case studies from previous establishment IQPs. Figure 4.1 depicts the frequency counts across both the center director interviews and case studies. While the team did not use the frequency counts to assess partner organizations quantitatively, these results guided

the choices of which criteria were more important when establishing a successful partnership in Prague. The remainder of this section explains each criterion in detail utilizing direct and indirect quotes from the center director interviews.
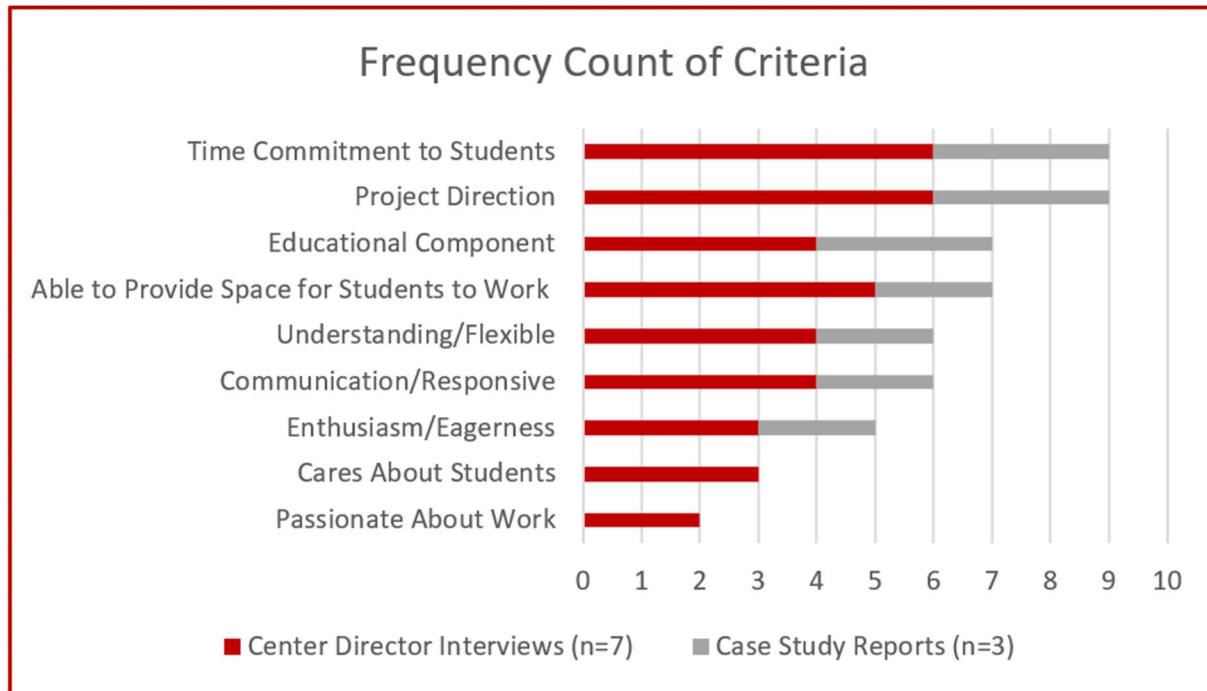
Figure 4.1: Frequency Counts of Partnership Criteria

4.1.1 Time Commitment to Students

Six center directors and all three case studies mentioned the importance of an organization's ability to dedicate time to student teams. Professors Nikitina and Hersh stressed this criterion the most. Professor Nikitina mentioned that time commitment to students is a characteristic that the Moscow Project Center expects of its partner organizations. She added that it should be a concern when trying to acquire new sponsors. While discussing how to make the IQP an attractive proposition for potential partners, Professor Hersh noted, "without the sponsor's commitment of time and thought, the projects can go off the rails." In addition, the team received feedback from a fellow Prague IQP team that time commitment from the sponsor was a critical aspect of their project being successful.

4.1.2 Project Direction

Similar to time commitment, six center directors and all three case studies mentioned the partnering organization providing project direction to the team. When asked about characteristics that make projects more successful than others, Professor Foo commented, "Having a project brief that shares enough information about the context [of the problem], and what [sponsors] expect without getting into the tasks, it is clear about the overall direction and goal of what the project would be and some of the objectives and outputs that the students may consider." When responding to a question about WPI's expectations for sponsor organizations, Professor Nikitina noted that they like a commitment from organizations to provide project direction through weekly meetings. It is preferable if an organization can provide a liaison to help guide the students and provide them with information and resources helpful to completing their project. Similarly, Professor Sakulich opined that "the sponsor should be the one to give them the information and point them in the right direction."

4.1.3 Educational Component

Four center directors and all three case studies discussed the educational component of the IQP. When discussing hurdles faced working with sponsor organizations, Professor Christopher explained, "they have to keep the academic part of the project in mind. The academic experience has to be worthwhile." In response to the same question, Professor Golding said, "we want them to know that a project has to be intellectually substantive. It has to meet WPI's needs as a bona fide academic research project." As the IQP is a degree requirement, WPI expects that students learn and grow from completing their project. Professor Foo highlighted that "a key function of the IQP is to teach students how to [manage tasks] themselves, to set their agendas and to plan a longer-term project."

4.1.4 Student Workspace

Five center director interviews and two case studies mentioned the ableness of the sponsor to provide space for the students. Talking about WPI's expectations for sponsors, Professor Golding said, "you want to know that the organization is going to provide a safe place to work…." When responding to the same question, Professor Foo noted, "it is great when a sponsor can offer working space so that students can become integrated into their office and organizational culture." Furthermore, when speaking about what helps create a positive experience for students, Professor Hersh commented, "I think it is great if the students could go someplace. Because partly, it is the day-to-day interactions with the organization and the sponsor that help students feel like they are part of something." Having a location for students to work in can enhance students' project experience and help sponsor organizations fulfill other criteria such as project direction and communication.

4.1.5 Understanding and Flexible

Four center director interviews and two case studies report sponsors being understanding and flexible surrounding the project. This criterion relates to allowing students to have the ability to work through a project in the way they see best and an understanding from the sponsor about what students can accomplish in seven weeks. Professor Hersh commented when discussing ways in which sponsors can create a positive experience for students: "[the students] need some degree of freedom to exert their sense of the project." In addition to being flexible and allowing the student team to work in their way, sponsors must have realistic expectations for what students can achieve: "I think you just have to try and shape them [the projects] so that they are doable in the time available and with the kinds of resources, intellectual or otherwise, that students will have" (Golding).

4.1.6 Communication and Responsiveness

Communication and responsiveness are criteria closely related to the more frequently mentioned criteria: project direction and time commitment to students. Four interviews and two case study reports mention these two topics. When talking about challenges faced with new or potential sponsors, Professor Golding said, "a couple of years ago in London, we had one sponsor, who was not responding during the prep term for the students, and that is what we want to avoid." Additionally, a fellow Prague project team expressed their need for a communicative sponsor based on their preparatory term experience.

4.1.7 Enthusiasm and Eagerness

Three interviews and two case study reports mention enthusiasm and eagerness from the sponsor. When asked if there are any tells about whether a potential sponsor organization would make a good IQP partner organization, Professor Sakulich said the following:

"I guess if I had to nail it down to one thing, it would be enthusiasm... If a sponsor is into it, and they are like, 'this sounds like fun. Let's do this, this, and this.' It doesn't really matter if they understand what the learning outcomes are and how many hours a week you expect to mentor our students and that sort of thing? That's something that is hard to predict. It kind of varies from person to person. There is no magical recipe."

4.1.8 Cares About Students

Three center directors mentioned the importance of a sponsor caring about the students. When asked about characteristics that he had noticed in successful sponsors, Professor Christopher highlighted caring for the students. Professor Nikitina told the team that it is nice when the sponsor can provide something to the students to express their gratitude, such as a welcome lunch or farewell dinner. She also mentioned that this often happens without prompting

from herself or the project advisor, showing that the partner organization genuinely appreciates the students' work. Additionally, Professor Hersh told the team about how it can significantly benefit students when the organization is active in helping them through the project, such as providing advice on how to phrase things in surveys so that the wording and sentence structure is readable to native speakers.

4.1.9 Passionate About Work

The criterion, passionate about work, was the least frequently mentioned, arising in only two center director interviews. Professor Christopher's mentioned the importance of an organization that is passionate about its work. At the same time, Professor Nikitina spoke about how the local coordinator of the Moscow Project Center is constantly prospecting for new sponsors and informs her of which organizations are eager to partner with WPI for a project.

4.1.10 Criteria of Suitable Partners Summary

Results from objective one provided the team with nine criteria to consider when assessing the suitability of potential IQP partner organizations. While center directors and the case studies mentioned some criteria more frequently, the team felt it was best to consider all criteria when analyzing an organization's fit as an IQP partner.

4.2 Objective Two Results: Identify Potential Partner Organizations

The team conducted two interviews with intermediate contacts in Prague, secondary research primarily through Web searches, and personal connections. The interviews yielded a list of potential partner organizations and initial contact information and the ability to establish a personalized relationship with these entities. The secondary research added additional entries to the list of potential partners along with their contact information. Through personal interactions

while staying in Prague, the team made connections with a few potential partner organizations and collected their contact information.

4.2.1 Summary of Contacted Organizations

Table 4.2 displays a summary of all the organizations that the team identified as potential partner organizations through intermediary contact interviews, personal connections, and secondary research. The list contains a total of 36 organizations containing past and potential partnering organizations. One of the organizations, Abaceda, was a current sponsor during this report, therefore the team contacted 35 of the entities listed.

Organization Name	
Abaceda	Meta
Academy of Performing Arts in Prague	Multicultural Centre of Prague
Assosciation for Integration and Migration	National Agriculture Museum
Assosciation for Private Farming of the Czech Republic	National Museum
Brevnovsky Pivovar	National Technical Museum
Buchty a Loutky	National Theater Institute
Centre for Integration of Foreigners	Nová Škola
CIEE Prague	Organization to Aid Refugees
Counseling Centre for Integration	People in Need Foundation
Czech Red Cross Prague 1	PostBellum
Czech Tourism	PRAGL
InBáze	Puppets in Prague
Innovation Week	Slovo 21
Jesus's Grandchildren	Society of Young Agrarians of the Czech Republic
La Strada	Staropramen
Library of Vaclav Havel	The Strahov Monastic Brewery
Lobkowicz Breweries	The Tap Tap
Medical Rescue Service of Prague	Zoo Praha

Table 4.2: List of Identified Potential Partner Organizations

4.2.2 Omitted Organizations

Originally the team discovered 47 organizations, but the team omitted several organizations due to a lack of previous projects with similar organizations or inadequate project potential. For example, the team did not find past IQP reports relating to a mainstream, commercialized food delivery service after sifting through the WPI Gordon Library IQP database. Another eliminated organization was a convention that takes place once every four

years. Because the next event would be in 2023, the team determined that reaching out at this time would be premature.

4.3 Objective Three Results: Inform Entity Representatives of IQP Details and Establish Relationships with Organizations

This section describes the outcomes of contacting potential partner organizations and holding meeting with representatives interested in learning more about the IQP program. Outcomes include major deliverables to Professor Deskins and Professor Keller, such as the organization profile database and the contact network diagram, response rates by contact source, and meeting summaries.

4.3.1 Organization Profile Database

The team collected brief descriptions of the entities' mission and purpose, contact information, and URLs to previous IQP reports relevant to the organization. The team stored this information within their Organization Profile Database, an Excel document containing information about each potential partner organization; Table 4.3 contains a sample of the Organization Profile Database.

Type	Organization	Website	Description	Connection	Address
Potential	People in Need Foundation	https://www.peopleinneed.net/who-we-are/about-us	Humanitarian non-profit	No Prior Relationship	Šafaříkova 635/24, 120 00 Praha 2
Interested	PostBellum	https://www.memoryofnations.eu/en	Archive of historical documents/ first-hand	Ms. Illnerova	Španělská 1073/10 120 00 Praha 2
Interested	PRAGL	https://www.pragl.glass/main-page	Glassblowing workshop and museum	Personal	Malé náměstí 7 Prague 1, 110 00
Past	Puppets in Prague	https://www.puppetsinprague.eu/	Teaching Puppetry	Professor Keller	Not Listed
Not currently interested	Slovo 21	https://www.slovo21.cz/	Promotes multicultural society and cohabitation	No Prior Relationship	Blanická 2028/15, 120 00 Praha 2
Potential	Society of Young Agrarians of the Czech Republic	http://www.smacr.cz/en/	Protect young agriculture community	No Prior Relationship	Plaská 622/3 150 00 Praha 5
Potential	Staropramen	https://www.centrumstaropramen.cz/#kontakt	Brewery	No Prior Relationship	Pivovarská 9, 150 00 Prague 5
Potential	The Strahov Monastic Brewery	https://www.klasterni-pivovar.cz/contact	Brewery	No Prior Relationship	Strahovské nádvoří 301, 118 00 Prague 1
Not currently interested	The Tap Tap	https://www.thetaptap.cz/#!partneri	Disabled Musicians	Ms. Illnerova	Na Pankráci 13, 140 00 Prague 4
Agreed	Zoo Praha	https://www.zoopraha.cz/en	Zoo	No Prior Relationship	U Trojského zámku 120/3, 171 00 Praha 7

Table 4.3: Organization Profile Database Sample

This research aided the team in contacting representatives of the entities. To protect the privacy of the organization representatives, the team omitted their name and contact information from the database shown in this report. However, the team delivered a full unabridged version to the Prague Project Center Directors.

The differing colors of specific organizations represent the current state of the situation resulting from communication between that organization's representatives and the team. The grey rows represent organizations that responded to the team and expressed current disinterest in the IQP program. Most of these organizations described a lack of personnel capacity to guide the projects but did not reject future partnership opportunities. In total, there are 12 currently disinterested organizations and 24 entities as potential partner organizations. The blue rows include organizations under two conditions- first, representatives that did not respond to the team's initial contact methods and second, representatives that communicated with team members, but never followed up with an answer to meet. The team detailed the distinction between these two conditions to the center directors within the Contact Information Database mentioned earlier in section 4.2.4. The team labeled these organizations as "Potential Partners" since the team did not receive a definitive response. Orange rows represent organizations that expressed interest in the IQP. After meeting with these organizations, many of the representatives needed to discuss the partnership further with their colleagues before finalizing a decision. Green rows represent organizations which informally, verbally agreed to partner with the Prague IQP program such as CIEE Prague and Zoo Praha. Purple rows represent past partnering organizations of the Prague Project Center.

4.3.2 Contact Network Diagram
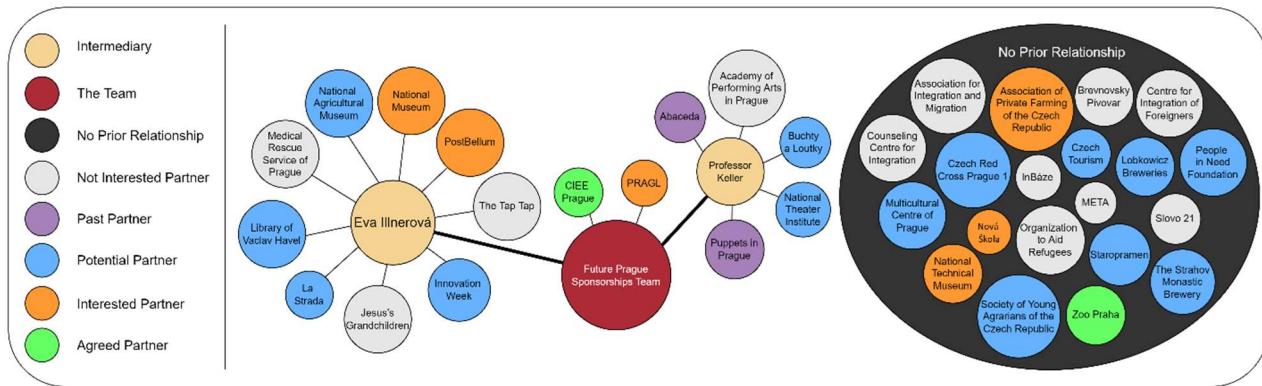
Figure 4.2: Contact Network Diagram

Figure 4.2 depicts a diagram describing the relationships between the project team and all potential sponsor organizations using the same color scheme from Table 4.3. The diagram is a visual representation of Table 4.3 that attempts to capture the current state of these relationships to include any personal connections and results from establishing communication with the project team. The gold circles represent intermediary contacts that the team interviewed. Organizations connected to gold circles have a direct relationship with an intermediary contact. The intermediary contacts gave the team specific contact information of a representative within the organization. Organizations within the black "No Prior Relationship" bubble did not have any direct connections from intermediary contacts for the team to communicate with. Secondary research contributed to the identification of these organizations as well as intermediary contact interviews. The red bubble represents the team. Any bubbles connected to this bubble have had a direct relationship or interaction with members of the team. The contact information database in conjunction with the contact network diagram from objective three offers to the Prague Project Center site directors all the information necessary to continue establishing relations with the organizations involved.

4.3.3 Responses to Initial Contact

Email response rates from entities varied depending on the initial contact source, for example intermediaries or personal connections. Table 4.4 displays a summary of the count of responses, meetings held, and interested organizations. The "contact source" column depicts which source gave the team contact information of an organization. The "contacts provided" column displays the number of entities each source gave the team.

Contact Source	Contacts Provided	Organizations which responded	Response rate	Interested Organizations	Interest rate	Meetings held
Ms. Illnerova	9	4	44%	2	50%	2
Prof. Keller	4	1	25%	0	0%	0
Personal Connections	2	2	100%	2	100%	2
No Prior Relationship	20	12	60%	4	33%	3
Total	35	19	54%	8	42%	7

Table 4.4: Organization Response Counts by Contact Source

The response rate exhibits the number of organizations that responded with a definitive answer whether to learn more about the IQP program through a meeting or to express disinterest. Within this column, the results from personal connections have the highest success rate, but only contain two organizations. On the other hand, the contact source with the most organizations had the second highest response rate. This difference in quantity of entities between "no prior relationship" and other contact sources may describe the higher response rate. "Meetings held" depicts the number of organizations that met with the team. "Interested organizations" displays the number of entities that currently indicates interest in the WPI program after meeting with the team. Most of the organizations that did not meet with the team expressed disinterest or did not respond. Table 4.4 includes one organization which has scheduled a future meeting with a center director, so the team cannot assess their interest prior to project completion. The team counted this entity as responding but did not include it within "meetings held" or "interested organizations."

4.3.4 Review of Potential Partner Meetings

The following sections contain a brief overview and summary of each potential partner meeting the team conducted.

4.3.4.1 Zoo Praha

The entire team met a representative of the zoo at the main entrance. Originally the team planned to present in a conference room, but due to scheduling conflicts, the team presented in an empty café booth. Two team members delivered the presentation on one laptop, while the other two team members observed and documented the meeting. The presentation was both informational and conversational, allowing the representative to ask questions throughout the presentation for clarity. After the presentation concluded, the representative asked a few questions for clarification. At this point, all team members answered any questions. There was initial ambiguity regarding the time commitment required by the zoo to the students, but once the team explained the information in further detail, the representative expressed interest in continuing discussions. Additionally, the representative expressed confusion on the technical aspect of a potential project. The team gave an example of updating the organization's website. The representative mentioned that students would have access to the zoo's cafés for day-to-day work, but conference rooms or office space may not be available. At the conclusion of the meeting the representative informally agreed to sponsor a student project for the following year and the team forwarded the contact information of the representative and all prior communication to Professor Deskins to finalize formal agreements.

4.3.4.2 CIEE Prague

CIEE Prague is an organization which provides coursework for American students studying abroad in Prague. Two team members met a representative of CIEE Prague at a local

restaurant. The team presented using a laptop, rather than a projector, due to the limitations of the environment. Since the representative was a native English speaker, there was no confusion related to the language or wording of the information. After the presentation, the representative asked several clarifying questions regarding the next steps if they were to become an IQP partner. The team explained how the center directors would work with the organization to develop project ideas suitable for an IQP. Next, the team and representative discussed potential project ideas, with both sides contributing ideas they had about potential projects. Following that discussion, the representative indicated they are "definitely interested," but would need confirmation from superiors that a partnership was feasible. After a few weeks, the representative gave the team an informal, verbal agreement to partner with WPI for the following year.

4.3.4.3 PostBellum

PostBellum is an organization that works to preserve history through various means. This includes a secondary school, the "Memory of the Nation" project, and their museum. Two team members arrived at the PostBellum office and prepared the presentation on a laptop. The representative indicated they were short on time, so the team began the presentation quickly. Throughout the presentation, the representative asked a couple of clarifying questions to make sure they understood the information, since they were a non-native English speaker. For example, the representative asked what 'open-ended solutions' meant when the team described qualities of a good IQP project. Another challenge the team faced was to convey that the IQP should have a technical component, but primarily revolve around a social science approach to finding solutions and drawing conclusions. The team ensured the representative that Prague center directors would work with the entity to develop a valuable IQP for both parties. The

representative informed the team that the organization has three parts and the team provided multiple project examples that could fit within each of the three sections of Post Bellum. Following the presentation, the team invited the representative to the final project presentations, which piqued the representative's interest. At the end of the meeting, the representative was curious about the next steps of the process. After further clarification, the representative explained the organization would make a final decision after the completion of the current Prague IQP projects.

4.3.4.4 Association for Private Farming of Czech Republic

The Association for Private Agriculture of the Czech Republic (APACR) works as a support system for private farmers in the Czech Republic. Three team members arrived at the Prague office of APACR, and a representative led the team to a private conference room. Since the representative only had twenty minutes, the team quickly set up the presentation on a laptop and began. The representative spoke English very well and seemed to understand the concept of the project. During the presentation, the representative asked a few questions based on content rather than clarification. While describing previous IQP projects with private farmers, the representative expressed concern about the language barrier between students and Czech farmers. The team mentioned the use of translators in previous projects to relieve any worry. With the knowledge from previous organization meetings, the team emphasized the consultancy aspect of the IQP. Especially with NGOs, the team assured the representative that a dedicated liaison would not spend every hour of the week with students. Additionally, the team stressed that students normally work on low priority challenges for the organization. The IQP is a perfect opportunity for NGOs to answer questions or work on projects that they may not have the time or resources to address. After the team invited the representative to the final presentations, the

representative expressed interest in viewing them, and the team sent the necessary details after the meeting. The last major concern was about the cost for the organization. The team provided information based on knowledge their advisor gave them. Overall, the representative seemed interested in partnership, but would discuss the opportunity with their colleagues. The meeting ended with the representative giving an example of a potential project, which confirmed their understanding of the IQP concept.

4.3.4.5 National Museum

Three team members met with two representatives in a large conference room. The team delivered the presentation on a projector. Based on previous meetings with potential partners, the team provided more detail on the topics that the prior potential partners found confusing. These included how the IQP differs from an internship and the minimal time commitment required of a liaison. Throughout the presentation, the representative asked clarifying questions and expressed a few concerns. The feasibility of an IQP between the months of September to January was a concern for the representative since the organization is extremely busy during those months. Although an IQP in A-Term (Mid-August to Mid-October) would be safer, it would be significantly better another time in the year. Over the course of the conversation, the potential skillsets of the students were an area of interest for the representative. Another major concern was the consumption of time for employees to scale down a project and make it feasible for undergraduates to finish within seven weeks. The team mentioned that WPI projects are usually lower priority for partner organizations and future student teams can continue to work on issues that need more than seven weeks to resolve. According to the representative, a potential method for assigning an employee as a liaison would be to give the students work within a project that the employee is currently working on. The alleviation of the liaison's work would allow an

employee to dedicate time to students. The representative asked about monetary commitments and formal agreements. The team provided information based on knowledge their advisor gave them. As the meeting ended, the representative began brainstorming logistics: the number of potential projects, discussions between colleagues before making a decision, and requesting more information about past IQP reports.

4.3.4.6 PRAGL

PRAGL is a small museum and glassblowing workshop in the center of Prague focusing on Bohemian glass art. Two members of the team met with two representatives of the organization in the PRAGL museum. One of the representatives was fluent in English and acted as a translator for the other representative, who was less fluent. Throughout the presentation there were several questions surrounding the timeline of the project and the presentation. Following the presentation, one of the representatives asked a team member why the team specifically asked PRAGL for a partnership, to which the team member replied,

> "When I participated in your workshop, glassblowing was such a new
> experience for me. I wanted to know the process of how to blow glass, how you
> learn to be a glassblower. I assumed others had these questions too and there is
> an opportunity to create educational content through the form of brochures or a
> video."

Following this response, the representative understood the benefit of partnering with WPI and mentioned that this partnership could be more beneficial to PRAGL than a traditional internship. The representatives also mentioned how they participate in educational visits from local schools. This response confirmed the representatives understood the potential academic component of the IQP. The representatives needed to speak to their supervisor and would get back to the team. The

team members highlighted that a decision was not urgent, and the representatives could take their time. In concluding remarks, the team invited the representatives to the final presentations.

4.3.4.7 Nova Skola

Nova Skola is an NGO which promotes educational inclusion for children and young adults from culturally disadvantaged groups including minorities and migrants. Two team members met a representative of the organization via Zoom. After quick introductions, team members delivered the presentation. The team adapted the way they explained the IQP program based on all the previous meetings with potential organizations, emphasizing aspects of the presentation which were confusing for representatives of these past meetings. The current representative did not ask any questions during or after the presentation and mentioned the information was clear. They expressed interest in the program by describing a few potential projects for future students. The representative was also intrigued by potentially viewing final presentations of the current Prague Project Center students. At the end of the meeting, the representative explained they would discuss the partnership opportunity with their colleagues and get back to the team.

4.3.4.8 National Technical Museum

The National Technical Museum is a museum in Prague with exhibits that display various technical and scientific fields. They have exhibits on topics such as astronomy, metallurgy, and printing. The team encountered scheduling difficulties with the museum because the team was only in Prague until December 11th, and the museum was unable to meet until December 13th. To accommodate the scheduling issue, the team coordinated a meeting between the museum and the Prague center directors.

4.3.4.9 Summary of Meetings

The seven meetings between the team and potential sponsors produced a range of interest levels and enthusiasm. While organizations like Zoo Praha and CIEE Prague agreed to become a sponsor for the following year, other organizations, such as PostBellum, expressed interest in learning more without a verbal agreement. Some common concerns that several organizations asked about include: how much time commitment is necessary, what are the students' capabilities, is there any financial burden placed on the partner organization and identifying the next steps if they expressed interest. Moving forward, the team put organizations interested in continuing discussions about a partnership in touch with the center directors to formalize agreements.

5.0 Recommendations

Recommendations from this report target both future students participating in establishment IQPs and project center directors. The team highly recommends future establishment teams to utilize as much of this report as possible. Although the team referenced previous establishment IQP reports, differing cultural experiences led to a variety of adaptations and results. Project centers in countries like the Czech Republic may benefit from the information in this report. The team believes this report is a foundation for future students allowing them to save time on their own establishment project.

The content of this seven-week project is part of the continual work of WPI center directors year-round. The team's suggestions are meant to benefit the current Prague center directors and any other directors in their search for partner organizations. The methodology and results of this project may produce efficient strategies for centers in countries with culture similar to that of the Czech Republic.

5.1 Recommendations from Objective One

Although, the wisdom gained from the center director interviews were valuable throughout the project and guided many decisions in the project, the amount of time spent inhibited an early search for potential partners. The original intention of objective one was to gain a resource for vital criteria of high-quality partners. The interviews assisted the team's decision-making throughout the entirety of the project, such as how to contact and inform organizations about the IQP program. Although future establishment teams may choose to conduct their own interviews, the team recommends analyzing this report and other previous IQP reports instead, to save time and focus their efforts on making connections themselves. Conducting interviews, analyzing transcripts, and editing them for conciseness consumed three

weeks of time and restricted the team's ability to expand the project center by delaying the process of reaching out to potential partner organizations. This report and previous others already detail the necessary criteria for suitable IQP sponsors. Future establishment teams can gain plenty of beneficial information from reading the transcripts of these interviews. This project focused on interviewing center directors of locations similar to the Czech Republic, so future establishment teams may want to interview specific center directors to understand the culture related to their own IQP center. If future establishment teams decide to conduct their own interviews, the team recommends using the program Otter.ai as a transcription service. This program worked well in providing an initial transcript from an audio file, although it will require a member of the team to edit the auto-generated transcription to fix any mistakes or discrepancies the program does not catch.

Another recommendation the team offers is for WPI to conduct an annual center director gathering. At the conclusion of several center director interviews, the interviewee(s) requested the team send them a copy of this report so that they could see how other center directors had answered the questions. This is a clear indication that center directors have an interest in seeing the management methods of project centers other than their own. If WPI were to coordinate a meeting of all the center directors, the more experienced and established center directors could offer information and methods they have learned throughout their time as a director to the less experienced center directors.

5.2 Recommendations from Objective Two

This team was fortunate to find a helpful ally to identify potential partner organizations incredibly early into the project. Ms. Eva Illernova was an immense help, and the team encourages future establishment teams to find an intermediate contact to interview and gain as

much contact information as possible with potential partner organizations. Within this project, the team met Ms. Illernova during a tour of Prague organized by the CIEE organization that provided housing for this year's Prague IQP. Future establishment teams must be open-minded and willing to pursue any potential leads. Direct connections between intermediary contacts and potential partner entities bypasses one of the most difficult steps in an establishment project, initial contact. Connecting with a potential partner organization through an intermediary contact bolsters the perceived legitimacy of the team in the eyes of the entity.

The team strongly recommends utilizing online research to identify as many potential partners as possible. There is a multitude of different viable organizations for IQP partnership. The team suggests future establishment teams search for academic institutions such as museums, schools, and libraries. Students should also focus their searches on NGOs, since they may truly benefit from the work of an IQP due to lack of funding or employees. If students proceed with contacting an NGO, they must be extremely clear on the minimal cost and time requirements towards their employees.

The team suggests that future establishment teams stay observant during their personal explorations of the center location. If a team member notices an entity that piques their interest, the WPI project database serves as the perfect resource to find any past projects relating to that organization. The database allows students to verify if an entity could produce a suitable project for future students. These past projects also helped the team while they informed entity representatives about the IQP program in objective three.

5.3 Recommendations from Objective Three

The team has several recommendations about meeting with potential partner organizations. Firstly, it can be beneficial to research the representative that will be at the meeting, so the team can easily understand and ease any concerns they may have. To illustrate this point, the representative from the National Museum had a background in information sciences. They expressed interest in data science and how a team's data collection could benefit the museum. Knowing this information prior to meetings allows future teams to provide example projects relating to the representative's specific field.

The team also recommends that any future establishment IQP teams working to develop relationships with potential sponsor entities become familiar with as many different types of projects as possible. Students can accomplish this by reading the abstract of projects in the WPI Gordan Library student database. An important part of meeting with potential partner organizations was tailoring the example project slides in the informational presentation to relate to the work of the organization the team met. Additionally, following a meeting with an organization, the team often sent several more project examples in an email. Being familiar with many different types of projects will aid future teams in providing example projects to potential partner entities. Moreover, providing sample projects showed the organizations that the team had researched them prior to the meeting to strengthen the relationship.

The team found that many of the organizations they met with were concerned about designing a project that satisfied the requirements of the IQP while also benefiting the organization. To alleviate these concerns, the team explained that the center directors would work closely with the organization to create a project that was valuable to both the organization and the students. The team also explained that the center directors would aid the organization in

writing the project description. The team found this to be very comforting information for potential partner entities to hear and recommend the WPI representatives emphasize this information in any future meetings with potential partner organizations.

5.4 Other Recommendations

While the following recommendation is unrelated to the team's completion of the project, the team believes that this information is important for the Prague center directors to consider. The team recommends that in future years the Prague center conducts projects in a different term, preferably A or D term. While there are some benefits to a B term IQP, namely visiting the Christmas markets taking place across the country, there are also downsides. Most importantly, many government organizations that could potentially be project sponsors are extremely busy during B term as that is when many organizations must compile all their end of year reports, which leaves them unavailable to dedicate time to students for an IQP. This was a concern for the representative the team met with at the National Museum.

From the perspective of students exploring the different opportunities the Czech Republic has to offer, most of the castles in the Czech Republic close at the end of October and tours become limited to only allow outdoor visitation. There are many hiking opportunities in beautiful locations such as the Bohemian Switzerland National Park, but these hikes are not as pleasant as they could be, due to colder temperatures and less-than-ideal weather.

6.0 Conclusions

Over the seven-week ID2050 term, the team designed the methodology to understand the qualities and criteria which lead to successful partnerships and projects for both sponsors and students. Once in Prague, the team redesigned the methodology after understanding the expectation level of the sponsor, Professor Deskins, for the project. One of the largest shifts the team implemented was utilizing intermediate contacts for organizations. The team found the intermediate contact interviews incredibly insightful and contacted many organizations as a result.

While in Prague, interviews with other WPI center directors, research of organizations, and meetings with representatives of interested organizations resulted in connections formed between eight different organizations that could move forward as future sponsors. The team reached out to thirty-five different organizations, eight of these entities expressed interest as a potential IQP partner with two informally agreeing to work with WPI for the following year. Additionally, in the process of reaching out to the organizations, the team created a contact network diagram, emphasizing the connections which led the team to each organization, and a contact information database, containing pertinent information of the organizations and the representatives within them. This information allows Professor Deskins to continue conversations with potential partner organizations and further the establishment of the Prague Project Center.

The city of Prague is rich in culture and opportunities that offer plenty of resources for future projects. Over the course of this project, the team has completed the goal to identify, inform, and establish relationships with potential sponsors in order to produce projects assisting the WPI Prague Project Center in expanding opportunities available to students.

References

About Ashoka. (n.d.). Ashoka Envisions a World in Which Everyone Is a Changemaker.

Retrieved October 8, 2021, from https://www.ashoka.org/en-us/about-ashoka

About Us. (n.d.). *Pragulic*. Retrieved October 1, 2021, from https://pragulic.cz/en/about-us/

Allegrezza, M., Salvino, A., Stern, J., & Tepe, A. (2021). *Assessing and promoting intersectional*

approaches among the Ashoka fellows [Interactive Qualifying Project]. Worcester

Polytechnic Institute.

https://digitalwpi.wpi.edu/concern/student_works/v979v590z?locale=en

Bragaw, B., Dyer, P., Gruner-Mitchell, R., & Larkin, B. (2021). *Identifying Community*

Development Opportunities for the WPI Hawai`i Project Center [Interactive Qualifying

Project]. Worcester Polytechnic Institute.

https://digital.wpi.edu/concern/student_works/9880vv137?locale=en

Britanica, T. E. of E. (2020). Sudetenland. In *Encyclopedia Britannica*.

https://www.britannica.com/place/Sudetenland

Britanica, T. E. of E. (2021). Munich Agreement. In *Encyclopedia Britannica*.

https://www.britannica.com/event/Munich-Agreement

Carrier, D. (2012). Art and National Identity: Some Museums in Prague. *Curator: The Museum*

Journal, *55*(2), 227–232. https://doi.org/10.1111/j.2151-6952.2012.00142.x

Carter, F. W., Osborne, R. H., & Kazimour, J. (2020). Prague. In *Encyclopedia Britannica*.

    https://www.britannica.com/place/Prague

Casserly, M. O., Chavez, S. R., Cervone, G. M., & Santamaria-Hopkins, D. (2021, May 13). *La*

    Makana y el Publico. Worcester Polytechnic Institute.

De Pauw, M., Weatherburn, A., D'Agostino, S., Catteau, F., Briere, D. C., Barboza, J. Z., Ellen,

D., Feirabend, & De Hert, P. (2021). *Franet national contribution to the fundamental human*

    rights report 2021 (p. 125). European Union Agency for Fundamental Rights.

    https://researchportal.vub.be/en/publications/franet-sr37-contribution-to-fundamental-

    rights-report-2021

Falvey, C. (2011, December 13). *The bombing of Prague from a new perspective*. Radio Prague

    International. https://english.radio.cz/bombing-prague-a-new-perspective-8558194

Fox, B., Friel, E., Gonsalves, L., & Marquez, J. (2018). *Public Art, Collaboration, and Serious*

    Fun: Opening Dialogue and Building Trust in Tirana, Albania [Interactive Qualifying

    Project]. Worcester Polytechnic Institute. https://digitalwpi.wpi.edu/pdfviewer/0c483j933

Heintzelman, L. (2016). Gender Inequality in the Czech Republic: Institutional and Societal

    Barriers to Equality. *Perspectives on Business and Economics*, *34*(7).

    https://preserve.lib.lehigh.edu/islandora/object/preserve%3Abp-9432687

History Matters. (2019, April 26). *The Velvet Revolution and Breakup of Czechoslovakia*.

    https://www.youtube.com/watch?v=h4KbZIRgSkg

How Theater Professionals Helped Stage The Velvet Revolution. (n.d.). Retrieved October 8,

    2021, from https://en.currenttime.tv/a/30274230.html

Jakub, M., Vágnerová, M., & Csémy, L. (2011). Developmental and Psychosocial

    Characteristics of Young Adult Homeless in Prague. *Procedia - Social and Behavioral*

    Sciences, *30*, 1888–1893. https://doi.org/10.1016/j.sbspro.2011.10.367

Kent, A., Kieselbach, R., Miller, K., Sottolano, R., & Vesella, S. (2007). *PreserVenice:*

    Preserving Venetian Public Art [Interactive Qualifying Project]. Worcester Polytechnic

    Institute. https://digitalwpi.wpi.edu/concern/student_works/b2773w070?locale=en

Law, J. L. (2018). Nongovernmental organization. In J. Law (Ed.), *A Dictionary of Law*. Oxford

    University Press.

Merriman, J., & Winter, J. (2006). Velvet Revolution. In *Europe Since 1914: Encyclopedia of*

    the Age of War and Reconstruction (Vol. 5). Charles Scribner's Sons.

Mihaleva, R. A., Petros, E. M., Drake, M. L., & Silvera, A. J. (2021, March 18). *Cultural*

    Preservation at Casa Museo de la Makana in Gualaceo, Ecuador. Worcester Polytechnic

    Institute.

Miller, H. I., Wang, Y., & Langstaff, M. (2021). *Expanding Recruitment at the Hangzhou*

    Project Center [Interactive Qualifying Project]. Worcester Polytechnic Institute.

    https://digitalwpi.wpi.edu/concern/student_works/7m01bp69d?locale=en

Mirońska, D., & Zaborek, P. (2019). NGO—Business Collaboration: A Comparison of

Organizational, Social, and Reputation Value from the NGO Perspective in Poland.

Nonprofit and Voluntary Sector Quarterly, *48*(3), 532–551.

https://doi.org/10.1177/0899764018797476

News. (2021, September 30). *Czech News Agency (Czech Republic)*. Access World News.

https://infoweb.newsbank.com/apps/news/document-

view?p=AWNB&docref=news/1855659512AEC6A0

NGOs (Nongovernmental Organizations). (2020). Gale Global Issues Online Collection.

https://go-gale-com.ezpv7-web-p-

u01.wpi.edu/ps/retrieve.do?resultListType=RELATED_DOCUMENT&searchType=ts&

userGroupName=mlin_c_worpoly&inPS=true&contentSegment=&prodId=GIC&docId=

GALE|CP3208520078&it=r

NGOs, Political Protest, and Civil Society. (2017, October 11). Political Science.

https://www.colorado.edu/polisci/ngos-political-protest-and-civil-society

PreserVenice. (n.d.). Retrieved October 8, 2021, from http://preservenice.org/about.html

Project Center Directory. (n.d.). WPI. Retrieved September 23, 2021, from

https://www.wpi.edu/project-based-learning/project-based-education/global-project-

program/project-centers

Roemer, J. E. (1998). *Theories of Distributive Justice*. Harvard University Press.

  https://books.google.com/books?hl=en&lr=&id=qQkX24xj9akC&oi=fnd&pg=PA1&dq=

  distributive+justice&ots=5uHWMo5XFk&sig=wINe_WDGX4jbDj6zkc7kkKb7bxg#v=o

  nepage&q=distributive%20justice&f=false

Saldaña, J. (2008). One: An Introduction to Codes and Coding. In *The coding manual for*

  qualitative research (pp. 1–31). SAGE.

Smith, M. L., & Matějů, P. (2012). Two Decades of Value Change: The Crystallization of

  Meritocratic and Egalitarian Beliefs in the Czech Republic. *Social Justice Research*,

  25(4), 421–439. https://doi.org/10.1007/s11211-012-0164-9

Sponsor a Student Project. (n.d.). WPI. Retrieved October 13, 2021, from

  https://www.wpi.edu/employers-partners/sponsor-student-project

The 15 Best things to do in Prague. (2020). TripAdvisor. https://www.tripadvisor.com/

The Fall of the Soviet Union | CES at UNC. (n.d.). Retrieved October 12, 2021, from

  https://europe.unc.edu/iron-curtain/history/the-fall-of-the-soviet-union/

Timelines Explorer—Data Commons. (n.d.). Data Commons. Retrieved October 8, 2021, from

  https://datacommons.org/tools/timeline#place=country%2FCZE%2Ccountry%2FSVK%2

  Ccountry%2FPOL%2Ccountry%2FHUN&statsVar=Amount_EconomicActivity_GrossD

  omesticProduction_Nominal_PerCapita

Tourism—2019. (n.d.). CSO. Retrieved October 13, 2021, from

https://www.czso.cz/csu/czso/home

Trevor-Roper, H. R. (1948, August 8). Munich—Its Lessons Ten Years Later. *New York Times*.

https://www.proquest.com/hnpnewyorktimes/docview/108390954/fulltextPDF/EE2C52B

77D44C83PQ/6?accountid=29120

Ústředí NADĚJE - nadeje.cz. (n.d.). Retrieved October 1, 2021, from

https://www.nadeje.cz/ustredi_nadeje

Vusilović, M., Kubala, R., Gočev, P., Šteg, J., Tkáč, P., Kozák, V., & Tožička, T. (2021).

Corporate interests are crushing democracy and the planet | Social Watch.

https://www.socialwatch.org/node/18607

World Tourism Organization (UNWTO) (Ed.). (2019). *International Tourism Highlights, 2019*

Edition. World Tourism Organization (UNWTO).

https://doi.org/10.18111/9789284421152

Zellerbach, K. C. G., Hartshorn, A. J., Ostapenko, A., & Dupuis, J. H. (2018). *Investigating the*

Feasibility of a Project Center in Iceland [Interactive Qualifying Project]. Worcester

Polytechnic Institute.

Appendices

Appendix A: Interview Questions for Center Directors

Hello <<INSERT NAME>>,

We are the Prague Future IQPs team consisting of Matthew Amodea, Emily Gorelik, Benjamin Sakac, and Andrew Sifferlen. We are identifying potential sponsors for the Prague Project Center as part of our Interactive Qualifying Project in B21. We hope an interview with you will help us gain a better understanding of how to make a project center stable and successful. We would like to inform you that this interview is voluntary, and you may withdrawal at any time. With your permission to record the audio of this interview, we will develop a transcript for our report. We will omit any personal information and you may remain anonymous unless otherwise stated. You do not have to answer any questions you do not feel comfortable with answering. Would you like to continue?

A.1 How many years have you been a site director?

A.2 Are you an original center director for your location?

A.3 How many site directors are there currently for your project center?

Sponsor Characteristics:

A.4 Approximately how many sponsors do you work with at this project center in a given year?

A.5 How many sponsors are in the rotation?

A.6 What are some common characteristics you have noticed among successful sponsors?

A.7 What do project centers have to do to secure a sponsor for multiple years?

A.8 In your opinion, what are WPI's expectations for IQP sponsors?

A.9 If there were any, what were some hurdles or obstacles you have faced with working with sponsors?

Techniques for finding sponsors:

A.10 What is the process you have used to approach a potential sponsor?

A.11 What were some difficulties you faced while trying to acquire new project sponsors?

A.12 What information do you discuss in preliminary meetings with these organizations?

Lessons learned:

A.13 What characteristics of a project make some more successful than others?

A.14 Have you seen any difference in successful project with social, economic, or cultural ties?

A.15 Do you have any insight on remote vs local projects?

A.16 What type of projects often lead to obstacles or difficulties?

Suggestions for success:

A.17 Do you have any suggestions or tips that will lead to the success of our project?

A.18 Are there any other center directors that you believe would be beneficial for us to reach out to?

A.19 Would you be willing to send us recent project descriptions from the past 3 years?

Appendix B: Interview Transcript with Professor Goulding

Matthew Amodea

How many years have you been a site director in London?

Professor Golding

I've been directing London since 2009. And directing Nantucket since 2009.

Matthew Amodea

Are you an original center director for this location?

Professor Golding

Not for Nantucket. I took over a year after Mike Elmes. Are you just interested in London or
Nantucket or both?

Emily Gorelik

*Focus on London because it was a part of the European Union, but we will take any valuable
information that you have to give.*

Professor Golding

I took over London. They started projects in the 70s as exchange programs and officially we
started in 1987. I've been directing it since 2009. I was co-director with Rob Krueger, who's a
professor in the social science department, for several years. Then he went off to direct the
Worcester, England Project Center so I've been directing it by myself for the past five or six
years.

Matthew Amodea

How large are those sites? How many sponsors do you work with each year, would you say?

Professor Golding

Well, London varies over the years, sometimes we do three terms in a year. When I took over with Rob Krueger in 2009, we were only doing two terms a year. And then, because of growth in the program, we've done, we did three terms in 2019. And then the pandemic hit, and we dropped back to two, and they were remote doing two terms this next year, and we will probably bump it up to three again in 2023. So, it varies. Typically, we're looking at 18 projects a year if we're doing three terms or 12 projects a year for two terms. We've worked with well over 100 different sponsoring organizations in London, I think we've probably had about 1600 students, and 450 projects.

In Nantucket we usually do six projects a year, just one term. Tt's probably 30 different organizations that we work with there.

Matthew Amodea

So, speaking about the London site, that's 18 per year. And are all those sponsors active? Do they participate every year?

Professor Golding

No. Usually, there's usually a core of sponsors that will have a project most years, but then there's some that take a year off. We're always looking for new sponsors. But the pandemic screwed us up entirely. It's going to be a struggle for the next couple of years rebuilding that network, because many of the people that I've dealt with for years have left the organizations that they were with, or the organizations have gone under. It's going to be a question of rebuilding that network.

Matthew Amodea

So, after you said it had gone down a little bit, how many sponsors would you say you've had in your rotation currently. Not all of them are active, but are you able to reach out at any time if necessary?

Professor Golding

I'd probably actually have a list of about 35 organizations that I might work with. I try and track as many organizations as I can, some are going to come through one year and not the next. I probably have a list of 100 people that I keep in touch with, but I would say 35 organizations are the ones that make up the active three to five organizations for a project term. And then many have projects every year. But like I say, I'm in the British Museum, for example, we do projects with the British Museum for a long time. And oftentimes, we'll do two projects in a year with different parts of the museum. It's a big museum. This year, they can't do any [because of covid] …

Matthew Amodea

I'm sure we have some questions later about this. But in the future, we're also going to be looking into museums. So that's, that's a good thing to hear. But with that, we'll now ask a couple of questions about what makes a successful sponsor?

Benjamin Sakac

So, along those lines, what are some common characteristics that you've noticed, among successful project sponsors?

Professor Golding

Um, well, it depends on what you mean by success and how you define success.

Matthew Amodea

I would say that our definition of success is broad. It would be their success in maintaining consistent contact with WPI. If they need to get in touch with the group that they are sponsoring, and their reliability to communicate with the project team also.

Professor Golding

Well, because a lot of organizations that we work with have worked with student teams before, they know what they're getting into. We assume that they had a good experience. They want to do another project. That also means that they have experience managing and interacting with students. So, it's less of an issue with repeat sponsors, they know what's wrong. So, what do you mean by success? It's all over the board. Is the organization supportive? Is the project high quality and deliver educational experiences and value to the students? There's a whole bunch of characteristics that one might use to determine what makes a good sponsor and how you might measure success.

Matthew Amodea

Are there any characteristics on the opposite end? Are there any problems that you have noticed with new sponsors, non-repeated sponsors, that were kind of like a red flag?

Professor Golding

Well as a center director you have to apprise [the sponsors] of what the expectations are. They've never done it before. … It's a process of education, but it doesn't really mean much until they've been through their first project experience. … A couple of years ago in London we had one sponsor who wasn't responding during the prep term for the students. It appeared that they were defining the project in a very narrow way, and they basically wanted students to come in almost like interns, and just bang in a bunch of stuff into a computer. That's what we want to avoid. So, we want them to know that a project must be intellectually substantive and meet WPI's needs as

a bona fide academic research project. They're not just there to bang [out work] day in and day out or set up chairs for events, or whatever it happens to be. Those are sort of red flags you'd watch out for when you're talking to people initially, about what it is they have in mind that the students might do, you monitor it during the prep period. … There's a lot of moving parts here. You've got the advisors involved, as well as the sponsoring organization, then you've got the team. So, trying to figure out if you have a project that doesn't go as well as you'd hoped for and figure out why it didn't go as well as you hoped, can sometimes be difficult, especially since I'm a director, I'm not advising all the projects. I can't be there three times a year, or even twice a year. It depends on what kind of feedback you get from the advisors and the students. But the biggest problem I would say is sponsors don't understand that this is an intellectual exercise.... You try and define the projects as a center director when you set the project up, write the project description, brief the advisors and the students on what the projects are about, you try and ensure that there's enough intellectual heft in there that those students aren't going to be doing those kinds of mundane tasks. But the other the other thing is that I think a lot of WPI, faculty, advisors, other standard directors there's sometimes this problem: what's an appropriate project for the IQP as distinct from an MQP. There are times when IQP projects start to blend into very much more technical projects that are more appropriate for MQP than they are for IQP. The IQP is meant to be more a project with technical components, but more social science based.

Matthew Amodea

Yes, so you did mention the museum that you've been talking about and how it's been a sponsor for quite a while. Are there any specific techniques or things that a project director must do to keep these organizations to hang on for all these years?

Professor Golding

Yes, have good teams doing good projects. Primarily, you have to you build a network based on word of mouth early and so we've been working with museums in London long before I came to direct the Project Center. I happened to have worked in museums previously in the [United] States, so I feel very comfortable working in a museum environment and doing the prep for students. It's easy for me to walk-the-walk and talk-the-talk when I'm dealing with museums, but I think other faculty also like working with museums. Museums are great because they are educational institutions; they understand the educational endeavor, even if they're engaged in what we call informal education, rather than formal education. They understand the educational endeavor writ large. They can see that there must be an intellectual piece of the project over and above what it is that they might be most interested in. So, you can design projects that are both able to deliver what WPI wants in terms of an academic project, but also able to deliver something that is of value to the museum. They're usually good because they're big institutions. So, you don't have the problems that you have working with small nonprofits. Obviously, there are small museums too, but when you're working with larger museums, they're more stable in terms of their ability to support a project. One of the problems working with like small nonprofits: environmental groups and groups that are delivering services to the local community, in one way, shape, or form, is when they're small nonprofits, they are sort of up and down on what contracts they've got, what grants they've got, the staff they've got, and so they can end up pulling the rug out, even before you get to send a team to them. Then you're scurrying around as center director trying to find a different replacement project. Whereas the big museums, until the pandemic anyway, were somewhat more stable. If staff move on, there are other staff that move into those positions, and oftentimes, they'll hand you off explain to the people that follow on. So, it gives you a sort of continuity you don't always have in other organizations.

Emily Gorelik

So, you mentioned that already that a good sponsor has a lot of communication with the students. But we want to know that, in your opinion, what are WPI expectations of sponsors? And what should we be looking for when we are researching organizations?

Professor Golding

Well, at minimum, the expectation is that they are going to provide a good project intellectually, the project description, that lays out what the expectations for that project are. Different center directors do it in different ways. Typically, you do it by example. So, you might share with those potential sponsors previous project descriptions, so they can see what level of detail they need to write up for the description of the project. I try to get them to lay out the nature of the problem they are trying to address, a little bit of background about the institution itself, and then a set of what they see as some of the prime goals and or deliverables that they would like to get out of the project. So, you try and coach them in shaping the project to meet all those pieces. Then you have to explain to them how this works if they've never done it before. … Our sort of minimum requirements are really that they provide a quality project, that they are willing to have somebody to oversee the students whilst they are on site, that they will meet once a week with the academic advisors and the team to discuss the prior week's progress and what's coming up, that there'll be a final presentation where they'll present student team will present their results and a final report, and then there may be a set of other deliverables that can be agreed on between the team, the advisors, and the sponsoring organization. Basically, you want to know that the organization is going to provide a safe place to work and an interesting project and the support that students need to be able to conduct that project during this seven-week period.

Emily Gorelik

This is all incredibly useful, thank you very much. We were also wondering if there are any hurdles or obstacles that you faced while working with any sponsors, and if there are certain types of organizations we should avoid working with, or just some red flags that we should be aware of looking out for.

Professor Golding

The biggest hurdle usually is just maintaining a sufficient number of interested sponsors and maintaining that network. Word of mouth is often the best way, so from one museum to the next. And then from one community group to another from one, we do a lot of work. Basically, in London we do work with museums, local authorities, government organizations, and other nonprofits typically delivering community services. Maintaining word of mouth from people ready in those sectors is the best way to develop the network. But the biggest hurdle is really maintaining that network. So that you've always got a ready supply of projects. I think that what I would say is my biggest problem. But it's also one of the most enjoyable parts of being a center director is you maintain that whole sort of network of people that you're in touch with all the time.

Emily Gorelik

So, you mentioned that museums are great sectors to work in as well as government organizations. But are there any sectors we should avoid in your opinion?

Professor Golding

I don't work with private companies. I will leave that to the MQP. Private companies would want a different set of deliverables. I have done some work with private companies, but relatively few. Usually, they want a different thing. They are not interested in intellectual exercise unless they are extremely broad-minded. It becomes more of a consulting relationship. They have hard and

fast deliverables that they want to achieve so it does not give you as much flexibility to shape it as an intellectual exercise that will meet both the sponsors' needs, but also the WPI's needs as an academic exercise.

Emily Gorelik

Thank you very much. And I'll hand it off to Matthew now to ask some more questions.

Matthew Amodea

What is the process that you have used to approach a potential sponsor? Was it for example, did you find them through mutual contact or was it through the front door?

Professor Golding

It's usually through mutual contact or networking. Cold calling is usually not a good way to identify sponsors. So, ask people you already know to recommend others. If it's sponsors you had worked with whether it's others within the organization or others outside the organization. But in London I now have a local coordinator to help me in London since we started doing three terms a year again, back in 2019, or the plan was to do in 2019 and so forth. Because of COVID, we only did two. But we were starting to ramp up in 2019, going back to doing three turns, and I say I couldn't handle all those contacts. I'm not in London often enough; I needed a local coordinator. We now have a local coordinator do that and are trying to expand the network beyond our existing set of sponsors. We may end up doing some cold calling of organizations to get into organizations that we haven't worked with before, or certainly not recently. We have some materials, promotional materials, we have a website that we point people to see what kinds of projects have been done before. We have some basic advice that we give potential sponsors. But as I say, cold calling is not very easy or effective. As much as we can, we rely on other contacts to get a foot in the door. But we'll probably do some promotional video that we can

circulate with other promotional materials, but by and large the kinds of questions people have, when you're approaching a new sponsor, what kinds of projects are what what's entailed in a project, what projects have you done in these topic areas. I will point them to previous reports, students have written as examples of projects we've done in this area or in that area and so forth, so they can review those. We will provide them with the names of other sponsors, whom they might want to talk to, to get a sense of how the program works from their end. You try and give them an honest assessment of what commitment is. Typically, in London, it's probably about four to five person hours per week, that student teams end up taking in terms of supervision. It depends on the project and the organization, and how involved the folks at that organization want to be. …

Matthew Amodea

So, you mentioned before, it seems like a unique situation to be in, where you have such a large network that your issue almost lies within, you can't get over to London enough to maintain that network. Do you have any other difficulties while trying to acquire new sponsors other than the lack of time to go to London?

Professor Golding

The biggest problem you have is sort of initial tentative conversations with people and then they pull out at the last minute, and you're scurrying around trying to find a project. That can be problematic. … I think you constantly worry about getting stuck in a rut. Should you be trying new sponsors with different kinds of projects? You don't want to keep replicating similar projects. In some ways, it's fine to do projects that are similar, the student teams are always different. …

Benjamin Sakac

You've touched on this a little bit already. But what information do you typically discuss in preliminary meetings with potential sponsors?

Professor Golding

I usually give [the sponsor] an overview of how the program works. In London, and elsewhere, I always emphasize that this is not like a typical student placement scheme, [the sponsor] is not going to get somebody showing up at your door who doesn't know the first thing about what [the students] are meant to be doing. [The students] are going to be well trained as much as we can in seven weeks. That this is what [WPI] expects from [the sponsor] and this is what they can expect from us. It's just trying to be very clear about what the expectations are, the logistics, and the expectations. What can they realistically expect to get out of a project, and how much they're going to have to put in to get that out? I tell sponsors that we do not typically expect them to have a lot of interaction with their team before the team arrives on site, but it's going to be to their advantage to have some interaction with their team during the prep. I usually say that they can expect the team will contact them in the first week of the prep term, and then set up a schedule for subsequent meetings. They might only meet three times during the prep term. I tried to be very clear about that. We don't want to nickel and dime them to death. On the other hand, if they're able to give more feedback, pass on more information about the project about the organization about the problem at hand, and spent time with the students during the prep period, then the team is going to be better prepared when they get there, but I don't want them to feel that they're obliged to do that. Most of that happens when the students get on site. I think just being very clear, and not over promising what you can deliver, being very clear about the expectations and not over promising.

So oftentimes, you'll have [projects] where people are interested in prototyping a possible app for a museum or prototyping an exhibit element, not typically an entire exhibit, which is far too big. I will say, don't expect that you're going to get a finished app that you can just hand off to visitors. Don't expect that you're going to have a finished educational program that you can just implement with parents and kids to come to the museum. You will have a good prototype of what the app might be. You will have a good set of materials and prototype of what the program exhibit might be. But [the sponsor] is going to have to take the next steps. Because if you promise that you're going to have a finished app, or a finished exhibit, you're probably not fooling anybody. If you are working with a museum, they know how long it takes to develop an exhibit.

Andrew Sifferlen

You just touched on, for example, an app for a project. Do you see any specific characteristics of a project that make it high quality or successful or follows WPI is plan for students to be enriched?

Professor Golding

My goal typically is to get students [a project] that has a bit of a technical piece, but the IQP is meant to have all these other [elements]. … I want them to interact with people. I want students to be able to conduct an intelligent conversation with professionals in the field. They have to be able to mold the lexicon that's used in that sub discipline, whether it's museum studies, or whether it's climate change policy in a local bar, they need to know the language, they need to know something about previous policies or previous practices in the museum. So, they can talk to professionals in a museum world sensibly about what it is they're trying to do. On the other end, I want them, if possible, rather than trying to develop all the bells and whistles of an app, is

to develop some pieces. Then then take it out on the museum floor and test it with members of the public. Because one of the great learning experiences, I think oftentimes students can develop all these bells and whistles, but what do people on the museum floor think about it? Do they recognize that green button on the left is one meant to push and the red one on the right does something else. So, I want them to go out on the floor. … So that would sort of be an example of the app thing. …

Emily Gorelik

Moving on to the actual types of projects. Is there any project that often leads to obstacles or difficulties that should be avoided?

…

Professor Golding

I don't think there's any projects that you should necessarily avoid, I think you just have to try and shape them, so that they are do-able in the time available and with the kinds of resources, intellectual or otherwise, that students will have. Because you don't want to set [sponsors] up for disappointment. You don't over promise to the organization. Any of these projects that involve designing something, it's always good to say that you shouldn't expect a finished product, whether it's a physical widget kind of design, or its design of an educational program, or something along those lines. Rather, it's going to be something that may need [the organization] to finish it off. I think what you want to avoid projects that can be done more easily remotely. I had a couple that got more into just web design, for example, where it was more about the product than it was the process. And the process wasn't the educational experience you want because it was devoid of that ability to interact with others, it became much more technical. So that would be that would be my main concern. Yes, there are other ones. It was a few years ago,

working with an organic farm outside London. What they were doing was great, trying to produce organic vegetables, farm to table in an urban environment. But really, what happened was, they just expected the team to show up and weed the gardens. That's not what we want either. … You have to be clear that students are not there to just do manual labor, or whatever. So, you have to watch out, you don't get sucked into that. Sometimes what happens when students are working at a museum, or they're working at local council, government agency, there is a big event planned, climate change conference in the borough, or a program at the museum, and they might be asked to help. That could be helping at the climate conference ranges from putting out chairs, giving a little presentation about their product in the middle, and then helping put the chairs away at the end. The students will come to me and say 'well, we're not meant to be putting chairs out, are we?' and well, 'how long did it take you?' This is all part of developing the camaraderie and the relationships with the people you're working with. They're all putting out chairs too, it might be the director of the museum. But the idea is, sometimes you have to mock in on most things. That's part of becoming part of an organization, learning how it operates, and getting to know the people who work in it. But what you don't want is that they show up every day and what they're doing is putting out chairs. …

Matthew Amodea

So, up to this point, you've given us a ton of helpful advice with how we approach sponsors and potential projects and organizations that we should look for and against. For example, having clear expectations and avoid private entity companies. Do you have any other suggestions or tips that you have specifically for us being in a foreign country with a big language gap, and still a new program here in the Prague center?

Professor Golding

Well, what else are you going to be doing? Are you hoping to meet with potential sponsors? You are going to be able to recruit sponsors.

Matthew Amodea

Yes.

Professor Golding

How are you going to go about that?

Matthew Amodea

We thought it was going to be a lot of cold calling, but as of right now, it seems [other center directors] have told us that's not a good idea so we want to learn as much information from yourself and other site directors.

Professor Golding

So what sectors are you looking at? You're interested in museums, is that because the center director thinks museums would be good thing?

Matthew Amodea

Yes, our center director, Professor Aaron Deskins, loves the idea of going down the route of museums and cultural items, such as puppetry is big here. It's a big tradition.

Professor Golding

Yes. If you can find out if there going to be like a meeting of a bunch of folks from different museums that you could go stand up and give a little presentation? Then people will come up to you afterwards and say, 'Oh, I'm really interested in that. Can you tell me more?' So, if you're able to get into an environment where there's a bunch of people together. Is there a puppetry convention, or something where a bunch of puppeteers are going to be together? So, for example, in London I'm a member of the Museum Association, I get their newsletter. Is there an

equivalent national or city related association where people come together that you could put a notice in about who you are and what you're doing, and see if anybody's interested in talking to you? Do they have any meetings coming up that you could gatecrash? But I think you could do the same for any organizations, is there a way to get in the in the door and on their agenda? Then you can you can talk to multiple people at once. Just getting in the door of a lot of these places. I mean, you may be lucky because people will be intrigued by the fact that there's a bunch of American students wandering around asking oddball questions. But the problem with walking into a museum is, who are you going to talk to? With big museums, you're probably not going to see the director. And most of the time, when I'm working with projects in London, we're not working with anybody at the upper management level, we're working with people who handle developing exhibits and programs at the ground level. … If you put yourself in the right place that could help. I'm not sure how you're going to do that.

Matthew Amodea

Yes, that's going to be our job. We have six weeks.

Professor Golding

Not as long as you think. But similarly, if you want to work with local government, or community groups, if there's a local sort of get together, or a local news letter that you can get yourselves into. Yes, you got to remember these sort of association news letters, they're looking for stuff to write. If you can make yourself into a story and the story would be: we're a bunch of students wandering around Prague, trying to figure out who might want to work with us. But yes, whatever leads you've got to get your foot in the door, quite honestly.

Matthew Amodea

Our best lead right now is with a tour guide that we had the other day, that gave us a tour of the city.

Professor Golding

Okay, well there you go. So, like I said, if you do a few more of those kinds of things, you might you might be able to work your way in somehow.

Matthew Amodea

And the last question, it's less of a question and more of a request, would you be willing to send us recent project descriptions that you've had, perhaps within the past three years or so?

Professor Golding

Yes, I can send you those. I mean, I'm not sure you want three years' worth, that would be a lot.

Emily Gorelik

Yes, I think three terms would cover it.

Professor Golding

Well, the past year probably wouldn't be helpful because they're all remote.

Emily Gorelik

Yes, the year prior to the start of remote projects ideally.

Professor Golding

… Yes. And you can go to the London project center website and see what stuff is posted there.

… All right so if I forget, prompt me and I'll send them to you.

Emily Gorelik

Thank you so much for your time.

Appendix C: Interview Transcript with Professor Sakulich

Emily Gorelik

How many years have you been a Project Center Director?

Professor Sakulich

It was 2014 that I became the center director for Panama and I became the center director for Iceland in 2018. Eight years for Panama and three years for Iceland.

Emily Gorelik

For either of those locations. Were you the original site director?

Professor Sakulich

For Iceland I was, for Panama I was not. Panama was started in 2010, I came on in 2014, and I pretty much took over.

Emily Gorelik

How many site directors do you currently have for Iceland? Are you working alone? Or do you have another center director with you

Professor Sakulich

It's just me for Iceland. Officially this year it's just me for Panama.

Matthew Amodea

How many sponsors do you work with at this Project Center in a given year?

Professor Sakulich

In Panama, we always have six IQPs... there's usually five or six sponsors a year because some of them do two projects. Some years, we have more sponsors than we need. I work with six but I had originally nine or so. In Iceland, it's a little bit more difficult, because I was just getting up to

a good number of sponsors, and then the pandemic hit, and none of them wanted to continue if we were going to do it remotely. In Iceland, it's three or four sponsors a year.

Matthew Amodea

Do you have many sponsors in a rotation? If you have a rotation at all?

Professor Sakulich

I don't have a rotation. I don't have enough sponsors to do that. I'm sure 20 years from now I'll be on rotation. I'll have plenty of sponsors.

Matthew Amodea

What are some common characteristics you have noticed amongst your successful sponsors?

Professor Sakulich

 I'll talk mostly about Panama, because it's only been three years for Iceland and it's hard to tell if anybody's in it for the long haul or whether they are successful or not. At least in Panama, it takes a personal relationship. I found some sponsors by just emailing people like, "my buddy said you might be interested in an IQP." Those projects always go okay, but it's not until the third, fourth, or fifth year when we've gotten to know each other and we've done a bunch of projects that a personal relationship really take off in a big way.

Matthew Amodea

Is there anything that you noticed that could let you tell that they're going to be a good sponsor in the future?

Professor Sakulich

I guess if I had to nail it down to one thing, it would be enthusiasm... If a sponsor is into it, then it doesn't really matter if they understand what the learning outcomes are and how many hours a week, they're expected to mentor our students. That's hard to predict. It varies from person to

person. I always contact museums because their people are super enthusiastic. When you see it, you know what I mean.

Matthew Amodea

What do project centers have to do to secure sponsors for multiple years?

Professor Sakulich

When I started the Iceland center, I did not have any people I knew there. I just sent out a raft of emails to people explaining what the IQP is. My success rate is about 5% in terms of the emails. In Panama, it came about due to the personal relationships. By sending out blind emails... you might get some sponsors, but then it'll take years to build that trust until they are comfortable with it. The best way is the university must send the center director over to the country for a while to meet in person and build that rapport.

Matthew Amodea

In your opinion, what are the expectations that WPI has for IQP sponsors?

Professor Sakulich

The official expectations: they've got to provide a place for the students to work, and they have to dedicate 10 hours a week to mentoring the young people and sending out information. That's a little bit much... I look at what is the point of a sponsor? The sponsor should be the one to give them the information and point them in the right direction. I've had sponsors that work 20 hours a week with the students because they're really into it. I've had sponsors that work one hour meeting a week where they say 'you should talk to this person or that person.' And both of those are perfectly fine models for being a sponsor.

Matthew Amodea

If any, what are some hurdles or obstacles you have faced while working with sponsors?

Professor Sakulich

Our program sounds like a scam... and because the IQP is so unique, convincing people that it's not an internship program is difficult. That initial contact and getting them to understand what the IQP is, is time consuming and difficult. Once you get over that hump, it's clear sailing. There's a lot of people at WPI, particularly in the marketing department, that over stress how much the sponsors get out of it. There has never been a project and IQP that would have been done faster, better, and cheaper if they just hired a local person to do it

Benjamin Sakac

What is the process you have used to approach potential sponsors?

Professor Sakulich

In Panama, a lot of it has been word of mouth recommendations, because I was not the first center director. We already had a couple partners and if I don't have enough one year, I'll go to the ones I do have and ask them if they know anybody. Six weeks later... I get an email back. In Iceland, it's been almost entirely sending emails. I looked up a list of all the museums in Reykjavik and just emailed. Sometimes it works out and sometimes it doesn't. It would be a lot easier if the university would send me to Iceland, then I could send emails to everybody ahead of time... go out and get a coffee, and talk about the IQP. That might be more productive.

Benjamin Sakac

What were some difficulties you faced while trying to acquire new project sponsors?

Professor Sakulich

When sending blind emails, 95% of them don't respond. The solution to that is sending more emails. If you only have a 5% response rate, but you send 1000 emails, you're going to have more sponsors than you know what to do with. In Panama, word of mouth and networking has

been great. The Panamanian work culture is different from the American one. I'm not saying it's better or worse. If I tell them I need the project descriptions by January 31, i'll get an answer February 10th. Which stresses me out and some years sponsors don't come through. At the last minute, I'm scrambling to find somebody. Not getting responses to blind emails is difficult and even with people I know. I'm aware that helping me out with projects is not anybody's top priority for their organization.

Benjamin Sakac

What information do you discuss in preliminary meetings, sponsor organizations?

Professor Sakulich

I talk about what kind of project the students would be able to do. In the past, I've started out with... 'we expect you to provide them a place to work and you got to meet with them'... That makes it sound ... like i'm trying to sell them something. Whereas if I start by talking about what kind of projects might be appropriate, they get excited, 'we've always wondered what the answer to this question is, but we don't have the resources to put any of our people on that project right now'... When it comes time to explain expectations, it's a little bit easier sell because they're already amped for the project.

Andrew Sifferlen

What are some characteristics of a project that you would consider higher-quality than other projects?

Professor Sakulich

One thing that's difficult with the IQP is a lot of universities and colleges require an internship to graduate... or a senior design capstone. It's not an internship. As long as the project is not an internship, it's the sponsor that makes good projects... This is the student's project and they can

take it in whatever direction that they feel is appropriate to meet the sponsors goals. As long as the sponsor has identified their goal, it's up to the students to make it a good project... A team of enthusiastic students will knock it out of the park... I really think it's the advisors and the students' job to make a good project, not the sponsors.

Andrew Sifferlen

Is there any type of project that you've seen to be more successful than others impacting a cultural aspect versus a social aspect?

Professor Sakulich

Not immediately off the top of my head. In Iceland, we do a lot of sustainability projects. But that's because... everybody there is super into environment sustainability. In Panama, for every project we have about arts and culture, we have another one about poverty and inequality. Off the top of my head, nothing immediately leaps out which is an easy subject to get people to participate in.

Andrew Sifferlen

Are there any specific projects that you've encountered over your experience that may have some type of obstacle to accomplish?

Professor Sakulich

If you have a motivated team of students, and you have advisors that can keep that motivation up, any project can be a success.

Andrew Sifferlen

Have you seen any differences in work ethic, or how successful a project is, depending on whether students are remote from where the organization is, or specifically working with them?

Professor Sakulich

I think the primary variable... is the student motivation and enthusiasm. ... It's really the motivation and the enthusiasm of the students that supersedes all other factors.

Matthew Amodea

Is there any big discrepancy in the quality of a project for smaller organizations versus larger organizations?

Professor Sakulich

No. In Panama, I've had students work with a university that has 1000 employees. I've had students work with one guy about cleaning up beaches. It's really the student enthusiasm that determines whether the project will be successful or not

Matthew Amodea

What were some of the projects that you did with museums, and how did you secure these?

Professor Sakulich

In Iceland, I just sent a random email. In Panama, it was personal connection that I had already worked with. Most of the projects had to do with either advertising the museum or managing the collection. Both museums had warehouses full of stuff, that their museum was not large enough to put on display permanently. They wanted an app; people could download to see pictures of the objects even if they were not on display. It was with a museum in Iceland that only had three volunteer employees. Museums are good because they usually do not have a huge budget. They have a budget for operations, but not a budget for planning and research. They can always make a little bit more use of student projects than other groups.

Matthew Amodea

What were some of the projects that went on at another school?

Professor Sakulich

A lot about sustainability. With the technological University, we developed a carbon footprint analyzer plan and a rainwater green reuse plan focused primarily on agricultural entrepreneurship. We do a lot of stuff about marketing, certain species of trees that grow on the property, and securing water supplies for the livestock through the dry season.

Matthew Amodea

Who do the students work with as their sponsor or professor?

Professor Sakulich

Usually faculty. If I go to a faculty member at a university, they would do a project on their research interest.

Emily Gorelik

Do you have any suggestions or tips for us, that will help us be successful in getting as many sponsors as we can?

Professor Sakulich

The only advice I can give is to be persistent in the sense of emailing, trying to get an introduction with everyone you can think of. The other thing is, you have to meet them in person. When you set up a project over email, it is just not a substitute for you to go and meet them in person and explain things and get to know each other. Zoom is a good middle ground because at least you can see each other. My advice to you would be when you cold-call somebody, make sure they know that you are students. People are usually happy to help other people. In Iceland in 2018, and in Namibia, other teams have done the same project you are doing, so there's a lot of project reports out there for you to read from.

Appendix D: Interview Transcript with Professor Christopher

Emily Gorelik

How long have you been a project site director?

Professor Christopher

I've only directed the Albania Project Center since 2013. But I have advised a dozen different centers prior to that

Emily Gorelik

So, when did you start becoming an advisor

Professor Christopher

1996, the first one was in San Francisco, we had a project center there. I did San Francisco, San Juan, and San Jose. I also advised at London, Venice, Australia, Copenhagen. Bangkok, maybe some other places

Emily Gorelik

For Albania, are you the original project center director?

Professor Christopher

Yes, I created the project center.

Emily Gorelik

Were you the only center director for the site? Or did you have another professor with you?

Professor Christopher

I'm retired as of last July, and so another professor is the current director. We worked together beginning in 2015, or 16. He first came on as an advisor, and then became co director with me. So, the first three years it was pretty much just me

Matthew Amodea

How many sponsors have you worked with at the Albanian Project Center within a given year?

Professor Christopher

We started with three in 2013. We had four projects in 2014. And then since then, we've had six projects per year, typically four person projects... 24 students typically.

Matthew Amodea

Have you had a rotation of sponsors, where you had extras that did not always participate every year?

Professor Christopher

That's the case, but it's not a formal arrangement. We decide each year what type of projects we'd like and that determines who sponsors. I want to clarify one thing. I've always not liked the term 'sponsor', because when I use it, people back off and think they have to pay. I think we've incorporated the term 'partner'

Matthew Amodea

What are some common characteristics you have noticed among successful sponsors

Professor Christopher

Someone who cares about students obviously, but also is passionate about the work they're doing. If you can determine that in advance, sometimes it's not easy to figure to what extent they're committed to, both the students and the project. But you can try to measure that. That's the advisor's responsibility in the selection. And if you have had a very good experience, you pretty much know what to expect from a sponsor, they become candidates for future projects again

Matthew Amodea

What have you done in the past to ensure that a sponsor will be a sponsor for multiple years?

Professor Christopher

We don't ask that or demand it in any way. It's a very informal process. If they like us and are happy with the work that the students have done and if we like them, we'd say 'let's think about what we can do in the future.' Now and then we like to mix things up and we like to give a sponsor a break sometimes. Take a year or two off. There are some one-time sponsors and you know that in the beginning. They have one particular thing they're interested in, and if the mission is accomplished, we keep them on the burner, but we don't necessarily guarantee that we'll see them again.

Matthew Amodea

What are WPI's expectations from the sponsors?

Professor Christopher

The project itself has to provide some educational value. Students have to grow in some way in the process. Sometimes you can't predict all this in the future beforehand, but WPI's expectation is that the students learn a lot and if possible, guided by the sponsor in the direction that's meaningful for them, and for the work that the students are doing.

Matthew Amodea

If there were any, what were some of the hurdles or obstacles you have faced in the past while working with the partners in the Albanians?

Professor Christopher

A few times, you do have to convince them of what we're trying to accomplish. They may lose sight of the fact that the students are not just working for them, but the students are working for the director and for WPI as well. They have to keep the academic part of the project in mind. The academic experience has to be worthwhile. The students are not employees, you want to make it

clear from the beginning that the students will do good work for you and will make progress on the problems you're interested in, but we can't guarantee that they will solve the problem completely. They'll do what they can, and to an extent they have two masters, the project sponsor and the project advisor. Making that clear to sponsors has sometimes been difficult, but not to the point of being impossible to clarify.

Benjamin Sakac

What was the process that you use to approach potential sponsors?

Professor Christopher

Initially, I had one contact, a WPI grad who had been doing work in Albania. He worked in the water sector, that is water distribution, water management, and all that. Having a contact is helpful. We came up with a project for him, it was called a water science fair for high school students. One tactic is to know somebody who can help you get started. I had gone to Albania the year before to investigate some other types of sponsors. I was also familiar with a special school, which was started by Americans in 1930s and was suppressed during the communist era, but had been revived and it's an engineering type school for high school students. I knew the people there. So, we contacted them. One tactic is to know something, and to know somebody to get started at least. I depended a lot on the internet, just searching wildly on the internet. I came up with a sponsor who provided us with a wonderful project, exploring a region outside the capital... The advisor typically has his or her own preferences for what type of projects they want to advise. You're looking at things that interest you and the advisor. After the first or second year, you depend on word of mouth. People who are invited to witness what our students have done at the end, particularly when they make their final presentations. They all think 'Wow, well, we could use students to help us. So, it's just word of mouth after that.

Benjamin Sakac

What were some difficulties that you faced while you're trying to acquire new projects?

Professor Christopher

The difficulties only occurred initially when people didn't know us. The difficulty is trying to explain to a partner what we're about, what we're trying to accomplish, and how we can be of advantage to the sponsor. Explaining what we're about is difficult, it's a hard thing for them to absorb that college students can do anything for them. They want professionals. Then they are typically surprised at the results that we get.

Sifferlen, Andrew J.

Were specific types of projects more successful than others, cultural versus social projects?

Professor Christopher

One recent project was public art in Albania. Working with the Art Department of a University, and the student painted murals. Public art can be healing for a country. I would say that it was a very successful project. Following our own interests, I think I tend to lean toward the more technical projects, but both are worthwhile. We've done a lot with tourism recently.

Sifferlen, Andrew J.

Have you seen projects to be more successful than others with students working on site versus working from the city with the sponsor?

Professor Christopher

Separation of students is sometimes difficult. From my experience, there has never been any serious problem associated with having half of the students in another location. One year, we had students in three different locations. All of them enjoyed where they were and accomplished their goals. One team of four in particular were 100 miles away from all the other students, but

they liked the city they were in and they wanted to stay there for the rest of the time. They stayed away for almost half the term. It works out, students are able to adapt.

Sifferlen, Andrew J.

Are there any specific types of projects that you think we should stay away from when suggesting potential sponsors?

Professor Christopher

Yes. You can be interested in what's happening politically, but don't make it part of your project. Don't be afraid to make a judgement, but not to the point of alienating the half of the society.

Emily Gorelik

Do you have any suggestions or tips or just any advice in general, that can help us succeed in our goal of finding sponsors in Prague in the Czech Republic?

Professor Christopher

Become very much aware about life in Prague and see what you can come up with as suggestions. Using online searches, you can find people who can follow through on what you're thinking about. One project we did in Venice, was to document all of the artwork, but mostly sculptures on buildings. If that was something that interested you, you could propose it. You're going to find that most your sponsors will be NGOs, but they could be companies too.

Emily Gorelik

Should we avoid larger companies over organizations, because that tends to lead to more MQP type work because they expect more out of the students?

Professor Christopher

I wouldn't avoid a company, for example, if you were doing work related to food or something, you might want to work with a winery or restaurant. I wouldn't rule out anything except politics.

Appendix E: Interview Transcript with Professor Nikitina

Emily Gorelik

Our first question is, how many years have you been a site director?

Professor Nikitina

Since 2013, so eight years, but in 2013 we just set things up. I guess, seven or eight years actively traveling with students to the Project Center.

Emily Gorelik

Since you mentioned that the first year in 2013 was setting it up, are the original center director?

Professor Nikitina

Yes, I'm the founding Project Center Director.

Emily Gorelik

Are you working alone in the Project Center Director, or do you have any other directors with you?

Professor Nikitina

For a couple of years at the beginning, I had Professor Oleg Pavlov from the social sciences co-directing with me. But he stepped down to pursue other things. He is still someone who is very involved and interested and we could do some joint grant applications with him. He is not technically listed as a director, but I have his ear and voice consulted on occasion.

Emily Gorelik

All right. Did he help you found the Project Center, or did he join later?

Professor Nikitina

No, he joined later, two or three years into existence.

Emily Gorelik

Okay, thank you. I'm going to pass it off to my Matt to ask a few more questions.

Matthew Amodea

How many sponsors do you work with at the project center within a given year?

Professor Nikitina

It really varies. You know, typically, we have anywhere between three and five projects. So, some projects could be sponsored by the same sponsors on a given year, I would say also three to five sponsors. We are based at the local university. So oftentimes, either professors or lab directors or faculty at that university pitch a project idea. …

Matthew Amodea

Okay. And you said three to five sponsors. Is that the total, or do you have a rotation where some may take a year gap?

Professor Nikitina

There are some people who don't sponsor projects for a year, then come back. There are sponsors that haven't sponsored anything yet. But they are kind of watching. They're coming to final presentations. They're trying to figure out an angle. They are called potential sponsors, but I'm sure they'll participate when the moment is right. …

Matthew Amodea

What are some of the common characteristics you have noticed among successful sponsors?

Professor Nikitina

Well, one of the big solutions that we have is the local coordinator. We have a local coordinator that is on-call year-round. She gets an annual stipend for being our eyes and ears on the ground, and she is always prospecting for sponsors. She has a WPI business card that she passes on when

she meets people. She was originally involved in the international office of the university where we stay, but now she is sort of a freelancer. So, I am in touch with her pretty much every week.

Matthew Amodea

We've heard a couple of other site directors mentioned a local coordinator. Do you feel like she is helpful in the growth of Russian Project Center?

Professor Nikitina

Critical, critical, instrumental, yes. She keeps me updated on what's happening. Who to work with, who not to work with, who is really eager. She sometimes visits various universities and, in the situations, where we might decide to send students there, I will send her over there to just see what the local facilities are, if she doesn't know already.

Matthew Amodea

Of course, for the next question, in your opinion, what are WPI's expectations for the IQP sponsors?

Professor Nikitina

Well, we would like them to commit to giving our students guidelines about project direction on a weekly basis. … So, we want them to commit a coordinator on their side, someone to meet with our students to give them pointers or provide them with a list of people to interview, organizations to contact, database to do exploring before and during the project work. So, we expect some time commitment. Sometimes we expect some office commitment. If the database is private our students can only access it in the office. And sometimes there is training available at the organization, so they need to provide a place to work. We don't ask for computers, the students bring their laptops, but we ask for space and access that they could provide. So yes, um, you know, it is nice when the sponsors offer like a welcome lunch at the beginning or a farewell

dinner at the end. And most of the time it happens without even my prompts. The sponsor will ask me what a good way would be to honor the students. And so sometimes it's a meal. Sometimes they provide our students with tickets to the ballet show, a Kremlin Museum visit, or a Metro monthly pass. I don't say that as an expectation. But if people ask me what a good way would be to credit our students' work; I give them suggestions like that.

Matthew Amodea

Of course. And my last question before I pass it off to Ben, what were some of the hurdles or obstacles you have encountered while working with sponsors?

Professor Nikitina

Well, you know, privacy concerns. Certainly, some sponsors have information they would not want to be in the published report. ... Especially those consulting companies we worked with. …
The other concern with the sponsors is the time they could or could not commit. It was not a big concern in the past.

The other thing, we make it a practice to issue certificates of project completion to our Russian student participants. They are not getting any credit for their work with us, this is all for honor and prestige. They do it for English practice. They do it for the prestige of working with American students. They are handpicked generally. So, people are excited to be with us. They serve as guides, cultural guides, and take our students to sports events, cultural shows, museums. And so, we would like to honor them. And we also give those certificates of recognition to our sponsors. Sometimes they want to include everyone and we just really focus on a coordinator of people, people we work with, because it is designed for students, because they do not get any credit otherwise.

The other concern I have at the front end is to make sure that their project fits our criteria, because of course, they want to do everything that they need done. And sometimes it is just a very technical problem that has no social or no clear social benefit. So, me and my coordinator have to steer them to reformulate or find an angle that shows a benefit to a certain demographic or community that benefits by solving this problem.

And another issue that is specific to Russia and. maybe to Czech Republic as well, people are very hesitant to coach their projects as problems. This idea that we do not have problems, so we have to be careful about phrasing it as a challenge, as an opportunity. Not just sort of an intractable social shortcoming. That just ruffles people's feathers the wrong way.

Matthew Amodea

Perfect. Thank you so much. And with that, I'll pass it off to Ben.

Benjamin Sakac

What is the process that you have used to approach potential sponsors? Like an example would be cold calling, sending blind emails versus you had a contact with an organization that someone knew already to get your foot in the door.

Professor Nikitina

It's all about who you know. It's all about contacts. So cold calling, I never do that. First of all, I have a local coordinator who does prospecting and she only brings me in at the point where she feels there is something there. Then we have a joint Skype, a brainstorming session, a conversation. So, I get them through the university coordinator, or through the university faculty, because universities are magnets for connections with businesses, with nonprofits. So, through the dean of the school with which you work, and his staff, his associate deans, I have a whole social network there that we could tap. ... So yeah, there is no cold calling or wandering around

the street. It's talking to people, developing it. ... I am sure in some Western project centers, some [cold calling] is done, but it is just much more practical and realistic to go through personal contacts.

Benjamin Sakac

Thank you. So, the next question that I have would be what were some difficulties that you faced while trying to acquire new project sponsors

Professor Nikitina

Well, just as I mentioned, formulating the project description in a way that combines technical and social aspects without exposing glaring social problem, … Right, couching it as a social need, a benefit, but not criticizing them for that major oversight. So yeah, phrasing it, formulating the project description, and adapting it to the need. … And this is a perennial problem with sponsors, they wanted to do everything yesterday. So, pacing them that eight weeks is not that much time. Giving us just a slice of a problem rather than the whole issue. Phasing it, sometimes they want to do the problem, but we say, 'okay, we cannot do it this year'. Let's say what do you want to do first, and then we'll pick up the next phase with the next batch of students. That could be a solution. So, parsing it, formulating it, and then tampering, dealing with expectations.

Benjamin Sakac

Great. Thank you. So, the last question I have is something that you have touched upon throughout the interview already, but what information do you discuss in preliminary meetings with potential sponsor organizations?

Professor Nikitina

Well, that typically is a Skype. And oftentimes, my coordinator has already done the preliminary because she knows what the projects are like. She has samples from past years. So, I am answering whatever questions they have unanswered, introductions, highlighting student work. The fact that we never had any problems. The fact that the work results are published. They like that. The publication of the abstract in the Academic Press, our library, that is a big thing. So, it is getting them in our expectations of meeting weekly meetings and need to point a point person on them on their own.

Benjamin Sakac

Awesome, thank you.

…

Emily Gorelik

You mentioned that you have a local coordinator, we've heard that from other center directors as well. How were you able to find someone in the location that would be willing to do this work?

Professor Nikitina

Well, because we are based at the University and we are working with the University on projects, they recruit the students. We're working with the University on lodgings and on the cultural program. They provide cultural program. Every weekend, we have a cultural event organized by the university. So, the coordinator was the person who was in the international office of that university. So, while I worked with her hand in glove for the first five to seven years before she went independent. But she's still very involved with that university, knows how the visas and cultural stuff is organized. She still has a lot of contacts there. Not just there, but in other communities. So she was the original International Office point person attached to our program, so I didn't have to find her. I just need to hold on to her.

Emily Gorelik

So, she was like the 'you' in Moscow?

Professor Nikitina

Right. Yes, that's very natural connection.

Emily Gorelik

All right, thank you.

Matthew Amodea

Could you briefly explain the difference between your responsibilities and that of the

local coordinator. In terms of securing the sponsorships, of course.

Professor Nikitina

Well, I make the ultimate decision. She is pitching project ideas, and sharing the possibilities.

For example, towards December, she will present me with a roster of projects and I'm not going

to accept all of them. I'm not going to work with all of them. I'm going to talk to some of them to

discuss the logistics. She sort of prescreens them. ... She also monitors the COVID situation and

other, happenings in the country, the safety concerns. So, she's our eyes and feet on the ground to

monitor that. Which is something I cannot see from here, and sometimes you cannot trust the

public sources on that. So, she's the one who confides to me what's going on. She was the one

who told me about the lockdown. I think papers here reported that there is some case growth, but

she's the one who told me what's happening in the subways, what's happening in the restaurant,

which stores are closed and all that. So it is a different kind of responsibility. But the buck stops

with me in terms of which projects go forward, which teams are formed, what is the outcome of

the projects. So, she just receives the final report so she can use it as marketing tools.

Emily Gorelik

I guess the last question isn't a question but more of a request. Would you be able to send us some of the project descriptions that you've used with organizations in the past so that we can kind of develop an own sample book that we can hand to organizations when they're asking for suggestions.

Professor Nikitina

So, project proposals, right? Okay. I will have to look and send you something.

Appendix F: Interview Transcript with Professor Burnham

Emily Gorelik

I'll start with a few questions. First, how many years have you been a site director?

Professor Burnham

Since 2016.

Emily Gorelik

Alright, so about five years?

Professor Burnham

Yes.

Emily Gorelik

And did you start with Switzerland or were you a site director at another location before?

Professor Burnham

I started with Switzerland.

Emily Gorelik

Alright. Are you with the original center director or did you replace someone else?

Professor Burnham

[The] Switzerland [Project Center] has an odd history, there was some project activity in the 1990s, and then in the early 2010s, and then Switzerland was dropped, and then I reactivated it. I didn't really use any of the contacts that existed before because I lived in Switzerland for six years in the 1990s and I've taught there in the summer for the five years prior to COVID. So, I had my own network, and you know finding projects is all about networking.

Emily Gorelik

Yeah, that seems to be what we're learning from a lot of interviews. It's all about networking. But for the Switzerland site now, are you working alone, or do you have another director working with you?

Professor Burnham

I do the IQP's by myself. I have colleagues who are involved in MQPs by virtue of their collaborations in Switzerland. So those are Professor Sturm, in math, and Professor Gericke in chemistry.

Emily Gorelik

All right, thank you. I'm going to hand it off to Matt now, and he'll ask a few more questions.

Matthew Amodea

Hello, how many sponsors do you typically work with at the Switzerland project center within a given year?

Professor Burnham

Right, so it's been a slow process of making the network a little bigger every year. So, in 2016, I had one independently arranged IQP. In 2017 there were four projects. And in 2018 and since there have been six projects. So, I work with six sponsors per year but as my network has grown, I might have a dozen different people who have hosted who come in and out so a project host might not sponsor every year. But, you know, you try one project host, and you see whether it works or not, and then maybe next year, they'll be busy, or someone will be out on sabbaticals. So, you need a replacement. So, my ambition is to have defined, you know, 12, or more reliable sponsors who are good mentors. ... So how many sponsors do I work with? The more succinct answer is six per year. Working up to a dozen or more in total.

Matthew Amodea

That answered my follow up question about sponsors having a rotation that aren't active every year. ... What are some common characteristics you have noticed among the successful sponsors that you've had?

Professor Burnham

It's more about the personal attitude of the main mentor there, whether they're interested in doing something like [the IQP]. So, it's more of an individual thing rather than an organizational thing. I've had all sorts of different organizations be very good sponsors: hospitals, government agencies, nonprofits, companies. So, there's nothing about an organization, other than every organization has a finite amount of time and resources, … that's where our students come in, to answer those questions for them. ...

Matthew Amodea

Okay, and before I pass it off to Ben, in your opinion, what are some of WPI's expectations for IQP sponsors?

Professor Burnham

Like the Global Experience Office?

Matthew Amodea

Yes, the Global Experience Office's expectations for the sponsor themselves.

Professor Burnham

I've never gotten any particular input on that. … I'm just looking, what I look for is win-win-win. So, a win for the sponsor means they learned something that they did not know before. A win for the advisors is that they help the students write a good academic report. A win for the students in terms of just overall great experience.

Matthew Amodea

Okay, thank you so much, with that I'll pass it off to Ben.

Benjamin Sakac

The first question I have is: what is the process that you use to approach potential sponsors?

Professor Burnham

So, as I said, the keyword here is networking. So having lived in Switzerland, to get started I just asked everybody I knew. I explained our program as briefly and succinctly as I could and asked if anybody knew of any organizations that might be interested. Then those people put me in touch with people they knew. I have a set of slides that I show. I asked if they want to meet, then I would send them typical project descriptions and project description templates, and work with them to write good one page project descriptions, which you probably saw in ID2050. …

Benjamin Sakac

Were there any difficulties that you've noticed when approaching potential sponsors?

Professor Burnham

No, it just takes a little bit of time to establish why should someone who doesn't know me spend an hour or a lunch break talking to me, right? So there must be a little bit of trust there, that their investment and time is worth it. So really, that's all through personal connections? … There's some faithful WPI alumni in Switzerland, and they have made quite a number of these connections for me.

Andrew Sifferlen

What are some characteristics of a project that makes it more successful than others?

Professor Burnham

I am looking for something that might be interesting to our students. So [projects] that are scientifically or engineering oriented, but also have some societal or artistic or educational

aspect. I also try to make sure that the sponsors know that this is not an internship, meaning, not to just to give the students a to-do list every day. A large part of your project experiences is determining exactly which way you're going to solve an open-ended question. Nor is it a work for hire, meaning that the students spend all their time making deliverables for the sponsor. So, there's always this kind of tension between making the sponsors happy with the things they're directly interested in, plus the academic aspect of writing a team social science report. So, I'm also looking for a sponsor with whom there's going to be good communication about the right balance for this win-win-win situation.

Andrew Sifferlen

And you touched on how a lot of these projects have some societal impact that you were referring to. Have you seen any difference in successful projects with social aspects like climate change versus maybe a cultural aspect like working with museums?

Professor Burnham

It's hard to have one uniform definition of success, the situations are so very different. Each project has unexpected challenges. I try to observe how the students respond to challenges and roadblocks. Do they need to modify their directions, because everybody has a finite amount of time, since we have very hard deadlines as far as finishing the report? …

Andrew Sifferlen

Previously, you mentioned how for some projects, they're a few hours away from Zurich. Have you noticed any difference, maybe enthusiasm or work ethic, when it comes to students who have to travel a little further away from the site?

Professor Burnham

In Switzerland, the IQP housing is in Zurich. Switzerland is great in terms of its public transportation. If you get on an intercity train, for a couple of hours, you bring your computer and you work. … We made sure to communicate from the very beginning that commuting is part of life, in the working world, and since then there's been no correlation between enthusiasm and distance of travel. In fact, this year, the teams that were farther away, were probably more excited about the project because it was like a special occasion to go visit.

Emily Gorelik

Do you have any suggestions for us as we are new at this? Are there any tips or tricks?

Professor Burnham

It's all about networking. Who can you ask to put you in touch with organizations that might benefit from basically free consulting? All right, so the consultants don't have much experience, but they're advised by two faculty members who can provide some guidance and ideas.

Emily Gorelik

Yeah, that's what we're doing the next couple of weeks. Reaching out to every corner of our contact book. It will be interesting to see how far that takes us. I also wanted to know; this is not a question but more a request: you mentioned earlier that you would show these potential project sponsors a PowerPoint that briefly describes the WPI and the IQP. Would you be able to forward that to us, and we'll modify it to line up with Prague a little bit better?

Professor Burnham

Oh yeah, no problem.

Emily Gorelik

Thank you so much.

Matthew Amodea

Also, if you have any recent project descriptions that you believe may help, anything that's recent that you believe may help us, that'd be greatly appreciated.

Professor Burnham

I could send you last year's project descriptions that we've just completed.

Matthew Amodea

Okay, that's perfect.

Professor Burnham

You know, one thing, that if you if you get any leads, you can look at the library database and find some project reports that are like what the sponsor might be interested in. You look at those project reports to think if they're a good example, and then you send them the link. They can see an example of a kind of report that they might end up with. So, there are two very definite deliverables, one is the project report, one is final presentations, and of course there are other deliverables that can be arranged.

Emily Gorelik

Thank you very much. I think that covers all our questions. Thank you so much for dedicating the time to meeting with us.

Appendix G: Interview Transcript with Professors DiMassa and Foo

Emily Gorelik

How many years have each of you been a site director?

Professor Foo

Well, we first sent students in the term of 2019. So, we were starting to plan and the fall of 2018.

Professor DiMassa

We have been doing this maybe four years, students have gone for three years.

Emily Gorelik

Did either you work on any as center directors at any other locations prior to Germany?

Professor DiMassa

No.

Emily Gorelik

At any point in time, the largest amount of said directors you had was three correct and but two are active.

Professor Foo

Yes, that is correct. It is very unusual to have three, we were just all interested in Berlin as a site.

Matthew Amodea

How many sponsors do you work with at this project centered within a given year?

 Professor Foo

Last year we had six distinct ones. Our first year, we sent two projects, both of the same sponsor. And then in the second year, we had five distinct sponsors

Professor DiMassa

It was different sponsors but housed under the same organization.

Professor Foo

In one year, we worked with four different sponsoring entities. One of those was a research institute, with two different researchers in there, one each became the main contact person for their respective project. So, it's the same sponsor, but they were not handling more than one project at a time.

Matthew Amodea

With those sponsors, do you have a rotation? And if so, how many of you have an application?

Professor DiMassa

Rotation sounds like a more organized way of describing what we are doing, which is just reaching out to contacts, and we know and soliciting project work from them. I do not think we have been in the position of doing a whole lot of balancing projects on and off because we are quite young ourselves, just three years into the process. We are still building relationships with sponsors and trying to establish project work. There could be a rotation that we have in mind as time goes on.

Matthew Amodea

What are some of the common characteristics you have noticed among successful sponsors?

Professor Foo

We are working towards developing relationships with different types of sponsors, so that we can make connections with lots of different people. … One quality, ... it is helpful when the sponsoring organization is really attuned to the educational dimension. The WPI advisors play the primary academic role in guiding the projects. And at the same time, the setup is different than acting as consultants. The team is under the guidance of academic advisors. So, it's helpful

for the sponsor organizations to recognize that and have a little bit of flexibility and tolerance for that.

Matthew Amodea

If you were to notice any characteristics that you would avoid, are there any red for red flags, you might note?

Professor DiMassa

Most advisors are looking for projects where students have agency over the project. And we are all striving to make sure that projects do not turn into what sort of internships or pieces of work where you are asked to be sort of data gatherers or collectors without a say in terms of how the project develops? That is a concern, I think, across the board for people. That would be a concern to me. I have seen a handful of projects like that, not in Berlin but elsewhere, and those tend to be weaker projects. That would be a concern to me, if I found a sponsor who might be looking at students just as free labor to do some work.

Professor Foo

We want to stay between two poles. On the one hand, we do not want sponsors who are going to micromanage everything the students do. So, they are like giving out tasks that students are completing. A key function of the IQP is to teach students how to do that themselves, to set their own agendas and to plan a longer-term project. On the other hand, occasionally, sponsors will just be MIA for a lot of the term and then drop in and have a lot of expectations at the end of the term. Not necessarily something that you will be able to plan for, but those are working characteristics that would make for a successful project. Then from a planning standpoint, it's much easier to work with people who are very responsive to communication and who can plan

well, so that you are not constantly following up with them to get you the project brief by a certain time.

Matthew Amodea

What do project centers have to do to secure a sponsor for multiple years?

Professor DiMassa

Most of the people we are working with have worked with more than once now. Part of it is just being forthright in our intentions for the center when we communicate with people. We have been clear from the beginning that this is intended to be a long-range Project Center, this is something that can develop ... We are always touching base with sponsors as well before the term during the term. We do follow up with sponsors afterward. We are always thinking about projects for the upcoming year. A lot of it is about communication, communicating our goals. There is a concern that maybe you have a team that bungles a project, and then is the sponsor not going to want to return or something like that. I have not found that to be the case, most of our partners are quite understanding, they know that it was variability.

Professor Foo

We are not trying to lock them in to work with us every year, but what we are doing is building relationships. When they find that there is something that would be helpful to work with a team of WPI students on then they would be welcome to approach us, but we are not developing an expectation. For the sponsors that seem really eager to come back each year, the value for them is really clear. Directors are not having to convince or sell a particular person organization and about what the value is, it is intuitive. Sponsors will be really eager to discuss the next project, even in the end of term wrap up meeting. They are already thinking ahead because they are excited about the possibilities.

Matthew Amodea

What are some of WPI's expectations for the IQP sponsors?

Professor Foo

The length of time that we would be expecting to meet weekly. More in terms of what the time commitments would be and the overall timeline. Fairly minimal. The only additional thing that I would mention is space. That varies by sponsor and by city. It is really great when a sponsor can offer working space so that students can become integrated into their office culture, their organizational culture.

Matthew Amodea

If there were any, what were some hurdles or obstacles that you have faced while working with sponsors?

Professor DiMassa

I do not perceive real obstacles. I say a disappointment is that there is a particular partner with whom we communicated for a long time wanted to work on a project, there was some concern on his part about what this might entail. He made a commitment, we did a project with him, students did a fantastic job. And then since the term we have tried to communicate with this particular sponsor, and have not had follow up, not an obstacle per se, just disappointing. But otherwise, I have not had really had problematic relations. I have advised that a couple other projects centers and I have come into some areas where some sponsors are difficult to work with, I have not had that yet in Berlin. And part of that is because we have been working through COVID for a couple of years now, too. So, the nature of those relationships is a little bit different than if we were on site. I have not seen obstacles, it's important to communicate clearly what our

expectations are: meeting time every week, sponsors respond to emails from students, if they are not overwhelming things like that.

Professor Foo

Depending on the level of English language skills by people in the host country, and or the kind of like, linguistic skills of WPI students that could pose a significant barrier, for projects that are not clear cut. I have had that experience with one very open-ended project, that was it was very creative, very interesting. And at the same time, it involves discussion of very abstract academic concepts that were really difficult to communicate on. Communication abilities are a precursor to a successful partnership, a successful project. It is circumstantial, but some of our sponsors have commented that doing remote projects has really been a barrier to deepening the quality of the project.

Benjamin Sakac

What is the process that you have used to approach a potential sponsor?

Professor Foo

We use different approaches. Emailing is the main way that we have gotten responses. I tried to drop by people's offices, and that was difficult before COVID, and that was difficult because a lot of NGOs use public co-working space.

Professor DiMassa

Early on, we had drafted a form letter that we could use to contact potential sponsors. That is how we first reached out and made contact that way. We had some relationships that formed through that sort of email outreach. Another thing that happened at the beginning was... the WPI alumni office keeps a record of where alumni live internationally or where they are from internationally. We were able to reach out to WPI alumni who were based in Germany, and we

contacted someone who is in Berlin. He was interested in working with us. And we continue to work with this research institute where he is based. Then a little bit of word of mouth through the sponsors with whom we are working and asking them if they can connect us with other folks.

Benjamin Sakac

What were some of the difficulties you faced when trying to acquire a new project sponsor?

Professor Foo

Nonresponse. I sent out lots of emails to different people, we kept a spreadsheet with rows of all the different potential sponsor entities and the dates of initial contact. And there were a fair number that they did not respond even after multiple replies.

Professor DiMassa

I would add that I have had a really hard time describing what the IQP is to folks outside the university and even to people who come to WPI, new faculty or students. It is not a standard project that has been done everywhere. Even the American undergraduate system is quite foreign to people who are not in the States and then to add the complexity of the IQP on top of that, it's a difficult thing to try to explain. The challenge when you are reaching out to people for the first time is to send them something that is comprehensible, that is not a thesis-length statement about what you are trying to do.

Benjamin Sakac

What sorts of information do you discuss in preliminary meetings with potential sponsors?

Professor Foo

We discuss the basic setup, the basic structure of the IQP, what roles we would each play, the advisors, the students, and then the sponsors. So, they have a sense of overall expectation. They tend to start as general conversations that are exploratory, so the sponsors can ask questions

about what they are confused about or interested in and get a basic sense of the parameters and then can potentially start brainstorming ideas of potential projects.

Professor DiMassa

The only thing I would add is that sometimes there is this awkwardness around whether there is a financial arrangement between WPI and sponsors. It is awkward for everyone to bring up and I think the fact that we use this language of sponsorship confuses people, and we should work harder to use the term partner or something along those lines. Sometimes our sponsors want to know if they are expected to finance projects or if payment is coming to them. It is helpful to be aware that is something that is often in the back of people's minds.

Andrew Sifferlen

Are there any characteristics of the type of project that are more successful than other projects?

Professor Foo

I think it's more about creating an overall portfolio of projects. One thing I will say is that it's helpful to include lots of information in the project brief. Having a project brief that shares enough information about the context, what is expected without getting into the tasks. It is clear about what the overall kind of direction and the goal of the project would be and some of the objectives, and some of the outputs that the students may consider. We have tended to be fairly open and broad. Some projects center directors really want their projects to be like sociotechnical projects and have certain characters of work working with technology in a very particular way with some social aspect. We have not really taken that approach.

Professor DiMassa

It comes down between open-endedness on the one hand and micromanagement on the other and finding a happy space between the two. A brief that provides sufficient detail in terms of what the goals for the project are.

Andrew Sifferlen

Is there a difference working on a project pertaining to a social challenge, like climate change, versus working with a museum pursuing cultural impacts?

Professor DiMassa

The work that has been done is not necessarily aligned with the work that the sponsor organization is doing, there is a lot going on in any given project.

Professor Foo

When you are building your portfolio of different projects, or different sponsors, there is the overall domain that the organization or the sponsoring organization works in and there is the specific topic and method and especially the method that the students are really focusing on. Cautioning against thinking about sponsors in a one-dimensional way is helpful. It is helpful to build relationships with a variety of different types of sponsors. So institutional sponsors, like museums, are one type of sponsor, while small scale, nonprofit organizations might be another, and government agencies might be another. But the different organizations might have different tradeoffs or different types of organizations will have different resources to share with the students in different limitations. And I think the institutional level sponsors might have greater longevity if they retain interest, but less community engagement. I you rely entirely on small scale, single issue, nonprofit organizations, they might be super interested for a few years and then lose funding or something. There is more uncertainty, compared with larger institutional partners.

Emily Gorelik

Do you have any suggestions or tips that will help us succeed in finding organizations?

Professor Foo

Reach out and start conversations, learning how to have those conversations. Be really comprehensive in terms of looking out for all sorts of different entities. You might have a specific idea of wanting to work with cultural institutions or museums, but maybe you take a broad approach, set up your spreadsheet, and just go for it. Having templates for your initial outreach is helpful. Examples of past project briefs, the products that have other projects can be helpful in making the IQP feel a little bit more accessible or legible to people who have never heard of it before.

Appendix H: Interview Transcript with Professor Hersh

Emily Gorelik

First, how many years have you been a site director?

Professor Hersh

I was a site director from 2012. So around nine years. I first started, I initiated something. It was an on-campus Project Center, in 2012, called the Center for Sustainable Food Systems. And we would do six projects a year with local and regional organizations around food system analysis. And then I think in 2015, I became Project Center Director, I initiated those projects in the director for the Greece Project Center. And then in 2016 or 2017, I can't remember. I became co-director of the Albanian Project Center. Now I'm the director of that. This is, so your professor, your advisor, Professor Kinicki and I, we advised in Albania together. A couple of years ago.

Emily Gorelik

Yeah, he's the one that encouraged us to reach out to you.

Professor Hersh

Yeah.

Emily Gorelik

You mentioned Greece and Albania. Are you the original center director for either location?

Professor Hersh

I am for Greece. And for Albania I wouldn't say I was the original center director. But I was sort of the ID2050 instructor at the beginning and talked with the person who set it up. So, I'm familiar with the people that set that arrangement at the beginning.

Emily Gorelik

So, you were there at the beginning?

Professor Hersh

More or less, yeah.

Emily Gorelik

All right. That's awesome. And then currently, are you the only site director? Or do you have anyone else working with you?

Professor Hersh

You know, that's a good question. Because sometimes, for example, the Albanian Project Center for the past... I've had a colleague who's worked with me there for three years or four years, two of which, unfortunately, we didn't go away. And so even though I'm the Center Director, sometimes she, Professor Leslie Dodson, is her name. She might have some ideas. She's the co-director of the Global lab. And so sometimes she has ideas for potential projects, not necessarily with the sponsor, but wouldn't it be cool to do such a thing? Something that we could use the global lab resources to investigate. So that's something that you might want to consider. ... There are co-directors and there are single directors. But sometimes you might have a long-standing working relationship with a colleague at that site, and that person kind of has ideas as to what might be a good project with a particular sponsor next year.

Emily Gorelik

Thank you, that's incredibly insightful. I'll pass it off to Matt who will ask some questions as well.

Matthew Amodea

Ok, so my first question, how many sponsors do you work with, at specifically the Albanian projects center within a given year?

Professor Hersh

So typically, it's we bring 24 students, and we have six four-person team. So, we've always had six Project Center project sponsors. We started I think, 2014. I was first there in 2015.

Matthew Amodea

So, imagine typically six projects. Do you have any sponsors that are in rotation, meaning they don't come back every year, but they may in a few?

Professor Hersh

It sometimes works that way. You know, I think it's good idea to have say, three project sponsors from the past year and have tried to develop two or three new project sponsors every year, or maybe two projects from a few sponsors. So that's a good point. Sometimes they're having WPI students exhaust sponsors, because WPI students in a number of ways they sort of work in a crazy way. They work hard, they demand a lot. Sometimes sponsors aren't used to that. Particularly new sponsors who don't understand that this isn't an internship or a study-abroad experience. This is a different thing. It's very hard for new sponsors to understand that relationship.

Andrew Sifferlen

Of course, and for my next question, what are some of the common characteristics that you have noticed, among successful sponsors you have worked with?

Professor Hersh

Now, I would kind of reframe that question a little bit. Because it's not so much successful sponsors. I don't know what you mean by success. But I think as a center director, you want to try to think 'what kind of experience do I want my students to have? What is it that would make this experience meaningful and, and hopefully transformative to students?' So, it's hard to know whether a sponsor will be able to work with us in a way that delivers that kind of experience for

students. So, I tried to think about a few things. How a project might be successful for the sponsor, for the students, and for the larger community which it serves? Now one is, there's some student teams that have a real hard time dealing with ambiguity and open-endedness, which is, in some ways, the point of these projects. I might want to have a project or two with an organization that has considerable resources like an NGO that's well-resourced or a government agency or municipality, where it's not necessarily a determined project, but the parameters of the project aren't as fluid and wide open as some other projects. I might think I want to have a few projects that are very open ended and I want to maybe work with a few NGOs or community organizations that have very undeveloped structures with respect to supporting students in ways that a well-funded NGO or a municipality might. Then, I might think, what would be of interest to students given their background when I looked at their majors? Even though they're not supposed to be in your major, sometimes I think there's a lot of robotics students here, maybe we should work with some group that might have an interest in STEM education, or something to do with that kind of talent and skills that students bring. So, I think it's a little bit more complicated than just what is a successful sponsor? In some ways the center directors think a little bit more about their growing familiarity with a center location. What kind of range of experiences do I have? What kind of experiences do I want to have for students? What do I think students are willing and able to handle? So as a center director, you're trying to almost develop different kinds of project experiences. Not all students want to have a very open-ended project description. I think that's something to consider for Professor Deskins. Successful project sponsors... well let me ask you what that would mean?

Matt Amodea

Anything that would result in, like you said, a positive experience. So, a common one that we've received is their ability to give feedback and work with the team. But also, when we go out to explore potential sponsors what are things that we could try to look for to ensure a positive experience for future IQP students.

Professor Hersh

Yeah, that's a different way of looking at it. That's kind of what would what would make it so that the students would have access to that sponsoring organization. There are a couple of things I think would be very... there's very practical considerations. One, is there dedicated space for students to work at? Oftentimes that's a problem in some countries. I think it's great if the students could go someplace. Because partly, it's the day-to-day interactions with the organization and the sponsor that helps students feel like they're part of something. Unfortunately, in a lot of places that doesn't happen. So, students work in cafes or in their accommodation, which I think is suboptimal. Are there opportunities for field work? To what extent can the sponsor help with transportation? Sometimes in certain places, public transportation isn't very good. Can they provide any kind of van service or something to support the students in the field? The center director needs to work with the sponsor to understand what the needs of the sponsor are. What would they like the students to produce, compared to what WPI requires or would like? The WPI IQP report, some sponsors feel that's very important. Sponsors that have a clear-cut sense of okay, this is the investigation we would like you to do. We'd like to have these results; we'd like to have these recommendations. A number of projects don't end up having recommendations. Instead, they are illuminating possibilities. For those projects, sometimes it's not a report that's important at all, it's other kinds of deliverables. Whether it's a community guide, or a video, or a how to guide for something. So, I think to be

clear there are academic requirements that we want, but the center director needs to think through what might be the range of outputs that would make this project an attractive proposition for a sponsor. Because without the sponsor's commitment of time and thought, the projects can go off the rails a little bit. I think one has to really shape the expectations of project sponsors. So sometimes you have a project sponsor [that] is so happy to have American students there. They're just happy that you represent a huge source of resources. Sometimes others kind of expect IQP projects become MQP projects, because they see you as technical people, and they want you to do a technical project. So there has to be some negotiation before the project actually starts. Different project center directors have different ways of beginning that conversation. So, often you have a conversation seven or eight months ahead of time, but you just talk about ideas. Sometimes center directors say, okay, can you write a project description for us which outlines your perspective and your sense of the project elements and possible outcomes. In some countries I feel that that's like asking them to do homework that they don't want to do. In those situations, we'll have a conversation about ideas. Then I'll write a project description that I think is suitable for our students based on what they've told me.

Then, I'll send it back to the sponsor, and we'll go through that a few times. So, that is the first step in trying to align our values with the IQP and what our learning outcomes should be with [respect to] the sponsors expectations. But you have to check in on that all the time because the projects changes. I don't know how much yours is changing but it's important to have weekly meetings with the sponsors and the students, just to discuss the projects. But it's even more important to make time to talk with sponsors outside of student meetings. To invite them for dinner, to have a coffee, to really talk about not just the project but about sort of what the organization is doing in other ways. How the project is part of this larger mission that they might

have. A set of expectations about what they would hope to do, and how this project is working for them and maybe not working so well for them. You need to also make it clear to sponsors that the students aren't interns. Even our sponsors that we've worked with for a while, sometimes they don't want to give students the possibility of failing. Sometimes initiatives don't work out. That's important. You know, sometimes sponsors want them to work out a little bit too much, for good reasons. And we do too, but sometimes that's not the case. [The students] need to be given some degree of freedom to exert their own sense of the project. They need to be able to realize sometimes things aren't working well, and you can turn them around. Or sometimes projects ended up not being necessary, but that's not a failure in my eyes in any way, because it's oftentimes very difficult. But the sponsor has to understand that because sometimes the sponsors become friendly with students. They want the students to have a good experience and sometimes overlook some of the difficulties and tensions around community-based projects.

Matthew Amodea

Thank you so much. With that, I can pass it off to Ben, who has a couple of other questions.

Benjamin Sakac

The first question that I have is, what is the process that you use to approach potential sponsors?

Professor Hersh

Yeah, good question. Well, there's a couple of different ways of doing it. A lot of Project Centers have liaisons. Have you had this conversation with anyone?

Benjamin Sakac

Yeah, we've heard that from a couple different people.

Professor Hersh

I don't really have liaisons. But essentially you rely in part on conversations with current sponsors. Just to identify new people you can be reading something in a newspaper. Or you'll be reading reports about a subject that interests you, and you'll see the name of an organization. You'll kind of cope, if you're in the country, you have an email template as to what you are, who you are, what you're doing, and that you would like to kind of discuss the possibilities of this. So, you have to be scouring the areas of topics that interest you. You know, there's lots of initiatives in these areas. You read reports and you see what's going on, you see who the players are, and then that's the first step. It's a little bit difficult because nobody knows you. There's like the initial startup stage. And for Greece, it was a little bit easier because we were working with an institution that provided us with some projects we negotiated with (a sort of a Greek farming college). But I know other center directors who just go into somebody's office and talk to them, or get introduced by someone. Because in some countries, you really have to be introduced to someone; with cold calling you're not considered to be serious, you're not considered to be someone that they're going to talk to. But the more you are in a place working the more your project standard can be recognized and the easier it becomes to find sponsors. Hopefully, there's a sense that they're doing good work. And then people get to know you, and they make the connections for you sometimes. That's how I've done it. But I'd be interested to read your report to see how other people go about doing it. Liaisons help. But in some ways, I prefer this kind of determining the projects myself. I think I know that gives me more of an on the ground feeling that other people don't have.

Benjamin Sakac

Great. The next question I have would be, are there any characteristics of specific projects, not the sponsoring organizations, but the actual projects themselves that provide a better experience for students?

Professor Hersh

Yeah, that's a good question. So, I always think it's helpful to have an external sponsor, unfortunately, you guys don't. But I think that's number one. I think sometimes when the students are working with an external sponsor, they feel more enthusiastic about the project.

For me, it's important that the students get out and do fieldwork. That's just my preference, to be immersed in work that is less computer based and more immersive in field experience. So that means doing a lot of work with small, grassroots organizations or community organizations. I think it's not just the sort of setting up of the project, it's also continually thinking about possibilities; thinking of new possibilities during the first three or four weeks of the IQP. And that requires the advisors to be somewhat astute and nimble in their advising; it requires them and the students to be connected, not just with the sponsor, but with the project itself in order to be able to challenge the sponsor and to challenge the advisors. So, the idea of providing the students with a strong sense that they're developing expertise in that particular area of their project. That's very important. It's useful to kind of scale and scope the projects so that they can be done in seven weeks. Now, it's also useful to work with sponsors and develop projects that are doable in seven weeks by understanding that this is one project of say, four you that the project center will be doing over a number of years. Sometimes in Albania, we've done an IQP and then that translates into an MQP in successive years because the technical component becomes more important.

There's no end to the kind of ways of talking about that, with respect to what makes a good project. A good project primarily has the most impact on the students when they can have an understanding of this difficult issue they're looking at. Being in a different world, being in a different place, and negotiating all of that. I think it's really very good to have projects that make students feel this isn't Worcester anymore. Good projects, I think, should be something that's a part of the entire IQP experience, whereby students no longer feel that they're part of the WPI grind. I find that the best projects have been done in ways that are unexpected, or not anticipated. So, the projects have to provide that sort of opportunity to feel lost. Not only have a feeling of loss, but to have it come around; whereby the students can have that ability to conduct that research and to make those connections with people, even if you need translators.

Benjamin Sakac

Thank you for that. Andrew has a couple questions now.

Andrew Sifferlen

Okay, speaking about projects. Have you seen a difference in the experience of students with a project that can be either socially based versus culturally based?

Professor Hersh

What's the difference?

Andrew Sifferlen

Well, for example, a social aspect could be like sustainability, versus a cultural base could be working with a museum.

Professor Hersh

So, let me see if I understand. Are you really trying to get a distinction between organizations that are more formal versus organizations that are more informal?

Andrew Sifferlen

Another way to phrase this question could be when you were talking about how it could be a smaller NGO versus a larger corporation?

Professor Hersh

Oftentimes you're quite happy if you have an organization that can help the students think through their project in ways that would be like having another advisor. So just to give you an example, I was advising in New Zealand, we work with the greater Wellington Regional Council, which is a sort of their government body. They're like the policy arm of the municipal government. They wanted the students to help them understand public perceptions of climate change, and how people understood their impacts. You know, they want to do a survey. And so that was okay with me. I mean, but they helped the students design the survey, they helped the students think through the questions. [As the sponsor] "In New Zealand, we don't ask questions like that." They provided both methodological sophistication and a cultural appreciation in very nice ways. The nice thing about it was that the students did a nice job with the report. And that report was then delivered to a large number of people at a policy council meeting with local politicians, policymakers, and other stakeholders. So, the students of course, were very proud of that work because they had that sort of public recognition. But they often said, we wish we could do more than just survey people. I mean, not that that's a bad thing. But they felt they would like to be able to explore the issues more in depth, but nevertheless, that survey data was a very important first cut. So, on the other hand, for example, when I first started doing this, I was working in the informal settlements in Cape Town. These are shanty towns. And we were working with very undeveloped, that's not the right word, but community organizations that were really struggling to get a foothold financially. They were very community based. They we were

doing work, looking at sort of how to encourage new buildings, to be more fireproof because there's lots of fires in informal settlements. It was very open ended. And the students didn't know necessarily who their audience was. They were unsure how to make the report satisfy WPI's formal requirements and how to make it meaningful for that group on the ground. They did an amazing job. But it was much more ethnographic. Do you know what that term means? So, his observation, it was like deep hanging out, which is an anthropological term, and they felt they weren't getting anywhere. Because it's very slow progress working in some projects, you can't force the issue. So, the students did an amazing job, they didn't think they were doing an amazing job, maybe. We have to explain that some projects are more informal, take longer, and the results are much less predictable. Recommendations aren't what's at stake here, what you're doing is working together with people to create opportunities and identify opportunities that may or may not happen. The demands are very different on students. There are certain demands, and working in these informal settlements with some community work in different places, makes it difficult, more challenging, and adds complex emotional demands on students. With other groups working in museums or working with municipalities, there's an emotional commitment to those projects. People want to do well, they're supported in different ways.

Andrew Sifferlen

No, that was, that was very helpful. Thank you. And one of our last questions is, if you have any suggestions that you believe will help us on our journey through this project?

Professor Hersh

Well let me ask you, what are the things that you don't quite understand yet?

Andrew Sifferlen

Currently, we're creating a presentation for the organizations we're going to contact about what the IQP is, how it benefits the partner, how it benefits the students and, how it's not an internship. Are there any things that you find confusing or difficult to explain to a partner? And what is the best way to describe them?

Professor Hersh

Sometimes you can write the most beautiful description about the project, and people still don't get it. The sponsors didn't understand that. I think it would be important for you to understand what prospective organizations in Czech Republic understand about the term internship. Are there any educational organizations, like WPI, who do project based learning or experiential learning? Sometimes it's so far out of people's experiences that even though they write about it, they don't quite have a sense of what it is. Think about if the universities in Czech Republic provide project-based learning experiences with respect to the EU. The marketing department at WPI thinks it might be useful if they bring out a media team to come to various project sites, and make videos of students, advisors, and sponsors. You might want to look at those and see if you can refer to any of them, particularly the sponsor videos. I think they've done one in Albania, Glacier, Boston, and I can't remember the rest. That might be something sponsors want to look at and they'll make up their mind. There are lots of templates out there that people have used, a boilerplate language about WPI.

In many cultures that I've worked in, the people want to see who you are as a center director, they want to get to know you, do they really want to work with you? Is it worth their time and investment? Even if you're suggesting that these projects could be really extraordinary, they may not like you and feel it's not worth it. A lot of discussion is over coffee, at least in the Mediterranean world that I've been working in, and slowly getting to know each other. You want

to make the process clear and help them understand how it's not going to be a burden. There's a trade off in time and human resources committed to it. The time you put into it is directed at projects and research rather than having to read papers or other things that they don't have time for. It's necessary for a very clear statement about the role of the advisors and what kinds of outputs could be done. More project centers relate to different outputs like audio visual materials and different kinds of written outputs, apart from reports. Those kinds of things would be important to stress.

Matthew Amodea

You brought up the amazing point that the design of the project is very critical in determining the experience of the students. Since the we won't have the job of finalizing the design, but we will have the opportunity to express different examples of designs that a sponsor may be able to replicate. Do you have any tips on how we can design a successful project or the experience of the students. You mentioned open endedness of the project and the deliverable aspect. But do you feel there's anything else we should know?

Professor Hersh

There are some really practical things, like building into the program fee. If you were working with a community in Prague, you would want to have a translator. We call translators co-researchers sometimes. Somebody your age who would help not just translate, but think through the project, offer new ideas, and give you cultural competence. The way you can provide that is to think through what the program fee would include. Open ended is good if you can explore those considerations, you know, with somebody to help you with language difficulties.

The second thing is that I think it help if the project sponsor encourages the students to think about multiple audiences for further work, such as the community they work with, and then the

sponsor, and then themselves. One of the things we've often done is we've had different kinds of presentations at the end. Sometimes we have community presentations, where it's five minutes, and everybody brings food, and you just chat and have a drink and celebrate. Other times it's a much more formal presentation. I think the in order for the center director to design projects you need to think through: What are the audience? Who the stakeholders here? And where do we want to emphasize our work with that particular stakeholder? I think that understanding those dynamics is important. Sometimes the sponsor is an NGO that wants the students to work with community members. And that adds multiple layers of challenge. So, when you design a project like that, you need to have the resources available to help students succeed.

Emily Gorelik

Thank you so much for your time this evening, it has been really helpful.

Appendix I: Interview Questions for Intermediate Contacts

Introduction Script: We are a group of university students from Worcester Polytechnic Institute (WPI), an engineering college in Worcester, Massachusetts, with a focus on project-based learning. We are currently in Prague, for seven weeks, completing a project for our third-year university project under Professor Dr. Robert Kinicki, our advisor.

Our project is to identify, contact, and establish relationships with organizations here in Prague and the greater Czech Republic that may wish to be a project partner. We are looking for areas of opportunity in the Czech Republic that would benefit from student projects with local Czech organizations. The student project teams work closely with their partner organization in order to complete a project that provides potential benefits for the sponsor and/or the populations that the organization seeks to assist, as well as an enriching educational experience for the students.

We would like to inform you that this interview is voluntary, and you may withdrawal at any time. With your permission to record the audio of this interview, we will develop a transcript for our report. We will omit any personal information and you may remain anonymous unless otherwise stated. You do not have to answer any questions you do not feel comfortable with answering. Would you like to continue with or without recording?

At this point we would like to provide a few sample organizations from other WPI project centers so that you understand the types of organizations WPI typically works with for Interactive Qualifying Projects (IQPs).

Example 1) PresserVenice is a non-profit organization in Venice Italy with a focus on restoring public art in the city.

Example 2) Cultural Heritage without Borders is a non-governmental organization that works to restore cultural heritage affected by neglect, war, and natural disasters.

Example 3) The US National Park Service is a federal government agency that manages national parks, historical sites, and other conservation efforts.

Interview Questions:

Prior to asking the questions below, the team spent a few minutes casually chatting with the intermediate contact.

I.1 Do you have any personal contacts with organizations such as NGOs, museums, and government agencies in Prague that are like the examples provided?

I.2 Do you know anyone else who might have personal contacts with organizations that could be potential project sponsors?

I.3 Do you know of any other organizations that might make good project sponsors, regardless of if you have an existing connection to the organization?

At the conclusion of the interview, the team requested that the intermediate contact send an initial email to the organizations they referred the team to giving a brief introduction for the team as well as copying the team so that they could continue the dialog themselves.

Appendix J: Initial Organization Contact Email Template

English Version:

Dobrý den <<Representative>>,

My name is <<Team member sending email>> and along with <<Other team members>>, under <<Advisor>>, we are in Prague as part of a study-abroad program with our university. Together we make up our university's IQP Organization Relations team in Prague.

In our university, Worcester Polytechnic Insititute (WPI), students can travel abroad and work with partnering organizations where we act as student consultants for 7 weeks on an interactive project known as the IQP. We are the first group of students that were given the opportunity to visit Prague, and our project is to find potential partnering organizations for future students that travel to the city. Some past projects include:

<<Previous Project Example 1>>

<<Previous Project Example 2>>

<<Previous Project Example 3>>

We would love to meet with a representative to discuss the potential for a partnership with WPI. We only ask for 30 minutes of your time.

Please let us know if you would be interested in discussing this further. We look forward to hearing from you and to a potential partnership.

Kindest Regards,

The IQP Organization Relations Team

gr-futurepragueiqpsponsorship@wpi.edu

https://pragueprojectcenter.org/faq/

Czech Version[1]:

Dobrý den <<Representative>>,

Jmenuji se <<Team member sending email>> a spolu s mými spolužáky <<Other team members>> jsme v Praze v rámci zahraničního studijního programu naší univerzity pod vedením <<Advisor>>. Společně v Praze tvoříme tým IQP Organization Relations naší domovské univerzity. Na naší domovské univerzitě, Worcester Polytechnic Insititute (WPI), mohou studenti cestovat do zahraničí a pracovat s lokálními partnerskými organizacemi, kde působíme jako studentští konzultanti po dobu 7 týdnů na interaktivním projektu známém jako IQP. Jsme první skupinou studentů, která dostala příležitost navštívit Prahu a naším projektem je najít potenciální partnerské organizace pro budoucí studenty, kteří do města přicestují. Některé minulé projekty zahrnují:

<<Previous Project Example 1>>

<<Previous Project Example 2>>

<<Previous Project Example 3>>

Rádi bychom se setkali se zástupcem této organizace a projednali možnosti partnerství s WPI. Žádáme vás pouze o 30 minut vašeho času.   Pokud byste měli zájem o další jednání, dejte nám prosím vědět. Těšíme se na vaši odpověď a na potenciální partnerství.

S pozdravem,

The IQP Organization Relations Team

gr-futurepragueiqpsponsorship@wpi.edu

https://pragueprojectcenter.org/faq/

Appendix K: PowerPoint Presentation for Potential Sponsor Meetings

Outcomes

BENEFITS TO STUDENTS AND PARTNERS

PROJECT CENTER DIRECTOR COMMUNICATION

NO FORMAL COMMITMENT FOR FUTURE PROJECTS

17

Final Presentations

If you are interested in seeing the final presentations, we can send you the location details once they become available. The presentations can be viewed in person or online.

- Date: December 6th
- Time: 3-5pm CET

18

Contacts and Additional Information

Contact the team: gr-futurepragueiqpsponsorship@wpi.edu

Contact our advisor: rek@wpi.edu

Prague Project Center Directors:

Aaron Deskins: nadeskins@wpi.edu

Marie Keller: mkeller@wpi.edu
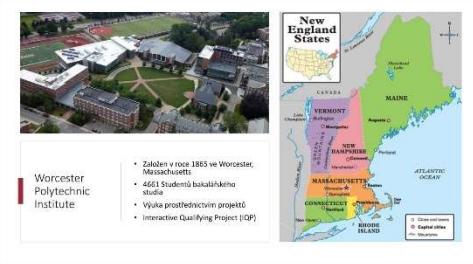
Prague Project Center Website:

pragueprojectcenter.org

19

Děkujeme
Questions?

Appendix L: Czech Handout of PowerPoint Presentation for Potential Sponsor Meetings

Památník pracovního tábora Spaç: Zkoumání digitálních metod

Cíl — Zachování kulturní památky prostřednictvím většího povědomí

Výsledek — Digitální rekonstrukce tábora a uchování příběhů o bývalé věznici

CH W B
Cultural Heritage without Borders
ALBANIA

9

Přizpůsobení vzdělávacích programů pro studenty s hendikepem

Cíl — Identifikovat problémy s přístupností a překážky ve výuce pro studenty s hendikepem

Výsledek — Vytvořit rámec s úpravami pro studenty s pohybovým, sluchovým, zrakovým a kognitivním postižením.

ZOOS VICTORIA

10

Jak se studenti připravují?

Naučí se strategie výzkumu a analýzy

Napíší návrh projektu

Vzdáleně interaktují s partnerskou organizací

11

Výhody pro partnery

Obětavost a časové nasazení studentů

Poradci zajišťují kvalitní práci

Závěrečná zpráva o projektu a výstupy

12

Stážisté vs. Poradci

Nejedná se o stáž
- Žádní zaměstnanci/žádná zaneprázdněnost
- Partneři neslamovují termíny

Poradenství
- Umožňuje flexibilitu
- Vyvážené výhody
- Více výstupů
  - Výsledky a návrhy
  - Výstup pro partnera

13

Zodpovědnosti partnerů

Věnujte
- Časový závazek 2 h/týden
- Kontaktní osoba

Udržovat
- Komunikace

Zajistit
- Popis projektu

14

Dobré projekty obsahují

Příležitosti naučit se něco nového

Otevřená řešení

Interakce s místní komunitou

Zajímavé a užitečné elementy pro partnerské organizace

Méně naléhavé úkoly

15

Předpokládaná časová osa

1 — leden - srpen — Diskuze

2 — polovina srpna - polovina října — Návrh

3 — polovina října - polovina prosince — Implementace

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9

10

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