Improving Remote English Instruction In Western Panama

An Interactive Qualifying Project Proposal
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BLL - Blended Language Learning
CALL - Computer-Assisted Online Learning
ESL - English as a Second Language
OU - Oteima University
WPI - Worcester Polytechnic Institute

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 Panama. 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 can hold 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 change this disparity by promoting entrepreneurship through student acquisition of stronger English language skills.

Oteima University would like to increase the accessibility of its English program and decrease the dropout rate in order to reach more students. Due to the University's focus on entrepreneurship, the university adopted English programs to help give their students a foundation of knowledge to propel them to success. While some students take part in the English program, Oteima University would like to improve the program's retention rate.

This prompted the university to seek dropout prevention strategies and assess their English programs. This assessment will include evaluating the effectiveness of Oteima University's current platforms, gathering student and faculty opinions on their learning needs, and adapting the online resources to fit their needs. Meanwhile, due to COVID-19, Oteima University has closed its campus and is currently only offering courses remotely. However, many students do not have reliable Internet access or any Internet access at all. Consequently, Oteima University would like to adapt their online English courses so that they are accessible to all students, including those with limited access capabilities. As a result, Oteima University

wants us to assist them in assessing their current technology in order to find what students and faculty desire for any future technology investments in order to reach more students across the nation.

The intent of this project is to help Oteima University keep its English program accessible to all students by expanding remote access while maintaining its quality and lowering dropout rates. We will focus on evaluating Oteima University's current teaching efforts and provide recommendations to University officials on how to improve their online English programs. Although COVID-19 is creating a more pressing need for remote education, Oteima University also wants to utilize online learning in its ESL program for more practical reasons such as scheduling flexibility for non-traditional students who have extensive outside commitments, and increasing how many students can benefit from these classes. In conclusion, we want to recommend solutions that would allow Oteima University's students to effectively develop their English language skills and allow them to succeed in the ever-evolving entrepreneurial market.

Chapter 2: Background

2.1 Poverty in Panama

Despite the success of the Panama Canal, 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 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 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).

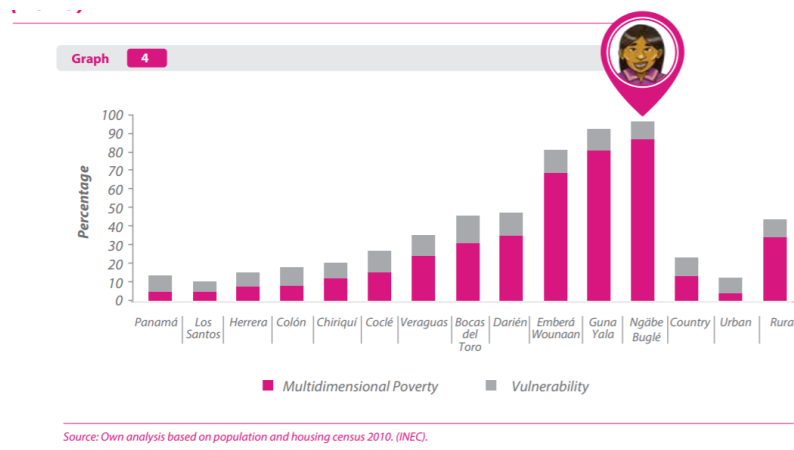Figure 1: "MPI and vulnerability by province and community (2010)" (UNDP, 2015)

The UNDP analysis indicates that income appears to correlate with the type of work being done. "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). A higher percentage of workers in the primary sector appears to correlate with higher poverty rates and lower incomes (see Figure 2).

However, the evidence is mixed for the impact of workers moving to different sectors. An OECD study (Cervantes-Godoy, D. and J. Dewbre, 2010) on "Economic Importance of Agriculture for Poverty Reduction" suggests that economic growth in agriculture 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 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 increased inherent isolation and may be less likely to lose their jobs due to COVID-19. However, rural areas are 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 their jobs due to COVID-19. In the US in 2018 (United States Department of Labor, 2019), "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". While this trend may not apply in Panama, many people holding primary and

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secondary sector jobs are inherently unable to complete 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.
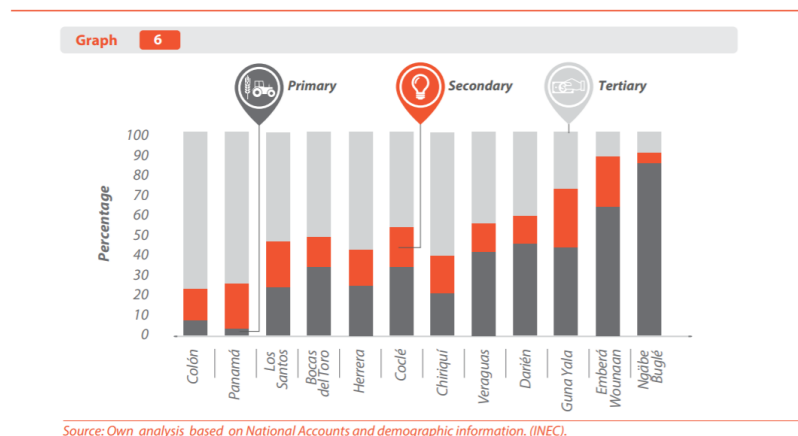

Figure 2: "Distribution of the economically active population by sector. Provinces and indigenous communities sorted by income in descending order. (2014)" (UNDP, 2015)

2.2 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 let some students stay on campus under special circumstances (e.g., international students), there are no in-person classes available to these students. 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. While many 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 work out many of the problems that these schools encountered as classes began.

This switch to remote learning has opened Oteima University's eyes up to expanding their online learning programs and they are planning to have some of their offerings to persist as

online courses even after the pandemic has ended. They believe this classroom model will allow for more accessibility in their student body 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 what they should do during the pandemic for their online courses, as many of its students do not have viable Internet access at their residences. To address this issue, Oteima is seeking solutions that will not only help those who struggle having no reliable Internet access at their homes but also expand their course delivery to include those who are able to and would benefit from the option of an online curriculum.

2.3 Internet Access Issues

The ability to access the Internet is one of the greatest tools that the world has access to today. It allows access to the World Wide Web, a massive virtual world where there are countless options for what you can do. It may be connecting with a friend on the other side of the globe or researching a topic that currently interests. The power that the Internet has on the world today is exponentially large and most people around the world can't go a day without using it in some way, shape or form.

The Internet also serves as one of the main tools to help our team reach its goals. This is because our focus is on improving the online programs currently being used at Oteima University. But a problem with this initiative is that many students are not able to get Internet access and in turn they are unable to receive all of the material for their classes. In Panama, there are four main providers of cellular phone service and Internet access: Cable & Wireless, Claro, Digicel, and Movistar. While these companies provide Internet access to most of the people in

Panama, there are still people who don't have this luxury. The areas who most often aren't able to receive the Internet are the rural areas of Panama.

There are two core reasons why Panamanians cannot connect to the internet. The first is that many regions lack the necessary infrastructure for network connectivity. Additionally, some people are unable to pay the monthly connection fees, even when it is available in their area. Often, people in the more rural areas of Panama will face both of these problems. At Oteima University, students come from all different provinces of Panama with many potential students living in different rural areas. This is why a major focus of this project is to determine potential strategies to provide current Oteima students and potential students without Internet access with a path and the necessary resources to access and succeed in Oteima's online courses.

2.4 Oteima University

Our team has the utmost pleasure and honor to work with Oteima University located in the city of David which is approximately 326 km west of Panama City. Oteima, whose acronym in Spanish stands for Computers, Technology, Education, Languages, Environment, and Agriculture, synthesizes aspects of various fields in order 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 has begun to put a large focus on entrepreneurship, particularly in western Panama, to facilitate the marketing and manufacturing of technological advances that could positively impact the lives of many of the region's residents. Many students that attend the University have few options to pursue outside of their education. Therefore, it is a major goal of the University to provide its students as many opportunities to succeed. How does Oteima's program work now?

Oteima Technological University provides its students with far more than 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 provide the level of knowledge that each student needs. 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 programs varies, but they all require good attendance levels to pass the program. For example, the 'English Course' lasts only 40 hours over five weeks of instruction compared to the Bachelor's Degree program which has a four-year track. 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 provides a number of resources for students. They offer free Internet access on the campus, as well as access to computer labs and tutors. Additionally, Oteima University has a "Moodle Team" to help students use Moodle. Students are also eligible to receive health services and low-interest loans (Oteima University, n.d.).

Oteima University also tries to foster entrepreneurship in its students. They offer a program where students receive seven animals and the school will teach the students how to care for them so they can start a small farm. They also offer an au pair program for women, which has a minimum level of English proficiency as an entrance requirement. The program offers housing, health insurance, and the opportunity to live in the United States for a year with one free

weekend per month and two months of paid vacation (Oteima University, n.d.). The au pair

program includes opportunities to strengthen English skills.

2.5 Online Learning Platforms Currently Used by Oteima University

Two of the primary online learning tools that Oteima University currently uses are

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 a cloud-based system that allows businesses and educational

institutions to track course progress and completion via predictive analytics. The key features

that Moodle offers are data backup, contact management, activity tracking, and in-built calendar.

Moodle also has messaging capabilities so that students may ask questions in order to streamline

communication. Furthermore, Moodle offers applications for both Android and iOS devices so

that students may receive class notifications for upcoming events and access course materials

remotely. 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. Otherwise, there are no royalties, fees, or other charges associated with Moodle

(Moodle, 2013).

Edusoft is a learning platform that provides students and teachers with an effective and

engaging English language learning experience. They provide educational solutions for not only

higher education but also corporations, government, and other types of schools. Edusoft's

English Discoveries interactive platform provides interactive learning materials and management

tools to the organization utilizing the service. Academic organizations benefit as there are ten

general English courses that are 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 offers a plethora of automatically scored assessments that provide feedback so that teachers can focus on activities that have a higher education value over teaching to ace an assessment (Edusoft Learning, n.d.).

2.6 Different Types of Language Learning

There are three different types of learning techniques used in language classrooms: computer-assisted online learning (CALL), blended language learning (BLL), and the traditional classroom setting (Jilg, n.d.). CALL is the technique most people associate with online courses, where materials are posted online and users can work through it at their own pace. Rosetta Stone and Duolingo are examples of this: applications that users can download straight to a mobile phone and permit people to begin learning a new language within minutes. BLL consists of an in-person class approach that uses aspects of technology to complement the lessons and aid in learning, and are typically organized as a class that the student takes partially online and partially in a classroom to allow for more flexible schedules (Jilg, n.d.). Finally, in traditional classroom settings the instructor assigns various vocabulary terms and grammar lessons and the students practice these concepts within a given thematical context (Oteima University. (n.d.).). However, this approach has had limited success and can lead to students potentially dropping trying to learn a second language or dropping out of University altogether. Past efforts to refine this teaching style have created a classic style classroom setting in which students attend 'conversational classes' with varying themes in order to better their skills with the English

language. Regardless of the techniques the instructor uses, there are many factors that affect students' retention rates that can vary for every student.

2.7 Online Language Learning

In the modern world, online technologies have become almost essential to classrooms across the globe. Mobile technologies in the classroom can promote interactivity, creativity, and collaboration amongst students with their professors. They also allow for new methods for instructors to monitor student progress, which can help instructors apply a more individualized approach. This may help instructors quickly identify and address problems, which may increase retention rates. Additionally, interactive learning activities provide a more hands-on experience for students, which may be more engaging than sitting through a lecture (Dexway, 2017). Some online tools do not even require an instructor. This approach means individuals can start learning a language instantly and work at their own pace. Popular examples include Rosetta Stone, a computer software that offers complete fluency courses, and Duolingo, a mobile app that teaches sentence structure and vocabulary. These tools often refine grammar and increase vocabulary through engaging exercises rather than reading from a book. Apps like Duolingo give people 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 their language skills.

2.8 English Education

English, the second most spoken language in the whole entire world, is often one of the most useful languages to know when doing business around the world or visiting another place. In Panama, people from all around the world converge along the Panama Canal to conduct business and move goods through the canal. This makes knowing English a very valuable skill for native Panamanians. The problem is that Universities such as Oteima University are looking for the most effective way to teach ESL (English as a Second Language) to people in locations far removed from commerce associated with the canal. There are programs all around the world that take a variety of approaches to teach the English language to those who do not speak it as their first language.

The United States Department of Education stated that the two key components that show English language program's success are that people who enter the program obtain both "English proficiency and parity of participation" in a reasonable amount of time (United States Department of Education, 2016). Meaning that not only does the program enable students to become proficient in the English language but also the program enables all students to become involved in the class. When evaluating programs across the United States, these are the two characteristics the department looks for plus assuring that all students entering the program are able to succeed in a timely manner.

In 1994, at Iowa State University, there was also an increase in the number of students who did not speak English as their first language. This was due to many people coming from around the world to attend their university with roughly ten percent of the student body being international students (Wolford, R. M. (n.d.)). The main goal of the university's ESL program is to ensure that these students are able to speak, read, and write in English so that they are able to

complete all of their regular coursework. In order to assess students who are coming into the system, every ESL student must take a placement test to determine their skill level. Based on this placement test, ISU places these students into different courses which range from courses designed to teach students to become fluent English speakers to courses which teach students how to write "clear academic papers". The program places the students at the appropriate place on this scale and into the correct classes to help build on the areas where they need to improve. Each student receives a unique learning experience based on their initial English skill level (Wolford, R. M. (n.d.)).

2.9 Fluency Techniques in ESL Classrooms

In many ESL classrooms, the course environment consists of a very structured approach to learning grammar rules that includes extensive reading and writing assignments. In spite of this focus on writing, many university students do not meet their colleges' writing standards when assessed on these skills. Many of those grading these tests noted poor vocabulary skills, general lack of knowledge, and grammatical or mechanical issues. This third issue prompted research into new schemes to teach ESL. At CUNY (a group facility at The City College), they decided to try a whole language approach on their students in ESL10 who already had a baseline on Spanish knowledge. In class, they read several books and responded to them in journals, writing a ten-thousand word semester-long project in workshop-style classes, which improved SKAT (required skills assessment tests) scores so much that they implemented it in their ESL20 and ESL30 classrooms. After these changes, their baseline writing SKAT writing scores improved from about 35% by around 60% when CUNY implemented these new classroom techniques (MacGowan-Gilhooly, 1991).

Another finding of researchers involved how L1 and L2 ESL students are the best at learning languages. L1 learning (children) involves listening to a large number of conversations, learning names, phrases, and syntax, and experimenting with speaking. Whereas L2 learning (adults), usually take note of adults' better-developed brains and abilities to learn rules and grammar structures and take an approach based on these skills. However, researchers argue that "The 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).

2.10 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 indirectly stakeholders. Families are impacted by whether or not the student is in school, 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. Employers in Panama are affected by how educated Panama's workforce is, so they are also stakeholders. 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 and is offering courses remotely. However, many students do not have reliable Internet access or any Internet access at all. Consequently, Oteima University would like to adapt their online English courses so that they are accessible to all students, including those with limited internet access. 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 other practical reasons such as scheduling flexibility for students who have extensive outside commitments and increasing the number of the number of students who can benefit from these classes. Our project goal is to help Oteima University keep its English program accessible to all students by expanding remote access while maintaining its quality and lowering dropout rates. To accomplish this, our objectives are to:

1. Gain insight into the needs, wants, and motivations of the students
2. Learn what the instructors think about student needs, factors in student retention, and the accessibility needs of the students
3. Identify strengths and weaknesses in the currently used online platforms.

3.1 Gain insight into the needs, wants, and motivations of the students

We want to better understand students' needs in regard to learning English to identify obstacles to success with remote learning. Our background research suggests that some of these obstacles include lack of Internet access, lack of technology, difficulty using technology, and time-consuming responsibilities outside of class. We also want to learn about broader student demographics so that our team can identify potential causes of these problems and solutions. For example, older individuals may be less comfortable with technology and struggle more with

remote learning. Our team wants to determine the scale of each of these issues and identify any additional issues that may be relevant as well.

Part of this objective is to determine the students' perceptions of their English classes, and uncover their likes and dislikes about the current program. In particular, we are interested in how students perceive the online coursework that Oteima University currently utilizes. Whether or not they find the current online programs useful and if they struggle to use it will inform our final recommendations.

Overall, in order to achieve this objective, we will investigate 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 will primarily collect the information by administering a questionnaire to students. Our team will distribute the questionnaire to students online with the help of the Oteima University staff, and will be offered in Spanish. Our group plans to contact a Spanish professor at WPI to translate the questionnaire. Our team will keep all results anonymous to preserve student privacy. In the questionnaire we ask students questions about basic demographic information, why they want to learn English, and what they think of the current English program. The full text of the questionnaire is available in Appendix B.

The questionnaire primarily consists of multiple choice and yes or no questions because we want to keep the questionnaire easy to fill out and easy to analyze. Students may leave open-ended answers in certain parts of the questionnaire, but no long essay-style answers are required

because we do not want any students to be discouraged from completing the questionnaire. Although detailed information is important, we want to have a large enough sample size to help provide us with a wide range of responses. This is also why we chose to use a questionnaire instead of interviews.

We will look for different groups of opinions between different demographic groups and to gain information on the difficulties that students report. Our primary goal for this objective is to identify the problems that the students face as well as what they think works well, which will ultimately guide our recommendations for solutions.

One limitation to this is that we may be unable to reach students who do not have sufficient Internet access if we plan on distributing the questionnaire online. This is an important group of students to learn from, but due to COVID-19 we may not be able to get contact with these students. There is also some risk of poor translation affecting the results, so we will work with a translator to convert the questionnaire into Spanish and to interpret the results. Another risk is that there may be a self-selection bias among students who complete the questionnaire. Students with poor experiences may be more likely to respond to the questionnaire, so we included questions to help gain perspective on their overall experience.

3.2 Learn what the instructors believe will improve student outcomes

Although we will be making recommendations, the administration will have the final say and much of the implementation will ultimately be done by the faculty. We also expect the instructors to have a different perspective from the students on why some students don't succeed.

The research questions we intend to study for this objective are:

- What do the faculty think about effective ways to learn English?

- How many of their students have accessibility concerns?

- What challenges do they notice with remote learning?

- What do they think of the online learning platforms that they are currently using?

- Are there any specific parts of the program they would like to see changed?

In order to achieve this objective, we will conduct semi-structured interviews with three to five professors within Oteima University's ESL department. We plan to contact department heads to assist us in consulting professors teaching at varying levels of the program. This will ensure we are getting information that will benefit all of the English classes, rather than just the higher or lower level ones. We will schedule these interviews before we arrive in Panama to assure we maximize the efficiency of our two weeks in David. All interviews will be kept confidential to protect privacy. Our group has developed questions intended for a thirty-minute interview that covers all of our key points, as well as a couple "soft" questions to build rapport. The structured questions and informed consent document can be found in Appendices A and C.

We decided to use semi-structured interviews because we want to learn from the instructors what they consider to be the main problems, so an overly rigid approach might not allow us to gain their full perspective. A completely structured interview might cause us to focus too much on topics that the instructors don't think are relevant and doesn't allow for them to contribute information not covered in the structured questions. However, a completely unstructured interview might not yield relevant information, so we chose semi-structured, which also guarantees us a standardized level of information. We intend to ask questions to lead them through the general topics that we believe they may have issues with, steering them in the direction of discussing useful information without preventing them from sharing their full

perspectives and offering up new information. We will rotate between group members to determine who will take notes on the interview.

After collecting the data, we will compare results between different professors. We plan to achieve this by first identifying phrases used by the professors in the interviews. From there, we will categorize those response words into positive and negative feedback and try to find patterns within those responses. Finally, through our assessment of the interviews we will have a good understanding of the main issues shared by the professors and will make recommendations based on those findings. These recommendations will reflect how the faculty feel about the current programs. We will also create a similar phrase mapping for the interviews that we conduct with the students and we will be able to compare the findings from the two groups and look for discrepancies between the student responses and the instructor interviews.

3.3 Identify strengths and weaknesses in the currently used online platforms

It is important for us to get a full understanding of how well the online platforms Oteima University currently uses are working so we can make an appropriate recommendation. We want to get a variety of different perspectives on this issue including those of students and Oteima University's faculty. By identifying the specific problems that Oteima University currently has, we can direct our research into solutions. We hope to achieve this goal by answering the following research questions:

- How well do their current online programs work?

- Should they change their current system?

We will gather this information by assessing each of the online learning systems that Oteima University currently uses. We will make assessments based upon instructor perceptions,

student opinions, information provided by the platform itself, and educators thoughts on the platforms. After gathering this information, we will compile the results to qualitatively rate each platform on accessibility, engagement, effectiveness, and any other qualities we deem relevant. From there we will begin to assess what our best options are in order to address the problems we uncover.

3.4 Conclusion

In conclusion, our team will gather data from the Oteima University community that will aid us in making sound recommendations in order to better the Oteima University English program. Specifically, our goal is to help Oteima University keep its English program accessible to all students by expanding remote access while maintaining its quality and lowering dropout rates. We intend to accomplish this through the use of the aforementioned questionnaire and interview style. After gathering this information, we will analyze it by looking for keywords in the data. This will inform our final suggestions to the Oteima University administration.

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Appendix A: Informed Consent Script

Considerations:

- Remain neutral on the subject. Ask open-ended questions that are not leading in any way.
- Make sure the interviewee is aware they can remain anonymous if they choose. This will hopefully ensure their answers are honest.
- If the interviewee appears to be uncomfortable with a question, do not pry, just move to the next question.

Introduction:

Hello _____. We are American students from Worcester Polytechnic Institute doing a research project on increasing the accessibility of Oteima University's English as a second language program. We are working with the University in an attempt to expand current classroom efforts to online platforms. We would like to interview you on _____. If it's okay with you, could we get your permission to record this interview on our phones to make sure we capture your responses? If you would rather not, it's perfectly fine, we can just take notes instead. Any information you share with us is completely confidential and will only be used for research purposes with your permission. Do we have your permission to quote you in our report? You have the option to remain anonymous. We will not identify you by name in any of our writing to make sure the information you share with us is confidential unless you would like to be quoted.

Our report will summarize current online efforts by the University and make recommendations on how to improve these practices with the data we collect. Our recommendations aim to reduce accessibility issues students are having through the expansion to more online classes. It will be available online after we finish writing it, and we can also email it to you if you wish. 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 don't understand our question, let us know and we can try to rephrase. Do you have any questions for us before we begin?

Date/Time:

Location:

Interviewers:

Interviewee:

Interviewee Role: _____

_____

Appendix B: Questionnaire Forms

Sample Student Questionnaire

Questions (Demographics)	Answer
What is your age?	
What is your gender identity?	
Where do you live when off campus?	
How many years have you been studying at Oteima University?	
Do you have daily access to the internet at your off campus residence?	
Are you currently employed?	
If so, how many hours a week on average do you spend working?	
On your average week, how many days do you use the internet?	
Indicate any additional other time-consuming obligations such as (Caretaker, dependants, etc.)	

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I think that English will help with future job opportunities in Panama.					
I think that English will help future job opportunities outside of Panama					
I believe that adding more online resources to the English courses at Oteima will benefit the program.					

I have consistent access to a computer/laptop					
I have consistent access to a smartphone.					
I have consistent access to a personal tablet.					
I think the program Google Meet is beneficial to my learning.					
I think the program Moodle is beneficial to my learning.					

Question	**Answer**
Do you have significant internet access issues when not on campus?	
What do you like about your English classes at Oteima University?	
What would you change about your English classes at Oteima University?	

Appendix C: Sample Faculty Interview Questions

Question	Yes	No
Do we have permission to record this interview?		
Can we anonymously quote you in our report?		
Would you like us to share our paper with you when it is complete?		

Faculty Interview Questions:	Notes on Response:
Some kind of warm-up question	
If you could make any changes you want to the English program, what would you change?	
What do you believe is the main cause of dropouts at Oteima University?	
What online learning platforms are you using now? What do you think about these tools? (Try to get feedback on all of them)	
Do you think a significant number of your students have Internet accessibility problems? How many? What type of problems?	
What do you think the biggest obstacles are in keeping students engaged in remote classes?	

Conclusion:

Thank you for talking with us today and for participating in our research! Was there anything in the interview that you think we missed or wish we would have talked about more? Do you want to review our notes and transcript of the interview? Is there anything else you would like to add? You can always reach us at (emails/phone numbers) and you can also contact Oteima University to ask for us (contact info). Thank you for your time.