



# Improving Remote University-Level English Instruction In Western Panama

Submitted by:  
Tyler Cierpich  
Hailey Delphia  
Lindsey Fletcher  
Justin Hines



**WPI**



# Improving Remote University-Level English Instruction In Western Panama

An Interactive Qualifying Project  
Submitted to the Faculty of the  
WORCESTER POLYTECHNIC INSTITUTE  
in partial fulfillment of the requirements for the  
Bachelor's Degree

By  
Tyler Cierpich  
Hailey Delphia  
Lindsey Fletcher  
Justin Hines

Date:  
October 15, 2020

Sponsored By:  
Oteima University

Advisors:  
Professor James Chiarelli  
Professor Robert Kinicki



## **Abstract**

The goal of this project was to partner with Oteima University in western Panama to evaluate the University's current online teaching efforts during the 2020 pandemic, and to provide recommendations in regard to their remote English programs. Working remotely from Massachusetts, our investigation gathered information on students' and professors' current perceptions of their educational programs and learning methods through faculty interviews and a student questionnaire. Our results indicate that a lack of reliable Internet access was the main issue students were facing. The project provided Oteima with recommendations to record online lectures, implement online office hours, continue the use of Moodle, and allow students to choose between online and in-person classes in the future.

## **Acknowledgements**

The Oteima I team would like to thank our advisors on this project, Professors James Chiarelli and Robert Kinicki for all the consistent feedback, assistance, and help throughout this project.

Special thanks to our Sponsor Cristhian Mora for all of his efforts in distributing our survey, connecting us with professors, and providing us with background information on students. Without so much time and effort on his end, none of this project would have been possible.

We would also like to thank all of the Oteima students who submitted feedback to our survey, as well as the professors from both WPI and Oteima who took the time to interview with us and assist us with our project.

## Authorship

Section	Author	Editor
Abstract	Hailey Delphia	Hailey Delphia
Executive Summary	All members	Tyler Cierpich, Hailey Delphia, Lindsey Fletcher
1.0 Introduction	All members	All members
2.0 Background	All members	Tyler Cierpich, Justin Hines
2.1 Poverty in Panama	Tyler Cierpich, Lindsey Fletcher	Tyler Cierpich, Justin Hines
2.2 Internet Access Issues	All members	Tyler Cierpich, Justin Hines
2.3 COVID-19 Impact	Tyler Cierpich, Hailey Delphia, Justin Hines	Tyler Cierpich, Justin Hines
2.4 Internet Access Issues	Tyler Cierpich, Hailey Delphia, Justin Hines,	Tyler Cierpich, Justin Hines
2.5 Fluency Techniques in ESL Classrooms	Hailey Delphia, Justin Hines	Tyler Cierpich, Justin Hines
2.6 Oteima University's Remote English Program	Hailey Delphia, Justin Hines, Lindsey Fletcher	Tyler Cierpich, Justin Hines
2.7 Project Stakeholders	Lindsey Fletcher	Tyler Cierpich, Justin Hines
3.0 Methodology	All members	Hailey Delphia, Lindsey Fletcher, Justin Hines
3.1 Learn what the instructors believe will improve student outcomes	Lindsey Fletcher	Tyler Cierpich, Hailey Delphia and Justin Hines

3.2 Gain insight into the needs, wants, and motivations of current students	All members	Hailey Delphia and Justin Hines
3.3 Identify strengths and weaknesses in the current available online platforms	All members	Hailey Delphia, Justin Hines
3.4 Summary	All members	Hailey Delphia, Lindsey Fletcher
4.0 Results	Lindsey Fletcher	All members
4.1 WPI Instructor Interview Analysis	Hailey Delphia	All members
4.2 Oteima University Instructor Interview Analysis	Tyler Cierpich, Lindsey Fletcher, Justin Hines	All members
4.3 Questionnaire Analysis	Tyler Cierpich, Hailey Delphia, Lindsey Fletcher	All members
4.4 Cross Analysis	Justin Hines	All members
5.0 Recommendations	Justin Hines	Lindsey Fletcher
5.1 Continue to use Moodle	Justin Hines	Lindsey Fletcher
5.2 Consider recording lectures and creating office hours to allow for additional student flexibility	Justin Hines	Lindsey Fletcher
5.3 Continue to expand online resources	Justin Hines	Lindsey Fletcher
5.4 Conclusion	Tyler Cierpich	All members
Works Cited	All members	N/A
Appendix A: Interview Structure and Questions	All members	All members
Appendix B: Student Questionnaire Form	All members	All members
Appendix C: Video Link and Script	Hailey Delphia	N/A
Appendix D: Interview Transcripts Chart	Hailey Delphia	N/A
Appendix E: Professor A Interview Transcript	N/A	Lindsey Fletcher
Appendix F: Professor B Interview Transcript	N/A	Hailey Delphia, Lindsey Fletcher

Appendix G: Professor Esther Boucher-Yip Interview Transcript	N/A	Lindsey Fletcher, Justin Hines
Appendix H: Professor Próspero González Interview Transcript	N/A	Tyler Cierpich, Lindsey Fletcher
Appendix I: Professor Oscar Roriguez Interview Transcript	N/A	Lindsey Fletcher
Appendix J: Professor Luissana Gómez Interview Transcript	N/A	Hailey Delphia, Justin Hines
Appendix K: Professor C Interview Transcript	N/A	Lindsey Fletcher, Tyler Cierpich
Appendix L: Professor Evelyn Hidrogo Interview Transcript	N/A	Hailey Delphia, Lindsey Fletcher, Tyler Cierpich
Appendix M: Professor D	N/A	Justin Hines, Tyler Cierpich
Appendix N: Additional Graphs	Lindsey Fletcher	Lindsey Fletcher

## Table of Contents

Abstract	i
Acknowledgements	ii
Authorship	iii
Table of Contents	vi
List of Figures	viii
List of Tables	viii
List of Acronyms	viii
Executive Summary	ix
E.1 Goals and Objectives	9
E.2 Methods	9
E.3 Results	10
E.4 Recommendations	13
E.5 Conclusion	13
Chapter 1: Introduction	1
Chapter 2: Background	3
2.1 Poverty in Panama	3
2.2 Oteima University	7
2.3 COVID-19 Impact	8
2.4 Internet Access Issues	9
2.5 Fluency Techniques in ESL Classrooms	11
2.6 Oteima University's Remote English Program	12
2.7 Project Stakeholders	14
Chapter 3: Methodology	14
3.1 Learn what the instructors believe will improve student outcomes	16
3.2 Gain insight into the needs, wants, and motivations of current students	20
3.3 Identify strengths and weaknesses in the current available online platforms	23
3.4 Summary	24
Chapter 4: Results	25
4.1 WPI Instructor Interview Analysis	25
4.2 Oteima University Instructor Interview Analysis	26
4.3 Questionnaire Analysis	31



Demographics	31
4.4 Cross Analysis	41
Chapter 5: Recommendations	44
5.1 Continue to use Moodle	44
5.2 Consider recording lectures and creating office hours to allow for additional student flexibility	44
5.3 Continue to expand online resources	45
5.4 Conclusion	45
Works Cited	47
Appendix A: WPI and Oteima University Faculty Interview Structure and Questions	50
Appendix B: Student Questionnaire	52
Appendix C: Video Script and Link	62
Appendix D: Interview Transcripts Chart	64
Appendix E: Professor A Transcript	65
Appendix F: Professor B Transcript	72
Appendix G: Professor Esther Boucher-Yip Transcript	83
Appendix H: Professor Próspero González Transcript	90
Appendix I: Professor Oscar Rodriguez Transcript	99
Appendix J: Professor Luissana Gómez Transcript	106
Appendix K: Professor C Transcript	115
Appendix L: Professor Evelyn Hidrogo Transcript	124
Appendix M: Professor D Transcript	133
Appendix N: Additional Graphs from Student Questionnaires	139

## List of Figures

**Figure E.1** Map of Panama

**Figure E.2** Opinions on Moodle by age group

**Figure E.3** Student Internet access off campus

**Figure E.4** Percentage of students with Internet issues off campus

**Figure E.5** Student opinions on adding more online resources

**Figure E.6** Outside obligations students reported having

**Figure 2.1** “MPI and vulnerability by province and community (2010)” (UNDP, 2015)

**Figure 2.2** “Distribution of the economically active population by sector. Provinces and indigenous communities sorted by income in descending order. (2014)” (UNDP, 2015)

**Figure 3.1** Graphic representing the methodology

**Figure 4.1** Which platforms Oteima professors reporting using

**Figure 4.2** Age distribution of Oteima University students

**Figure 4.3** Opinions on Moodle by age group

**Figure 4.4** Student employment status

**Figure 4.5** Hours worked by employed students

**Figure 4.6** Outside obligations students reported having

**Figure 4.7** Comparison of student opinions on Meet and Zoom

**Figure 4.8** Student Internet access off campus

**Figure 4.9** Amount of students with Internet issues off campus

**Figure 4.10** Frequency of Internet issues off campus in students who reported issues

**Figure 4.11** Student device access

**Figure 4.12** Student opinions on adding more online resources

**Figure 4.13** Use of scholarships to pay for Internet

**Figure 4.14** Why students want to learn English

## List of Tables

**Figure 3.1** Table of interviewees

**Figure 3.2** Part of the Google Sheet that was used to code our interview responses

## List of Acronyms

**COVID-19** - Coronavirus Disease 2019

**ESL** - English as a Second Language

**OU** - Oteima University

**WPI** - Worcester Polytechnic Institute

**MPI** - Multidimensional Poverty Index

## Executive Summary



*Figure E.1: Map of Panama*

Amid the COVID-19 pandemic, universities in countries across the world are sending students home and making the switch to online learning. The inability to hold in-person classes due to COVID-19 has increased Oteima University's interest in expanding its online learning programs even after in-person classes resume. They believe this classroom model will introduce more flexibility for their student body who have prior commitments such as work or families that prevent them from attending traditionally scheduled classes. Consequently, Oteima is seeking strategies to improve their remote course delivery to benefit those who are unable to take courses on campus.

Oteima University, located in David in Western Panama (see Figure E.1), is working to reduce the economic disparity in Panama by promoting entrepreneurship through student acquisition of stronger English language skills. In a

study conducted in 2015, the United Nations Development Programme (UNDP) used a “multidimensional poverty index” (MPI) to identify multiple individual deprivations in education, health, and standard of living. They determined that the national MPI average in 2010 was 14.1%, but “it fluctuates on a range from 4.2% in Panama [province] to 89.5% in the Ngabe Bugle community”. This demonstrates the economic inequality in Panama, and expanding access to education is an important factor in combating this inequality.

### E.1 Goals and Objectives

Due to COVID-19, Oteima University has closed its campus to students for the Fall 2020 term and is only offering courses remotely. Our project team partnered with Oteima University to evaluate the University's current online teaching efforts during the pandemic and provide recommendations in regard to their remote English programs that Oteima can continue to utilize after COVID-19.

### E.2 Methods

The project team conducted semi-structured interviews with six instructors from Oteima University's ESL department and three instructors from WPI's ESL department. The WPI interviews

primarily served to improve our interview skills and structure in preparation for the Oteima University interviews. We conducted the Oteima University interviews with six instructors, who represented a variety of ages, backgrounds, and experiences. We coded the data collected from these interviews based on key points that were repeated across interviews. We then inserted them into a Google Sheets document and marked which of the nine professors had touched upon that same topic, then counted how many professors mentioned overlapping topics.

We collected information about the students' point of view by administering an online questionnaire focused on why students wanted to learn English and what they thought of the current English program. In order to grab students' attention and convince them to help us by taking our survey, we created a short video explaining who we were and why we were conducting our survey. The video was sent out along with the questionnaire when we distributed it.

To distribute our questionnaire to students, our sponsor Cristhian Mora uploaded our video and survey links onto the class Moodle pages for all of Oteima University's ESL courses. We gathered 111 student responses and created graphs visualizing our results, including some cross-analysis graphs where we compared two sets of data.

### **E.3 Results**

#### **Faculty Interviews - Potential of Remote Learning**

Four out of the six Oteima professors said that they want online or hybrid classes after the pandemic to offer more students opportunities to receive their preferred learning experience. They discussed potential applications of remote learning even when in-person classes resume, such as expanding access to students who cannot afford to go to campus every day. Expanding access to education is important, as Professor Rodriguez described to us: "...[T]eaching is the only way that improves the student's knowledge and also helps to break the chain of poverty. So, [through teaching] we are kind of training the minds".

#### **Faculty Interviews - Platforms**

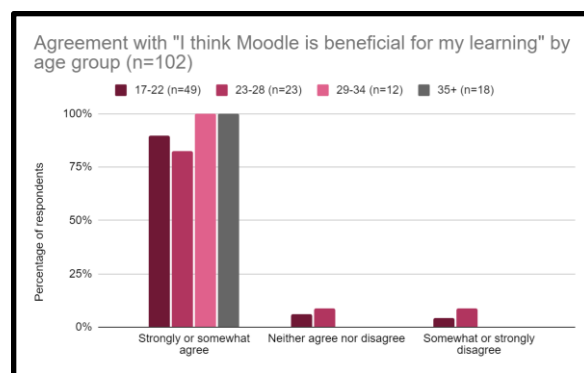
From the Oteima faculty interviews, we determined how often the six professors used each of the platforms that we discussed with them. All six of the Oteima professors indicated that they used Moodle, which is a learning management system. Five out of six of the Oteima University professors clearly stated that they felt positively about Moodle and agreed that it was useful for learning.

## Faculty Interviews - Internet Issues

Multiple teachers said in the interviews that the largest problems they faced with conducting classes virtually related to students' and professors' lack of Internet access or poor Internet connection. Five out of six professors mentioned experiencing occasional problems with network connections while teaching their classes. Many of the teachers also reported that a significant number of their students had issues staying connected through the entirety of the class. These problems lead to a drop in attendance, making it harder for those students to get the proper experience and benefits out of the class and often leads to students failing or dropping the class. To get a better idea of the students' perspectives on these issues, the next section considers our student questionnaire results.

## Student Questionnaire - Platforms

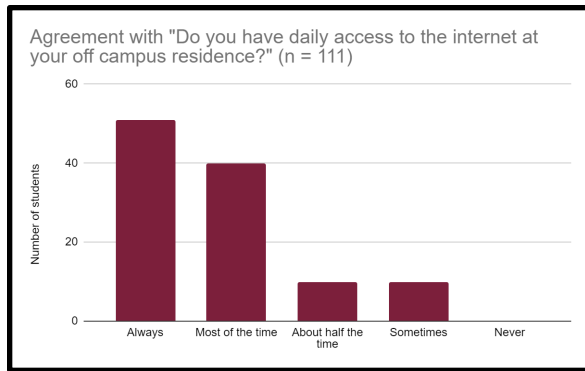
In our research, we investigated any possible correlations between the ages of students and factors of the ESL program such as opinions on the various platforms. When we grouped students by age group, we found that regardless of their age most students believed that Moodle is useful, with very few in any age group believing that it was not useful to their learning (see Figure E.2).



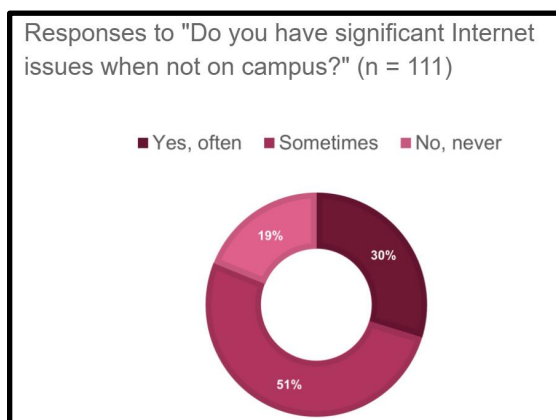
*Figure E.2: Opinions on Moodle by age group*

## Student Questionnaire - Internet Access

Although many students reported that they have daily Internet access, Figure E.3 depicts that 19% of students indicated that they have consistent Internet access about half of the time or less. As shown in Figure E.4, even students who often have Internet access at home face issues with Internet connectivity: of all students who responded, 30% reported that they have Internet issues “often,” and only 19% reported that they never have Internet access issues. Figure E.3 demonstrates that most students have frequent Internet access, but Figure E.4 demonstrates that most students also have significant problems with the Internet. This suggests that connection quality is a larger concern than Internet access.



**Figure E.3: Student Internet access off campus**

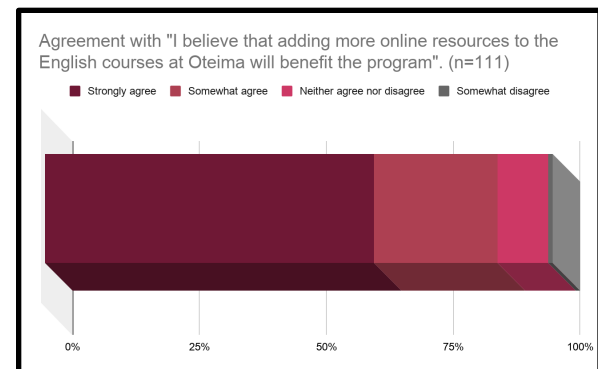


**Figure E.4: Percentage of students with Internet issues off campus**

### Student Questionnaire - Adding more online resources

Despite the various issues that some students face with online courses, students overwhelmingly favored adding more online resources to the English program at Oteima University. Of the 111 students surveyed, all responded to the question asking if they thought adding more online resources would be beneficial. Figure E.5 illustrates that about 85% of the students surveyed strongly or somewhat agreed that

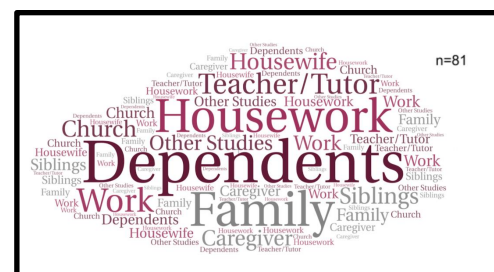
Oteima University should add more online resources to the English program.



**Figure E.5: Student opinions on adding more online resources**

### Student Questionnaire - Outside Obligations

Along with investigating factors that affected students' learning within Oteima University's ESL program, we also sought to gain insight into what could be influencing students' educations outside of the classroom. As seen in the word cloud in Figure E.6, when asked about what outside obligations they had other than their degrees, the majority of students responded that they had either work or families to attend to, with various other social and economic responsibilities reported as well.



**Figure E.6: Outside obligations students reported having**

## E.4 Recommendations

Based on our results from Oteima ESL faculty interviews and student survey responses, we recommend that Oteima University consider implementing the following practices into their ESL program:

- ***Record lectures and create online office hours for students.*** Students indicated many instances of having Internet accessibility issues that would cause them to miss classes and information vital to understanding their lectures. Online office hours would allow for teachers to have more face to face time with students and to help students with inconsistent Internet access ask questions about topics they may have missed. Recorded lectures could also help students who were unable to participate in the live classes. This flexibility can also assist students who have significant outside obligations. Additionally, recording lectures can benefit students even if they do not experience connection problems.
- ***Give students the option to take online courses in the future.*** Students indicated multiple outside obligations such as work and families, and the desire for a more flexible learning plan for their studies. Four of the six Oteima professors believed this hybrid style of classes would be beneficial after COVID.

- ***Continue using Moodle as a primary educational platform.*** Both students and professors believe the program Moodle is both beneficial to their learning and easy to use.

## E.5 Conclusion

Our project aimed to research and analyze the effectiveness of Oteima University's remote English education program. Through the use of interviews of both Worcester Polytechnic Institute and Oteima University faculty and a questionnaire distributed to Oteima University students, this investigation yielded a set of recommendations for Oteima University to consider as actions to improve the delivery of their English program. In summary we recommend that Oteima University continue to utilize Moodle, consider adding additional options for students who are unable to attend live classes consistently, and continue with plans to expand options for remote learning. Overall, our findings confirm that students and faculty generally approve of Oteima University's English program and other current new developments. These new developments can help Oteima University increase enrollment and improve the program's ability to connect students with a quality education, which can then help students acquire better jobs to improve their lives.

## **Chapter 1: Introduction**

Panama is famous for its Panama Canal, which revolutionized international trade and generates a significant portion of Panama's income. However, much of Panama's wealth is concentrated in Panama City and does not reach the rest of the country. Panama has significant wealth inequality, and one contributor to this problem is the disparity in English skills. Far fewer Panamanians outside of Panama City are fluent in English, which holds them back from competing in the global market. Oteima University, located in David which is the capital of the Chiriquí Province in Western Panama, is working to reduce this disparity by promoting entrepreneurship through student acquisition of stronger English language skills.

Higher paying jobs are often in the tertiary sector, which means the worker supplies a service rather than producing a product. Jobs in the primary and secondary sectors primarily consist of extracting raw materials and creating products with those raw materials, respectively. According to a study conducted by the United Nations Development Program (UNDP, 2015), wealthier provinces in Panama have a significantly higher percentage of the population working in the tertiary sector than less wealthy provinces. Learning English may give Panamanians more career opportunities in the tertiary sector and improve their socioeconomic status. Oteima University emphasizes entrepreneurship, and learning English can lead to more opportunities for Panamanian entrepreneurs to reach a broader international audience.

Oteima University wants to expand their remote English language program to make it more accessible and effective for students. Although COVID-19 is forcing students to take courses remotely as of Fall 2020, Oteima University's ESL department wishes to expand their



remote online courses for students who cannot attend the university in person for various reasons, particularly students in rural areas.

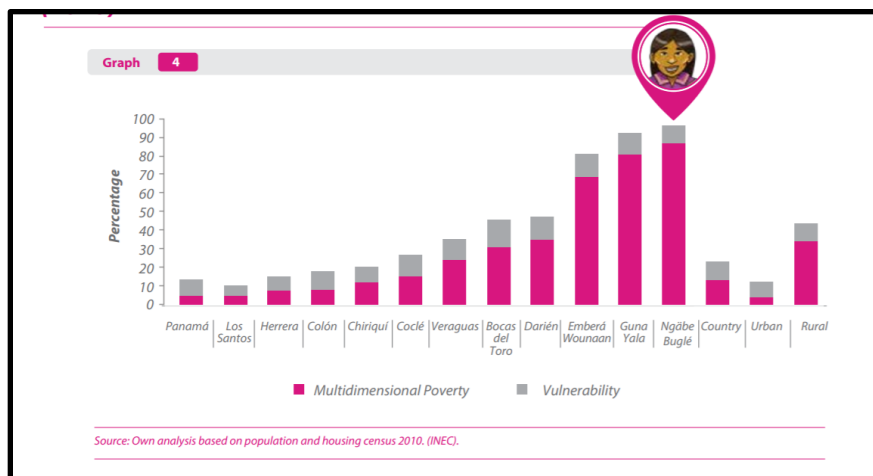
We are delighted to have had the opportunity to work alongside Oteima University to assess their remote English learning program. We worked with Professor Cristhian Mora to contact students and faculty. The team collected data primarily through faculty interviews and a student questionnaire. We assessed how COVID-19 impacted students, particularly with regards to their ability to access the Internet. Through the use of the student questionnaire we were also able to gauge how beneficial the current platforms being used by Oteima University are to the students' learning. Then through the interviews conducted with faculty members at both Worcester Polytechnic Institute and Oteima University the team learned how faculty currently utilized online platforms in order to best teach their respective English courses. With the results from our research, the team presented three recommendations to Oteima University that are based on the Internet issues that their students faced as well as how to best optimize how materials are delivered to the students for their courses.

## **Chapter 2: Background**

This chapter covers the background of our project. The first section discusses the state of Panama in 2020 during the current pandemic and how the virus impacted the country. The next section introduces our sponsor Oteima University and its current programs and operations with a look at how the COVID-19 pandemic has changed the teaching methods at Oteima University. The team additionally looked at the challenges that both the University and its students face with online classes and more specifically the various Internet problems that disrupt the fluidity of many of the classes. We also reviewed different language programs at other universities while examining Oteima University's program and how it functions. The final section presents a brief overview of the stakeholders for our project

### **2.1 Poverty in Panama**

Despite the great wealth that the Panama Canal brings to the nation, many Panamanians still live in poverty. In 2018, the World Bank Group estimated that 12.5% of Panamanians live on less than the US \$5.5 per day (The World Bank, 2020). Poverty in Panama varies greatly by region, with rural areas hit hardest (The World Bank, 2020). In a study conducted in 2015 the United Nations Development Programme (UNDP) used a "multidimensional poverty index" (MPI) to identify multiple individual deprivations in education, health, and standard of living. They determined that the national MPI average in 2010 was 14.1%, but "it fluctuates on a range from 4.2% in Panama [province] to 89.5% in the Ngabe Bugle community" (see Figure 2.1). The Ngabe Bugle community consists of indigenous Panamanians, and the UNDP's analysis found indigenous communities to be at dramatically increased risk of multidimensional poverty (UNDP, 2015).



**Figure 2.1: “MPI and vulnerability by province and community (2010)” (UNDP, 2015)**

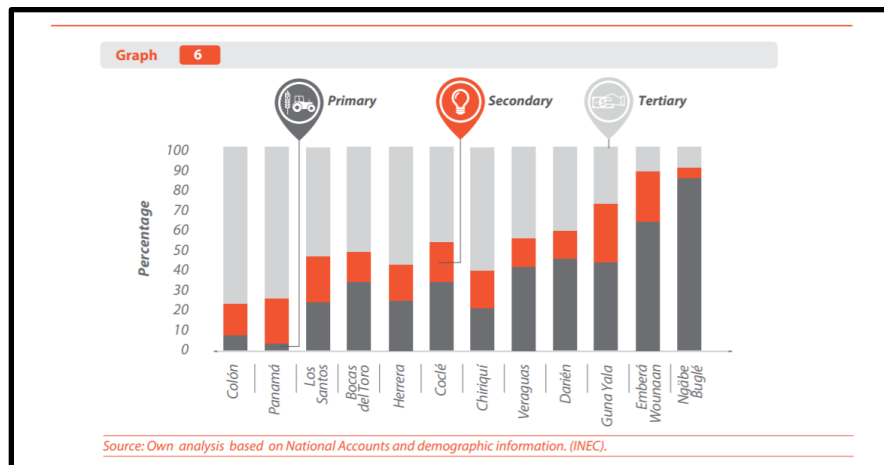
The UNDP analysis indicates that income correlates with the type of job an individual has. “The highest income, observed in Panama and Colon, was seen to respond to a structure of employment in which the predominant activity is of tertiary services. Middle-income areas have a more diversified structure, while lower-income areas have a structure of employment centered in the primary sector.” (UNDP, 2015). Localities with a higher percentage of workers in the primary sector (e.g., Ngabe Bugle in Figure 2.2) are more likely to have higher poverty rates and lower incomes.

However, the evidence is mixed for the impact of workers moving to different sectors. An Organization for Economic Co-operation and Development (OECD) study (Cervantes-Godoy, D. and J. Dewbre, 2010) on “Economic Importance of Agriculture for Poverty Reduction” suggests that economic growth in the agriculture sector is a powerful tool in reducing poverty, but “[a] common finding is that the poverty-reducing powers of agriculture declines as countries get richer.” They do suggest that in the absence of economic growth, “poverty could be reduced [...] through migration of farmworkers to off-farm jobs.” They also note that it is difficult to gauge the net effect of decreased food prices, because this may simultaneously

benefit people on lower incomes and harm those who produce the food, who are often low-income themselves.

A significant factor that is difficult to currently analyze is the impact of COVID-19 on poverty. While it seems reasonable to assume that this virus will harm people at lower incomes most, the impact in different economic sectors may be difficult to classify. Rural areas may experience less disruption to daily life due to their inherent increased isolation and may be less likely to lose their jobs due to COVID-19. However, rural areas may be more likely to have poorer medical care and sanitation, which could cause them to be harder hit by the virus.

Increasing the education levels of residents may enable more people to work from home, preventing them from losing jobs due to COVID-19. In the US in 2018 “42 percent of those with an advanced degree performed some work at home on days worked, compared to 12 percent of those with a high school diploma and no college” (United States Department of Labor, 2019). While this trend does not necessarily apply in Panama, many people holding primary and secondary sector jobs are inherently unable to perform them remotely. Hence, it seems reasonable that the tertiary job sector would see more remote employment. Because working in the tertiary sector often requires more education, increasing education in Panama may decrease the negative impact of COVID-19 on poverty. Additionally with the way that the world is changing, many companies may decide to have people work from home permanently to save money on office space.



**Figure 2.2: “Distribution of the economically active population by sector. Provinces and indigenous communities sorted by income in descending order. (2014)” (UNDP, 2015)**

In particular, knowledge of English may allow Panamanians to hold jobs in the tertiary sector. English is the second most spoken language in the entire world, and therefore often one of the most useful languages to know. English is one of the most useful tools for Panamanians to have as using English provides opportunities for people in both the tourist and business markets. In Panama, people from all around the world converge along the Panama Canal to conduct business and move goods through the canal and tourists from all around the world come to experience the wonderful sights and atmosphere of Panama. This makes knowing English a very valuable skill for Panamanians. Institutions such as Oteima University in the western province of Chiriquí seek the most effective techniques to teach English as a second language (ESL) to people in locations far removed from commerce associated with the canal. Throughout the world, such programs take a variety of approaches in teaching the English language to those who do not speak it as their first language.

## 2.2 Oteima University

Our team has the unique opportunity to work with Oteima University, located in the city of David in Western Panama. Oteima, whose acronym in Spanish stands for Computers, Technology, Education, Languages, Environment, and Agriculture, synthesizes aspects of various fields to create a model system for technological education. Their system highly promotes the application of knowledge in areas of teaching, intensive research, and production. As a result, Oteima focuses on entrepreneurship, particularly in western Panama, to facilitate the marketing and manufacturing of technological advances that could positively impact the lives of the region's residents. Therefore, it is a major goal of the University to present its students as many opportunities to succeed (Oteima University, n.d.).

Oteima University provides its students with far more than just the technical background needed to succeed in the ever-changing technology field. In fact, the University offers a vast array of English education programs designed to best develop the level of knowledge that each student needs. Their English programs range from additional courses to supplement a student's main learning objectives all the way to a Master's Degree (Oteima University, n.d.). The time commitment for each of the English programs varies, but they all require good attendance levels to pass the program. These classes cover topics such as English grammar, phonetics, writing and drafting, orthography and writing, Spanish, literature, and ethics. The majority of the programs require students to finish their time in the program with a minimum grade point average of seventy-one points (equivalent to C) with exceptions to major projects required for graduation that require a minimum average of eighty-one points.

Oteima University gave students a number of resources including free Internet access on the campus, as well as access to computer labs and tutors. Oteima University also has a "Moodle

Team” to help students use Moodle, which is a free learning management system. Moodle is used as a course interface in which students can see announcements and assignments for the class similar to other programs such as Canvas or Google Classroom. In addition to educational resources offered by Oteima University, students are also eligible to receive health services and low-interest loans (Oteima University, n.d.).

### **2.3 COVID-19 Impact**

Amid the COVID-19 pandemic, universities in countries across the world are sending students home and making the switch to online learning. While colleges may permit some students to stay on campus under special circumstances (e.g., international students), there are no in-person classes available to these students. In fact, according to the US Embassy in Panama, the Panamanian Government imposed movement restrictions permitting only certain adults to leave in-home isolation during specific two-hour time slots. On August 24, 2020 the Panamanian government lifted these restrictions and replaced them with a new curfew from 7:00pm until 5:00am, Monday through Friday throughout all of Panama. Currently, adults can still only go outside on certain days. For women that is Monday, Wednesday, and Friday while for men those days are Tuesday, Thursday, and Saturday. Sunday is a day of total quarantine for all citizens, beginning on Saturday at 7:00pm and ending on Monday at 5:00am. Additionally, in the province of Chiriqui where Oteima University is located, total quarantine continues on weekends from Friday at 7:00pm until Monday at 5:00am (U.S Embassy, 2020). Consequently, it has become vital for universities to adopt online learning technologies such as Zoom and Google Meet and adapt them to fit their classroom needs.

Since colleges quickly made this switch, due to the sudden and impactful nature of the COVID-19 pandemic there was not much time to refine these online classes and address the

plethora of problems that these schools encountered as classes began. The inability to hold in-person classes due to COVID-19 has increased Oteima University's interest in expanding their online learning programs even after in-person classes resume. They believe this classroom model will improve accessibility for students who have prior commitments such as work or families that prevent them from attending traditionally scheduled classes. However, this leaves Oteima University with questions regarding their plans for online instruction during the pandemic, as many of its students do not have viable network access at their residences. To address these issues, Oteima is seeking solutions that will not only help those who struggle having no reliable Internet access at their homes, but also strategies to expand their course delivery to include those who would benefit from the option of an online curriculum.

To adapt to the pandemic's effect on their Fall program, Oteima University has begun offering classes at different times for their students. They have Saturday and Sunday classes, weekday morning classes, and weekday night classes to accommodate their students. In addition, they record each lecture which enables students to watch them at a later date if they cannot attend an online lecture due to access issues, or if their schedule does not permit it.

## **2.4 Internet Access Issues**

The ability to access the Internet is one of the greatest assets currently available to the people of the world. The Internet allows access to the World Wide Web, a massive virtual world where there are countless options and opportunities for educational advancement. Whether it be connecting with a friend on the other side of the globe or researching a topic that currently interests them, the power that the Internet has in the world today is far-reaching and billions of people around the world cannot go a day without using it in some way, shape, or form.



Furthermore, the Internet enables students to learn anywhere that they have Internet access.. In Panama, there are four main providers of cellular phone service and Internet access: Cable & Wireless; Claro; Digicel; and Movistar. While these companies supply Internet access to most Panamanian people, there are still people who do not have this luxury. Rural areas of Panama are often most likely to lack Internet access. As a result, students who live further away from the center of their city are not able to get Internet access as easily and therefore struggle to complete online courses

There are two core reasons why some Panamanians cannot connect to the Internet. The first being that the COVID-19 virus has forced people to work and learn from home while many regions of Panama do not have the proper infrastructure to handle the increased online traffic. As a result of the COVID-19 pandemic, telecommunication service providers around Panama have installed the infrastructure needed for citizens to have Internet access. This infrastructure handles citizens accessing online webpages. However, currently citizens of Panama have a limited amount of data capacity due to the heightened online traffic caused by the pandemic and with a countless number of people using video conferencing services daily. Additionally, economically-strapped students are unable to pay the monthly connection fees, even when it is available in their area. These students who tend to live in the more impoverished areas of Panama often have to choose between buying food for their family or buying Internet access. A small percentage of students are able to mitigate the Internet payments through scholarships. However, the scholarship alone may not be enough to cover the fees for sufficient Internet access for school. At Oteima University, students come from various provinces of Panama and often face these issues which restricts them from getting their education. The goal of this project is to contribute potential strategies to help Oteima students navigate around the connection issues that they face.

## 2.5 Fluency Techniques in ESL Classrooms

In English as a Second Language Learning (ESL) many universities have taken different approaches to deliver their course materials. The course environment consists of a very structured approach to learning grammar rules that includes extensive reading and writing assignments. But after the City College of New York (CCNY) found that few students passed the college's Required Skills Assessment Test (SKAT), they researched a new form of language learning. They decided to try a whole language approach on their students in an introductory ESL class. The intention of this class was for students with basic English knowledge but poor English reading and writing skills. In class they read several books and responded to them in journals, writing a ten thousand-word semester-long project in workshop-style classes, but the students did not have any lessons about grammar or use any ESL textbook. After the approach was successful in the lower level course, they implemented this strategy in their higher-level English courses as well. With the expanded implementation, pass rates for the writing section of the SKAT increased by 60% and pass rates for the reading section doubled (MacGowan-Gilhooly, 1991). Although Oteima University does not utilize such a progressive approach, research projects and scientific papers are a core component of many of its English courses.

The MacGowan-Gilhooly paper discusses differences between first language acquisition (L1 learning) and second language acquisition (L2 learning). L1 learning involves listening to a large number of conversations, learning names, phrases, and syntax, and experimenting with speaking. Whereas L2 learning usually takes note of adults' better-developed brains and abilities to learn rules and grammar structures and takes an approach based on these skills. L2 learning often involves formal grammar lessons, unlike L1 learning. However, researchers argue that “[t]he best classroom L2 acquisition will occur when the input provided to learners is

comprehensible, interesting and/or relevant, not grammatically sequenced, provided in abundant quantity, and in such a manner to promote self-confidence and self-direction while arousing little or no anxiety” (MacGowan-Gilhooly, 1991). They found that it is best to incorporate these L1 learning techniques into L2 classrooms while focusing on providing abundant interaction and communication with fluent individuals, just as children pick up languages from their parents when younger. This facilitates a more natural progression of vocabulary, grammar, syntax, and pronunciation throughout their ESL classrooms (MacGowan-Gilhooly, 1991).

## **2.6 Oteima University’s Remote English Program**

In the modern world, online technologies have become essential to classrooms across the globe. Employing mobile technologies and applications in the classroom can promote interactivity, creativity, and collaboration amongst students with their professors. Furthermore, they support new methods instructors can use to monitor student progress and apply a more individualized approach. This helps instructors quickly identify and address problems, which may increase retention rates. Additionally, interactive learning activities create a more hands-on experience for students by creating fun ways for teachers to test their students' knowledge. Students become more engaged with the class when they're not sitting through a lecture (Dexway, 2017). Through hands-on experience students can grasp how much of the presented content they retain and find what areas they need to improve in immediately. Some online tools such as Duolingo and Rosetta Stone do not even require an instructor. This approach means individuals can start learning a language instantly and work at their own pace. Students use these tools to refine grammar and increase vocabulary through engaging exercises rather than reading from a book. Apps like Duolingo give users the opportunity to learn a new language whenever they have free time, without the commitment of a formal class. Although the self-paced nature of

these courses improves accessibility, the user must remain independently motivated to keep moving through the lessons to actually improve language skills.

The primary online learning platforms that Oteima University currently uses are Google Meet, Zoom, Moodle, and Edusoft. Moodle is a free online learning management system that is suitable for all ages and sectors. The word Moodle is an acronym for Modular Object-Oriented Dynamic Learning Environment. Moodle is now a cloud-based system that businesses and educational institutions can use to track course progress and completion via predictive analytics. The key features that Moodle offers are data backup, contact management, activity tracking, and a built-in calendar. Moodle has messaging capabilities so that students may ask questions in order to streamline communication. Furthermore, Moodle offers applications for both Android and iOS devices that enables students to receive class notifications for upcoming events and access course materials remotely on their smartphones. Users can integrate third-party applications such as Google Apps, Microsoft Office 365, NextCloud, and more into Moodle. Users can download, install, and freely use Moodle due to its GNU General Public License. Hosting, maintenance, and training comprise the costs of using Moodle. However, there are no royalties, fees, or other charges associated with Moodle (Moodle, 2013).

Edusoft is a learning platform that supplies students and teachers with an effective and engaging English language learning experience. It provides educational solutions for not only higher education but also corporations, government, and other types of schools. Edusoft's English Discoveries interactive platform administers interactive learning materials and management tools to an organization utilizing the service. Academic organizations benefit as there are ten general English courses aligned with the Common European Framework of Reference for Languages (CEFR) standards and designed to help students of all abilities learn the

language. The English Discoveries offer a plethora of automatically scored assessments that returns feedback so that teachers can focus on activities that have a higher education value over teaching to an assessment (Edusoft Learning, n.d.).

With the emergence of the pandemic, to make online learning easier and more accessible Oteima has introduced the use of platforms such as Zoom and Google Meet. Google Meet is a program which enables students to attend their classes virtually and supplies many useful tools for online learning. Students can join video calls where teachers teach the class on their computers. Google Meet additionally offers chat services so that students and teachers can communicate about questions that the students may have. A similar tool to Google Meet that is also used at Oteima University is Zoom. Zoom is another program which allows for people to meet virtually through video. Zoom lets users connect with each other from anywhere in the world making it yet another helpful tool for universities such as Oteima during the pandemic. These two platforms support Oteima's students scattered all over Panama to learn directly from their professors while being miles away from each other.

## **2.7 Project Stakeholders**

The primary stakeholders in this project are the students, faculty, and administration at Oteima University. However, the families and potential employers of students are indirect stakeholders as well. Whether or not the student is in school impacts families as well as if the student can continue their education remotely and if the student is able to get a better job as a result of more education. How educated Panama's workforce is affects employers in Panama, making Panamanian employers stakeholders as well. Potential students are also stakeholders, because if Oteima University expands their program to better accommodate students with limited Internet access, more of these students might register for classes and obtain a better education.

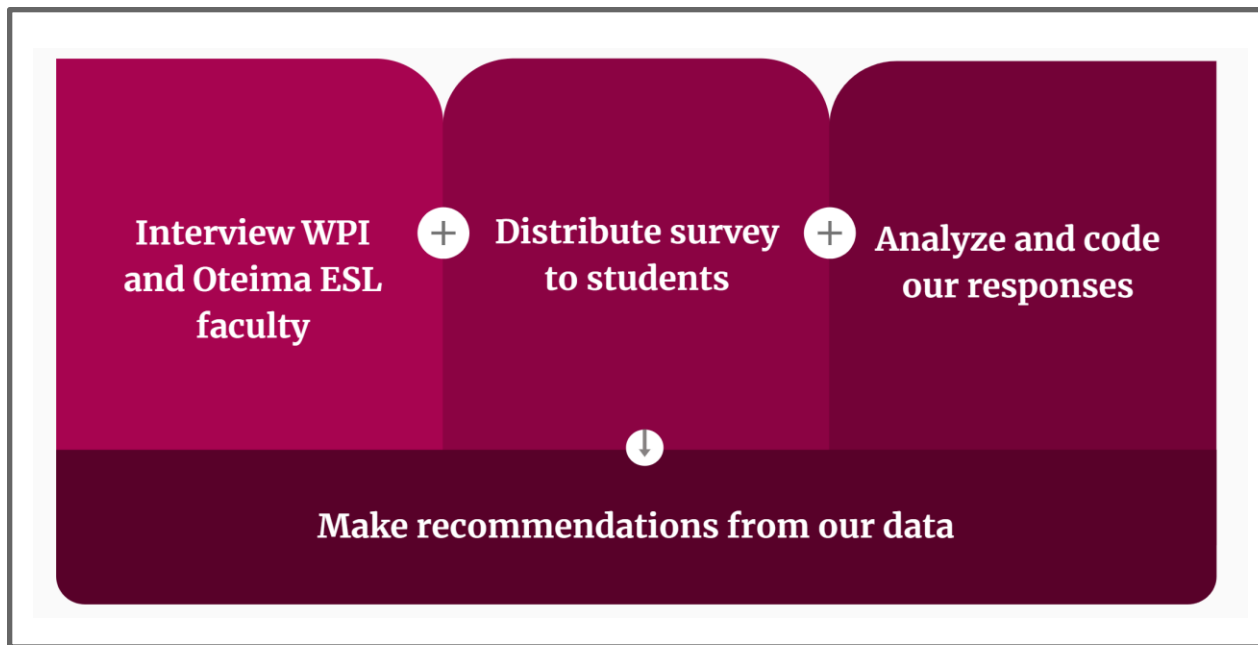
## Chapter 3: Methodology

Due to COVID-19, Oteima University has closed its campus to students for the Fall 2020 term and is only offering courses remotely. Although COVID-19 is creating a more pressing need for remote education, Oteima University also wants to utilize online learning in their ESL program for practical reasons such as scheduling flexibility for students with extensive outside commitments and accessibility for students who live too far away to come to campus normally. Our goal was to partner with Oteima University to evaluate the University's current teaching efforts during the pandemic and deliver recommendations in regard to their remote English programs.

To accomplish this, our objectives were to:

1. Learn about the instructor's thoughts about students' accessibility needs, maintaining student engagement remotely, and factors in student retention.
2. Learn about the students' opinions on currently used online platforms, their motivations for learning English, and the obstacles they face while completing their education.
3. Identify the strengths and weaknesses in Oteima University's current methods of remote English language instruction.

This chapter describes the methods (see Figure 3.1) used to accomplish our objectives.



*Figure 3.1: Project methodology*

### **3.1 Learn what the instructors believe will improve student outcomes**

The faculty of Oteima University interact with the students on a daily basis. This is why the faculties' perspectives were crucial to gaining insight on how the Oteima University English program currently operates. We wanted to hear from the stakeholders in order to gain a broad perspective on the challenges that they face.

The research questions germane to this objective were:

- What challenges do the instructors notice with remote learning?
- What are the instructors' opinions of the online learning platforms that they are currently using?
- How many of their students have accessibility concerns?
- Are there any specific parts of the curriculum they would like to see changed?

In order to achieve this objective, the project team conducted semi-structured interviews with six instructors from Oteima University's ESL department (see Table 3.1). Additionally, our

team interviewed three WPI faculty members who specialized in ESL learning as well. However, we did not include these WPI interviews with the Oteima interviews in our results. This is because we wanted to make recommendations to Oteima based on only the Oteima faculty. The purpose of interviewing the WPI professors was to refine our questions before interviewing the Oteima University faculty.

	<i><b>Interviewee</b></i>	<i><b>Date</b></i>	<i><b>Time</b></i>	<i><b>Appendix</b></i>
W	Professor A	September 9th, 2020	3:00 PM EDT	Appendix E
P	Professor B	September 11th, 2020	11:00 AM EDT	Appendix F
I	Professor Esther Boucher-Yip	September 11th, 2020	1:00 PM EDT	Appendix G
O	Professor Próspero González	September 18th, 2020	11:00 AM EDT	Appendix H
T	Oscar Rodriguez	September 18th, 2020	12:00 PM EDT	Appendix I
E	Professor Luissana Gómez	September 25th, 2020	12:00 PM EDT	Appendix J
I	Professor C	September 25th, 2020	3:00 PM EDT	Appendix K
M	Professor Evelyn Hidrogo	September 25th, 2020	4:15 PM EDT	Appendix L
A	Professor D	September 25th, 2020	5:00 PM EDT	Appendix M

*Table 3.1: Table of interviewees*

We conducted the interviews over two days and represented a variety of ages, backgrounds, and experiences. This facilitated gathering information from across a representative group of the faculty population in order to minimize biases in data collection. All of the interviewees were



asked if they wanted to keep their identities confidential, and we sent all professors a copy of our full interview transcript before their approval. Our group developed questions intended for a forty five-minute interview that covers all of our key points, as well as a couple “soft” questions that built rapport. Three group members asked questions while a fourth took notes. The structured interview questions, including those asking about consent, can be found in Appendix A.

Our team conducted semi-structured interviews to learn what the instructors consider to be the main obstacles of teaching remotely, whereas a completely structured approach might have prevented us from gaining their full perspectives by causing the interview to focus too much on topics that the instructors didn’t think were relevant. A completely structured interview also might not have allowed them to contribute information not covered in the structured questions. However, a completely unstructured interview might not have yielded relevant information, so we chose semi-structured. The team asked all interviewees for permission to record the interview for research purposes before moving forward with the rest of the interview. We then asked questions to lead them through these general topics:

1. Their teaching experience
2. The current technology and tools they use to teach
3. Opinions on Student engagement
4. Their teaching preferences.

We used these topics to steer the conversation in the direction of useful information without preventing them from sharing their full perspectives and offering new information.

When we interviewed each professor, we first requested permission to record each session so we could then use the video recordings to transcribe and pull out relevant quotes for

our research. Once we got permission, we recorded the interviews and using a program called Descript we transcribed our interviews and uploaded the audio clip to the program. After creating these transcripts, we went through and checked the validity of the generated transcripts by listening to the audio files while reading through what the program wrote, and making sure to fix any errors it had made to make it clear who was speaking during each part of the interview. The next step was to go through and delete any filler words such as “um” and any repeated words that the program picked up while transcribing.

To code these interviews, we picked out key themes and discussion topics that came up throughout the interviews with the six Oteima University professors, inserting them into a Google Sheets document. From there, we used these points and marked how many of the six professors had mentioned something similar or touched upon that same topic. The tools of Google Sheets made it easy to count how many professors mentioned each of the themes so we could determine a numerical value to use to analyze and compare the different interview themes we had collected. This spreadsheet can be seen in Table 3.2 below.

Mark X if present in interview							
Theme	Frequency	Professor Próspero González	Professor Oscar Rodríguez	Professor Luissana Gómez	Professor C	Professor Evelyn Hidrogo	Professor D
<b>Platform Use</b>							
Uses Zoom	2					x	x
Uses Meet	5	x	x		x	x	x
Uses Canvas	2		x			x	
Uses Google Classroom	2		x	x			
Uses Blackboard	1		x				
Uses Moodle	6	x	x	x	x	x	x
Uses WhatsApp	5	x	x		x	x	x
Uses Kahoot	1				x		
Uses Edusoft	1	x					
Uses Teams	1					x	
Uses Flipgrid	1	x					

*Table 3.2: Part of the Google Sheet used to code our interview responses*

### 3.2 Gain insight into the needs, wants, and motivations of current students

We wanted to better understand students' points of view on the online platforms used and their expectations of their classes in order to identify obstacles and successes with remote learning. Our background research suggested that these challenges included struggles with Internet access, lack of technology, difficulty using technology, and time-consuming responsibilities outside of class. Additionally, our survey design included broader student demographics to identify potential causes of these problems as well as solutions. For example, older individuals may be less comfortable with technology and struggle more with remote learning. Our team wanted to determine the importance of each of these issues to the students and identify any additional issues that might be relevant to our research.

Part of this objective was to determine the students' perceptions of their English classes, and uncover their likes and dislikes about the current program. In particular, we were interested in the students' perceptions of the online coursework that Oteima University currently utilizes. We wanted to see how students felt about the current online programs to determine any obstacles they encountered with the programs when learning remotely. We used this feedback to inform our final recommendations.

To achieve this objective, we investigated the following research questions:

- Why do students want to learn English?
- What do students think about the existing English program?
- What outside influences are affecting their learning?
- What do they think of the online learning platforms that they are currently using?

We collected this information by administering an online questionnaire to the ESL students, the full text of which is available in Appendix B. To create the questionnaire, we used the program Qualtrics, an application designed to create and send out surveys as well as analyze the data collected from the survey. The questionnaire focused on why students wanted to learn English and what they thought of the current English program. All results are anonymous to preserve student privacy. As our sponsor indicated that the target students would be able to handle an English questionnaire, we proceeded with that guidance and developed the questionnaire in English. To start our survey, we had a single-answer question that required students acknowledge they read our instructions for the survey before proceeding, and had a question where they would then input their student ID number to eliminate duplicate responses. In the case that students didn't know their student ID number, we did allow them to put in their cell phone number since a list of all this information was provided by our sponsor, and would

still ensure that students wouldn't submit multiple responses. To make sure we input the numbers correctly, the team used Qualtrics' built in validation tools to ensure that students must only put in numerical characters before they can proceed.

Our questionnaire included a few demographic questions before leading into the main topic but primarily consisted of multiple choice and agree/disagree statements to keep the questionnaire easy to fill out and analyze. Some questions were only visible to students that answered a specific question with a certain answer; for example, students would only see the question of how many hours a week they worked if they selected "yes" to being employed in the previous question. Some questions were open-ended and permitted longer answers, but the emphasis was on minimizing short response questions. According to Qualtrics' built-in feature that gives tips to help create effective questions, students are more likely to complete surveys when there are three or fewer open response questions. Although gathering detailed feedback was important, we wanted to have as many responses as possible to provide us with a wide range of data. Additionally, time constraints and not being in Panama as planned, led to us choosing to use a questionnaire instead of conducting student interviews.

In order to grab students' attention and convince them to help us by taking our survey, we created a short video that would be sent out along with the questionnaire (link: <https://youtu.be/IqaNsWAmxyw>). Our team recorded short clips of video of us across various parts of WPI's campus to provide the Oteima's ESL students with insight into what our lives were currently like and how we are practicing social distancing. Then, we recorded the audio of Hailey talking and edited it all together using a script that we had written (see Appendix C for the full video script).

To distribute our questionnaire to students, our sponsor Cristhian Mora uploaded our video and survey links onto all of the class pages of the Oteima University ESL program class Moodle pages. This meant it would show up right at the top of each class page where students were likely to see it. The questionnaire opened on September 7th, 2020 and was until October 4th, 2020. During this time period, we gathered a total of 177 responses. This was higher than our initial goal of 120 responses, which was half of the 240 students that Cristhian Mora estimated were in Oteima's ESL program. However, after checking the responses, we learned that 66 of our responses were actually duplicates, meaning that students took the survey again under their same ID number. To deal with this duplication, we counted only the most recently submitted student response and omitted the previous versions from the data. Hence, our final total number of unique student responses was 111. However, in the case of the short response questions, the team considered both responses since the input was often different from the other response the same student had initially submitted, therefore giving us more information on this same student's opinion.

While we used Qualtrics due to the many analysis tools it had, we ended up using Google Sheets to analyze data when it came time to actually look at and visualize our results. We studied relationships between demographic information collected and several of the research questions we had sought to answer.

### **3.3 Identify strengths and weaknesses in the current available online platforms**

It was important to understand how well the online platforms worked for Oteima so we could make an appropriate recommendation. We wanted to get a variety of different perspectives on this issue including those of students and Oteima University's faculty. To do this, we coded specific themes from the interview to assist in identifying the needs and concerns of the teachers.

The team sorted different phrases out to find the general opinions of the faculty and student body, and analyzed student responses to the questionnaire to understand their opinions. We hoped to answer the following research questions from our analysis of the data:

- How well do their current online programs work?
- What changes do the students and faculty want to see?

We made assessments based upon instructor perceptions, student opinions, information supplied by the platform itself, and educators' thoughts on the platforms using our aforementioned techniques for both coding and the analysis of the questionnaire. In the faculty interviews, we questioned them about different topics and sorted the positive and negative responses to find opinions shared by the majority of the interviewees. Similarly, in the questionnaire when we asked students about using a program or application, we grouped responses together based on whether they had positive or negative opinions on the topic. After gathering this information, the team compiled the results to rate each platform on accessibility, engagement, effectiveness, and other relevant qualities.

### **3.4 Summary**

In conclusion, our team gathered data from a variety of sources in order to get a full assessment of Oteima University's ESL program. Instructor interviews and student questionnaires yielded information about the needs and wants of our primary stakeholders, while investigating specific platforms and providing context for those wants and needs. After analyzing the results from methods, we were able to highlight primary areas of concern in the current system and how instructors and students would like to see them addressed.

## **Chapter 4: Results**

This chapter discusses the results from our project, including raw data and analysis of the data. The chapter will also discuss the analysis of the instructors' platform use and opinions on the usefulness of each platform as well as their thoughts on why students lacked Internet access. There also will be an assessment of methods for increasing student engagement such as learning games. Additionally, there will be an analysis of students' access to devices, frequency of Internet problems, causes of Internet problems, and platform preferences. Our analysis also includes correlations between age and platform opinions and between device access and Internet access. The results from the analysis gave insight on the perspectives of instructors and students regarding remote education. This allowed us to deliver a comprehensive assessment of the remote English learning program at Oteima University.

### **4.1 WPI Instructor Interview Analysis**

While conducting our WPI interviews, we extracted key takeaways from both their responses and the flow of our questions as well. We found that the order of our questions was slightly confusing, so we adjusted our questions accordingly. We also refined questions that were sometimes misunderstood, clarifying the scope of the questions and their anticipated responses. Finally, we developed new questions on topics that we had not previously considered, paying close attention to the recurring ideas and difficulties that the professors discussed.

One of the recurring topics of discussion that came up in all three of our WPI interviews was the impact that varying time zones had on their students' quality of education, as well as how online learning requires much more structure than in-person classes. Consequently, all WPI professors currently record their online lectures, so any student who was unable to access their



class at the scheduled time can watch the videos at their convenience. While this does not exactly match Oteima's situation, we were still able to draw parallels from this similar case and its implemented solution.

## **4.2 Oteima University Instructor Interview Analysis**

After conducting and transcribing interviews with six Oteima University professors we had a significant amount of data regarding how they taught remotely. Many reported adapting their teaching styles to accommodate remote classes. Professor Hidrogo noted gauging class engagement was more difficult with remote classes, because with in-person classes “you get to know the students like, you can see their faces and if they're getting it or not getting it.” Professor Hidrogo was not the only one who felt disconnected from her students: three of the six professors implemented new measures to assess if students are participating in class. In our interview with Professor Rodriguez, he described how communication in remote classes had changed from in-person classes saying “...well as I told you before some people don't have a good Internet connection. In addition to that, we have to use Whatsapp. So we already have a Whatsapp group [...] So as the teacher, we have to be updated and try to look for the resources in order to provide a tool that allows the student to be in touch with the class.” In addition to Professor Rodriguez, five out of the six interviewed Oteima professors used Moodle and Whatsapp to continue having discussions with students outside of class. Tools such as Moodle and Whatsapp help professors increase the likelihood that their students' learning needs are being met.

Half of the Oteima interviewees reported incorporating learning games into their classes. Professor Prospero Gonzalez mentioned using Kahoot and stated that they “use it with [their]

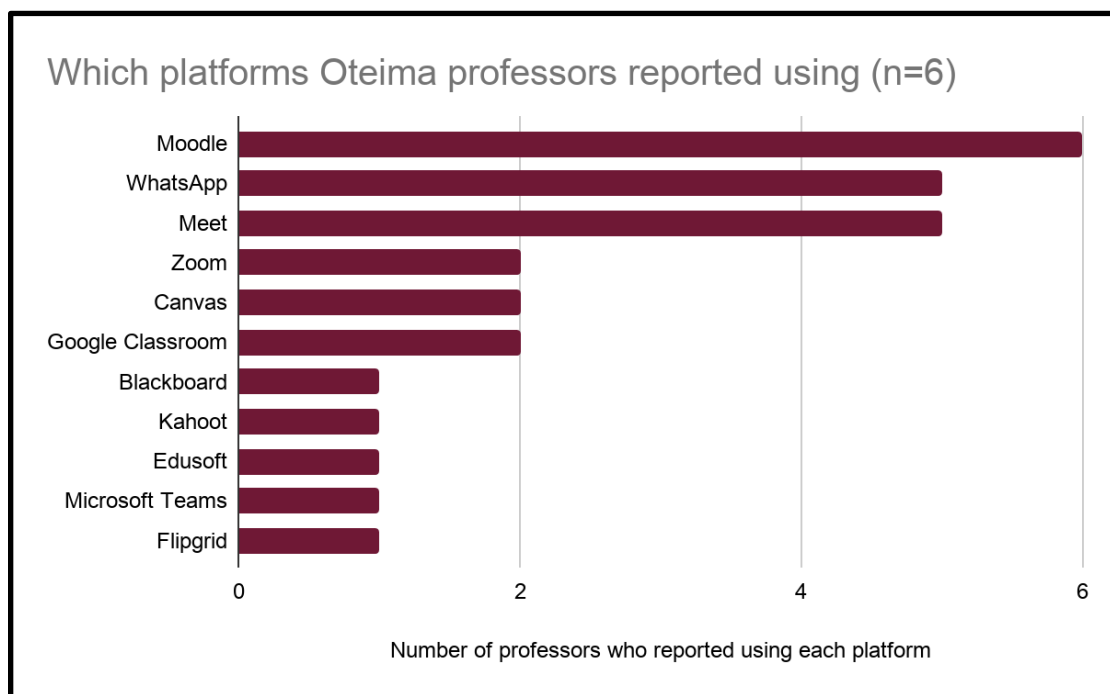
little kids from the elementary school and with the older kids at Oteima and they both love it.”

Kahoot is an online platform that lets the user create fun, interactive quizzes where students can compete with each other. This enables Professor P. Gonzalez to quiz his students on whether they know the material and keep them active and involved in the class. He told us that learning games help students to “learn unconsciously” and “avoid making people feel stressed”. Another professor told us that he likes to use a game called “Hot Potatoes” with his class, which is a Moodle plugin. Moodle lets teachers add additional features to their Moodle classes by including a variety of plugins. Although investigating the effectiveness of games for language learning is beyond the scope of this paper, it appears to be popular among faculty and students at Oteima University.

Professors also talked about potential applications of remote learning even when in-person classes resume. Four out of the six Oteima professors said that they want online or hybrid classes after the pandemic to offer more students to receive their preferred learning experience. Professor Rodriguez, when discussing the impact of teaching said, “teaching is the only way that improves the student's knowledge and also helps to break the chain of poverty. So, I can see there through teaching we can modify and we are kind of training the minds”. In order to give students the chance to escape poverty, institutions must offer students the opportunity to learn. Continuing to have online and hybrid classes implies more students will have the opportunity to learn and better their lives even if they cannot go to campus every day.

The faculty interviews also yielded information about how often the six Oteima University faculty members used each platform. Moodle, WhatsApp, and Google Meet were the most popular, with five out of the six instructors interviewed employing them (see Figure 4.1). When asked about their thoughts on these platforms, two professors indicated that Zoom

performed better than Google Meet. According to one of these professors, Google Meet does not allow for the instructor to see the students while screen sharing, which caused a problem when the instructor's Internet connection malfunctioned. Another professor stated that Zoom seems more "complete" than Google Meet and has more features. Two professors reported that they had encountered technical issues with Google Meet, but neither used Zoom in their classes. Given this preference for Zoom over Google Meet, it's notable that only two professors indicated that they use Zoom while five indicated that they use Google Meet. Even the professor that thought Zoom was more complete uses Google Meet primarily. However, one important limitation is that our sample size was small, and issues with Zoom may have simply been professors not reporting them during our interviews. This implies more specific questioning is necessary before reaching any conclusions about whether Google Meet or Zoom best serves instructor needs.



*Figure 4.1: Which platforms Oteima professors reporting using*

Moodle was the most frequently used platform, with all Oteima instructors in our sample using it. As the primary learning management system for Oteima University, this is no surprise. Instructors had a positive perception of Moodle, with five of the six professors interviewed clearly stating that they liked Moodle. Although several instructors reported using similar platforms (such as Canvas or Blackboard), none expressed that they would prefer any of these platforms to Moodle or that they would like to stop using Moodle. Student perception of Moodle was also overwhelmingly positive. (see section 4.3 for more details). Although the small sample size of the instructors limits the ability to extrapolate this to the faculty as a whole, it's promising that five of six faculty interviewed viewed Moodle positively and students also had primarily positive feedback about Moodle.

In our interviews, we asked all nine of the interviewed professors about the largest problem that they faced with conducting classes virtually. Multiple teachers said in the interviews that they faced problems related to lack of Internet access or poor Internet connection. During the six Oteima University interviews, five professors mentioned experiencing occasional problems with network connections while teaching their classes. Professors brought up various levels of problems with connectivity. One problem that multiple professors mentioned was issues with the weather. In our interview with Professor Prospero Gonzalez, he informed us of the difficulties that rain could cause with his Internet connection. He told us that “maybe it's going to be raining in the afternoon [...] So we don't have connection with the Internet, even if you are paying, some situations happen with that.” Professors reported that the weather is a major issue for many of the students who report experiencing power outages on a regular basis.

Many of the teachers reported that they had students who live in less developed areas of Panama, and these students often had issues staying connected through the entirety of the class.

This not only impacts the students understanding of the material, but it also causes confusion between the teacher and the student because the professor may not know if that student has disconnected or is skipping out of the class.

Professor C stated a significant number of his students who live in the less developed regions of Panama struggle financially and cannot pay for the network services that they need. When talking about this issue Professor C said “sometimes now they have to choose whether to pay for the Internet or to buy food. So, I think that is a problem.” The difficulty for poorer students to obtain Internet access was a common theme in our interviews. Half of the teachers said that they believed that network access was much harder to obtain for the poorer students living in less developed areas of Panama.

According to Professor Mora, with the emergence of the COVID-19 virus, many of the networking companies have been making it easier for people in Panama to pay for and access the Internet. Despite this, many of these services still require the student to pay for their Internet access. Another option for students that Professor D discussed included buying membership cards to Internet libraries where students can go to access the Internet. The problem with this is that students do not have network access for the entirety of the day and have portions of the day where they are unable to use any online materials. This is a widespread problem with students and professors [Hidrogo, Professor C, and Professor D] both said that they have students who need to leave their residence in order to obtain an Internet connection.

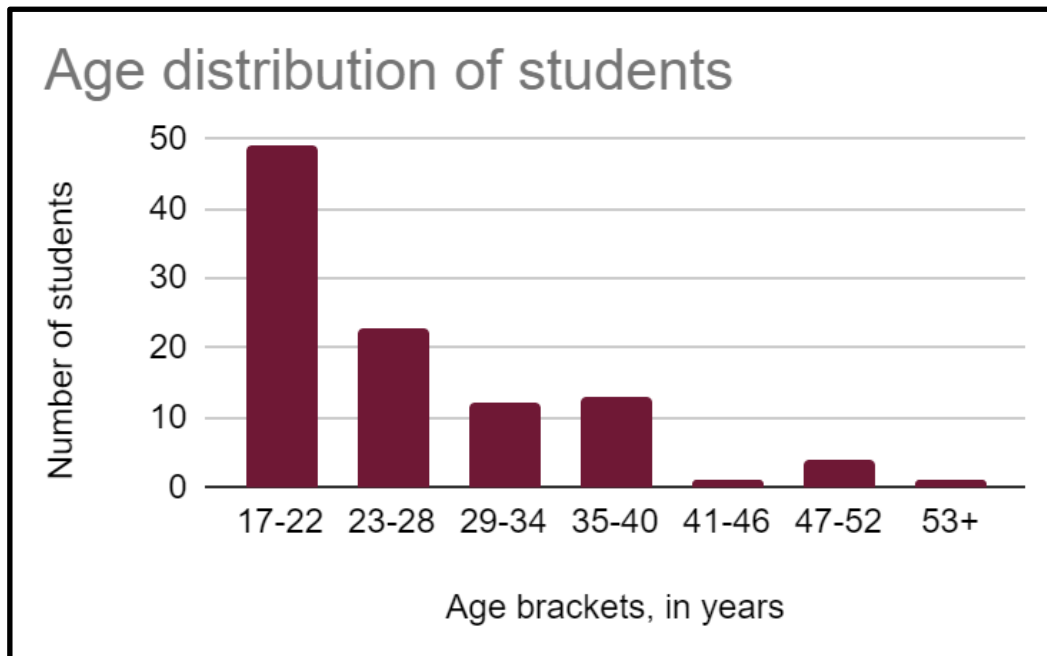
It is clear from the professor interviews that there is a problem with students obtaining a good Internet connection. The problems with network connectivity led to a drop in attendance for online classes and with a drop in attendance, it becomes harder for those students to get the proper experience out of the class and often leads to students failing or dropping the class. To get

a better idea of the students' perspective on these issues, the next section considers our student questionnaire results.

### **4.3 Questionnaire Analysis**

#### **Demographics**

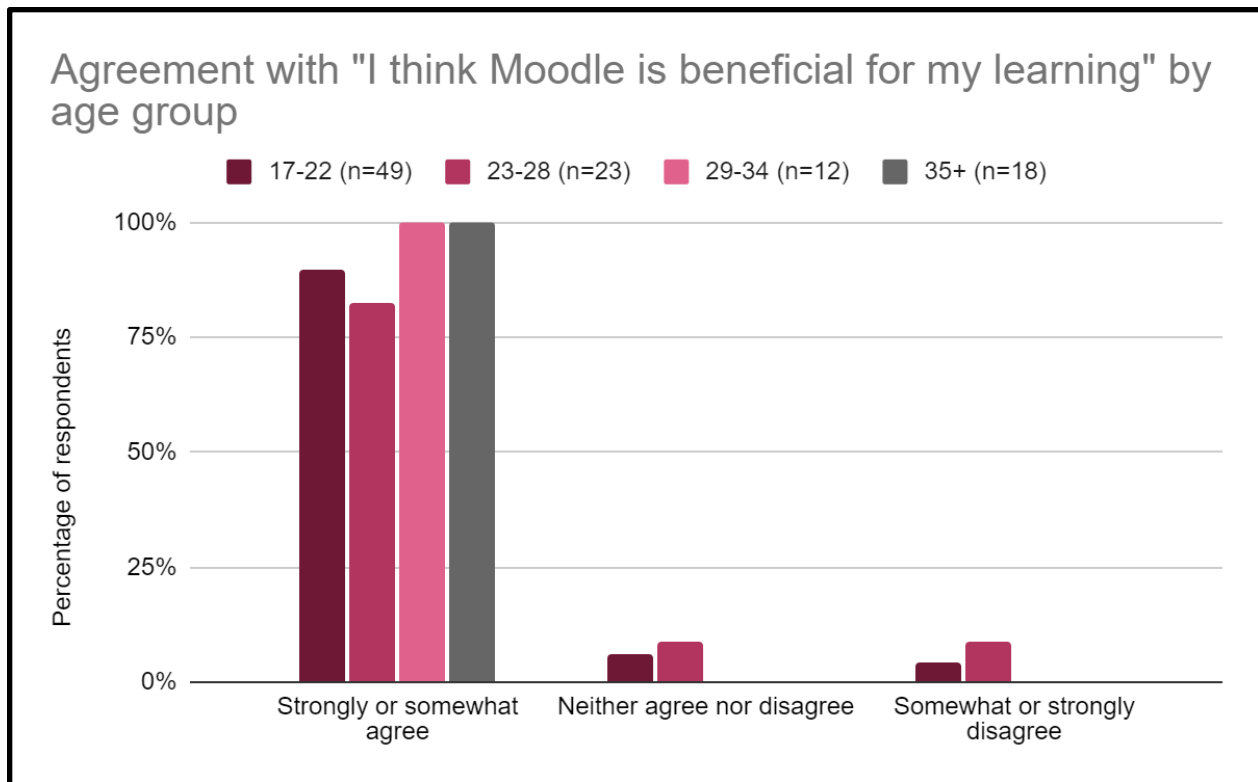
We distributed the Qualtrics questionnaire to the Oteima University English students. This gave us the demographic information on the students. In total, 111 students completed the questionnaire. Of these students, 78 were female, and only 33 were male. The plurality of Oteima's ESL students who took the survey fell into the 17-22 year old age group, with 49 out of 103 responses in that category. The age distribution of all students can be seen in Figure 4.2. Most of the students who answered our questionnaire had been studying at Oteima University for less than two years. In total, 39 students had been at Oteima for less than a year, and 36 had been studying for a total of two years, with other categories such as one year of study and three years of study having 22 and 14 responses respectively. No students in our sample reported studying at Oteima University for four or more years.



*Figure 4.2: Age distribution of Oteima University students taking survey*

### **Comparing ages and platform opinions**

In our research, we investigated any possible correlations between the ages of students and factors of the ESL program such as opinions on the various platforms. For example, breaking down our student age groups into four categories, Figure 4.3 graphs their opinions about the benefits to their learning Moodle. We grouped all students age 35 or older together because these groups had very small sample sizes individually. The figure illustrates that most students believed that Moodle is beneficial regardless of their age, with very few in any age group believing that it was not beneficial to their learning. Noticeably, all students in the 29-34 and 35+ age groups reported that they thought Moodle was beneficial in their online learning. This shows that the students of all ages like Moodle and find it to be a beneficial learning tool for Oteima students.

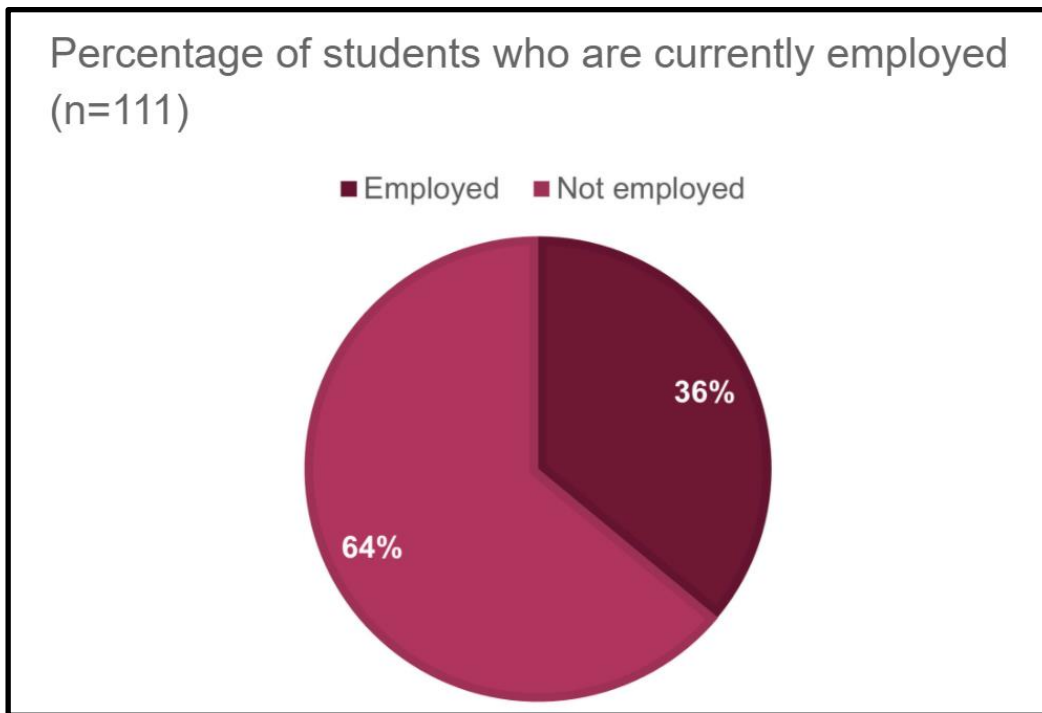


*Figure 4.3: Opinions on Moodle by age group*

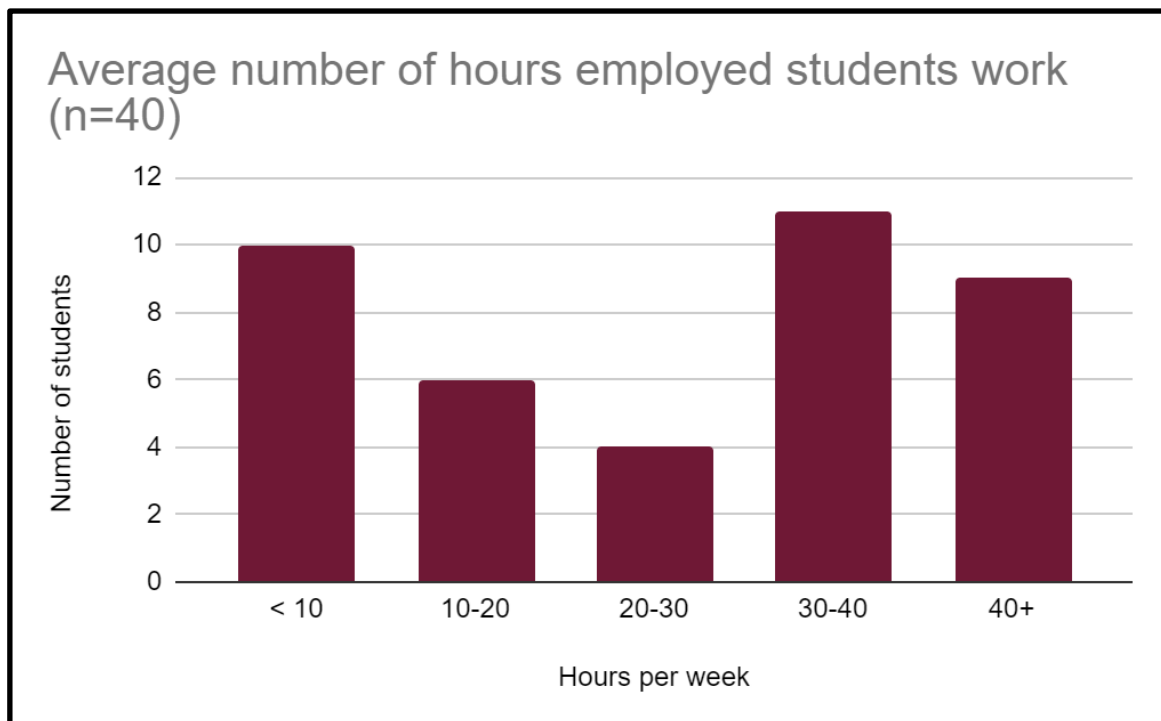
## Student Employment

Panamanian students may need to work while taking classes. Figure 4.4 indicates that 36% of our student sample reported being employed and Figure 4.5 shows the number of hours these students work during the week, with 10 out of 40 working less than 10 hours per week, and 50% working at least 30 hours per week. Therefore 18% of students in the total sample reported working at least 30 hours per week, which may prevent these students from spending sufficient time on their courses.





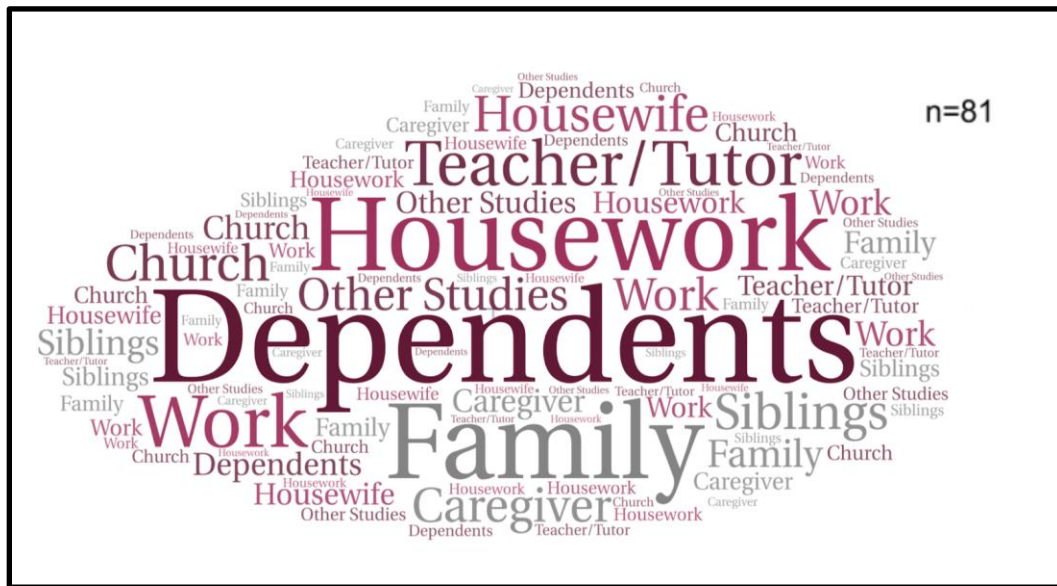
*Figure 4.4: Student employment status*



*Figure 4.5: Hours worked by employed students*

## Outside Obligations

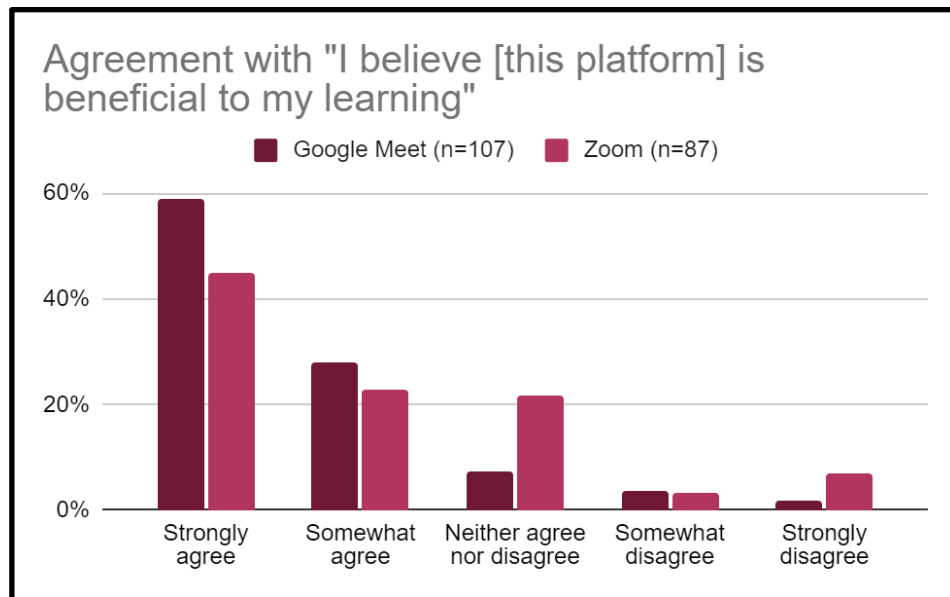
Along with investigating factors that affected students' learning within Oteima University's ESL program, we also sought to gain insight into what could be influencing students' educations outside of the classroom. When asked about what outside obligations they had other than their degrees, the majority of students responded that they had either work or families to attend to, with various other social and economic responsibilities reported as well.



*Figure 4.6: Outside obligations students reported having*

## Meet versus Zoom

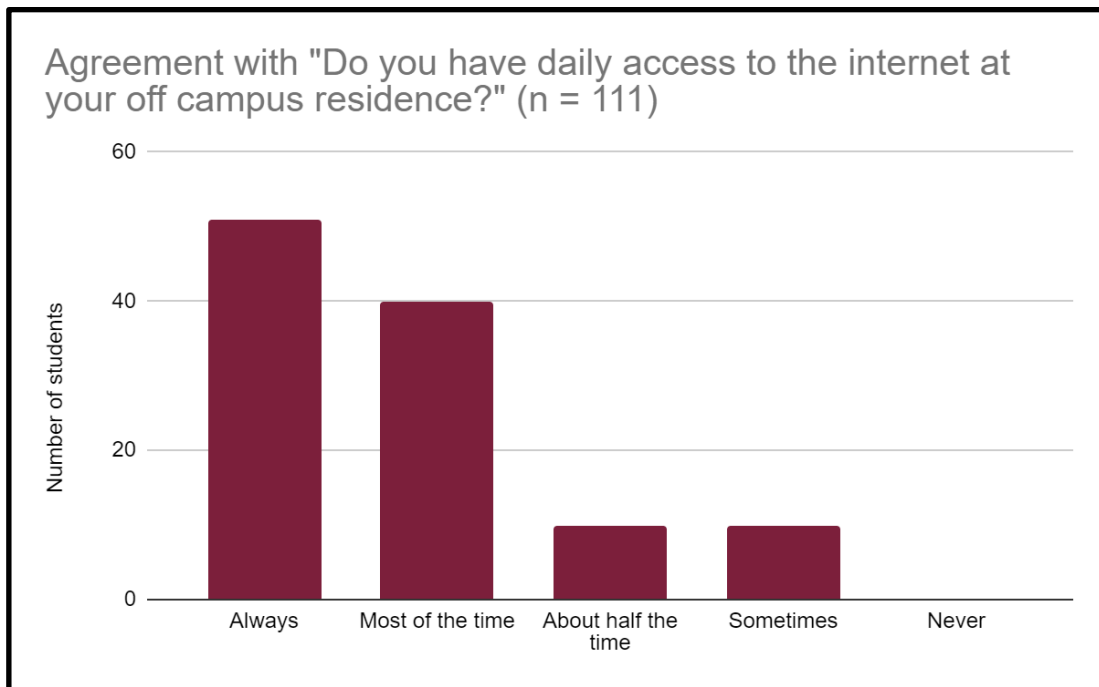
The team wanted to determine whether students who were taking online ESL courses preferred Zoom or Google Meet. This showed us which platform students found beneficial to their learning as well as what they found easy to use. Figure 4.7 reveals that while the results are generally very similar for both of the online meeting platforms, the majority of Oteima's ESL students chose Google Meet over Zoom. To students, Google Meet is the more useful platform that they like to use during their online courses, although few students disagreed with the use of Zoom.



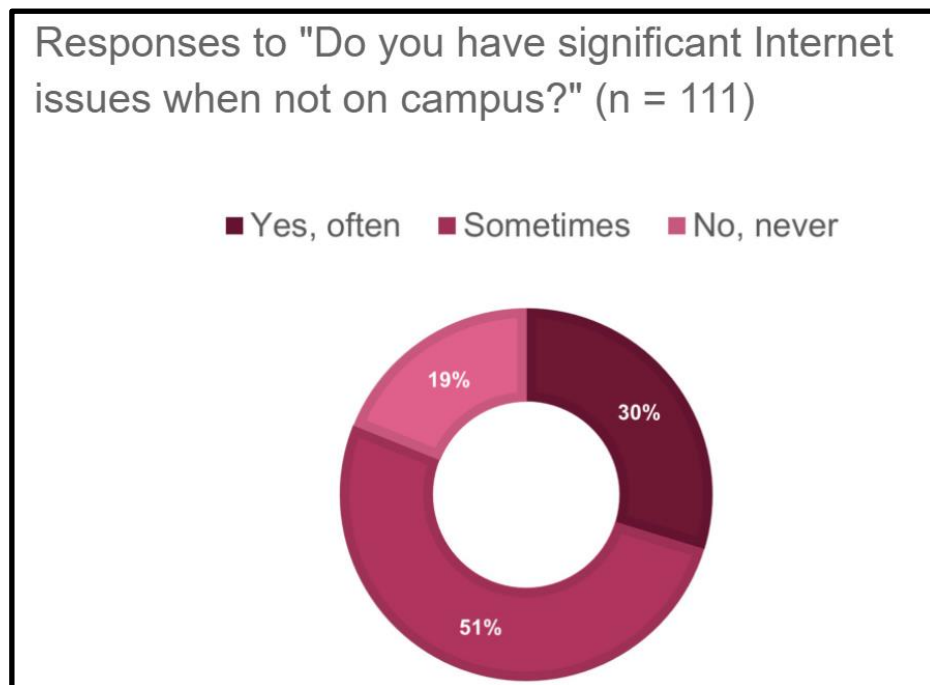
*Figure 4.7: Comparison of student opinions on Meet and Zoom*

## Internet Access

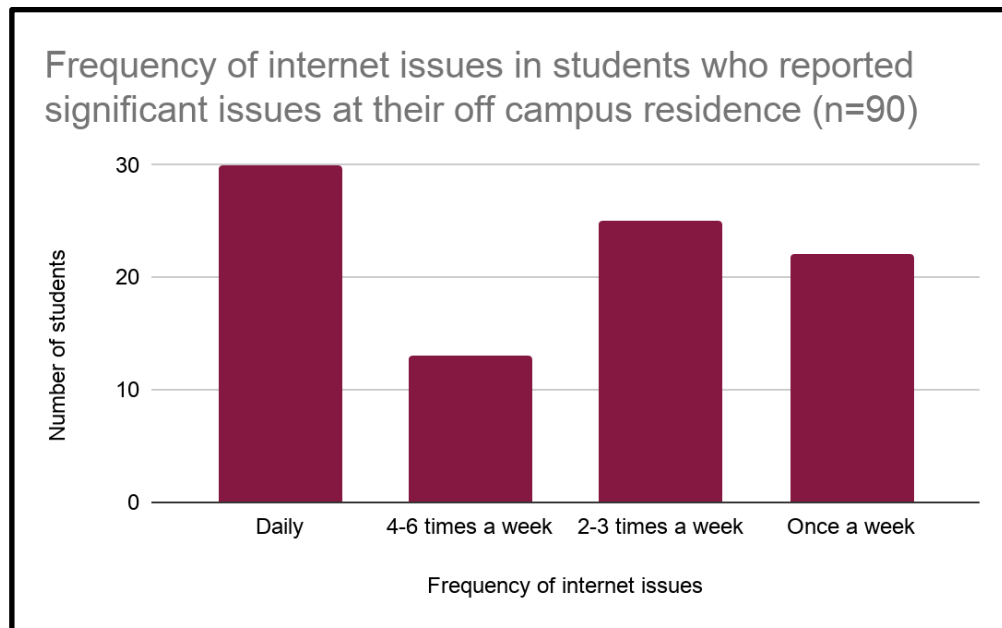
Although many students have regular Internet access, there is still a group of students who struggle to find consistent Internet access. A significant portion of students endorsed that they often had Internet connection, but they also had significant access issues. Figure 4.8 depicts the frequency that students have Internet access, with 19% of students indicating that they have consistent Internet access about half of the time or less. But Figure 4.9 shows that even students who often have Internet access at home face issues with Internet connectivity: 30% reported that they have Internet issues “often”, and only 19% reported that they never have Internet access issues. Additionally, half of the students who reported Internet issues reported experiencing significant issues at least 4 times per week. Both of these questions had the same number of respondents, which suggests that connection quality is a larger concern than Internet access.



*Figure 4.8: Student Internet access off campus*



*Figure 4.9: Percentage of students with Internet issues off campus*

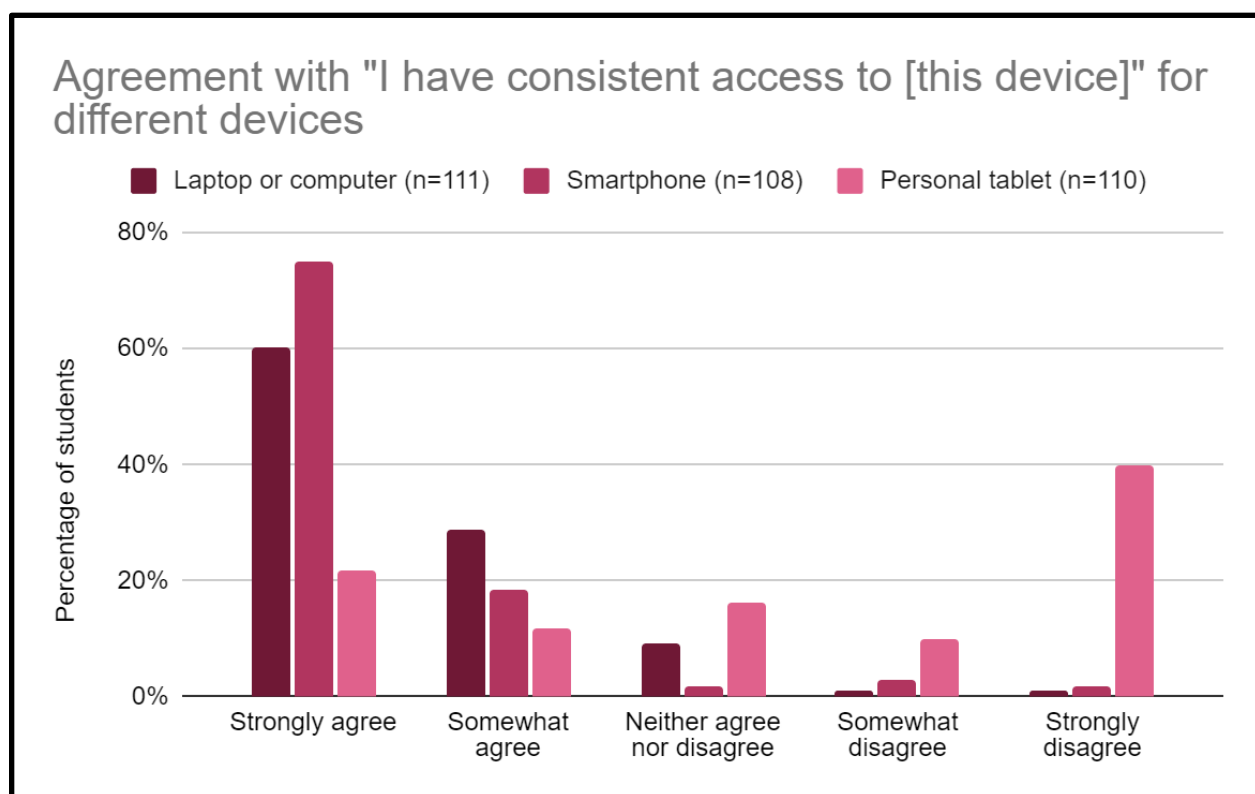


*Figure 4.10: Frequency of Internet issues off campus in students who reported issues*

## Device Access

Another factor in students' ability to participate in remote courses is their access to devices that can access the Internet. As shown from the data in Figure 4.11, our team asked students if they have consistent access to a smartphone, laptop/computer, and personal tablet. Almost 80% strongly agreed that they had access to a smart phone and about 60% strongly agreed that they had access to a laptop. 44% of the surveyed students reported tablet access, while nearly all students (94%) strongly or somewhat agreed that they had access to a smartphone, and 90% of students strongly or somewhat agreed that they had access to a laptop or computer. This suggests that most students have at least a moderate level of device access. The team considered students to have "reliable" access if they selected "strongly agree" for at least one of the three devices. Our analysis does not consider answers in which students who selected at most "somewhat agree" to have reliable access because choosing "somewhat agree" indicates there are mitigating factors that interfere with their access. Under this relatively strict definition,

81% of students met our criteria for reliable device access. Given that nearly all students endorsed having smartphone access, device access does not appear to be a major barrier to students. One area for further study is whether students without laptop access struggle to complete assignments because not all learning platforms or websites are mobile-friendly and smaller keyboards can make writing assignments more difficult for students.

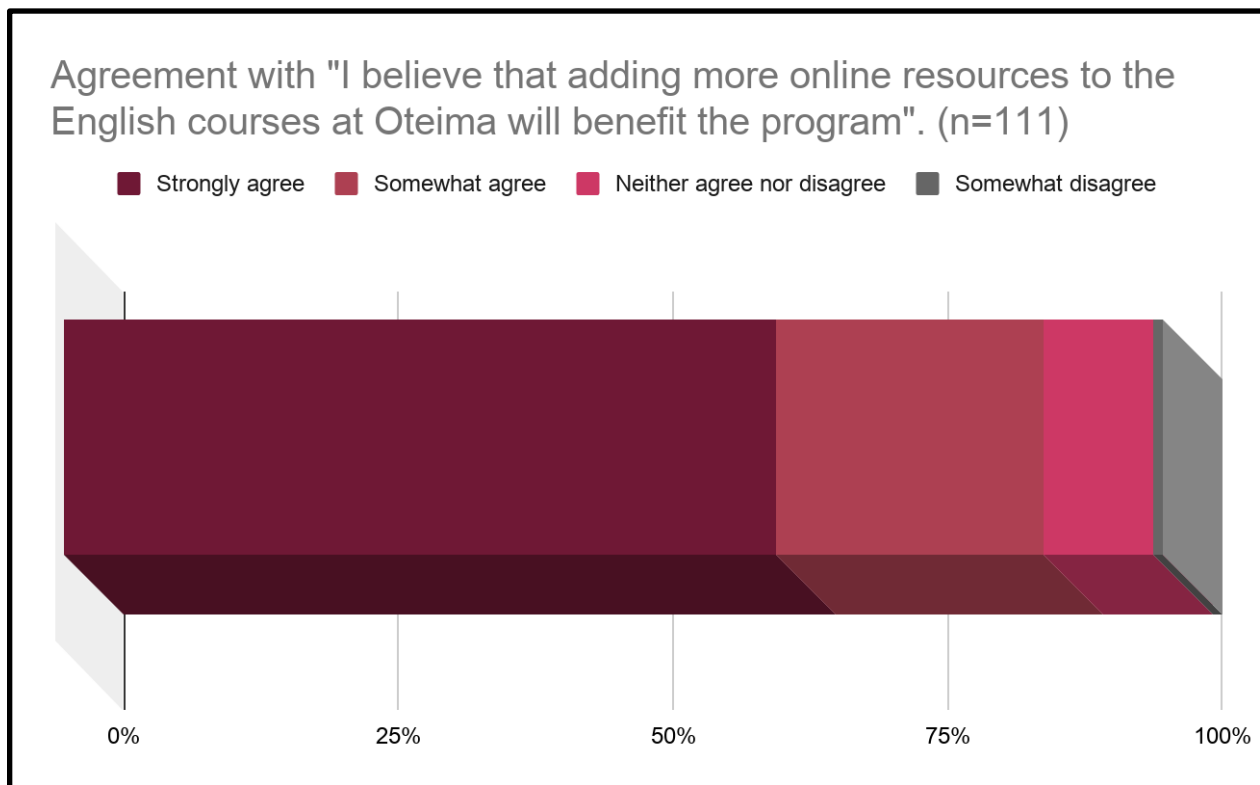


*Figure 4.11: Student device access*

### **Adding more online resources**

Despite the various issues that some students face with online courses, students did overwhelmingly favor adding more online resources to the English program at Oteima University. Of the 111 students surveyed, all responded to the question asking if they thought adding more online resources would be beneficial. About 85% of these students strongly or somewhat agreed that Oteima University should add more online resources to the English

program. Some students also felt that recording classes would be helpful, with one student saying, “The classes are recorded and we can see them several times [and] the delivery of the work is more flexible.”

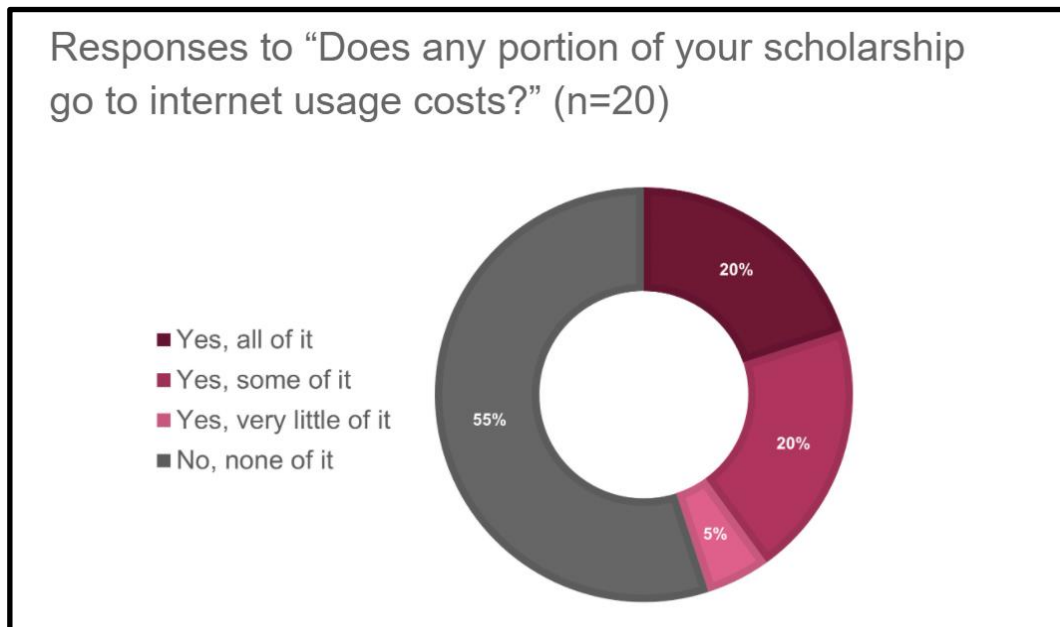


*Figure 4.12: Student opinions on adding more online resources*

## Scholarships

As evidenced in Figure 4.13, scholarships did not appear to significantly affect students' ability to connect to the Internet. Only 20 students reported having a scholarship, and only 45% of these students reported that any of their scholarship went toward paying Internet costs. In total, only 8% of students who responded used their scholarship toward Internet costs. However, about half of these students reported that all of their scholarship went toward Internet costs. This

suggests that the scholarship is very important for a small number of students, but does not impact the majority of students.

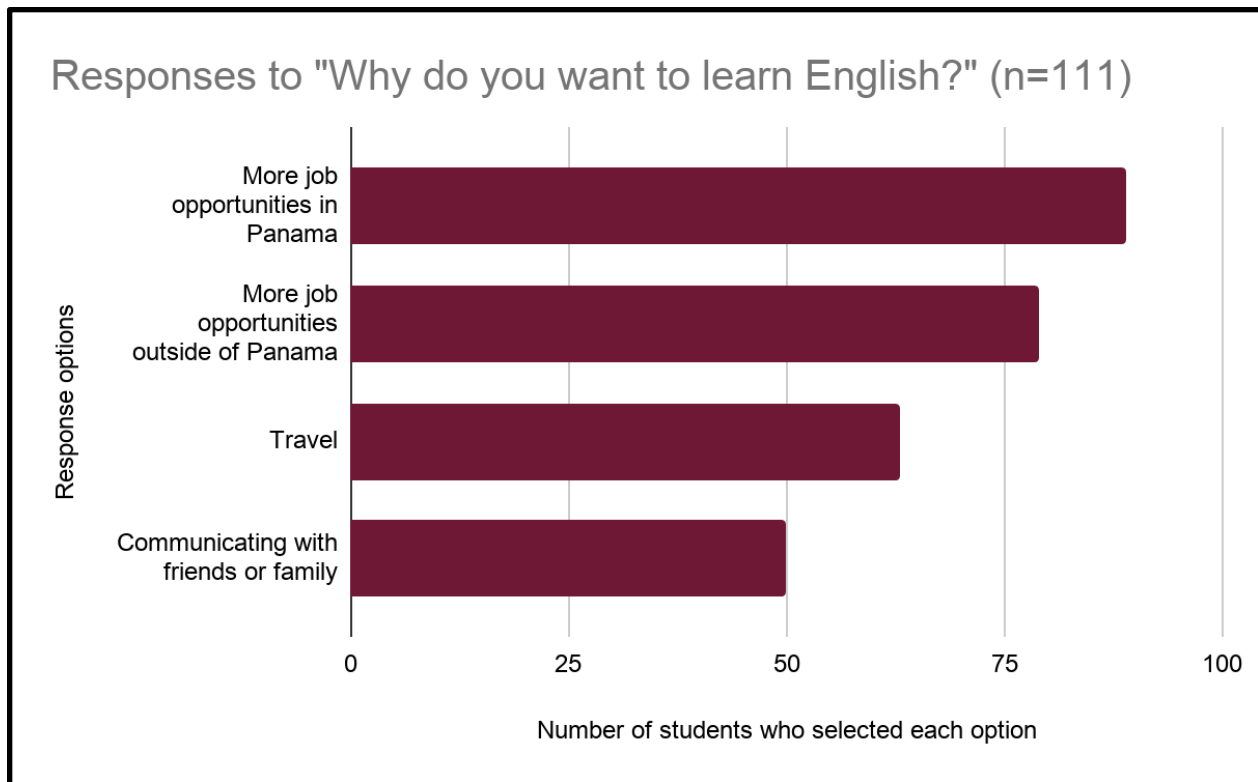


*Figure 4.13: Use of scholarships to pay for Internet*

#### 4.4 Cross Analysis

Our research wanted to compare the opinions of students and teachers when asked similar questions. One important research topic was the value of learning English. When asked why they wanted to learn English, 80 percent of students said that they were learning English to help with future job opportunities with 75 percent saying they are learning to pursue jobs outside of Panama. Figure 4.14 graphs the results of a question where we asked students to select all the reasons that they wanted to learn English. In the professor interviews, the professors also agreed that learning English is a skill that greatly improves an individual’s chances of getting a job in Panama.





*Figure 4.14: Why students want to learn English*

One topic we discussed with both students and teachers was the use of platforms such as Zoom and Meet. Five out of the six Oteima teachers used Google Meet as their main platform for conducting online class. However, two professors stated that Zoom had more useful functions than Google Meet. On our student questionnaire, we asked if both Google Meet and Zoom were beneficial to their learning. Through this, we saw that students appeared to favor Google Meet over Zoom. This can be seen in Figure 4.7, which shows that only 34 percent of students said they strongly agreed that Zoom was a useful tool for their learning, but when asked the same question regarding Google Meet, the number of students who strongly agreed almost doubled to 61 percent.

In addition to getting data on the platforms the teachers used to conduct online classes, we evaluated how many students and teachers experienced issues with the Internet when

participating in class. One student expressed that they had issues with connection during Meet classes saying, “the signal is weak and sometimes breaks, I can’t be present for the Meet classes.”

Connectivity problems were a recurring issue throughout the teacher interviews with five out of the six teachers indicating that network connectivity was a major issue while teaching their classes. In our interview with Professor Rodriguez, when talking about connection problems he said, “Some of these students live in those places, where there is no electricity...They have to go to a high place where they can get, get their connection.” Thus our results make it clear that both teachers and students face issues getting consistent connection throughout the day.

## **Chapter 5: Recommendations**

In this chapter, we will discuss our final recommendations based on the data analysis we conducted in the previous chapter. These recommendations are based upon the information collected through our faculty interviews and survey of students. From this, we have formulated three final recommendations that Oteima University could consider for their remote ESL program.

### **5.1 Continue to use Moodle**

Moodle is currently the primary learning management system that Oteima University uses. All of the faculty we interviewed used Moodle, and their opinions on Moodle were nearly entirely positive. Five of the six professors clearly stated that they liked Moodle, and students also overwhelmingly had positive views on Moodle. More than 75% of students somewhat or strongly agreed that Moodle was useful for learning. Therefore, we recommend that Oteima University continue using Moodle as its primary platform for delivering course materials.

### **5.2 Consider recording lectures and creating office hours to allow for additional student flexibility**

Many students had Internet access but experienced problems with connection. Students frequently indicated that they had Internet access, but experienced issues with its quality and reliability. Recording lectures and creating virtual office hours may help students who do not have Internet access at the time of the lecture. The recordings may also be a useful tool for teachers to review their prior lectures. These measures could also benefit students who have significant commitments outside of school and may have more difficulty attending scheduled classes (see figure 4.6 for these outside obligations). Although some professors already record

lectures or hold office hours for students, it could be beneficial to encourage faculty to implement or continue to use these measures.

### **5.3 Continue to expand online resources**

Students and teachers both expressed a desire for Oteima University to add more online resources. More than 85% of students surveyed somewhat or strongly agreed that adding more online resources to Oteima University's English program would be beneficial. A couple of professors mentioned that remote courses have the potential to save time for both the students and professors because they do not need to physically travel to the university. Continuing to offer remote classes after in-person classes resume, could also allow students who do not live close to the university to take courses there. Oteima University has already expressed an interest in this, so our results indicate that students and faculty have a positive perception of these changes. Therefore, we would encourage Oteima University to continue its current efforts to expand options for remote learning.

### **5.4 Conclusion**

Our project aimed to research the effectiveness of Oteima University's remote English education program. Through the use of interviews of both Worcester Polytechnic Institute and Oteima University faculty and a questionnaire distributed to Oteima University students, this investigation yielded a set of recommendations for Oteima University to consider as actions to improve the delivery of their English program. In summary we recommend that Oteima University continue to utilize Moodle, consider adding additional options for students who are unable to attend live classes consistently, and continue their plans to expand options for remote

learning. Overall, our findings confirm that students and faculty generally approve of how Oteima University is handling remote learning in their English program.

## Works Cited

- Ahmadi, M. R. (2018, June 20). The Use of Technology in English Language Learning: A Literature Review. Retrieved May 12, 2020, from <http://ijreeonline.com/article-1-120-en.pdf>
- Caeto. (n.d.). Licenciatura en Inglés. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/programas/licenciaturas/licenciatura-en-ingles/>
- Cervantes-Godoy, D., & Dewbre, J. (2010). Economic Importance of Agriculture for Poverty Reduction
- Dexway. (2017, January 31). 5 benefits of educational technology in learning English. Retrieved May 12, 2020, from <https://www.dexway.com/5-benefits-of-educational-technology-in-learning-english>
- Edusoft Learning. (n.d.). English Discoveries for Higher Education. Retrieved May 12, 2020 from <https://edusoftlearning.com/higher-education/>
- Encyclopaedia Britannica. (2020, March 5). Panama City.
- Gonzalez, O. (n.d.). Curso de Inglés. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/curso-de-ingles/>
- Gordon, B. L., Worthington, W. E., Padelford, N. J., Bray, W. D., & Cho, A. (2019, November 21). Panama Canal.
- Jilg, T. (n.d.). Staying the Course: Factors Influencing L2 Learner Dropout and Suggested Remedial Actions. Retrieved May 12, 2020, from <https://pdfs.semanticscholar.org/6ee4/c40bda83657b08c713f48ef1b2ff362aea31.pdf>
- Lopez, J. C. (2020, February 27). Ayer jueves 20 de febrero, la Escuela de Inglés. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/ayer-jueves-20-de-febrero-la-escuela-de-ingles/>
- MacGowan-Gilhooly, A. (1991). Fluency First: Reversing The Traditional Esl Sequence. *Journal of Basic Writing*, 10(1), 73-87. Retrieved October 13, 2020, from <http://www.jstor.org/stable/43443560>
- Map of Panama. (n.d.). Rough Guides. Retrieved October 15, 2020, from <https://www.roughguides.com/maps/central-america-and-the-caribbean/panama/>

- Moodle (2013, June 25). Retrieved May 5, 2020, from [https://docs.moodle.org/24/en/About\\_Moodle\\_FAQ](https://docs.moodle.org/24/en/About_Moodle_FAQ)
- Oteima University. (n.d.). Educación Continua. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/educacion-continua/>
- Oteima University. (n.d.). Especialización en Didáctica del Idioma Inglés. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/programas/especializaciones/especializacion-en-didactica-del-idioma-ingles-2/>
- Oteima University. (n.d.). Servicios Estudiantiles. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/estudiantes/servicios-estudiantiles-2/>
- Oteima University. (n.d.). Go AuPair. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/go-aupair/>
- Oteima University. (n.d.). History of the Oteima Technological University. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/oteima/historia/>
- Oteima University. (n.d.). Incubadora de Empresas. Retrieved May 12, 2020, from <https://www.oteima.ac.pa/estudiantes/incubadora-de-empresas/>
- Oteima University. (n.d.). Misión, Visión y Valores. Retrieved October 14, 2020, from <https://www.oteima.ac.pa/oteima/mision-vision-y-valores-2-2/>
- The World Bank. (2020, April 16). Panama Overview. Retrieved May 12, 2020, from <https://www.worldbank.org/en/country/panama/overview>
- UNDP. (2015). Atlas of Local Human Development: Panama 2015. Retrieved May 12, 2020, from [http://www.undp.org/content/dam/panama/docs/documentos/undp\\_pa\\_atlas\\_summary\\_english.pdf](http://www.undp.org/content/dam/panama/docs/documentos/undp_pa_atlas_summary_english.pdf)
- United States Department of Education. (2016, November) Tools and Resources for Evaluating the Effectiveness of a District's EL Program. Retrieved May 12, 2020 [www2.ed.gov/about/offices/list/oela/english-learner-toolkit/chap9.pdf](http://www2.ed.gov/about/offices/list/oela/english-learner-toolkit/chap9.pdf).
- United States Department of Labor. (2019, June 19). American Time Use Survey Summary. Retrieved May 12, 2020, from <https://www.bls.gov/news.release/atus.nr0.htm>

Wolford, R. M. (n.d.). A qualitative analysis and evaluation of Iowa State's ESL writing program: the English 101 series. Retrieved April 22, 2020, from <https://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1184&context=rtd>



## **Appendix A: WPI and Oteima University Faculty Interview Structure and Questions**

### **Collect before interview begins:**

Date/Time:

Interviewee:

Interviewers:

Note taker:

### **Introduction:**

Hello Professor \_\_\_\_\_. We are American students from Worcester Polytechnic Institute doing a research project on evaluating the effectiveness of Oteima University's remote English program.

If we ask a question that you do not want to answer, just let us know and we will move to the next one. If you do not understand our question, let us know and we can try to rephrase. We will also be happy to share the transcript or our notes from the interview with you at the end if you would like. Do you have any questions for us before we begin?

### **Structured Interview Questions**

A.1 Do we have permission to record this interview? Any information you share with us is completely confidential and will only be used for research purposes with your permission.

A.2 Can we anonymously quote you in our report?

A.3 How long have you been teaching?

A.4 Why did you go into teaching English?

A.5 What online learning platforms are you using now?

A.6 What do you think about these tools? (Try to get feedback on all of them)

For each tool, ask about the advantages and disadvantages and if they received training on the use of the tool.

A.7 How do you keep students engaged with remote learning?

A.8 What do you think the biggest obstacles are in keeping students engaged in remote classes?

A.9 Do you think a significant number of your students have Internet accessibility problems?

A.10 If so, can you estimate what percentage of students have accessibility concerns?

A.11 What type of problems?

A.12 If you could make any changes to the English program, what would you change?

A.13 What do you enjoy about teaching remotely?

**Conclusion:**

A.14 Thank you for talking with us today and for participating in our research! Is there anything you would like to add that we haven't already covered?

A.15 Do you want to review our notes and transcript of the interview?

You can always reach us at [gr-oteima1@wpi.edu](mailto:gr-oteima1@wpi.edu). Thank you for your time.

## Appendix B: Student Questionnaire



Dear Oteima University English Students,

We are four students from Worcester Polytechnic Institute (WPI) in the United States and we have been working alongside Oteima University as a part of our degree requirements for WPI. The academic project assigned to us was to help improve online learning for students and instructors due to COVID-19 forcing everything online. While we are sad to have missed out on the opportunity to travel to Panama and experience a term there, we have been connecting with Oteima University remotely and would like to hear from you.

With the help of Professor Cristhian Mora we have put together a questionnaire to learn about your experiences with remote learning. We want to hear your thoughts and opinions on online English learning at Oteima University. The questions should only take about four minutes to complete, and your responses will be kept completely anonymous. Although no long answers are required, we encourage you to be thorough and specific with your answers.

You will be asked for your student ID number upon starting the questionnaire. However, if you are not able to provide an ID number you may put a phone number down as verification.

We thank you for taking the time to help us with our survey. For any questions you may have about the survey, feel free to reach out to us with the email located below.

Thank you in advance for all of your help,

The WPI Oteima I project team  
gr-oteima1@wpi.edu  
Tyler Cierpich, Civil Engineering  
Hailey Delphia, Architectural Engineering  
Lindsey Fletcher, Industrial Engineering and Mathematics  
Justin Hines, Civil Engineering

Please select the response below to continue.

☐ Yes, I've read and understand the information above.





---

What is your student ID number? (Without dashes)

\*If you do not know your ID number, feel free to put in your phone number without the dashes or country code (ex: 507-6645-6845 would be 66456845).





# WPI

What is your age?

What is your gender identity?

☐ Male

☐ Female

☐ Other

How many years have you been studying at Oteima University?

☐ Less than 1 year

☐ 1 year

☐ 2 years

☐ 3 years

☐ 4 years

☐ Greater than 4 years

What classes are you currently enrolled in?

Where do you live when off campus?

---

Do you have daily access to the internet at your off campus residence?

- ☐ Always
- ☐ Most of the time
- ☐ About half the time
- ☐ Sometimes
- ☐ Never

---

On your average week, how many days do you use the internet for class work?

- ☐ 1 or less days
- ☐ 2-3 days
- ☐ 3-5 days
- ☐ 5-7 days

---

Are you currently employed?

- ☐ Yes
- ☐ No





# WPI

How many hours a week, on average, do you spend working?

- ☐ Less than 10 hours
- ☐ 10-20 hours
- ☐ 20-30 hours
- ☐ 30-40 hours
- ☐ 40+ hours

Do you currently have a scholarship for your studies?

- ☐ Yes
- ☐ No



# WPI

Indicate any additional other time-consuming obligations you have such as (Caretaker, dependants, etc.)





# WPI

Why do you want to learn English? (Select all that imply)

- ☐ I think that learning English will help my future job opportunities in Panama
- ☐ I think that learning English will help my future job opportunities outside of Panama
- ☐ I would like to travel to an English speaking country
- ☐ I would like to better communicate with friends or family members who speak English







# WPI

---

I have consistent access to a computer/laptop

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

---

I have consistent access to a smartphone.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

---

I have consistent access to a personal tablet.

- ☐ Strongly agree
  - ☐ Somewhat agree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat disagree
  - ☐ Strongly disagree
-

---

I think the program Google Meet is beneficial to my learning.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree
- ☐ I've never used this platform before

---

I think the program Moodle is beneficial to my learning.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree
- ☐ I've never used this platform before

---

I think the program Edusoft is beneficial to my learning.

- ☐ Strongly agree
  - ☐ Somewhat agree
  - ☐ Neither agree nor disagree
  - ☐ Somewhat disagree
  - ☐ Strongly disagree
  - ☐ I've never used this platform before
-

I think the program Zoom is beneficial to my learning.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree
- ☐ I've never used this platform before

I believe that adding more online resources to the English courses at Oteima will benefit the program.

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree



# WPI

Do you have significant internet access issues when not on campus?

- ☐ Yes, often
- ☐ Sometimes
- ☐ No, never





# WPI

If you have difficulty accessing the internet, what specific problems do you encounter?

What could Oteima University do to improve the accessibility of its English classes?

What do you like about your English classes at Oteima University?

What would you change about your English classes at Oteima University?





We thank you for your time spent taking this survey.  
Your response has been recorded.

## Appendix C: Video Script and Link

Link to the actual video: <https://youtu.be/IqaNsWAmxyw>

---

*[Video pans over the WPI Quad and football field.]*

Hailey's Voiceover: "Here at Worcester Polytechnic Institute in the United States, we've had to make some changes to keep learning in these unprecedented times."

*[Video of Justin reading a book, before the scene changes to Tyler and Lindsey sitting at a table doing online work at a laptop together.]*

Hailey's Voiceover: "We know that schools around the world are coming up with creative and exciting ways to learn with this 'new normal', and Oteima University is no exception."

*[Video of Tyler looking at and reading books in the library that changes to Lindsey and Justin waving at the camera by the WPI entrance sign.]*

Hailey's Voiceover: "We want to hear about your experiences with remote learning."

*[Video transitions to an image of a red background with text that says "Please help us by filling out the survey. ¡MUCHAS GRACIAS POR SU TIEMPO!" with the link and QR code to the survey, along with WPI and Oteima University's logos.]*

Hailey's Voiceover: "While we wish we could be down in Panama giving you the survey ourselves, please help support our "new normal" and fill out our survey with the link provided. Thanks!"

## Appendix D: Interview Transcripts Chart

<i>Interviewee</i>	<i>Date</i>	<i>Time</i>	<i>Appendix</i>
Professor A	September 9th, 2020	3:00 PM EDT	Appendix E
Professor B	September 11th, 2020	11:00 AM EDT	Appendix F
Professor Esther Boucher-Yip	September 11th, 2020	1:00 PM EDT	Appendix G
Professor Próspero González	September 18th, 2020	11:00 AM EDT	Appendix H
Professor Oscar Rodríguez	September 18th, 2020	12:00 PM EDT	Appendix I
Professor Luissana Gómez	September 25th, 2020	12:00 PM EDT	Appendix J
Professor C	September 25th, 2020	3:00 PM EDT	Appendix K
Professor Evelyn Hidrogo	September 25th, 2020	4:15 PM EDT	Appendix L
Professor D	September 25th, 2020	5:00 PM EDT	Appendix M

## **Appendix E: Professor A Transcript**

**JH: Wow. And why did you go into teaching ESL? Was there a certain reason that made you want to do it?**

**I:** Well, I mean, it wasn't my, it isn't my direct background. It, you know, what it was need based, that needed someone to, initially to cover, but I was a willing, willing participant. I always like working with international students. I have been one myself and I haven't been teaching much of ESL. My background is in comparative literature.

**JH: Yeah. I guess then I'd ask what made you want to teach then?**

**I:** In general? Well, I mean, I think this is the best job in the world. Uh, getting the, the energy, the curiosity, the ability to transform. Uh, thinking lives. I mean, teaching literature, you really go deep into yourself. No, no other teacher, you know, engineering teacher, teachers don't get to do what I am privileged to do is really build selfhood design alives in some ways, focus, important questions. So yeah, it was a natural choice for me.

**JH: Yeah. So we know that most of WPI is using Zoom. Are you using any other online learning platforms other than that, to like help you other than Zoom and Canvas or?**

**I:** Well, mostly Zoom, for the class, the ESL class that I'm teaching right now has to be Zoom because half of my class is 12 times zones away, 7 times zones away, 11 times zones away. So they're not even in this country. And a few people who are actually planning to go back home. So, uh, it wasn't that someone had to accommodate me. I am accommodating the class because you know, pretty much. Everyone there is distant. So Zoom is what we use for that. Um, and in my GPS class, I've been using echo 360 with Q and A feature, which gives a little interactivity. We stop every 20 minutes or so and get students to post on the discussion board, put the questions in chat, and we have that sort of informal back and forth session. And then the lecture



goes on and then the students at the end post three takeaways from this class, so Canvas discussion board is very well used too, in addition to Zoom.

**Hailey Delphia: Okay. So I know that you just said Canvas is good for us. Like they have their pros and then Zoom is more interactive. Do you have any other like, comments about like, what you think about these tools? Like, do you think there's anything that needs improvement or...?**

Well, I mean, I am in teaching because I love to be with students. So this is a loss. I mean, it's, yes, it's a, it's, you know, a work around tool. And as a work around it's, you know, I was much more skeptical at the beginning. I am more comfortable with that. I don't think students are getting that much less. I mean, socially, GPS for example, is a course, I don't know if any, one of you have taken GPS in your first year.

You mean you probably took it because of social integration, right? Because you kind of have a semester long community of people, you get to know people, you work with them. So, yeah, Justin, you know, that sort of the whole, uh, nonacademic reason to do that. So it is definitely a loss. So I am hopeful that things in B term will look a little better and, and we will do project work with smaller teams in person, so I'm creating for that time. Um, but. You know, I'm realistic. Yeah. We're all waiting to be back with you guys. And I'm sure you are, you're eager to get together with, with, uh, the rest of the class. But Zoom provides that some options for being interactive discussion board also makes it more visible who is participating, who is posting, who is, uh, having questions because, you know, as you know, in a GPS classes, you have a large group and air time is very precious and you're fighting for, for that too. Not everyone gets to participate as much as they can. Whereas Zoom gives you a chance to post your questions in the chat, as many as you like. I also feel that. Now that we're teaching GPS online. I get a lot more emails from students because they feel that's their lifeline. And I don't mind that at all. Uh, you know, I wish I was there, but, um, but I feel, I feel it's so totally okay. So in some ways I'm communicating with more students that way.

**Lindsey Fletcher:** Um, would you say one thing that I noticed in, um, one of my previous remote classes was that online discussions, um, could at times they would get a lot more in depth. Cause you can only do so much, um, in a class discussion. Would you say you, But like we had these like long the sessions happening just on the Canvas discussion board. So would you say you've seen that as well?

**I:** Not, not only in depth, but I would say I'm more thoughtful. So people have, because you. People have the benefit of time to think through the question and maybe even do a quick research, you know, so they don't look stupid or they don't say the obvious things. Uh, they are better written and they're well better thought through. Whereas in class you have generally extroverts take over, right. And basically. Stick out, what's on the top of, very top of their mind. And it's sort of almost skewed against the introverts who may have deeper questions, but don't, uh, don't really fight for that airtime. So, the class, the online class, gives the introverts more. It levels the playing field, gives everyone time to think through a question. Uh, Spell it out better. And you know, the act of writing out the question is a thinking process. So it refines the question, it refines the quest and, and gives you more to work with as a, as an instructor. Yeah. And the other thing, Lindsey, I would, I would add to that, the reason, So say the deliverable, the end result is of a different quality. And I will say I have never had research reports, IQP reports, of the depth and the quality of writing. Um, on site, you know, when you're distracted by interaction, culture, you know, exploration, which is all great, but that takes away right, takes away the time and depth of research. The publishable quality of the result was quite amazing. I was a, um, I mean, I understand why, why that sort of working in silos produces that kind of a, an in depth exploration, but I am enjoying it. I mean, it was very, very, the students were very proud of the research. They were able to do each working in silos and then, you know, creating their writing. They're the joint piece of report. Um, uh, I, I three reports and I would say I would publish all three of them. In fact, I just told the students, I would support their application for the presidential award. It was that it was that good.

**HD:** Okay. Um, I know you talked to us a little bit about how you've been engaging with students remotely,, how you've been using like the polls and stuff in them. So like how, how

**is that different to how you were engaging with students? Like prior to COVID, like, how is that different from what you'd be doing in class?**

**I:** Um, well, email, you know, certainly a higher volume of email chat. A use of a discussion board is, is key. I did have an in person class as well. Uh, so it was important for me to see those faces. And I'm hoping that in the term, when we are broken into smaller teams, I will actually work with, um, student teams in person. I mean, it's a different modality, but I don't think that. Uh, I am a short-changing student. You know, my, my rule is always respond to students, even if, just to say, okay, I got it. Thank you. Whatever, a two word response, but I always do. Uh, and with the interact, with the online model, it's, it's, it's more extended. And I always, during class time, I give those pockets of time for less formal back and forth exchange. Um, I haven't used breakout teams, this, this term yet. I did use them in D, I had a smaller class, but we have a lot of guest speakers. We have a lot of guest speakers. Again, they're just going to present on Zoom. We actually have more guest speakers this year, but they will be, they will be Zoom, um, uh, Zoom speakers. Um, so it will be interesting to see how that that compares. But, we have people from different backgrounds. And as few as we have a structural engineer, we have an architect coming, coming, uh, to class. So it's, um, So we bring in voices from outside of academia, into our class. And in some ways it's easier. We don't have to worry about travel and a meeting and get them adjusted to our technology and all that. It's going to Zoom. So hopefully that part will go, go well. It'll be interesting to see how teamwork, uh, plays out when the sort of direct social interactivity is taken out and we were just working to produce it in your joint. So, um, so Zoom is kind of a happy medium, because if we were doing it in person, we would be disadvantaging a third of the class.

**HD: And then I know you were just talking about groups, how the group dynamic is different. Do you think there's any big obstacles in keeping students engaged now in your classes now that you're online now that there's so many distractions of people being at home or...?**

**I:** Well, that there's a plus of course, that they are, you know, at home, they're going to bed to sleep in their own bed. They sort of, that stress has taken out of those, uh, you know, of, you

know, being on campus and, and, you know, being at the whim of being sent to quarantine any day, which I'm sure is, is at the back of people's minds. Um, On the other hand, you know, as you know, you learn from each other, a lot, those teams, I compose of people with different backgrounds who come from different countries with different interests. Um, uh, Yeah, and they, and they add and complement the, spread the wisdom in the group. So that will, could work in terms of writing, producing a piece of writing that I don't see as a problem in terms of really, you know, personal chemistry. That could make this for people to, um, you know, maybe work on an MQP together or doing, uh, you know, starting a business together. That is probably on the minus side. You know, hopefully when we come out of this, people could, could reconnect. Uh, but, uh, but in terms of work process itself, you, you can definitely, um, uh, Produce, as I said, a very decent piece of writing, maybe a higher quality than if you were just having these endless meetings that would go on a tee, everyone going on a tangent describing their report or brothers' antiques or whatever, which is part of the human experience, but takes time. Um, so, so yeah, the pluses and minuses, hopefully on balance, we would still. Uh, have a decent learning experience going on in, in working in teams and definitely for sure. Um, dealing with these teams, do you seem to have a significant number of students having Internet issues at all? I'm not. Not that, uh, that, uh, it was recorded. I had, she was with my Internet, Um, when WPI gave me a new desktop and for some reason it works really great, but it doesn't, you know if I go in Zoom, my voice will be breaking all the time. So I'm talking to you on my laptop. I get I'm looking on my computer screen, but I, I cannot. For some reason they weren't, you know, I wasn't on campus, so they didn't look into what, what was wrong. So some of the part of the IQP experience, we were watching, uh, films, uh, on the Russian space race. Um, and, uh, and I was, I was getting those films and, and we will watch him by screenshare. And, uh, and the voice was just, you know, breaking all the time. It took me a while to really find out that I couldn't fix that. Um, and sometimes, so we get a message from the students in our class that our lecture is breaking on them. I don't know whether it's a local connection or broadband or what, but it is not once I, you know, really abandoned my computer and where the laptop, I didn't really have problems on my end, occasionally students had on and, um, temporarily, but not, not to the point that. We really, um, that that was problematic. And also every lecture is both recorded. Ian, the slides are uploaded. So the students have access to the material and can watch using a different rewatch using a different connection. Um, so it hasn't been, it hasn't been too much of an issue. I really.

Other than a couple of complaints. And sometimes, uh, I, my teaching partner, forget to press record a student's status report, please record. So we, um, turn it on and turn the recording on. Uh, maybe because of some issue we don't know, but it hasn't been a massive problem.

**Tyler Cierpich: Okay. Okay. Um, yeah. So just a final question. If there's any changes you wanted to make to any of the programs that you're a part of, um, right now remotely, what did you make any changes in? What would they be?**

**I:** Well, um, With ESL specifically with ESL students. Uh, the issue is of course time, because I have students in South Korea, which is 12 times 12 time zones away. So when I, when I say good morning, they're laughing. They're because they're. They're barely awake. It's almost a major. So if they are already sleeping, it's late, you know, then I have a student in Russia, which is seven times zones away. So figuring out the, like the, the ideal time to hold a class, uh, is, is difficult, but we decided that the original time we'll stick with it. We'll um, Uh, figure things out, even though some are going back to China and that will be yeah, again, late at night, but it's still, it's still doable for them. So that's kind of a, uh, uh, obvious. First thing you need to deal with. Um, uh, well you have too with online instruction, you really have to be there very structured, much more structured than in class where you could sort of do things on the fly and, and, and make it work. It just doesn't happen. You have to be. Very explicitly posted, send a link, explain three times and then repeat it. So more structure, more, more explicit instructions. We make very good use of PLA's who are watching the chat box. As we're giving a lecture, they're watching the chat box and responding to the questions that they can. Spawn too. And others, they alert us to the questions that they need us to explain. So where we are, we were giving them very actively involved in, in monitoring Q and A. So we actually, this year appointed our four PLAs to four different positions. We have a discussion board manager. We have a key events folder, someone who will be in charge of the main presentations assignments or assignments. We have a PLA who is a tech support PLA. So the students know which questions to address to whom and most of the time they address it to us. So we get a higher volume of, of, um, online messaging going on. Which is fine. Sometimes we say, well, I'm copying this PLA she will handle it, you know? Um, and, and. Uh, deflected, but have them, uh, give them a chance to be interacted with students. So yes, more structure, more use of PLS, explicit instructions. We don't take attendance

online, but we ask students to post three takeaways from each class. So they are, uh, when they are listening, they are trying to figure out what, what is it that they learned? Is it that our key point here is trying to synthesize information as they're listening. So that's sort of our way of making sure that people are engaged. We sometimes just give time, stop and say, okay, now's the time for you to post in the chat box, ask us directly, or. Put your three takeaways on the discussion board. So making these pockets of time for interactive processing time has been key.

**TC: Alrighty Yeah, definitely making the most of your time is definitely important. So with that, thank you for talking with us today and participating in our research. Um, Was there anything in this interview that we maybe missed or wish we would have talked about more?**

**I:** I think it's good. And I wish you guys, um, a great term regardless. Um, and, uh, yeah, keep up the good work with your sponsor. This is good. This is great. You're lucky to have them still engaged. Um, And someday you'll, you'll get to go to Panama. I don't have doubts

## **Appendix F: Professor B Transcript**

**JH: Okay. And what got you into teaching ESL?**

**I:** So, before I was teaching English, I was working in international development in the international development field and through happenstance. My husband was also working in that field and we ended up moving to West Africa. We were living in Senegal, in Dakar, the capital, and, I didn't have a job. He was, he, he got the job, so we moved there. And so I was looking for more work in international development there. but I wasn't having a lot of luck finding that. And I saw that a school was advertising for English teachers. I had an English major in college, so I thought, well, I can do that sort of on the side until I find something else. Uh, and so I signed up and I, and I. After gosh, after the very first class that I taught English, I knew suddenly that was what I wanted to do, that it was like, I wanted to close the door and tell them that they couldn't the students, they couldn't leave yet. Cause I had so much more, it was so fun and I had so much more to tell them. , and it just, it, it was such a good thing fit for me. I realized that was really what I wanted to do. So, I taught there for a while and then I went and got a master's degree in teaching English. Continued to teach in, in West Africa for about seven years. and then went on to, you know, we moved back to the United States and I was teaching English as a second language in Minnesota after that.

**JH: Wow. That's really kind of cool how you sorta, you know, found your passion, you know, whatever that I feel like strives for right now.**

**I:** Yeah, I was lucky.

**JH:** Alright. Now uh, Tyler I believe, or Lindsay. Sorry. Do you want to? You're, I think you're muted.

**Lindsey Fletcher: Sorry, so with all of the coronavirus stuff, have you been teaching remotely now?**

**I:** Yes. So we started in, uh, D term, as you recall. , that was the first time I'd ever taught English as a second language remotely. It was my very first time doing that. and I was surprised at how well it went. Honestly, I was happily surprised and I think it was very successful. I, then, taught two courses in D term. I taught one course in E term. And that was obviously online. And now I'm teaching two courses in A term, both are hybrid. , but most of my students are, you know, international students. So most of them are not here in the U.S. so most of them are, are, are joining remotely.

**LF: Nice. So how do you, how do you like, keep students engaged with remote learning compared to right in person?**

**I:** Well, one big difference. One, one huge difference is, the difference between a synchronous and an asynchronous class. So with synchronous classes, it's really easy to keep students remote. Honestly, the class isn't all that different. When I have all of my students online in Zoom, we can pretty much do everything we did when we were sitting in class together, and I found that to be a very successful way to do the class. Asynchronously, What I have to tell you is just, it's nowhere near as good or as interesting. It's much harder to have any kind of personal contact with the students. It's hard to have any type of like, It doesn't really feel like a class. It feels like something different. And, , so, uh, remind me what you, what your question was again. Exactly. What were you asking?

**LF: Yeah, so. How do you, how do you keep students engaged with remote learning?**

It's, yeah. So when it's synchronous is very easy, because we're all there together at the same time, I'm asking questions, we're having discussions, it's very dynamic, and so that, that in-person communication that we can do synchronously works very well for that. Asynchronously, how do I keep them engaged?



One way is by having a lot of little assignments that require, you know, them to submit something, me to give feedback on it, having it go back to them, they, you know, using my feedback to make changes, having it come back to me, so having, uh, Sort of a larger assignment, broken down into little pieces that require a lot of back and forth between the student and myself. That's one way, I don't think it's as good as in person, but it's, it is definitely one way. Another way, of course is, you know, I would have office hours online and encourage students to come and the students who did come, some did not all, but the students who did come, I did get to develop more of a personal experience with, we could look at their writing together at the same time, I could do a lot of what I would normally do during a synchronous class, which is, you know, we look at the work together, we discuss it. We talk about what's working, what isn't working. and that was very engaging for students. what wasn't very engaging was like, read this reading and answer these questions and submit your answers and I'll look at them and grade it, like that's just so not engaging. And so not interesting. So the chances in which I got to respond to a student and they responded back to me and I went back to them that kind of back and forth that worked and office hours when we could be together.

**LF: Yeah. Are you, so with online learning, are you using any online platforms other than Canvas and Zoom?**

**I:** Google Docs and, yeah, that's about it. Zoom is really the major one. Canvas of course, for all the assignments. And oftentimes we're using Google docs as a, when we're at the same time as the other things.

**LF: When you say, well. What do you think about these tools? Are there any specific features that are particularly helpful or features that you wish that they had?**

**I:** Zoom seems to work very well for me. I like how we can do breakout groups. That's great. I like how we can share documents. Students can share, and we can all look together and comment. For one of my classes last. In D term, we, uh, we read the autobiography of Malcolm X and then we watch the movie Malcolm X and, it was actually really cool the way we could, I could show the movie everybody's watching and we could do a live chat at the same time as the

movie. And in some ways we even almost have more engagement than I did when we did it in class, because I didn't have to stop and pause the movie and say, so what did you think of this part? Right. Which kind of broke things up. But instead students could sort of spontaneously respond to things that they were seeing on the screen. And we could kind of have that side chat going at the same time. I thought that was a very cool way to do it, a lot of engagement there, things that haven't worked for me. It hasn't been the platform. It's been the infrastructure of the, of the Internet, you know, students having trouble, uh, with making their connection or my connection, not being great. You know, times when it's just lagging, uh, times when we just can't, you know, the Internet is just not good and we, we all can't seem to go well or see each other. Well, that's been the biggest challenge. I would say that. And I mean, just the fact that my students are scattered across the globe. So I have blessed their hearts. I have some students who are in China and who are up at one o'clock, two o'clock in the morning to be in class, to be in class synchronously with me. I don't require it, of course. And I have some students who are not. Who is attending the class? Asynchronously. So I record the class. Oh, that's, that's another good feature of Zoom, right? The fact that I can record the class and share it with students, but my God, that's gotta be boring as hell. Can you imagine watching a class, like it's hard enough to stay engaged in a real live class, but watching one in which other people are doing stuff like I can't even imagine how they can manage to get through it.

So, I worry a lot about those students. And I, I wonder to myself, if I'm doing, it's not really fair, honestly, like for remote students who cannot attend synchronously and work and I'm treating the class synchronously, they get sort of the, the worst of it, probably. They're the, they're in the minority. So I feel like it's attention, right? Like it's the best way for students who can be synchronous. That's the, definitely the best way to do it. But when I have a few who can't do it that way, yeah. That's not great learning for them, honestly. So, that's, that's it.

**Tyler Cierpich: So on that note, if you could make any changes to the current state of the English program, would you change anything or do you like how it's going?**

**I:** Well short of being able to change time, things that we could be doing differently. Uh, yeah, sure. Here's a good one. This would be a good thing. If there was a way we could have structured the classes so that we have, a course for students who are going to be, uh, asynchronous and it's

just for them. It's a lot of work to, you know, it needs to be a separate class and. And, and as professors we need to be given the time and the compensation for teaching a separate class. Like I just can't do it. I can't teach two. I don't have the time in the day to create two separate classes, but that's really what is needed, even though it would be a small number of students, probably, you know, one class, it would be two. And in the other class it would be four. Cause the rest are managing to come synchronously. Mmm. It would be better, the learning would be better for them. If I was being given the time and the money to create a separate class for them, that's what I wish we could do. I understand that we can't because of budgetary reasons and stuff and numbers, you know, it's not, I'm sure it's not. Mmm, profitable in the least to create a special class for two students, right. A special in pay me to do that. That would be crazy. But. That would in the best world, that's how it would go.

**TC: What types of, if you made that, if you could have those separate classes, what types of changes would you have in those classes compared to traditional?**

**I:** So the difference would be instead of presenting material, live synchrony and synchronously, and, interacting with students that, for the students who weren't. For the asynchronous class, it would be all. , I would be recording short videos. , I say short, I try to make them short. Oh, it's horrible. You know, you really want to keep them under. Yeah, don't go more than 15 minutes. 10 would be shorter than 10 would be better because you really boost the chances that someone will actually watch the whole thing, but some of my videos would get to be too long. Okay. So one of the things I would do is I would revamp my whole, I'd have to chop my, my, my, , content down into much smaller chunks and create a bunch of smaller videos to cover the same material. Now it's not nearly as interesting when the students aren't there to interact with it to ask questions, you know, instead I have to do stuff like, okay, pause the video, look at this. Think about how you would answer this question. Yeah. And come back and then, okay. Now you're back. I have no idea what you said or what your answer would be, but here's what my answer is, you know, like it's not nearly as interesting as having live answers. Right. But it's a little bit better. Yeah. Then I think probably than watching, uh, you know, a two hour class recorded because honestly what happens is nobody watches it. They can't, they can't, you can't sit through that. And it's just, and it's not even interesting to see what other people say. So. Okay. Uh, right.

So what I would do is I would have lots of smaller chunk videos. , and then I would probably best case scenario would be God, if you could, somehow with a smaller chunk of videos, really chunk it down and be like, I want you to do this. I want you to write something, you know, how would you fix this sentence? And then I want you to email it to me or, you know, submit it. And I'm going to look at it. And I'm going to give you feedback and then we're going to go onto the next video. And in, and in that video, I'm going to respond to what you wrote. I'm going to see what you submit, and I'm going to say, Ooh, that's an interesting sentence, but did you notice you did this? And you did that. So why don't you try this? You know, that kind of personalized feedback, best case scenario, that would be the best, but wow. Imagine if you had a, you know, 15 students and that'd be a lot of different videos, you'd have to shoot.

**TC: Yeah. So it sounds like the kind of the back and forth between the instructor and the students is kind of the key thing, , for the asynchronous classes.**

**I:** Yeah, definitely.

**TC: Yeah. I definitely agree. Cause I had a class last term where it was recorded lectures. And I feel like some of them were just so long and it's hard to just sit down and just watch it, watch a lecture for like, you know, an hour. Plus it just is, you know, it just, I, I like the idea of doing like 10 minute chunks, you know, and you can just kind of bang out. You can. Do one or two and then take a break and then do the, and I think that's, I actually liked that a lot.**

**I:** Yeah. I mean, we have all this research that shows that like one of the worst ways to try to learn something is to sit and watch a video or, or, or read something like, like it's just so it's so not active. There's no active learning going on. It's completely passive. You can't even be active if you want it to be. So , That's just a really crummy, crummy way to try to learn anything we can do to make it more active would help. Yeah.

**TC: That was the wildest thing for me in the term, I had a linear algebra class and just going from like sitting through 50 minute classes to barely being able to watch a 40 minute**

**video, it was just. Why is this so hard? Like I'd have to pause and go back. Cause I'd missed it. It was just the wildest thing.**

**I:** Right? Your whole brain just goes on autopilot. You're like there, I watched it. I made my eyes stay on the screen for 40 minutes. I can't tell you what, what it was. I don't really remember, but I was there. I was watching it dammit. Right. It's just so not. Active your brain just has better things to do. And maybe, you know, I haven't spent much time with programs like duolingo. Yeah, sorry, duo lingo, lingo. Yeah. Duolingo, or those other online app platforms that people often use to study a language. I know there's some research that shows that that learning tends to be very shallow. That you think you're learning a language, but, eh, yeah. It's, it's not really, but. The reason why they have some success is because of the interactivity. Right. Maybe we should be taking a lesson from that and trying to do more app based or more phone-based or just some, even if it was on a laptop, like some more things like that. , but yeah, again, there's the question. I mean, I do know that there are a lot of research questions, whether or not. Those programs actually have long term learning. So that would take more research to know.

**LF:** So we're checking our uh, interview questions. , Yeah. I'm a little skeptical of Duolingo. Like I feel like it's kind of vocab heavy. like it's kind of, you just kind of learned to hit the right answers without necessarily having the deeper understanding. Like you're clicking the boxes and you're dragging the things around and you're just kind of seeing, Oh, that worked. Oh, that didn't, which I mean is, is legitimate. Yeah. I'm not a huge fan. Right?

**Hailey Delphia:** I don't think it really works. Yeah, no, I would like when I, when I was in high school, I took six years of Spanish and I was very close to being fluent. And cause I thought we were going to Panama, tried going into Duolingo and like picking it back up and like, it should have been easier for me since like I had that background in Spanish and it just was very repetitive, very, like, I didn't feel like I was learning anything.

**I:** What I think there is to admire about Duolingo and those types of things is that the persistence is high for people. People like them and they persist with them. So somehow they're doing

something right there to get the, to get people, to keep coming back. That's what I would, you know, if you're talking about engagement, People do engage with them, maybe. Cause it's sort of gamified maybe because it makes you think you're learning, even though you're not, you feel like success there. I got the box. Right, right. I don't know. Yeah.

**HD: I feel like I got the biggest success back in high school our AP Spanish teacher told us to this was back when, I dunno if you ever heard of trivia crack, like the trivia game, we'd have us play that in Spanish to try and like help our vocab. And I feel like that helps, but like I havent found, like, success. And like, I just felt like immersing was like the way to do that.**

**I:** Right. It's one thing to learn words. It's another thing to be communicating in another language. And in the end, you know, we just, you need another person to communicate with. That's why, that's why this online learning is. So if it's not synchronous, if it's asynchronous online, learning with a language it's like really crazy hard. Cause you're, you're not actually communicating with, with someone live.

**TC: Yeah, there's definitely a lot of drawbacks to online learning. But is there anything that you enjoy about teaching remotely?**

**I:** Well, yes. like I said, the, I found some of the apps to be, or some of the features of the platform. To be helpful, like when we watched the movie and we could do the online chat. That was cool. Yeah. It was also, I mean, I have to admit it's very convenient to not have to go to the classroom, like save a lot of time with just being able to like sit down in my living room and launch class and away we go. So there's some savings there and in time. In some ways, because my classes are small. This was, this is, this would be maybe not true for big classes, but when my classes are small and I have all my students with their videos, You know, if the camera's on and we're all there together. Like. I see. Everybody's faces really well, so I can see who's paying attention and who isn't. I can see who's understanding and who isn't. I can see who's about to give an answer, in some ways, you know, being able to see the face so up close has some advantages. So, and I'm a little, maybe a little more likely to, notice. You know what it is, it's

because we're all seeing each other's faces, you know, when we're in class and somebody looks like they are maybe nodding off, falling asleep, or just not, not engaged. Sometimes I'll say something. Sometimes I'm just going to keep going because I'm on my role and I'm doing my thing. And I don't know, I just don't feel like interrupting it to say, "Hey, yo, what are you doing? Wake up. Throws me off my game. Right. But when I know that every student can see every other student, I would feel embarrassed not to say, Yao! what's going on. Your eyes are closed and you look like you're falling asleep because. I would assume that all the other students could see that, that I can see that. And I'm not saying anything which would mean maybe they can wander away. And I won't say anything, right. Like, so I feel more accountable to responding to my students when we're all this close with each other's faces. So maybe that's a positive thing.

**TC: For sure. That definitely helps being held more accountable for your own learning and not falling asleep during class, for sure.**

**I:** Yeah. Also, honestly, it's fun to see people's houses. You know, I bring my cat and my dog in, you know, my daughter wanders through the screen. Like I think there's a real sense. , you know, we get to see that with their students, like it's humanizing, obviously it's very humanizing to see each other that way.

**TC: Yeah, for sure. I know Hailey's cat likes to wander in during our Zoom calls.**

**HD: Yes. I'm really surprised we haven't seen him today.**

**I:** Yes. And it's charming, you know, and it just reminds you that, you know, we're all people trying to get by and do our best, and that's a nice feeling. It helps to produce a feeling of community that way.

**TC: Yeah. So we'd like to thank you for just talking with us today and participating in our research. , Was there anything in this interview that you think we missed or wish we would have talked about more?**

**I:** Well, I don't know the context of Panama These are university students, right? So they're at a university. Are they? I mean, I would imagine connectivity issues could be a huge deal, maybe they've got the infrastructure and, and are fine, but , obviously when you don't have great. When every student doesn't have great connectivity, you end up having some serious, uh, you know, issues of, of, , some people not getting the quality education that you know, that others are getting. So, yeah, I assume, and I hope you'll be looking at the, that piece there, you know, the, the effects that, that people can have when they don't have great, when, when they don't have great, uh, connection and just don't have the means to have a great connection. , are the students, the students in Panama are probably not living at the university. Right. In fact, many universities don't even really do that. Don't do housing, right?

**JH: Yeah. I don't even think your Oteima has housing. Right. So they're all scattered over Panama. Okay, right? Yeah.**

**LF: Yeah. It seems like in terms of the accessibility issues, kind of what our sponsor was saying is that a lot of students have been able to get Internet, but it's like, you know, like the cap isn't that large and they need the connection's not great. So it seems like a lot of them. They can access like web pages, but they can't do like the Zoom calls and the videos, because that's just so much more demanding on your Internet.**

**I:** Yeah. And it definitely changes the game for teaching. You know, if you know that your students just aren't going to have the Internet to do synchronous classes and you're going to have to go asynchronous, then it definitely lowers the quality of the teaching. And, uh, it requires a lot more creative work on the part of the teacher to create these short chunkable things and then respond to every student as much as you can providing that individual response so that there's actually maybe some learning on an individual level. Yep. Well, that's a cool project you guys are doing.

**TC: Thank you so much.**

**JH: Thank you for your time. This has been really helpful.**



**I:** Glad to do it. Good luck. And, uh, you know, if you need more, just set up another meeting with me.

**Team:** Alrighty. Thank you.

**Team:** Thank you.

**Team:** Have a good weekend.

**I:** You as well, thanks.

## **Appendix G: Professor Esther Boucher-Yip Transcript**

**Hailey Delphia:** Yes. Alrighty. So how long have you been teaching in general?

**Interviewee:** Uh, 25 years. Yeah, I'm old.

**HD:** And then how about just ESL?

**I:** 20 years.

**HD:** Okay. And then, so why did you go into teaching English?

**I:** Well, teaching in general is attractive because, you know, a teacher makes a direct impact on students' lives. You know, whether they are elementary school or college students like you, there's an immediate impact. And, you know, I get to inspire students. So that was the motivating factor. ESL is English language teaching, which is the subject of my choice mostly because, uh, English is a worldwide Language and an international language. And I feel that I have the skills and experience and the passion to, you know, not just be a user of the language, but be a supporter and advocate of the learning of that language and the use of the language.

**HD:** Okay. Um, and then, so at WPI, have you been teaching remotely or are you one of the hybrid courses?

**I:** Uh, so I taught remotely in D a and E, which is in the summer. And then now it's a hybrid. Yeah.

**HD:** Okay. And then how is that going?

**I:** Uh, well, it's, um, it's a little unnerving because, you know, I've got to learn new things, new ways of teaching, uh, in a hybrid form. but you know, if it's either in person or fully remote, I

think that it would be slightly easier, but you know, having to integrate two kinds of teaching, I had to develop some of my own teaching skills.

**Lindsey Fletcher: Yeah. So how do you, how do you engage with students, remotely compared to how you engage with students prior to teaching remotely?**

**I:** Okay. So I think there are benefits using technology, especially teaching remotely in a foreign language learning classroom, because, as you know, and if you have experienced learning a foreign language, there's a lot of close up, observation of how pronunciations are made, how conversations develop and things like that. So that's part of language proficiency. So, doing it remotely, using a, you know, a tool like this Zoom where I can actually see my students is extra Nice. The movements of their mouth, I'm able as a teacher to correct them immediately. Uh, so that's, that's the benefit of teaching remotely in a foreign language classroom I like that. Why is the scene? You know, the same, um, teaching skills are applied when I teach students in person, because I can go up to them. You know, uh, less than three, less than six feet and actually watch them and hear them and see speed coming out from there. Because they have to, uh, pronunciation, um, So that is how, you know, students can develop and learn. So when we give them immediate feedback, in person now the hybrid version is difficult because I need to make it seem seamless. So there are some things right now because of the COVID situation that I cannot go up close to look at them, but I can go up close to them like this and have them come closer to the camera and I can watch. Yeah, so their mouths move, and I can correct them. Yeah. So to have that seamless, uh, learning, uh, is difficult, you know, so in the classroom we cannot do that, but we can do that online. So in the classroom we have to do something else. So that is, for, you know, um, uh, skills in learning, speaking pronunciation and all that. But when it comes to reading and writing, you know, the difficulty is less because, you know, so this actually I have to write and then some things online and as you and I know, Canvas is a great tool, a platform where students get to submit things and I can make corrections. But, uh, the disadvantage for English language learners is, uh, they have to understand my feedback in a reconfirm. Right. So when I see them in person on a normal day, normal days where, you know, we have in person, uh, reviews in class, I can give them immediate feedback, verbally backed up by what I had written in terms of their feedback. So again, in this hybrid form is

difficult because it has to be seamless. Seamless means no disruption in. Um, in the way I teach it, to provide feedback and there's no disconnect between what the students are learning and what I'm teaching. Does that make sense to you?

**LF: Yeah. That makes sense. Um, so are you using any online learning platforms right now? Like Zoom and Canvas?**

**I:** So Zoom Canvas, um, what you call it? Uh, some of the online dictionaries, uh, some of the online, um, you know, podcasts, things that students can get for free and are available to them. Open Educational Resources. You know, so wherever I, in whichever part of the world, they, uh, you'd have access to some of these resources. So these are the tools that we have, uh, insert that in Canvas, we help them, uh, have access to language, uh, um, resources. Yeah, but in terms of teaching tool, it's just a Canvas and Zoom. And if we didn't Canvas, of course, we have a studio, you know, the, the lecture capture thing, and all the embedded, uh, features and tools. So, uh, so mostly I use Canvas and Zoom.

**LF: What do you think about those? Like what features do you find helpful and what features do you wish that they had, or like, changes that you would like to see?**

**I:** So I think this has improved over this short period, they have embedded many things that would help all teachers, especially English language teachers. They have embedded Zoom, there's embedded echo 360 and so forth. Right? So the lecture capture capability and the recording capability, I think that's very helpful for students to be able to see us and we see them. Yeah. So that's that. Uh, opportunity for us to interact with students' lives. So that's precious. Uh, and also for students who want to re-listen to, you know, the lecture, they can go back and, uh, you know, Gone through the link and they have the recording. So I think that's helpful for students in terms of using technology. And of course, you know, the advantage is, you know, once we go back to the classroom, we don't normally record our classes or our lectures. And so, you know, it's real time. Students have to understand the lessons and, you know, um, Demonstrate proficiency right there. So now the advantage for them is that they can go back and

review. And so for me as a teacher, I don't have to repeat some of the lessons that I've had with them, so they can go back to the recording. Is that right?

**LF: So, what do you think, um, what would you say some of the biggest obstacles are to keeping students engaged in remote classes?**

**I:** Because at WPI we teach students, uh, students who take our classes are international students. They are all over the world. Uh, so we do have students in, you know, in your home countries, uh, and students at. You know, in Worcester on campus. So the difficulty now is getting, you know, everybody, on the same time zone everybody in the same class, uh, to get them engaged and to discuss and to talk about, you know, uh, whatever, uh, lessons that we have and to, you know, exchange perspective. So that's the problem we have now, the disadvantage is that we cannot be the whole class together. Um, yeah. And so how, because I know some of the problems that a lot of people have been expressing to us is like students in different time zones in different places. Um, so how do you feel, um, generally that remote learning has affected student attendance? Again, this is, you know, specific to WPI. WPI students are really good. Like you guys, you know, uh, in attending classes and, you know, completing assignments. Uh, so really my, I don't have a big issue with attendance cause students show up. Um, but I do have. Problems having students send me things really on time because you know, the time before, uh, it's not accommodated, you know, that the posting of the Dateline. So I had to verbally tell them, listen, if you're in China, then you know, you get an additional 12 hours to submit things. So in terms of getting work. Submit it all together. That's the problem. Um, but anything else and gauge not really, um, you know, if I do use, um, on Canvas, the discussion forum, I also have, you know, considered that some students will not be seeing this Until they wake up. So, you know, because of the lag in time, uh, you know, the responses are not, uh, simultaneous or, you know, it's not, you know, uh, in a collective fashion, so I've got to read them all, Right. So I have to accommodate, review and provide my feedback, and it's not as immediate as I like. So I've got to, you know, just wait a few days or, you know, half a day to just provide feedback in that discussion.

**Tyler Cierpich: Yeah. Um, going off of that, do you think a number, a significant number of your students have Internet accessibility problems or anything like that?**

**I:** I think that they have access, um, because most of our students are in larger cities. If it's not a big town, it's a larger city and they do have Internet access. However, it's you who can correct me if I'm wrong is the bandwidth or the speed. So sometimes, you know, it's hanging, and it's fast and then they miss a little bit. And then like, I assume they knew because, you know, I see the picture or, you know, because I don't hear them sometimes. So I assumed, and then, you know, there's a lot of repetition and clarifying that you were here when I say so I think that that is the major issue. So they do have access, but it's not the same as, you know, as being live all at once.

**TC:** Yeah, definitely a lot of give and take. Um, yeah.

**TC: So if there are any changes that you'd want to make to the current state of this English program, what would you suggest those changes be?**

**I:** If any, at all you mean in the way, uh, the way we, what, what, uh, technologies we have now in the situation were any of the capabilities or ways of going about teaching. Right. Okay. What would be my dream technology? Okay. What would your dream changes to the program be? Yeah, I think again, language learning must be in person face to face. Um, because you know, we learn it's a skill, right? So to improve on a skill, you need to have. If not immediate feedback, uh, feedback for improvement, uh, that is clear to the learner. So if you know, there are obstacles to do it's because of this, because we are not close to each other. And because technology is not allowing, uh, it's not, you know, advanced enough for us to have that kind of interaction, even though we're apart. So if that could be a technology where, you know, bandwidth is not an issue, uh, you know, uh, Speed is not an issue. Then I think, you know, this is a reasonably good platform. For language learning. Um, and then if it's a, if it's a smaller group or the better, but you know, sometimes at WPI, our courses are large. So, you know, if you have 15 students, it's hard for the teacher to manage groups. Uh, and then, you know, if a student's proficiency is not at the same level, there are various levels in the class. It's even more difficult to gauge using

technology. Uh, so, you know, if there are things like, um, Uh, uh, you know, we do have rooms, but you know, it takes a while while for us to get used to, you know, putting students in rooms. But, you know, if we could, uh, pre what do you call that preset students in rooms and students know which rooms they will be in for breakouts, that will be helpful. Um, and we do have that on Canvas, but it doesn't allow students to have life discussions. Uh, although Zoom has that, um, What else? Uh, if you know, I'm sure there's a technology, but I'm not familiar with it. You know, if we can have, um, A real time correction. So, you know, students write a passage or a paragraph, and I can actually see the student writing and real time. I can, you know, look over and correct and say, Hey, you know, Your sentences are unclear here. You know, there's no subject-verb agreement here. You are breaking the grammar rules here. If I can real time and look at their corrections as well. And then when we teach reading and we have students annotating. I look over their shoulder, right. So I quickly, you know, quietly observe them and yeah, see what they're doing. Um, but again, we don't have the technology. Maybe we do, but I don't know if students are annotating and you know, there's a passage and reading and I can see them over Zoom. They are reading, but I can't see over their shoulder, how they are annotating unless they show me. Showing up like this and when they do that, all of their friends can see. Right. Um, so yeah, so those are the, my, you know, my wishlist, if, uh, if we have the opportunity to, you know, be more familiar with what's available and use technology to the best of our abilities as English language teachers, for sure.

**TC: That's definitely quite valid. Um, do, on the other hand, do you enjoy anything about teaching remotely?**

**I:** Yeah. So one of the things is, you know, the student who typically sits right at the back of the class—they are now right in front of me. Right. So, you know, he, he cannot like, you know, duck or, you know, hide behind his, you know, not book, you know, you are all there. So when I call you, you cannot run unless you are absent. And then I come closer to the camera, but then I can't see your mouth moving. And you have to do that? So, you know, that is something that I find, uh, you know, advantages to be. Uh, but you know, when I'm in the classroom, I have to go really upfront with this person's face and, you know, tell them, listen, I need to see your mouth

move. Right. So that's the advantage, right? Um, yeah, with that, thank you for talking with us today and participating in our research.

**Um, was there anything in this interview that you think we missed or maybe wish we would've talked about more?**

I think you want to also look at, where this university is, uh, offering their language classes, you know, look at how technology is used for, you know, students at different levels, right? Because there is a difference in how we teach students at, you know, beginner level, intermediate level and advanced level. However, if the student does not take, um, um, uh, Responsibility for their learning. We call it learner autonomy. Uh, to me, if the students are not taking responsibility for their learning, then the process of developing language skills is a little slower. If I find myself motivated that I need to, for instance, go to Panama and use Spanish, my Spanish will increase exponentially, whatever it is that I'm learning from. So, uh, you want to consider how the teachers are using technology in a remote situation. For teachers knowing their students' level of English proficiency and things like that are important.

**TC:** Yeah. That's definitely something we'll definitely take into consideration.

**I:** So tell me who are your advisors for this project?

**TC:** Professor Kinicki and Chiarelli.

**I:** Okay. Okay. So I wish you good luck if I can be of any help to you. If you want to come back and ask a few more questions, I'd be happy to do that yet. I Zoom into everybody's eyes. Yeah, I can have you come closest so I can look at you. Um, but I'll be happy to answer questions by email as well. Yeah. So you can tell I'm very passionate about teaching and that's my background and my expertise teaching a foreign language. Thank you so much for your time. This has been really helpful, and I really hope you must make a deal with each other that you go to Panama someday. You must do that at least for a week and stay in a nice hotel. So good luck. And I hope you will stay safe and keep in touch with me. Thank you so much. Have a great weekend. Bye.



**Whole Team:** Bye! Have a great weekend!

## **Appendix H: Professor Próspero González Transcript**

**Hailey Delphia:** Do we have permission to record this interview? Any information you share with us is completely confidential and will only be used for research purposes with your permission. Can we anonymously quote you in our report?

**Interviewee:** Yes, of course.

**HD:** And then to get into things, how long have you been teaching?

**I:** Well, at the university, I've been teaching for 11 years. I have 11 years working with other universities, well, five years, but just working with Oteima for 11 years.

**HD:** And then why did you go into teaching English?

**I:** Well, it is because it's a new language and it's around the world. The most spoken language. And when you travel around the world, different cultures, you have to use and communicate with English. Sometimes students feel that they don't have to learn this language because it's not important, but when they realize that it is the cultural language that it's around the world well they are like this. They discover that it is interesting to learn. They are going to be involved with environment. So I love teaching and especially English because it's a very nice language to be spoken. Well, it's not similar to Spanish because Spanish is a little bit difficult, but teaching English is easier than Spanish.

**Justin Hines:** And so, kind of getting into the teaching aspect of it at Oteima, which online platforms have you been using to assist in your remote learning?

**I:** Just in different platforms we are using Moodle? This is one of the useful platforms we use with the students because we upload the activities. Then the students are going to be developing

and we decide the date. Now we are just using that [Google] Meet to explain the classes because we are working virtually. Also, we are using Edusoft. This is for students in the low levels to encourage them to practice grammar and the different skills. So Moodle has been very good just following through with each and because they are going to develop different activities. There are a lot of tools there. They could complete and achieve what we want, the learning process of the language.

**JH: And out of all the tools what do you like about each one? What do you not like so much about each one? Do you have things that you could improve about them?**

**I:** Well, there are a lot of tools and I love to use hot potato in Moodle. It helps students to avoid following rules. And it is now me where, where they feel, or that you learn unconsciously. You know that when we are learning grammar, sometimes students block because, oh, you have to follow rules. But you have to memorize and then you have to look for games to teach grammar and I use this one that is very, very useful to clarify, and to avoid making people feel stressed about grammar, hot potato. It's a very, very good activity, too. I found some games there that encourage people to develop that part, especially grammar. That is one of them, I don't want to say horrible, but well, for a student, sometimes it needs people to feel, 'oh, grammar'.

**JH: So obviously with the Coronavirus, a lot of things have changed and I'd imagine that a lot of things changed with how you run our class day to day. So my question for you would be how has your teaching and your class changed now versus back before when you were in person?**

**Like, what are the major things that you find that you're doing differently now, besides the obvious.**

**I:** Yeah, absolutely it's different because we have to change our methodology, some techniques that we're accustomed to be doing in the class. You have to be thinking because the time connection here, for example, here in Panama is not, well, I don't want to say that it's not the same around the world. However, we have to be controlling the class and we have to be very flexible. Because some students are not available to be connecting for two hours, one hour. So

we have to be adopting the content, to that time because some students, they paid money to connect and what happened, the megas it's running out quickly. The Internet connection, well broke. So we have to be very clear. We have to explain the assignments precisely to make them to learn. I'm teaching, for example, linguistics and I try to divide into periods because linguistic it how is you learn from other cultures. How the mind it's acquiring the second language acquisition in this case, English. And I divide the time because they have to speak and they have to participate because it's one of the aspects. But what happened with those students that they couldn't because Internet, Internet connection is not working. So we have to look for other ways. So it is totally different friend. Of course, when you are in a class face to face. So the methodology, the techniques, just strategies totally are different. The interaction, the way you are going to be making them to learn a topic it's going to be some wrongs because you have to go directly. Well, you know that when we are in a class, we have three hours, two hours, and then we could be with how they incurred groups, uh, five groups members, and we do it virtually, however, we have to look for another way because they have to be chatting by WhatsApp. They have to do other things, the time they are not clear. So this moment we are living at a very important period of education, especially here in Panama, because it's the first time we are just in these virtually.

**JH: Yeah and using all these different, new tools and new programs and methods of teaching, what would you say is the biggest obstacle that you faced doing the remote classes?**

**I:** Well, there are, there are things, but I consider that some situations have come from the way students have been doing the things. For example, I implemented the use of Flipgrid. I don't know if you have used Flipgrid because what happened when we are doing a presentation, they don't have speakers, they can't be speaking because of connection. So I use Flipgrid so they could do a presentation. So I put the topic and they record and it's not a problem. So it's not an excuse. So sometimes we have to look for just the way if this road is not possible. Well, look for another road. So I think that we could have some situations, of course, but we as teachers, we have to look for the way, because now we don't have to go just in one way. We have to look for different ones because it's not a time in which students are just going to be focusing one way. So

to say that yes, we have problems. However, it depends on the teacher looking at the way to conduct the learning. Just that.

**Lindsey Fletcher: Yeah. So, in terms of the accessibility concerns, would you say that a significant number of students have problems with having insufficient or no Internet access?**

**I:** Yeah. So sometimes we'll have these kinds of problems and because, well, you know that we have a variation here in the type of people. So we have some students that they don't have the possibility to access a virtual class. However, we look for other ways. We use WhatsApp and we have personal training. Um, in my case, I explained to them those students who couldn't access to a virtual class. Days ago, I had a class where students should be presenting an oral report, they have to explain topics. What happened? It was raining cats and dogs. It was a lot. And those students, five students, couldn't report. So they were a worry. And I say, don't worry. What you have to do is record your voice, send me your presentations, and I'm going to be evaluated. And then I'm going to be making questions because well, you know, that sometimes students could be reading the information. However, I make questions to discover the part of the analysis, because in this way, with the line that people start thinking, nothing has Spanish when they are going to be speaking in English, because it's the problem. Some of our students, they think in Spanish to say that in English and well, I'm trying to force them to communicate, just thinking in English. It is a process of course, but yes, with the problem of those students, we look for other mechanisms to interact with them.

**LF: Yeah, that's really interesting how you work around that. So with the weather with the rain, is that for a lot of students on an issue where when the weather is more extreme, they can't get connection?**

**I:** Yeah, it's happening because we are in winter. It happens on those days. It's raining a lot. So today for example, maybe it's going to be raining in the afternoon. So what happened with the connection they closed practically. So we don't have connection with the Internet, even if you are

paying, some situations happen with that. With the weather, sometimes electricity. We have to be waiting for them too with that activity or any topic.

**LF: And so could you estimate about what percentage of your students have problems with accessing the Internet?**

**I:** Well, yes. I tried to guide them to look for the way to learn the topics. This is a situation that make us to understand and how to be flexible with the times. However, we have to be continuing with the process because what happens is, some students, when they don't develop the activity, they say, I don't have a connection. So you have, I have to look for the way to, to know when students are lying and when the students is telling the truth. So now we have a strong job because we have to discover the different types of students when they are saying, because most of the time they say, 'Oh, teacher, I don't have connection', but you know, more or less what is happening. And even you are going to discover these. And it's very interesting, but the important thing is that they try to understand that we are in a new process. This is totally different, but now we are adapting because we are humans and we are capable of adaptation. This is one of the things that some linguistic theories applied and such.

**LF: So if you could make any changes that you would like to make to the English program, what changes would you make?**

**I:** Well to talk about the English program, mean the subjects, um, the way of teaching?

**LF: More with the way of teaching.**

**I:** Well, yeah. I would like to do some changes, especially with preparations of some teachers. I know, for example, in my case or in many teachers' cases, we are not native. However, we could be learning the language. One of the things that I'm talking and I taught with my teachers is when I'm teaching to masters is we have to be very careful when we are teaching. Because if just say for example, have a, had a word or just say a bad pronounced or we are going to be having facilitation. And there's this a student is not going to be communicating as well as they need to

do. Sometimes we could do mistakes. We are humans, of course, and, or a learning styles sometimes it's having some variation because of the language change. Even it happens in the Spanish, but I would like to make teachers get ready with techniques, methodologies or strategies when they are going to be teaching a second language, because this is an important language. If you say, for example, dangerous was to say something, the students is going to listen or dangerous the teacher is repeating dangerous, but it's not the pronunciation because it's dangerous. So these processes could be affected and this is one of the things that I would like to change in some English programs. If you're going to be teaching something, be sure what you are going to be saying. If you are not sure, because we are humans of course. Try to get ready, because if you say something wrong, the students is going to be learning this wrongly and it's going to be repeating that, um, falsification is taking place. And when you are going to disappear, this it's a problem. I have some students that they say fears. I fears my fears and I say, okay, yes, but I'm not going to say directly, or it's not fears is fears. So I'm trying to do it unconsciously to make them to know however, it's really problem to make them to clarify this aspect. But yes to develop those types of programs, for example, in high school I work in high school. I have a program with students in Kansas. So I'm working with Newton. I don't know if the school it's correct. Newton, Kansas. This is in the United States. So I'm working with some students. That teacher is teaching a Spanish in the United States and I'm teaching English. So we decide to, the students, her students is going to be teaching my students English and my students in Spanish. So this is intercultural learning. And you know something, my students were not starting this year. I said, okay, let's start teaching English, learning English. And they told me no, why English? So I don't like when I'm doing this project. They are interested and they say, teacher, how do you say these words? How do you say this? Because I want to ask the girl. I want to ask the boy this question. They are interested. Why? Because we are making an environment where they are discovering English is useful. It's not a subject. So I think that looking at those types of projects would be making people encouraged to learn. Engaging them to discover how important it is to learn a second language and communication.

**LF: That's very interesting. Are there any specific resources that you think it would be helpful if the instructors or the students had like any resources you think would be helpful that you don't currently have?**

**I:** Well, yes, we have some resources to conduct the learning. So we have some apps they could be learning. For example, I use this when I'm teaching grammar. This is a game, and sometimes the students are using candy crush or they heard you saying this from Facebook. I don't know the name, but they are making houses and things. And I say, don't be using this. Don't waste your time playing with this. This is okay. But use this game to learn. So if you are the winner, you are going to be available to be learning both things you are going to be enjoying, and then you are going to be learning grammar, because this game, it's very interesting because they put in this order the part of the grammar, but you have to probably destroy the wrong sentences and you are playing but you are learning. And those are resources. A lot of these, a lot of resources. But we as teachers, we have to find the way we could use at the moment, because not all the resources could be useful for different levels. We have to be very careful with that because if you are going to be teaching, for example, these grammar smash games for students in research paper, but it's not going to be available because they have a lot of mechanisms of doing things. So we have an important role as teachers. Identifying what resources could be available for students. What strategies to be designed to complete any task, any assignment we are going to be asking for.

**LF: Thank you. Yeah, that's very helpful. What do you enjoy about teaching remotely?**

**I:** Well, this is my passion. I love teaching and I started very early on. I think I was 20 years old when I started and have been working at different levels with elementary, high school university level with masters. This is one of the things that teachers should be having. To have a passion to teach, not by getting money. Money, well it's necessarily of course. But if you do something that you love, you are going to be receiving good results. And teaching is not just to say, well, I'm going to be teaching. It's to look for ways to think before doing a class. What is the best way where our students could discover, could learn? Because the second language acquisition is a process. And I love to be teaching where my students learn unconsciously. And they say at the end of the course teacher, I didn't know how I could learn this. And this is the way that I love a lot because I don't force them to, well memorization is important yes. But sometimes we have to look for this memorization that is useful. So we could learn 1000 words today, but if you forgot a

word tomorrow, you forgot everything. So you have to look for the way, how to put in real situation content. Those works we put in practice. So I think that it's just saying, think, look for the way that is a good strategy, a good technique. To adopt methodologies because we have multiple intelligences. We have different styles of thinking, different behaviors. For example, one student could be learning in a way, but I have three students that they couldn't. So it's adaptation of the activities you are going to be teaching.

**LF: Yeah, that's very interesting. It sounds like you really, kind of cause like with immersive learning, like you just, you learn it because you use it in that sentence, like kind of what you're trying to replicate, which is very interesting. So that actually wraps up our main questions. Thank you so much for talking to us today. Is there anything you would like to add that we haven't already covered?**

**I:** Well, thank you very much for inviting me and taking me into consideration. This is very good. And well, I hope you are going to be obtaining good results with this project you analyze, and then you could be putting in practice. This is one of the things that we need. We need to make our world a better place. And teaching is a good way to do it. Because we have different types of students and as a teacher it's conducting different learning styles, so we could be the difference and you, you are involved with the teenagers, with older people, and then this process is really important. Thank you very much.

**Team: Thank you. Thank you.**

**LF: Would you like to review our notes from the interview before we wrap up here?**

**I:** Yeah.

**LF: We can send those to you right after we log off here. So you can always reach us via email. and you have the email address from when we contacted you. Right? So we will send you those notes. And thank you so much for your time.**



**I:** Yeah, no worries. Anytime. Thanks. Okay. Be careful.

**JH: Have a great day.**

**I:** You too. Great. Fantastic.

## **Appendix I: Professor Oscar Rodriguez Transcript**

**Hailey Delphia:** Anything that you share with us is completely confidential and will only be used for research purposes with your permission?

**Interviewee:** Okay. No problem.

**HD:** And then can we anonymously quote you in our report?

**I:** No, if you want to use my name, no problem for that.

**HD:** Okay. And then, okay, so we can get into things. How long have you been teaching?

**I:** Well, at the university level, I have been working at least 10 years, 10 years. Okay. Because the thing is in Panama, I don't know if you will, you know, but in Panama, so we have toward a different place. So my permanent job is in medical at these two institutions that regulate the education in Panama. And I have been working in that place as a English teacher for elementary school, but also I work in university level. For example, at Oteima University is all about 10 years, but also I have been working in another private university in Panama.

**HD:** So why did you go into teaching English? Like what were the motivations behind that?

**I:** Well, the thing is at the beginning I was just interested in English because it's the global language. So I, I will, in those times I want to learn in order to communicate my ideas and also to interact with people around the world, in other countries. So that's why I was interested in studying English.

**Justin Hines:** And so for your English classes what are the major online platforms that you've been using to help teach your class during this time?

**I:** Okay. Well at Oteima University we use the Moodle platform. It's the platform that we regularly use and they are updating it during the years. And I think two weeks ago they updated the last version is I think is 3.9, I think. But also we use another in another university, they use some special platform. And also as a teacher, we used platforms, for special cores, for example, we use Edmodo, Google classroom. We also for example, let's see. I have to remember the name, Canvas too. I know so there are other ones, but I don't remember now, but at Oteima University it is mandatory to use Moodle platform because it's the path that is approved for the institution that regulates the university in Panama.

**JH:** And for these different platforms what do you like about them or not like about them?

**I:** Okay, for example, well, even young people are more close to using [Google] classroom. I don't like [Google] classroom because it's not a real platform. According to my opinion, it's not an academic platform. Okay. So I consider it the best, I think it's Moodle and also Blackboard. Canvas has some important facts, but I consider Moodle is the one of the best, and also Blackboard.

**JH:** And so with the remote learning and with doing all your classes online has the way you engage with students changed versus how you used to do it before the pandemic.

**I:** I can't listen to you properly. Can you repeat the question please?

**JH:** Yes, no problem. So I said during the pandemic has how you taught your classes online changed versus how you taught your classes beforehand. Like, is there any major changes to your teaching styles you've made during this new phase of learning.

**I:** Okay. Well, I think the first thing I have to say is, no much, well, there are few people in Panama, a few students and a few teachers in Panama that have special training to use platform. Okay. They are more focused on traditional teaching. So for example, we have an advantage in Oteima University because we have a blending system. So some classes are face to face during the week and the rest are by online session. So yeah, it changes during the pandemic situation. So

it's not difficult for us because we already used this system. And the only thing we eliminated is the face to face sessions. So now I am 100% online, but for me it was not difficult because I already have a certification in the study of the English language with a major in online instruction. So for me was, I feel if I were a fish into the water I'd have a problem with that. But I think for many professors, they have to go to the Internet and try to look at some tutorials, or something like that in order to be updated. But I consider the situation was difficult in terms of the connection. Okay. The Internet connection, the way the students are connected to be in touch with the professor because we use [Google] Meet. A video conference to our last session. And also they have to be connected that sometimes they don't have enough money to buy a phone card. And sometimes the Internet connection is really slow and sometimes they can't connect because of some natural problem and that's the difficulties we already faced.

**JH: And so would you say that is the biggest obstacle is having connectivity problems with students, or would you say that there is another thing that you would say is the biggest obstacle that you have to overcome with the full online learning?**

**I:** Well, I think that one of the problems is the quality of teaching and also the quality of learning. Because as you know, as a teacher, we don't have control over the assignment that the students are doing. The only thing we have to do is promote critical analysis. Some questions that are related to see what they have in their mind. So the analysis, the critical thinking because we can't control that information, that they have accessed in the Internet or social media. I think this is one of the things we have to modify during this pandemic situation, because this is not just assigned work or teaching some topic that the student proves their knowledge. Instead of that they use the previous information to create the new knowledge.

**JH: Yeah. I think that is definitely something that I didn't really think about how the whole entire quality of it has kind of [the education] changed with moving online.**

**Tyler Cierpich: So while you're trying to provide your students with this new knowledge, do you think a number of your students have Internet accessibility problems during this time?**

**I:** Well, for example, I try to prove, so I try to provide them the content, but also they prove that they really get the knowledge by doing some effective assessment. Okay. That is not a normal assessment. An effective assessment is they have to prove that the work they did has a kind of complex thing. For example, last quarter, I was teaching translation one. So I already provided them the method, the technique we already had many practices. Okay. But the test was, they have to transfer some texts from Spanish to English and also from English to Spanish, that is not just, they have to provide the text. Okay. But also they have to analyze and they have to express in a session what a specific technique they use for certain specific purposes. Okay. For example, they have to prove that, not only they use, for example, that they need, that it is called transposition, but what kind of transposition they use, because transposition is the way some text is modified by the fixture of the language. Okay. So they have to prove, well, I made a transposition in this one. This one was modifying this one while the specific part of the speech was modified for one, one leads to another. That's it, the way that their assessment is effective. Otherwise, I consider it's not effective.

**TC:** That's that sounds like a very effective way of doing it, especially in this new normal. Are there any issues with people doing that with Internet issues? Have you seen, like how many students have issues completing that?

**I:** Okay, well as I told you before some people don't have a good Internet connection. In addition to that, we have to use Whatsapp. So we already have a Whatsapp group. For those people that live far away and the signal of the Internet is really low or bad at all. And, in that way, I record some short videos explaining the topic and also they have to send me some videos about the class and about the assignment. So this is another option we use for those people who have this problem. Or maybe they can't recall some notes or something like that. But the thing is the learning process doesn't stop any it's continual. So as the teacher, we have to be updated and try to look for the resources in order to provide a tool that allows the student to be in touch with the class.

**TC: Great. So off that if you could make any changes to the English program as it currently is, would you change anything?**

**I:** About our English program?

**TC: Yes.**

**I:** Well, I consider the subject. For example, some things need to be practiced more time, I think just a quarter. It is enough. So the thing is , there are some studies that are pretty important for the student development. The time is enough to cover the whole content. And also for example, in the master program that the university has. I consider this master would be changed in order to be focused on more study related to the Internal study of the language instead of using a tape instead of the, the use of the tools of technology to teach. I consider it would be a kind of combination of those elements in order to foster the program.

**TC: sounds great. Finally, is there anything that you specifically enjoy about teaching remotely?**

**I:** Okay. Repeat the last part.

**TC: Is there anything that you enjoy about teaching remotely?**

**I:** Okay. Well, I like teaching because and especially English because I consider it teaching is the only way that improves the student's knowledge and also to break the change of poverty. So I can see there through teaching we can modify, we are a kind of training of mind. Okay. So we have the power, and this power will be offered to the student. And they can see the reality of the world because most of the students have a real, several problems. Okay. And they go to the university because it is a kind of process, but they are not conscious of what education is. So when they discovered this as a teacher, help in that way, students are different. So, teaching for me is also the way that I can help my country to make a better citizen. Okay. Not that is not only to provide them content but also values. Okay. You know they will be a better citizen.

**TC: Yeah, for sure being a more global citizen is definitely a valuable skill to have. I know you touched on poverty a little bit, but do you think that learning English can help students get out of poverty?**

**I:** Yes, because it's a global language. In Panama, if you already know English, you have more opportunities to get a better job. And also that is not only to get a job and get money. But also how your mind changed because if you are able to be connected with new information, it allows you to be a better person either it allows you to get knowledge and knowledge is power. In this day and age, the thing is we have to promote self training in order for the[m] to get more knowledge and this knowledge will be used to improve their lives in different ways to be a better person, to be a better family, to have a better family. And also to desire a better life if you want. So give me lists. I think, for example, for me it was a real thing because well I don't have many opportunities. So when I decided to study, I tried to start university, but later I have to withdraw because I have to work because I have a twin sister and brother and my mother can't support them properly. So I have to help my mother and my family. Later, I got married but in my mind, I think the only thing that I have to do to change my relative was the study. So I started studying later and thanks to that decision my life changed. That's why I consider education really important for all of us to change our reality. So, we can be successful or sometime we can start working, but these kinds of words are not the best for you and sometimes you are not a successful person. Okay.

**TC: Yeah, for sure that that would help. On behalf of the team, we thank you for talking with us today and participating in our research. Is there anything that you would like to add that we haven't covered yet?**

**I:** Well related to the situation. Well, I consider Panama, as you know, it's a developing country. Many people don't believe in online instruction. So Universidad de Oteima and other universities are the few universities that provide this kind of system. But nowadays they were forced to change. So, the thing that they criticize nowadays, they are torn and I'll try to go this one. But, I consider we have a cyclical life. So even the traditional teaching or traditional way of learning is

good, but there are no other components that we can include in order to facilitate the learning process to the students. So that's why many students now have the opportunity to be in touch with the professor and continue studying because the pandemic situation affects the face to face lesson. So this is my point of view. I believe in online education because I was poor for education and education. Well, it depends on the student and also the teachers, because some people in Panama consider online education as an easy way to get a diploma. But we know that it's not. So it would depend on the teacher, the institution, and also the student too. So if you, if you want to learn, you are going to look for the way of learning, even if you have a good teacher, it depends on the other. So it depends on the students too.

**TC: For sure. Again, that's all the questions we had. We just wanted to ask if you would like to review our notes or transcript of this interview afterwards?**

**I: Yeah, no problem. So, okay. That's all. Thank you so much.**

**Entire Team: Thank you. Have a great day.**



## **Appendix J: Professor Luissana Gómez Transcript**

**Tyler Cierpich:** Sounds good. Yeah. So any information you share with us will be completely confidential and only used for research purposes. Can we anonymously quote you in our report?

**TC:** Take that as a yes. So first question, how long have you been teaching?

**Interviewee:** Well, I started this job or the path of teaching in two thousand and eight. So it was from a very long time ago. Yeah. And I started teaching, my first role was kindergarten kids. And then I say, you know, like moving next then in 2009. I had the opportunity to work in a government program. The name is the after school program. From that year, it was English for life, but it's the same that we had some years ago. And so I was in charge of teens, teenagers. It was very interesting. And so since about 2008, I have been teaching kids, teenagers, adults, the three groups of people.

**TC:** Yeah. You. So, yeah, you've definitely been teaching a wide range of people, for sure. Why did you go into teaching English?

**I:** Honestly, I didn't, it was not my idea. I mean, I didn't want to be a teacher. Honestly. I always say, well, if I'm studying English, maybe I can be a translator because that is the major that I studied here in Cherokee. And, uh, but then, you know, opportunities. And, uh, I remember the professor from university, they started talking about like, maybe you can be a professor. You can be a, maybe a professor here in the universities or just take the, the program. And I was like, okay, I'm going to try it then. And then the opportunity, you know, to work as a teacher, with the kids, it was a very interesting experience. And, and, and well, now I'm here, I'm a teacher, I'm a professor. And that's what I always invested. I never said no, I'm not going to be a professor because yeah, you don't know what could happen.

**Justin Hines:** So I'm just going to ask a couple of questions about, you know, more the platform that you've been using. So which online learning platforms have you been using

**for teaching since, you know, or I guess in general, and since, you know, the pandemic and everything that's happened?**

**I:** Moodle, that's the platform that I have been using, uh, for my class that I have from another university. We, uh, we had, uh, like. I have, it's not like a kind of platform like Moodle, but then we have to switch with change to Oteima. And now I'm using Moodle as well. I know it because that was the platform that I have to use for my, uh, defendant master degree that I got from a virtual environment. And, like a personal platform because I worked for other places too. And, uh, I have the, I mean, I'm free to use whatever I want and I was using Google Classrooms, but the one that I have to use and I'm like, you know, like I would have more than 100% of myself working on is Moodle, that's the platform?

**JH: And with Moodle and you know, any other platforms that you use day to day, how do you feel about them? Do you have anything that you'd like to change? You know, things that could be improved?**

**I:** About Moodle. You mean? Yeah. Well maybe if I know the platform, I think that it has been very easy. Maybe just some things have changed because I took that program in 2014. So. Six year have passed and many things have changed, but at your school too, you know, you do, start getting some information if, uh, I remember that I used to use yeah, a lot of hot potato, but now it's changed the name. Eh, I don't know because the, the, the interface isn't it, Spanish. Uh, that is the only thing that I don't like, because I remember like some of the names or something structured that it has in English and believe it, or not some time. It made me feel comfy. It's like, I don't remember with, that's the thing that I have to use or not, but, uh, I'm trying to, uh, to start, you know, like getting some videos and things that can help me to improve, or maybe to add something that maybe give me new further students, or again, mean my work may be easier for them and make it user friendly. Uh, but. I feel very comfortable using Moodle. I think that there is nothing that maybe I have to say, we have to change this now. I'm good with it.

**JH: Okay. And, you know, compared to beforehand, when, you know, you had in person classes and, you know, there were some online classes, but has how you engage with students changed since the pandemic and kind of how you approach your day to day class?**

**I:** Well, it has been very difficult. At the beginning I thought that it would be easier, but then you realize that that is completely different. But at the same time, I think that just depends on the subject that you have to teach. When it started, I was in charge of the group of translation from the other university. So it was easier because it was just like, you have to upload this paper and then they turned the paper and that's it. But now that I'm working at Oteima. I have two conversation groups and it is not easy. That's not easy at all because I have a, like 20, 20, and 15 students in both groups. So sometimes you would, you want, you know, you are like the only one who is speaking. And then, Hey, can you say something or I have this question, who would like to answer this question, or I have to use some time, like those type of programs or websites where you can type the name of the student. Like they will have names. And then okay. Now to say something, Carla, this is their charge though. What can you say about this question? Or what's your opinion, but it's, very difficult. But as I said before, that's I think that that's depend on the subject that you are teaching. And another thing, , is about the Internet connection. For example, it is very early in the morning. I don't have like a lot of students that said texting me like teacher, I don't have connection in that because you said 8:00 AM, 9:00 AM. So I think the connection is pretty good at the time, but when it is in the afternoon, I have a class at one, and sometimes it starts raining. And if they live very far away from the city, I start receiving a lot of messages. Teacher. I don't have electricity right now at home. I don't know what it's happening with my Internet connection, but the data is not working or even if there is a nine lane, the evening shift, we are having like those type of problems that is maybe like the negative things about a being teaching, you know, like, remote teaching.

**JH: Yeah. And would you say that Internet connection is probably the biggest obstacle that you face, or are there any other big issues that you think come with online learning?**

**I:** Well, Internet connection. Yes. I think that that is the first thing, because of course, if they don't have Internet connection, they're just going to be like harder and they're not going to be

able to know the class. And another thing is like, They're going to say this in the way, like the institutions, you know, they have changed the procedure of enrolling the students and now they don't want most of them. They don't want to have the same group that we used to have in the past. I mean, I was in charge only for my student here in David, but now they can have a student from, you know, all the country, like from the different provinces that we have here. Yeah. And sometimes if I have a group, let's say like seven people, they were from David, they know each other. And then I have to introduce another group of people and that maybe can create something in it. Even though there is not a face to face, they are like, Oh, I don't want to say anything. Maybe they have better English than I, and then they are going to start, you know, like laughing at me. And, probably that could be one of the reasons that sometimes the students don't want to participate, like talking about that part, like class participation, but some of them are. I guess I have to say that, yeah, all of them are very, uh, engaging with it. With the class and, and they try to do their best. So I try to be, uh, flexible with them. but not too much. I mean, like, I can give you this opportunity because I can understand that you can face any situation with any problem. The same could happen. Yeah. You know, the, like last Saturday I was talking a lot and then my students go to the messages and say teacher, we can't hear you. Where are you teacher? And I didn't know that I didn't have Internet connection at the moment. So there are things that I can understand and, and I try to look for alternatives, but yeah Internet connection and maybe like being in a different space. And try to interact with people that they don't know. And so those are the things that can affect the interaction or, you know, like the, the process of learning that we are.

**JH:** Alright. Lindsey, are you gonna move into some of your questions?

**Lindsey Fletcher:** Do you think you could estimate about what percentage of students have issues with Internet accessibility?

**I:** Well, I can tell you the second number and I want to, uh, to publish on the, uh, the more of the students that I have for one group, and then you can do your math. And for example, my group is 21 (students). Sometimes I have like four or five students who are not able to attend classes. So I don't know, maybe 5%. So that's I mean, and then at some time, yeah, they are able to be there

and. And, then we went with getting another guesstimate, like this is going to happen. Or if I am going to have my class, you know, time, most of the time they are on time. Sometimes they, I have all my students there and like five or 10 minutes, then one of them disappears. And then again, he appeared as though it is like, Hey, you're like a gospel come in. And then you will. Yeah.

**LF: Yeah. That's helpful. Thank you. So if you could make any changes to the English program to the way that you're teaching English, what would you change or with the program as a whole, not necessarily just what you do, but sort of the English department.**

**I:** But, later with the situation that we are facing, we are using remote learning or in general?

**LF:** More in terms of remote learning. Yeah.

**I:** Like could be a. Well, that's a very interesting question. Honestly. I know exactly how the department or faculty or people in charge in university, you know, they, uh, how they are trying to arrange the things that it can work and that the students can have the, the, the access to, to the program. Uh, but first I would. The thing that I would do is like, Hey, if you are going to register or enroll in any very short class, it's important that you know that you have to, I spent a lot of time, right? Maybe like trying to educate the students or people who are going to enroll in this type of learning, that it is not like a face to face class that even those the. It's something that's changed. Suddenly, you need to know that you have to spend maybe like eight hours per day. And especially when you are having more than one subject, maybe that is one of the things. Eh, but I have to see this part. I mean, it is a bachelor degree and they have to spend like 13 weeks for a subject. Of course, then you are, you don't want to enroll in the subject where you are going to be just like four weeks because talking about the price or sometimes institutions, they want to sell you the same amounts of money. It doesn't matter as if you just would say like you were paying like maybe \$200 for 15 days of classes. Now you have to pay \$200 for it for only four weeks. So, I mean, hey come on. So now we know that it is, it is not the same, so, but I'm paying the same amount of money. Maybe like trying to make the schedule more flexible for just students. Like, uh, we can maybe reduce some hours. And, and when the eh, or offer maybe like

the two programs, now you have the option when everything, you know, Eh, we, we can, uh, return to the classrooms and we can return to our normal life. Eh, you can continue you on your face to face classes, but this moment we have a new offer for you, which is going to be the visual environment, you know, or visual learning, remote learning, and you get enrolled for these programs. You are not going to be here for 15 or 16 weeks. It's going to be only for eight weeks, maybe or 10 weeks. And. And the students maybe can have the, uh, the, the chance to choose which subjects he or she wants, you know, to, to take for it for that term. Maybe that could be the option, because I can understand that now for the university that I'm working at, they are having like five, four or five subjects. And, uh, and that is like two hours or four hours ish. And that is for 16 weeks. That's a lot. So I'm trying to apply some activities that I feel that they are going to have enough time to, to complete, and they can turn their tasks time because, uh, it is not just like I'm going to put in like ten activities. And I know that that's not going to work. So maybe like creating a different schedule, creating a different, eh, or, or promoting a like different study program could be the thing that can change the way that, uh, that the students are trying, you know, like. Studying or taking this. So we are living now.

**LF: Yeah. It seems like definitely one thing we've been hearing a lot is that you just have to think a lot of things need to be modified to make the remote learning work.**

**I:** Exactly. Yeah. Because it's different when you are, for example, date. Those are the studies after you graduate, like yeah, there is a maybe a postcard rate or whatever master degree you are going to be yours for a week or a month in each subject. And it is different because you know that it's only one subject, eh, you know, you have your life, you have to worry, you have too many other things, but if you're going to study, you're going just to learn one thing, but it is different when you are, if you are working, if you have family and you have four subjects and you have to be there. I mean, it is not going to be only one day. You have to be maybe two or three times per week say that you have to be there spending a lot of time. So those are things like if you don't know about what remote learning means or what it means taking a, in a virtual environment, that's gonna make it feel like so much stress. And, and then, uh, you gotta want to say, like, I don't know that the teacher is the one that's a problem because he does sing it out.

They weren't going to, but that's another thing. The thing is that if I don't know that I want to feel so stressed and I don't want to continue.

**LF: Yeah, that makes a lot of sense. Is there anything, or what do you enjoy about remote learning for teaching remotely?**

**I:** you have the option to add a lot of resources, probably you were not able to do it when you were face to face classes. so the students, I mean, it doesn't matter where they are. If they have Internet connection, they are going to be able to, to do the activities, that, It can be more interactive, but again, that will depend well on the amount of people that you're going to have in your class and the group that you're going to have. But I would say about the resources. I mean that sometimes they didn't know like, Oh, I need to know that I can use this page, or for example, if there were a lot of it online dictionaries, because that's something that I'm using in my classes. It doesn't matter. I mean, it, you don't have a physical yeah, but here you have a lot of dictionaries that you can use for your classes. So it's going to make your work. Yeah. Easier. You don't need to be like, you know, like look up the word. So now you can just type the word, enter the city. Everything is going to be right. But, uh, right there. And, I have to say that about the resources, the things that you can, I mean, the class and make it maybe more attractive for them.

**LF: Yeah, that sounds so far. We have found that a lot of people, even if they don't prefer remote learning as a whole, there are some benefits to it. , So that actually wraps up our questions. Uh, thank you so much for talking to us today and participating in our research. Is there anything you would like to add that we haven't already covered?**

**I:** No, I mean, I'm fine. And thank you for this opportunity. It was very interesting. This is the first time, uh, I mean that I'm like having this type of a meeting that you guys are very interesting to know about this. People said that this is something that this is not something new, that remote learning that's existed for many, many, many years ago. The problem is that we haven't been being, you know, using it. In the right way. And sometimes people like to compare Panama country, United States, but that's not the same thing. Uh, but at the same time, we can see that

there are a lot of them seminary days, we did some parts of of the country in some way. I was like, Oh, I had to help rigidity. It was like a kind of workshop for 360, eh, from the education. Yeah, obligation we're from Arkansas and they were explaining situations that we are facing now. I mean, the same thing about it. You don't have connection about a having, for example, the hardware like computers or tablets and the students are, they want to get worse and the students didn't have access to these things. And the same thing, they should have been here because most of the districts, they don't have a computer or if they had a computer and as always. Know situation where the stores are closed. And what happened with my copywriting is not working. I experience it's the same thing like two months ago. And I was like, Oh my goodness, what I'm going to do right now. And, uh, and my husband knows a lot about technology and he fixed my computer. You know, I didn't know what to do. And, and I don't like to use my cell phone. And there are a lot of students that I don't know how they can work using a cell phone. I mean, doing this. The assignments and, and that was pretty interested in saying, I, you have a seizure. I am unable to do that. I'm able to, to type anything. Definitely here were documented. It was like, Oh my gosh, really? Well, good. Pretty good. , like y'all, don't fix that now that we are facing this thing we have to, while we are going to do next year, because we know that many of those names could happen. Maybe it can be around the word or it can be only a specific country and a specific place. And we have to see for different alternative just to improve the education for the better off, you know, the students and everybody. And also, I understand that. I think that government. And I'm, here in the tradition in my country. Yes. That most of us, and especially the, or professor from a university, eh, we have to spend a lot of time working on this. It looks like it can be easier, but it's not just like getting a link, copy and paste and that's it, or take this and call them, put the code here and you have the video. That would be easier, but not if you want to. To create something which, you know, can look like very friendly or attractive the students or the student see that. If, uh, if the teacher want me to, uh, put my, all my effort here, I want to see that the professor is also working on this. And the platform is not something that looked like, Oh, I'm just gonna put this and that's it. And you have the, the, main structure. It's not it's things like, I like to videos, pictures about the topic and that the students feel like, okay, Just, you know, like just in game dance and she's trying to do fast and, and, and I'm always open for any, any suggestion or questions or any w they have the tool. I think that the government has to see that part and the administration also from the institution that if they see that we are



working, maybe they have to be a little bit more flexible. We'd ask, especially when we have to, to send the evaluations of the students and when we have, and that people in our classrooms, because it's not too easy, there are exercises that, you know, you can turn the platform. And so the platform is going to do the work for you, but there are some others that we are not able to read, or the platform is not going to be able to do great. For example, like translation classes. How the platform is going to evaluate that. So it's means that you have in mind a group of more than 10 people reading this, you have to spend a lot of time and then you have to give them some suggestions. If it's going to be about like time consuming a lot, it's going to take too much.

**LF: Yeah, it definitely seems like switching to remote learning just requires a lot of time and preparation on the instructor side. I actually have a job right now as a teacher's aid for one of the professors here at WPI. And there's like so much stuff to do to get all the materials online. And like we were making things and trying to make it accessible to like the students in different times zones. And yeah, when we do a lot, I think the teachers don't get enough credit for how much they have to do to make their remote learning work.**

**I: Yeah. Okay.**

**LF: Yeah, That, that wraps up our interview. , you can always reach us at the email that we originally contacted you with. If you have any questions or anything you want to follow up on. Thank you so much for your time and for talking with us.**

**I: No, no thank you guys. It was a pleasure.**

**Whole Team: *Thank you.***

**I: Okay.**

## **Appendix K: Professor C Transcript**

**Tyler Cierpich: Sounds good. Yeah. So any information you share with us will be completely confidential and only used for research purposes. Can we anonymously quote you in our report?**

[...]

**TC: Yeah. You. So, yeah, you've definitely been teaching a wide range of people, for sure. Why did you go into teaching English?**

**I:** Honestly, I didn't, it was not my idea. I mean, I didn't want to be a teacher. Honestly. I always say, well, if I'm studying English, maybe I can be a translator because that is the major that I studied here in Chiriqui. And, uh, but then, you know, opportunities. And, uh, I remember the professor from university, they started talking about like, maybe you can be a professor. You can be a, maybe a professor here in the universities or just take the, the program. And I was like, okay, I'm going to try it then. And then the opportunity, you know, to work as a teacher, with the kids, it was a very interesting experience. And, and, and well, now I'm here, I'm a teacher, I'm a professor. And that's what I always invested. I never said no, I'm not going to be a professor because yeah, you don't know what could happen.

**Justin Hines: So I'm just going to ask a couple of questions about, you know, more the platform that you've been using. So which online learning platforms have you been using for teaching since, you know, or I guess in general, and since, you know, the pandemic and everything that's happened?**

**I:** Moodle, that's the platform that I have been using for my class that I have from another university. I have, it's not like a kind of platform like Moodle, but then we have to switch with change to Oteima. And now I'm using Moodle as well. I know it because that was the platform that I have to use for my, uh, defendant master degree that I got from a virtual environment. And, like a personal platform because I worked for other places too.

And, uh, I have the, I mean, I'm free to use whatever I want and I was using Google Classrooms, but the one that I have to use and I'm like, you know, like I would have more than 100% of myself working on is Moodle, that's the platform?

**JH: And with Moodle and you know, any other platforms that you use day to day, how do you feel about them? Do you have anything that you'd like to change? You know, things that could be improved?**

**I:** About Moodle. You mean? Yeah. Well maybe if I know the platform, I think that it has been very easy. Maybe just some things have changed because I took that program in 2014. So. Six year have passed and many things have changed, but at your school too, you know, you do, start getting some information if, uh, I remember that I used to use yeah, a lot of hot potato, but now it's changed the name. Eh, I don't know because the, the, the interface isn't it, Spanish. Uh, that is the only thing that I don't like, because I remember like some of the names or something structured that it has in English and believe it, or not some time. It made me feel comfy. It's like, I don't remember with, that's the thing that I have to use or not, but, uh, I'm trying to, uh, to start, you know, like getting some videos and things that can help me to improve, or maybe to add something that maybe give me new further students, or again, mean my work may be easier for them and make it user friendly. Uh, but. I feel very comfortable using Moodle. I think that there is nothing that maybe I have to say, we have to change this now. I'm good with it.

**JH: Okay. And, you know, compared to beforehand, when, you know, you had in person classes and, you know, there were some online classes, but has how you engage with students changed since the pandemic and kind of how you approach your day to day class?**

**I:** Well, it has been very difficult. At the beginning I thought that it would be easier, but then you realize that that is completely different. But at the same time, I think that just depends on the subject that you have to teach. When it started, I was in charge of the group of translation from the other university. So it was easier because it was just like, you have to upload this paper and then they turned the paper and that's it. But now that I'm working at Oteima. [...] So sometimes you would, you want, you know, you are like the only one who is speaking. And then, Hey, can

you say something or I have this question, who would like to answer this question, or I have to use some time, like those type of programs or websites where you can type the name of the student. Like they will have names. And then okay. Now to say something, Carla, this is their charge though. What can you say about this question? Or what's your opinion, but it's, very difficult. But as I said before, that's I think that that's depend on the subject that you are teaching. And another thing, , is about the Internet connection. For example, it is very early in the morning. I don't have like a lot of students that said texting me like teacher, I don't have connection in that because you said 8:00 AM, 9:00 AM. So I think the connection is pretty good at the time, but when it is in the afternoon, I have a class at one, and sometimes it starts raining. And if they live very far away from the city, I start receiving a lot of messages. Teacher. I don't have electricity right now at home. I don't know what it's happening with my Internet connection, but the data is not working or even if there is a nine lane, the evening shift, we are having like those type of problems that is maybe like the negative things about a being teaching, you know, like, remote teaching.

**JH: Yeah. And would you say that Internet connection is probably the biggest obstacle that you face, or are there any other big issues that you think come with online learning?**

**I:** Well, Internet connection. Yes. I think that that is the first thing, because of course, if they don't have Internet connection, they're just going to be like harder and they're not going to be able to know the class. And another thing is like, They're going to say this in the way, like the institutions, you know, they have changed the procedure of enrolling the students and now they don't want most of them. They don't want to have the same group that we used to have in the past. I mean, I was in charge only for my student here in David, but now they can have a student from, you know, all the country, like from the different provinces that we have here. Yeah. And sometimes if I have a group, let's say like seven people, they were from David, they know each other. And then I have to introduce another group of people and that maybe can create something in it. Even though there is not a face to face, they are like, Oh, I don't want to say anything. Maybe they have better English than I, and then they are going to start, you know, like laughing at me. And, probably that could be one of the reasons that sometimes the students don't want to participate, like talking about that part, like class participation, but some of them are. I guess I

have to say that, yeah, all of them are very, uh, engaging with it. With the class and, and they try to do their best. So I try to be, uh, flexible with them. but not too much. I mean, like, I can give you this opportunity because I can understand that you can face any situation with any problem. The same could happen. Yeah. You know, the, like last Saturday I was talking a lot and then my students go to the messages and say teacher, we can't hear you. Where are you teacher? And I didn't know that I didn't have Internet connection at the moment. So there are things that I can understand and, and I try to look for alternatives, but yeah Internet connection and maybe like being in a different space. And try to interact with people that they don't know. And so those are the things that can affect the interaction or, you know, like the, the process of learning that we are.

**JH:** Alright. Lindsey, are you gonna move into some of your questions?

**Lindsey Fletcher:** Do you think you could estimate about what percentage of students have issues with Internet accessibility?

**I:** Well, I can tell you the second number and I want to, uh, to publish on the, uh, the more of the students that I have for one group, and then you can do your math. [...] So I don't know, maybe 25%. So that's I mean, and then at some time, yeah, they are able to be there and, then we went with getting another guesstimate, like this is going to happen. Or if I am going to have my class, you know, time, most of the time they are on time. Sometimes they, I have all my students there and like five or 10 minutes, then one of them disappears. And then again, he appeared as though it is like, Hey, you're like a gospel come in. And then you will. Yeah.

**LF:** Yeah. That's helpful. Thank you. So if you could make any changes to the English program to the way that you're teaching English, what would you change or with the program as a whole, not necessarily just what you do, but sort of the English department.

**I:** But, later with the situation that we are facing, we are using remote learning or in general?

**LF:** More in terms of remote learning. Yeah.

**I:** Like could be a. Well, that's a very interesting question. Honestly. I know exactly how the department or faculty or people in charge in university, you know, they, uh, how they are trying to arrange the things that it can work and that the students can have the, the, the access to, to the program. Uh, but first I would. The thing that I would do is like, Hey, if you are going to register or enroll in any very short class, it's important that you know that you have to, I spent a lot of time, right? Maybe like trying to educate the students or people who are going to enroll in this type of learning, that it is not like a face to face class that even those the. It's something that's changed. Suddenly, you need to know that you have to spend maybe like eight hours per day. And especially when you are having more than one subject, maybe that is one of the things. Eh, but I have to see this part. I mean, it is a bachelor degree and they have to spend like 13 weeks for a subject. Of course, then you are, you don't want to enroll in the subject where you are going to be just like four weeks because talking about the price or sometimes institutions, they want to sell you the same amounts of money. It doesn't matter as if you just would say like you were paying like maybe \$200 for 15 days of classes. Now you have to pay \$200 for it for only four weeks. So, I mean, hey come on. So now we know that it is, it is not the same, so, but I'm paying the same amount of money. Maybe like trying to make the schedule more flexible for just students. Like, uh, we can maybe reduce some hours. And, and when the eh, or offer maybe like the two programs, now you have the option when everything, you know, Eh, we, we can, uh, return to the classrooms and we can return to our normal life. Eh, you can continue you on your face to face classes, but this moment we have a new offer for you, which is going to be the visual environment, you know, or visual learning, remote learning, and you get enrolled for these programs. You are not going to be here for 15 or 16 weeks. It's going to be only for eight weeks, maybe or 10 weeks. And. And the students maybe can have the, uh, the, the chance to choose which subjects he or she wants, you know, to, to take for it for that term. Maybe that could be the option, because I can understand that now for the university that I'm working at, they are having like five, four or five subjects. And, uh, and that is like two hours or four hours ish. And that is for 16 weeks. That's a lot. So I'm trying to apply some activities that I feel that they are going to have enough time to, to complete, and they can turn their tasks time because, uh, it is not just like I'm going to put in like ten activities. And I know that that's not going to work. So maybe like creating a different schedule, creating a different, eh, or, or promoting a like different study

program could be the thing that can change the way that, uh, that the students are trying, you know, like. Studying or taking this. So we are living now.

**LF: Yeah. It seems like definitely one thing we've been hearing a lot is that you just have to think a lot of things need to be modified to make the remote learning work.**

**I:** Exactly. Yeah. Because it's different when you are, for example, date. Those are the studies after you graduate, like yeah, there is a maybe a postgrad rate or whatever master degree you are going to be yours for a week or a month in each subject. And it is different because you know that it's only one subject, eh, you know, you have your life, you have to worry, you have too many other things, but if you're going to study, you're going just to learn one thing, but it is different when you are, if you are working, if you have family and you have four subjects and you have to be there. I mean, it is not going to be only one day. You have to be maybe two or three times per week say that you have to be there spending a lot of time. So those are things like if you don't know about what remote learning means or what it means taking a, in a virtual environment, that's gonna make it feel like so much stress. And, and then, uh, you gotta want to say, like, I don't know that the teacher is the one that's a problem because he does sing it out. They weren't going to, but that's another thing. The thing is that if I don't know that I want to feel so stressed and I don't want to continue.

**LF: Yeah, that makes a lot of sense. Is there anything, or what do you enjoy about remote learning for teaching remotely?**

**I:** You have the option to add a lot of resources, probably you were not able to do it when you were face to face classes. so the students, I mean, it doesn't matter where they are. If they have Internet connection, they are going to be able to, to do the activities, that, It can be more interactive, but again, that will depend well on the amount of people that you're going to have in your class and the group that you're going to have. But I would say about the resources. I mean that sometimes they didn't know like, Oh, I need to know that I can use this page, or for example, if there were a lot of it online dictionaries, because that's something that I'm using in my classes. It doesn't matter. I mean, it, you don't have a physical yeah, but here you have a lot of

dictionaries that you can use for your classes. So it's going to make your work. Yeah. Easier. You don't need to be like, you know, like look up the word. So now you can just type the word, enter the city. Everything is going to be right. But, uh, right there. And, I have to say that about the resources, the things that you can, I mean, the class and make it maybe more attractive for them.

**LF: Yeah, that sounds so far. We have found that a lot of people, even if they don't prefer remote learning as a whole, there are some benefits to it. , So that actually wraps up our questions. Uh, thank you so much for talking to us today and participating in our research. Is there anything you would like to add that we haven't already covered?**

**I:** No, I mean, I'm fine. And thank you for this opportunity. It was very interesting. This is the first time, uh, I mean that I'm like having this type of a meeting that you guys are very interesting to know about this. People said that this is something that this is not something new, that remote learning that's existed for many, many, many years ago. The problem is that we haven't been being, you know, using it. In the right way. And sometimes people like to compare Panama country, United States, but that's not the same thing. Uh, but at the same time, we can see that there are a lot of them seminary days, we did some parts of of the country in some way. I was like, Oh, I had to help rigidity. It was like a kind of workshop for 360, eh, from the education. Yeah, obligation we're from Arkansas and they were explaining situations that we are facing now. I mean, the same thing about it. You don't have connection about a having, for example, the hardware like computers or tablets and the students are, they want to get worse and the students didn't have access to these things. And the same thing, they should have been here because most of the districts, they don't have a computer or if they had a computer and as always. Know situation where the stores are closed. And what happened with my copywriting is not working. I experience it's the same thing like two months ago. And I was like, Oh my goodness, what I'm going to do right now. And, uh, and my husband knows a lot about technology and he fixed my computer. You know, I didn't know what to do. And, and I don't like to use my cell phone. And there are a lot of students that I don't know how they can work using a cell phone. I mean, doing this. The assignments and, and that was pretty interested in saying, I, you have a seizure. I am unable to do that. I'm able to, to type anything. Definitely here were documented. It was like, Oh



my gosh, really? Well, good. Pretty good. , like y'all, don't fix that now that we are facing this thing we have to, while we are going to do next year, because we know that many of those names could happen. Maybe it can be around the word or it can be only a specific country and a specific place. And we have to see for different alternative just to improve the education for the better off, you know, the students and everybody. And also, I understand that. I think that government. And I'm, here in the tradition in my country. Yes. That most of us, and especially the, or professor from a university, eh, we have to spend a lot of time working on this. It looks like it can be easier, but it's not just like getting a link, copy and paste and that's it, or take this and call them, put the code here and you have the video. That would be easier, but not if you want to. To create something which, you know, can look like very friendly or attractive the students or the student see that. If, uh, if the teacher want me to, uh, put my, all my effort here, I want to see that the professor is also working on this. And the platform is not something that looked like, Oh, I'm just gonna put this and that's it. And you have the, the, main structure. It's not it's things like, I like to videos, pictures about the topic and that the students feel like, okay, Just, you know, like just in game dance and she's trying to do fast and, and, and I'm always open for any, any suggestion or questions or any w they have the tool. I think that the government has to see that part and the administration also from the institution that if they see that we are working, maybe they have to be a little bit more flexible. We'd ask, especially when we have to, to send the evaluations of the students and when we have, and that people in our classrooms, because it's not too easy, there are exercises that, you know, you can turn the platform. And so the platform is going to do the work for you, but there are some others that we are not able to read, or the platform is not going to be able to do great. For example, like translation classes. How the platform is going to evaluate that. So it's means that you have in mind a group of more than 10 people reading this, you have to spend a lot of time and then you have to give them some suggestions. If it's going to be about like time consuming a lot, it's going to take too much.

**LF: Yeah, it definitely seems like switching to remote learning just requires a lot of time and preparation on the instructor side. I actually have a job right now as a teacher's aid for one of the professors here at WPI. And there's like so much stuff to do to get all the materials online. And like we were making things and trying to make it accessible to like**

the students in different times zones. And yeah, when we do a lot, I think the teachers don't get enough credit for how much they have to do to make their remote learning work.

I: Yeah. Okay.

LF: Yeah, That, that wraps up our interview. , you can always reach us at the email that we originally contacted you with. If you have any questions or anything you want to follow up on. Thank you so much for your time and for talking with us.

I: No, no thank you guys. It was a pleasure.

**Whole Team:** *Thank you.*

I: Okay.

## **Appendix L: Professor Evelyn Hidrogo Transcript**

**Hailey Delphia:** So first question, do we have permission to record this interview? Any information you share with us is completely confidential and will only be used for research purposes with your permission.

**Interviewee:** Sure.

**HD:** Okay. And then can we anonymously quote you in our report?

**I:** What was that?

**HD:** Can we anonymously quote you in our report?

**I:** Sure, the report, when you say the quote?

**HD:** Yeah. So like, if you say something that we thought would be relevant to our paper.

**I:** Yes. Yes, of course. Yeah.

**HD:** Perfect, so to start things off, how long have you been teaching for?

**I:** Okay. I do a, well, I taught back in 2011, the school, bilingual school, I was called American school. And then after that, I began another work. I started working at the airport here in David and then last year, 2019. I started teaching again because I got my, my post graduate degree in higher education. And I had just finished my master's degree, but higher education. So total three years, almost three years. I was born in Dallas, Texas, I lived there till I was 5 years old, then my Mom and I moved to Panama, so I finished High School here, in a Catholic School, called Saint Agustin High School, as soon as that happened, I moved back to the United States, and I learned English in Maryville College in Knoxville, Tennessee.

**HD: Yeah, and then, so why did you go into teaching English?**

**I:** Well, because, when I lived, because I lived in Florida for many years, I lived in Florida, in Orlando, Florida for 10 years. And then, back in 2010, I decided to move back to Panama where my family is. So, I wasn't able to get a job, in what I did because I had, I used to work for an engineering company as a drafter in the architectural department. So I wasn't able to get a good job here. So I decided, I thought to myself, well, I know I can teach it. So I was able to find a job, in that school, in school.

**I:** And then, I thought to myself, you know what, I don't want to become an architect because I started to, to study architecture when I came here. So I don't know, one day I said, you know what? I think I'm going to take an English degree here. It doesn't mean, I mean, I, I learned English in Maryville college in Knoxville, Tennessee.

**I:** I don't know if you know that. That's where I learned my English. So when I came out this year, then, well, I decided to continue studying architecture because. I don't know why I think of my day, but I mean, when I lived in Orlando, when I worked at this place, I mean, I had to love, I have to, go in and I was, you know, in front of a computer, like eight hours a day.

**I:** So I said, you know what? They don't want that for me. I want something different and I know English. So, I'm going to get my English degree because I knew English, but I didn't have the, so, I went to get my English degree, it took me three years to get it because I was able to do some exams. So I was, because I already knew English.

**I:** So I finished earlier than my other classmates. And then, That was back in 2014, but I continued working for the airport, till September, 2018, because in 2018 I started, studying my post graduate degree in higher education because I wanted to teach, but I didn't want, I didn't want to teach in a high school or in elementary school, I wanted to teach at a university, but in order to do so, I needed to get, I mean, post graduate degree in higher education. So as soon as I finished it, I finished it back in October, 2018. And then I started applying. I had university, but because I didn't have enough experience, I got hired by, by, a bilingual school. But I told the, the,

I told the director and all that that's I have another name, what do you call it? Yeah, well, yeah, that the director, the principal, I told the principal, she was doing my interview. So I told her that I wanted to teach at a higher level because that's where I am, that's how I got there to go. I asked her to go, let me teach, you know, higher, higher high school, then, high school. So she said that, that it was okay. So I taught high school last year at a bilingual school and it was nice, it prepared me to, to, to work with, to work with, students from, at a, at a university, I believe, and I know for a fact now, or experience that, much difficult to teach to teach high school kids than to teach university students is, is much, much, difficult, but I did it and I'm, I'm happy I did it because it prepared me to, to teach, university experience. So that's the story.

**HD: Well, that's nice. It's nice that you were able to realize that you wanted a new degree and then swap it like that. That's really nice,**

**I:** But I don't only work for Oteima. I also work for two other universities so I can make a living because

**HD: I think our last interview was telling us, something similar.**

**I:** You know, groups probably two or three each university. So in order to make a living, I have to teach probably eight to nine groups, like two or three groups per university.

**I:** But I'm happy. I'm getting, you know, university students. I really enjoy it. Then I realized last year when I was 36 years old, that this is what I want to do for the rest of, or until I retired.

**Justin Hines: That's great.**

**I:** I do like what I do.

...

**JH: Okay. I was just going to ask for your online class and, and, what are the platforms that you've been using to help deliver your online learning materials?**

**I:** Okay. Oteima, with Oteima students, I use Google meet, for, well, this is another university, UDI, for sure they call it UDI, right? They use teams, but they do have their own platform. It's called Canvas and Oteima has a Moodle. And for the other university, I used this platform. So two to two different platforms, this one's meet and ?.

**JH: And for these platforms, what do you like about them? What don't you like so much about them and say something that you feel like could be improved on or changed with them?**

**I:** Well, I do know this, that, that the platform teams thing is more complete. Like you have some more features for the teacher or the students, as teams also have the option that you can share your screen, but this one also has that, I think they're both really. Really, I mean, as far as you know, teaching, I think there's, there they've worked fine both. Well, you can work fine with them. I like, I don't have any complaints regarding it. I mean, you can report, well, if I use my, my, my personal account, not the one for the university state. it doesn't let me record it. Doesn't let me record the meeting. If I use my personal body by using this one, which is from Oteima, that means it lets me record now. But I don't have any, anything wrong to say about that.

**I:** The only thing is that Zoom seems a little bit more complete. I mean, not complete, I mean, a little bit more. It has more stuff. They have more features for the students then, and you can, like for example, my daughter, she's in kindergarten and they use things at her school. And the teachers, they can schedule their meeting every day, like today.

**I:** Like, yeah, like tonight I'll be able to see what she's going to do next. Like every teacher, a schedule while they're going to do, Every day, like what they're going to do in, for, physical education, whether it wants to do it for IT, whether it wants to do for, English or English classes, so if you want to compare them, I will say that teams it's more than a Meet.

**I:** Well, I can work fine with both. Like each you let me share the screen because I use a blank, work, word, paper. Let me, yeah. Yeah. A blank, word document. That's the word for. So I make it to be my board. Like if I want to explain something, I will use a blank, word document to, to explain.

**JH:** Okay. And so when teaching your remote classes, do you find that your style of teaching has changed in order to keep your students engaged when they're teaching virtually versus, you know, when you're teaching a in person class.

**I:** Well, I do. I just think that classes, what do you call them? virtual and the other one had to focus, what did you say?

**JH:** Virtual versus like in person classes in person.

**I:** I mean, I didn't need that. like, I mean, you get to, you get to know, like, you can see their faces if they're getting it or not getting it. And virtually that's, you know, that's, you kind of do that, so, but as far as my teaching goals, I tried to keep everything the same, like, Like when we were in person, I like if we were at the university at the end of the class, I always check if they have growth. My explanation, because my explanation will become a, there is study materials for the partial it's time for the final exam or for any points that I want to do. So I make sure I, I go, I go, chair by chair and check that day, every seat everything's written down, or I ask them to bring them to my desk.

**I:** And since I kind of do that, now, what I asked him to do is to take a photo of their, of their, their notes and they send it to me, to do whatsapp my private, to my private account. That's how I made sure. I mean, sometimes, I mean, I don't read it all, but I do, you know, make sure that they, they do have, the study material because that's what you become.

**JH:** Yeah. And so when teaching online, what would you say is the biggest obstacle that you see?

**I:** The biggest, I will say, I mean, I try to keep my classes as interactive as possible. Like I, I do ask them questions, all the time. Like I. I'm not a teacher that, you know, enters class, either a virtual class, or a classroom to only talk and talk and talk and stuff. No, I do make my students, he interacted with me when I conversed with them. I, I, I speak with them. I asked them questions and I made them participate in the class. So, I will say that will be an obstacle because, yes, you can do that in, in, in, in virtual classes, but sometimes, they might get entertained at home. And if you ask them something. They are not there. Like for example, I will ask Justin, and then no one answer and, you know, you realize that, that, you know, that student is not in front of her in front of his computer or in front of him a cell phone. So I will say that is the most challenging thing, you know, to make them stay with you. In your, in your classes.

**JH:** Definitely. And I think that's, you know, doing virtual class in here, I think it's the same thing. You can kind of tell sometimes not everybody's as engaged with the classes, you know, if they will be in person.

**I:** Yes and not, not all of them want to turn their cameras on. Not all of them want to do that. And you cannot force them like legally here in Panama, you cannot.

**I:** Yeah. Legally you cannot, you cannot do it. You look, you even have to ask them a ? i want to get reports, but it's usually not a problem. I don't make it a big deal because if I make it a big deal, they might start thinking, Oh, well, No ?. No, I better don't get there before then. So I don't even mention it.

**I:** I only report the classes because it's, if the student, if there's a, a student that is absent, I need to have the reporting if he cause he or she asks for it for the class and they do ask, the teachers to report, our classes, because that's also evidence of our work. Yeah. Yeah.

**I:** So one thing that we've, that's come up a lot in our other, all the other teachers and professors that we've talked to so far is Internet accessibility problems and getting Internet connection.



**Lindsey Fletcher: Would you say a significant amount of your students have problems with getting access to the Internet?**

**I:** Yes, I have. Especially here, you know, same. I do have a few students, not, maybe two that day, believe in areas where the Internet is not as good. So, what I do with them is saying, let me know. And I let them be absent right through my classes because I know that they are not a login. And I let them do any homework, any classwork, any, any, I let them, do I let them do I like 'em, I'm flexible with them, because I know they're few, like I've only had probably one, one that, that he told me that he, you know, that he needs. What do you call it? They're native, native Panamanians here just like in the U S, and he, I remember that he leaves that area in the ?, it's like saying they're in the reserve in the US.

**I:** They, anything that whole month, which is a reserve buddy, and, where they live. And it's usually on the mountain, on the mountain. So, the Internet is not that good over there. And, he explained that to me and, we were able to work

...

**LF: Yeah. There are definitely a lot of challenges with remote learning, if you could make any changes to the English program, what changes would you make?**

**I:** I would say, the English program at Oteima, I will say, I think it's pretty good. The, the plan that they offer, as far as the English degree, I, my. I might ask them more, conversations because, sometimes they're good at writing, but then there are, they are afraid to speak or, yeah, we'll probably ask more conversation class.

**I:** And you know what, every, whenever I start a new course for me, I always ask them three questions, and you probably know this is strategy, it's called, I think it will just fall down. Okay. Like what I, what I know, what I learned and I, what I would like to learn. So those three questions. And most of the time they always answer.

**I:** “I want to be able to, I want to, I want to speak English fluently”. That's usually what they say, what they want when I, when I asked them those three questions. So I would say more, more conversation, more subjects, regarding conversation. Because, I mean, at the end, that's what we want to do when you're learning a new language is, to be able to, to, to, to have a conversation with, with another person that's in that language.

**LF:** Yeah, that's definitely very important to be able to actually talk and have a conversation with people, so our last question here is what do you enjoy about teaching remotely?

**I:** What I enjoy teaching, when, when they didn't, when I finish a course and they, led me, know, that they, that they learn a lot with me, that's actually, that's what I, when, when I feel, happy when they let me know that they have learned with them, that they appreciate my work, that they appreciate my patience, I would say that's the most rewarding part, as far as the university level...

**LF:** Yeah. That makes sense, that's actually the last question that we have for you today. Thank you so much for talking with us today and, Participating in our research, you can always reach us at the email that I contacted you with. If you have any further questions, thank you so much for your time.

**I:** Do work. You're welcome. Let me know how the project is, how, what grade you got in the project?

**HD:** Definitely. It was wonderful meeting you. Thank you for all of your help.

**I:** You're welcome. It was wonderful meeting you too. Tyler Lynsey, Hailey and Justin



## **Appendix M: Professor D Transcript**

**Hailey Delphia: Can we anonymously quote you in our report?**

**I:** All right.

**HD: Perfect. So to get right into things, how long have you been teaching?**

[...]

**HD: Alright. And, so why did you go into teaching English?**

**I:** Well, first of all, let me tell you that when we have the opportunity to work with students at a high level at university, as a university teacher, if students are at ease, like care is a very complex task, you know, because they 're adults in the world. And we are studying, working with them for the first time, but us coming into yours as coming here, so we are getting more experienced and then we are able to at least work with different parts.

**Tyler Cierpich: So when you're teaching online, what online learning platforms have you been using?**

**I:** Well, at university , I'm talking about Oteima. We are working online for more than five years. But we are working in Moodle. We are working in English face to face more. And also we are working with Meet. I got semi for essential mode in which the students attend on the weekends, for example, a group of students that they, because they are working during the week and all other students, are going to attend the classes face to face from Monday to Friday. Well, it's a different experience now with COVID, now we are not having the face to face sessions. Everything is aligned in the, we are working like a side grownup and ethic part of speech. That is the way that we are teaching right now at Oteima, I would say.

**TC: Awesome. So what do you think, is good or bad about these tools that you like or dislike?**

**I:** In my personal experience, to teach on online it's a great opportunity, it's a great way to teach, especially when we are updated with some of the tools that are available on the web. And those tools permit us to work with our students And Zoom and meet work with our students.

**TC: Yeah, definitely helps with accessing your students more. So on that. How have you been engaging with your students recently remotely compared to how you engaged with them prior to the virus?**

**I:** Well, in this case, the first of all that I have to do is make my questions also make some questions for myself. So, first of all, I need to be clear that some of my students will have some problems with the connection. Okay. That even though they have problems with the connection. So I have to try to enable them today, try to have the way that they connect, use WhatsApp, because also we are using WhatsApp and in the case of we also, we are using Moodle with Oteima University and they are using the platform Moodle. And also we are using Google Meet. Well, in Google Meet we have sessions that like the face to face session. And also, I have to realize that what is the technology that my students are using, if they are using those phones, because that's, in some cases they have some issues within the farms. I have to be clear, for example, if my students know how to navigate or they know how to navigate. And in this case, in an online course, for example, because in my case also, I like to use PBworks. That is a free platform, but I have to be clear that we'll be sure that my students know how to navigate or how to use PBworks in this case. And also what is very important is how I'm going to check my students' progress. And how they can share. For example, they can hear their classmates. And the most important thing is to give feedback. That is, you know, a big process. And the most important is we as a teacher, have to try to motivate most of the students, so that they continue to push and they continue working. Even though we have some issues with the connection, we have few problems with the technology, but they have to go ahead.

**TC: Yeah, definitely getting that feedback to students is definitely a vital part in the education. So, what do you think the biggest obstacles in keeping your students engaged in these remote classes other than Internet access of course**

**I:** Well, the time, the students have to be sitting in front of the computer. So it's, it's difficult and most of the time, well, not most of the time, at least we are organized like a schedule. And with this student, they are, for example, if they have two hours of classes these days, we are connected one hour and then the rest of the half hour, 45 minutes, they are working on the task. And later on, we are again connected for 15 minutes more. For example, if they have questions or want to give more feedback about something, and then that's, the way. It is a big obstacle because, you know, some of them, live in far away places where they have a poor connection there. The problem is the connection, the Internet that is the biggest obstacle that they have.

**Lindsey Fletcher: Can you estimate about what percentage of your students have problems with Internet access?**

**I:** I'm sorry.

**LF: Sorry. Can you estimate about what percentage of your students have problems with accessing the Internet? Like they can't get the Internet or it's not good enough.**

**I:** It's inconsistent. They have two ways to access the Internet. One is to pay for example, that's a problem, that you have to pay by month in other cases, for example, they buy a card. And with that card, they are able to access the Internet in certain places. We use it here, for example, at the home, when we have the connection 24/7, and in some cases they do not have the same connection.

**LF: So if you could make any changes to the English program, what would you change?**

**I:** Are you talking about Oteima?

**LF: Yes, specifically at Oteima**

**I:** So I have students for example, and they are at 10 on Saturday, for example, just Saturday or Sunday, for example, because as I mentioned before, they have something, or they are working during the week. So I consider that the students who attend just on Saturday or Sunday, are not learning in the same way as the students that go from Monday to Friday. Okay. Just in the case that they have a connection, for example, we're in the week with the teachers, but that's not it that's happening now. They attend on Saturday. And that's it, just to enter for example, to Moodle, to do their assignments. But that way it's like I recall, and those they are, have to, for example, they have written reports every week, but they do not have more of a connection with the teacher. So if I have to change something, I prefer that the students attend, for example, from Monday to Friday. In the case that they can not attend the university face-to-face but they have a connection during the entire week with the teachers. Okay. Because that's the thing that we're losing now that we use technology, we use meet in different ways to have connections, but they just have the connection on the weekends. And what happened the rest of the week, just in the case that they wrote a message or they sent a message through WhatsApp. That is the case also we are using WhatsApp in our cell phones, and then we have some groups in WhatsApp. And then for example, if they have a question, they write up questions and they send me the questions through my cell phone, and then I'm going to answer the questions, but that's it just through the messages that is not there, you know, face to face, at least using meet or using Zoom or Skype

**LF: There are definitely a lot of challenges with teaching remotely. But, what do you like about teaching remotely?**

**I:** Well, let me tell you something. I like, for example, when I have my students in the classroom, you know, because that is the only way that I can observe how much they know, for example, if they are working or not, If they are able to do something or not. And that is some of the things that I miss from the remote.

**LF: Is there anything that you would like to add that we haven't already talked about?**

**I:** Yes, of course. So, well, I like to read a lot about trends or things that we can apply in our teaching methodologies in our classroom. But now of course, that is knowing our classroom is like distanced. And I like to work a lot with forces after you, you stand up all the forces? Oh, well therefore it is like I had 21st century skills that actually I like to students, try to work on them a lot and I have to try to engage my students to develop those skills. Those skills are like collaborative work, communication and critical thinking, creativity, because in some cases we, as a teacher, have to put a stop to the students and yours. We have to tell the student what they have to do. That's where the 21st century skills are totally different. So we have to, have other students, try to develop by themselves because they are the people who are going to get a job. Now, I have a job. And then, yeah, so for me that is very important to develop. And the development of 21st century skills is very important. And I share with my colleagues, and with my fellow teachers, that they have to try to promote this. Okay. And more in this time that we are having these pandemic and also motivate a lot of our students to not hesitate and not laugh that they have to continue working because they need to be professionals. They are the future. You are the future. So now we are working with you who are the people that are going to be in charge of many jobs in the States.

**HD:** It's interesting to see too. Because I know like, our professor was talking to us about how Zoom is kind of becoming this new normal, how we're probably going to be seeing a lot more of like Zoom work, and interviews on Zoom. And like a lot of schools may be considering just using Zoom as an option for students to take classes in general. I know a few professors in our interviews before this have suggested that they thought it would be a good idea for Oteima to at least continue offering online classes to students who have benefited. So it's interesting to see how that's gonna pan out.

**I:** Oh, well in this and this opportunity we are using at least, Google Meet. Okay. Because Oteima is paying for the domain. Then they are paying for that. And then they are demanding of the students. If the students have students and teachers, we have to use Google Meet, but I liked Zoom too. And there is another option that we can use too. But for me, it's okay. That's very interesting. Very useful. And that's it.



**HD:** Well I think that's all the questions we had. If there's nothing else you wanted to touch on specifically.

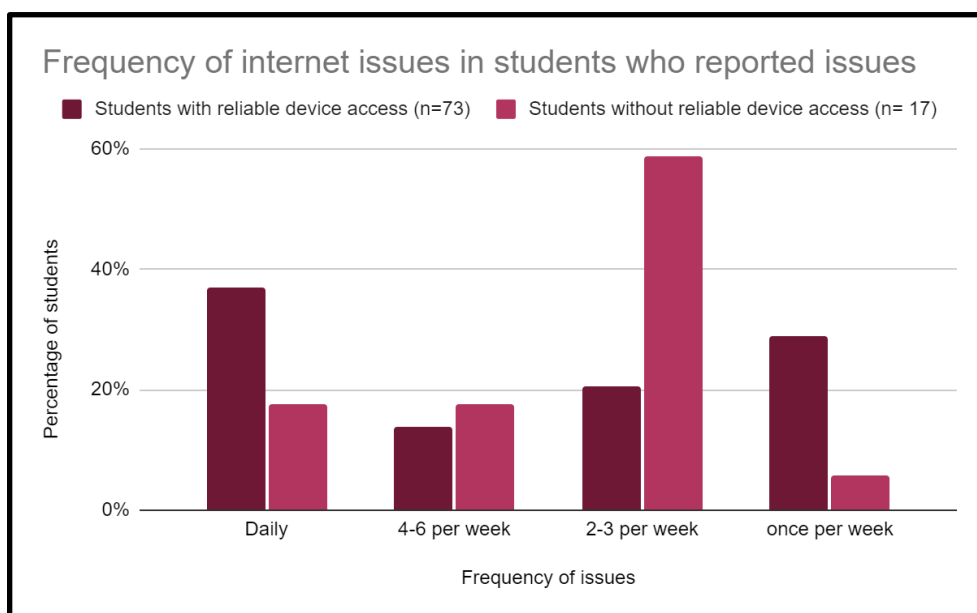
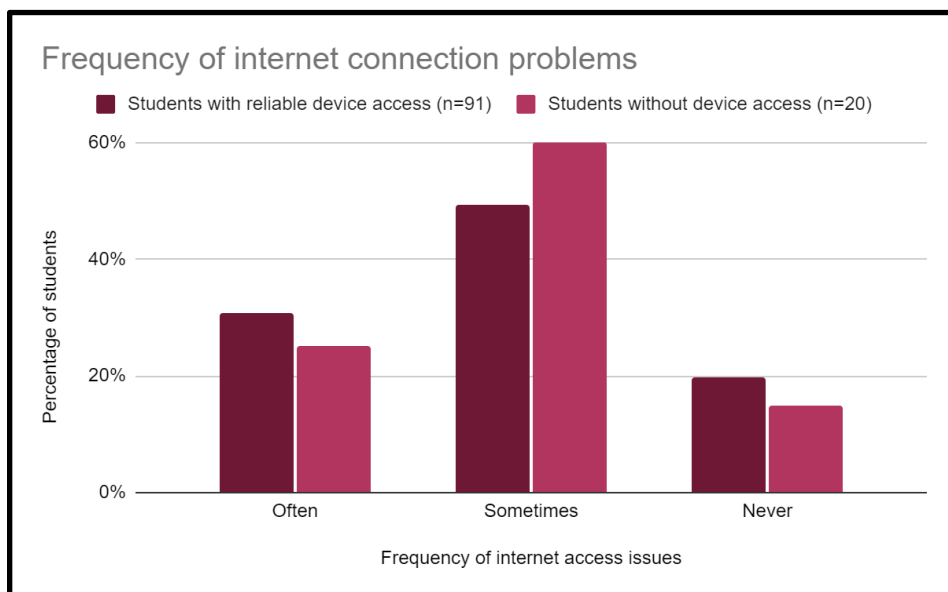
**LF:** Thank you so much for talking with us. We really appreciate it. And thank you so much for your time.

**I:** So for me, it's been a pleasure to answer your questions and at least to help you with your project.

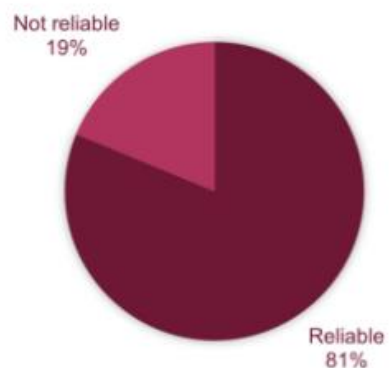
**HD:** And thank you very much for all the feedback. It's going to be really helpful for us.

**Team:** Thank you.

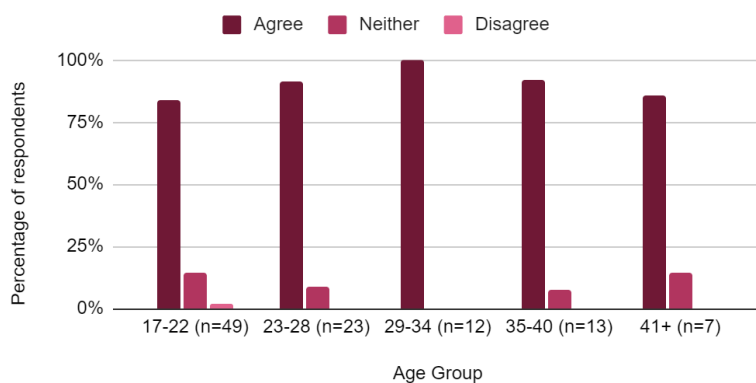
## Appendix N: Additional Graphs from Student Questionnaires



Percentage of students with reliable device access  
(n=112)



Opinions on whether more online resources would be beneficial by age



Do you have a scholarship? (n=110)

