UNIVERSIDAD TÉCNICA DEL NORTE

INSTITUTO DE POSTGRADO

MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS MENCIÓN INGLÉS

Use of interactive resources in a self-learning platform for Pre-A1 Beginner students: A qualitative analysis

A Master Thesis

Submitted in Partial Fulfillment of the Requirements for the

Maestría en Pedagogía de los Idiomas Nacionales y Extranjeros: Mención inglés

AUTHOR: BERNARD GEORGE FASSETT VELASCO, B.A.

DIRECTOR: ERNESTO Jr. SANTOS RAGUS, M.Sc.

IBARRA - ECUADOR

2020

Thesis Director and Advisor Approval

As thesis director and advisor of the work presented by Bernard George Fassett Velasco B.A., to opt for the title of Magister in Pedagogy of National and Foreign Languages: Mention teaching English, we attest that such work qualifies and holds sufficient merits to be submitted for public presentation and evaluation by the designated examining jury.

En la ciudad de Ibarra, el 4 del mes de mayo de 2020.

In the city of Ibarra, on May 4, 2020.

Ernesto Jr. Santos Ragus, MSc.

CC 1715344527

Boris Cristian Cadena Murga, MSc.

CC 1712233830

Examining Board Thesis Approval

"Use of interactive resources in a self-learning platform for Pre-A1 Beginner students: A qualitative analysis"

Author: Fassett Velasco Bernard George

UNIVERSIDAD TÉCNICA DEL NORTE

BIBLIOTECA UNIVERSITARIA

AUTORIZACIÓN DE USO Y PUBLICACIÓN A FAVOR DE LA UNIVERSIDAD TÉCNICA DEL NORTE

1. IDENTIFICACIÓN DE LA OBRA

En cumplimiento del Art. 144 de la Ley de Educación Superior, hago la entrega del presente trabajo a la Universidad Técnica del Norte para que sea publicado en el Repositorio Digital Institucional, para lo cual pongo a disposición la siguiente información:

DATOS DE CONTACTO			
CEDULA DE IDENTIDAD:	1713215331		
APELLIDOS Y NOMBRES:	Fassett Velasco Bernard George		
DIRECCION:	Escuela Politecnica Nacional, Edificio Aulas y Relación con el Medio Externo, Av. Toledo N23-55 y Madrid; Quito-Ecuador; Postal Code 170525		
E-MAIL	bfassett@cec-epn.edu.ec		
TELÉFONO FIJO	022443968	TELÉFONO MÓVIL	0995021281

DATOS DE LA OBRA	
TÍTULO:	Use of interactive resources in a self-learning platform for Pre-A1 Beginner students: A qualitative analysis
AUTOR (ES):	Fassett Velasco Bernard George
FECHA:	4 de mayo del 2020
SOLO PARA TRABAJOS DE GRADO	
PROGRAMA:	☐ PREGRADO ■ POSGRADO
TÍTULO POR EL QUE OPTA:	Magíster en Pedagogía de los Idiomas Nacionales y Extranjeros: Mención inglés
DIRECTOR:	Ernesto Jr. Santos Ragus, MSc.

2. CONSTANCIAS

El autor (es) manifiesta (n) que la obra objeto de la presente autorización es original y se la desarrolló, sin violar derechos de autor de terceros, por lo tanto la obra es original y que es (son) el (los) titular (es) de los derechos patrimoniales, por lo que asume (n) la responsabilidad sobre el contenido de la misma y saldrá (n) en defensa de la Universidad en caso de reclamación por parte de terceros.

Ibarra, a los 22 días del mes de abril de 2021

EL AUTOR:

Bernard George Fassett Velasco
ID # 1713215331

Dedication

After having completed a grueling two-year journey full of adventures, surprises, and drawbacks; but mostly full of emotion and success, I believe it is the moment to make a pause and look back for a minute. In this moment of joy and recognition I wish to thank and dedicate this work to four people who supported me unconditionally through this journey.

First and foremost, I wish to dedicate this work to my family, who have always been there for me during this long and, many times, exhausting journey. Special thanks to my wife Cristina, for her unconditional support and encouraging words every time I needed a push to keep going. To my kids for understanding that the sacrifice of many nights and weekends without their dad was for a greater good and benefit for all of us. Thank you for being my inspiration. Thank you Bernardo José for understanding and supporting me, even when you had to sacrifice time that you would have wanted to spend with me. In addition, thank you Camila for showing me that the effort was worth it, by emulating it with your own school work. Finally, thank you Mateo for showing me the greatest joy in the world every time I came back from class and you said Papaaaaaa!

I just want to shout out loud We all made it!

Bernard George Fassett Velasco

Acknowledgements

I wish to thank all the staff and faculty at the UTN Postgraduate Institute for all the support and help during the course of my Master's program. The knowledge attained during the program has been of crucial importance to develop this investigation.

Also, to my Thesis Director and personal friend, Ernesto "Jun" Santos, MSc, who guided me through the course of this investigation, helping me to attain a high quality product; useful for future generations to come. His professionalism was demonstrated every step of the way.

Finally, my partners, Rebecca Avalos and Mónica Viteri, for their support and help with the proofreading of different tools used throughout this research and the final report.

Contents

Tables

Figures

Abstract

Use of Interactive Resources in a Self-Learning Platform for Pre-A1 Beginner Students: A Qualitative Analysis

Author: Bernard George Fassett Velasco

e-mail: bfassett@cec-epn.edu.ec

The following research examines the factors that affect Generation Z learners, who are native users of technology, in their learning process when using technology as a tool. This research focused on how to use technology aided self-learning activities for Gen Z Pre A1 Beginner level students. For the research, a Qualitative Action/ Participatory Research, that used interviews and observation as research tools was used. Two research questions were defined (1) How do interactive resources help Generation Z Pre-A1-Beginner students develop self-learning skills for learning a foreign language? (2) What is the teacher's perception on the dynamics change of a class for Generation Z Pre-A1-Beginner students using flipped method? The researcher chose an initial sample of 20 students, who met the criteria of age range for Gen-Z, using a non-probabilistic methodology. To gather data, there were two interviews with the teacher and one interview with students; also an observation of one class. The results analyzed how Centennials interact with different stimuli in the process of learning. Relevant information about Gen Z as well as teachers' perceptions are presented. The research found five main topics from the teacher and students point of view: (1) the experience using self-learning models with technology, (2) preferences and readiness from the participants, (3) usefulness of self-learning methodology and technology, (4) training required for using self-learning methodology and technological tools, (5) and motivation to use self-learning methodology and technological tools for the course. Teacher training proven to be one of the key factors needed for a successful application of the model.

Keywords: Generation Z; Self Learning; Blended Learning, Technology; Flip Model; Moodle

Resumen

Uso de Recursos Interactivos en una Plataforma de Autoaprendizaje para Estudiantes de Nivel Principiante Pre-A1: Un Análisis Cualitativo

Author: Bernard George Fassett Velasco

e-mail: bfassett@cec-epn.edu.ec

La presente investigación examina los factores que afectan a los estudiantes de la Generación Z, quienes son usuarios nativos de la tecnología, cuando utilizan tecnología como herramienta en su proceso de aprendizaje. Esta investigación se centró en cómo utilizar actividades de autoaprendizaje asistidas por tecnología para los estudiantes de la Generación Z de nivel principiante Pre A1. Se realizó una investigación cualitativa de Acción/Participación, que utilizó entrevistas y observaciones como herramientas de investigación. Se definieron dos preguntas de investigación (1) ¿Cómo ayudan los recursos interactivos a estudiantes principiantes Pre-A1-de la Generación Z a desarrollar habilidades de autoaprendizaje para aprender un idioma extranjero? (2) ¿Cuál es la percepción del profesor sobre el cambio de la dinámica de una clase para los estudiantes principiantes Pre-A1-de la Generación Z usando el método invertido (FLIP)? El investigador eligió una muestra inicial de 20 estudiantes, que cumplían con los criterios del rango de edad para la Gen-Z, utilizando una metodología no probabilística. Para recopilar datos, se realizaron dos entrevistas con el profesor y una entrevista con los estudiantes; también se realizó una observación de una clase. La investigación encontró cinco temas principales desde punto de vista del profesor y de los estudiantes: (1) la experiencia utilizando modelos de autoaprendizaje con tecnología, (2) preferencias y preparación de los participantes, (3) utilidad de la metodología y la tecnología de autoaprendizaje, (4) formación necesaria para el uso de la metodología de autoaprendizaje y herramientas tecnológicas, y (5) motivación para utilizar la metodología de autoaprendizaje y herramientas tecnológicas para el curso. La formación del profesor ha demostrado ser uno de los factores clave necesarios para una aplicación exitosa del modelo.

Palabras Clave: Generación Z; Auto-Aprendizaje; Aprendizaje Mixto, Tecnología; Modelo Invertido (Flip); Moodle

Chapter I

Introduction

Learning English is of uppermost importance in today's world. English is the language chosen for Business, as over 1.75 billion people speak it at a useful level; making of English the fastest expanding language of all time. Many multinational companies are using it in an effort to facilitate communication between employees and offices around the world (Neeley, 2012). Also, English has become the language of Science, as it allows scientists to focus on learning only one language to understand other scientists around the globe (Gordin, 2015). Yet, English language learning in Latin America still ranks at a very low proficiency level even though countries in Latin America have a very solid legal support; six out of the ten countries have laws that determine schools must teach English and the rest of the countries promote English learning (Cronquist & Fiszbein, 2017). Ecuador is one of the countries with very solid language requirements in Latin America.

The Ministry of Education of Ecuador started a project for strengthening the learning of English. For this purpose, the program design included new approaches to teaching, considering a communicative approach, content and language integrated learning (CLIL), international standards, development of thinking skills, and a learner-centered approach. The main objective of this curriculum design is to prepare high school students to be active participants in a globalized society focusing on life, work, and entrepreneurship skills (Paredes et al., 2015). As it is clear throughout the whole document, the Ministry of Education of Ecuador's point of view is to change education in order to match it to the requirements of a globalized society. This will undoubtedly lead to the need of defining the role of technology in this matter.

Technological improvements are changing lives and the way to share and access information. According to the *Agencia de Regulación y Control de las Telecomunicaciones*, ARCOTEL in Ecuador, as of September 2018, there are 9'059.204 mobile internet accounts (Ministerio de Telecomunicaciones y de la Sociedad de la Información, 2018a), and total internet access penetration is 64.69% (Ministerio de Telecomunicaciones y de la Sociedad de la Información, 2018b). This means almost seven out of every ten houses have internet access in Ecuador. On the other hand, education worldwide has started to adapt new approaches such as the flipped model introduced by Jonathan Bergmann and Aaron Sams in 2007, which uses technology as a tool. Furthermore, this trend is not an isolated event, because new generations are eager to learn and use technology.

Generation Z, also known as Centennials, are native users of technology in their daily life and expect to use it inside and outside of the class (Josuweit, 2018). This is also the student group that the new English Curriculum of Ecuador is aiming for in order to move towards a globalized society (Paredes et al., 2015); keeping in mind that the flipped classroom methodology shifts from a teacher-centered approach to a much more interactive learner-centered approach, where the use of technology is a constant. On the other hand, Pre-A1 students, according to the Common European Framework of Reference (CEFR) (2018, p. 46), are learners with a proficiency level where they do not have the capacity to produce communication and the understanding and interaction is limited to a basic selection of words or fixed phrases (see Appendix 1). The purpose of this study is to explore the possibility of using different interactive activities through technology to help Pre-A1 Beginner students to develop self-learning skills when learning English as a foreign language.

The Problem

1.1. Problem Statement

At Centro de Educación Continua de la Escuela Politecnica Nacional (CEC-EPN), there is an English placement exam, developed by Cambridge University for the Interchange series. Through this placement exam, CEC-EPN authorities established that a grade under 30 corresponds to a student that should be placed at a Beginner (Pre A1-CEFR) level. However, what this test cannot determine is if there is a gap among students placed in the same level. First, there may be a generational gap, which means that Generation Z and other generations require different strategies, methodology and techniques in order to learn a foreign language. Second, teachers may need to develop these strategies, methodology and techniques to help students in their learning process. Third, technology is rapidly gaining space in classrooms and the use of new technology may not be optional anymore.

1.1.1. GEN Z: Analysis of a generation

Beginners (Pre A1-CEFR) have gaps that affect their language learning process. From the language knowledge perspective, these students can be divided into two very distinct groups: A first group can be called “True Beginners”, who are students with no or very limited prior contact or exposure to the English language. The other group, who we may refer as “experienced beginners”, has had some contact with the target language; although, it has been insufficient in order to attend a higher level. This gap affects the first group for the reason that the material used to teach does not cover all the information that these students require to level up with the knowledge of the second group. On the other hand, the possibility of identifying all the gaps among students in both groups simply by administering a placement exam may result difficult; leading towards the need to understand the differences between generations.

Most likely, the greatest gap among Beginners (Pre A1-CEFR) is not related to language knowledge but rather to a generational gap. Learning characteristics among different generations, such as the G.I.; Silent; Boomers; 13er, or X; Millennials, or Y; and Centennials, or Z (Fishman, 2015; Howe & Strauss, 1992), must be considered when organizing and planning a class. Generation Z or Centennials is the way to call the latest generation of students who were born between 1995 and 2015 (4 to 24 years old). These students expect more interactivity as the class develops and learning takes place, due to their native technological background (Josuweit, 2018).

Regardless of the generation, all students have different needs for learning a foreign language as well as different methodologies that work better in each case. These methodologies may lack of material adequately designed and used with different generations. Therefore, it is of great importance to identify possible activities and methods that Gen Z learners may expect to find through their learning experience and that they may more adequately benefit from.

1.1.2. Teaching expectations

Since the beginning of formal education, where the standard procedure was sitting in a chair and desk writing everything that the teacher wrote or said, is not enough anymore. Teachers, as well as students, expect to mutually benefit from the learning experience. Understanding and applying different methodologies and theories is a much better strategy, especially with new generations such as Gen Z. Yet, believing that only one method or theory is the only way to teach or lean may also be a mistake. For this reason, it is of uppermost importance to understand the learning theories behind the different methodologies developed up to date.

Understanding the learning theories is a very solid first step in order to understand what is expected today in teaching. There are three main streams to what is known as learning theories: Behaviorism, Cognitivism, and Constructivism. The first two, are usually considered as part of a higher philosophical order known as objectivism and the latter is referred to as the opposite; constructivism (Jonassen, 1991). An interesting fact is that, even though these constructs are seemingly opposites, each one is built upon each other. From these constructs, certain methodologies such as Audio-Linguistic, Presentation, Practice and Production (PPP), the Communicative approach, Task-based Learning, humanistic teaching, and the lexical approach among others have evolved (Harmer, 2001).

The tendency nowadays pushes learning methodology and techniques towards Self-regulated learning (SRL). The belief is that SRL is an ability to learn on your own, but in fact SRL has no direct relationship with the skills and is by no means a capacity or an ability, self-learning is a process by which the learner can self-regulate his/her learning process. In addition, a learner develops skills and therefore knowledge through a self-regulating process (B. J. Zimmerman & Schunk, 2001).

After having understood the expectations of GEN Z and the different methods that a teacher may use to teach them, it is now time to understand how technology may adapt to this teaching environment.

1.1.3. Technology and new methodologies in teaching

Technology in teaching is not something new. For many years, teachers have been using movies, music and fancy presentations to draw students´ attention and teach them in a more efficient manner. Nowadays, all of these activities are what is minimally expected in a classroom. However, designing the type of extra material that these students may need in order to optimize their learning and fill-in those gaps, is not an easy task. Considering the difficulty

to identify gaps, it is important to analyze the learning possibilities that technology may add for helping students acquire an L2 with the aid of technological tools.

The growth of the internet in the past years has evolved and exponentially changed the way to access information. Social networks have changed the way we communicate and research any given topic. According to Internet Live Stats (2019), over 40.000 searches are processed every second, which means over 1.2 trillion searches worldwide every year. Generations such as late-Millennials and Centennials are technologically savvy, as they were born into a technology-driven world; in other words, these generations are native to technology (Josuweit, 2018). Nevertheless, classrooms are not fully reflecting these generational needs in the learning process.

To sum up this section, it is important to have a clear picture of how the new generations, and especially Gen Z, expects to learn. Centennials, being native as they are to technology, expect to use it in every type of daily activity. Teaching methodologies have changed and evolved into the use of different techniques from which technology is part of. Nonetheless, the needs of latter generations and teaching methodologies that involve the use of technology routinely appear to lack the convergence required. Therefore, the challenge is to focus on finding a way to blend the needs of Gen Z students with the technology and teaching methodology available.

1.2. Background and Need (Justification)

The importance of this research related to the inadequacy of self-learning material use at CEC-EPN, which may also be the reality for the rest of English Teaching Centers in Ecuador. If any material is being used at all, it is mostly taken from existing foreign materials developed by other teachers or companies but with no connection from one to another. Self-learning has been limited to workbooks and homework repetition exercises. Most online platforms, such as

Cambridge Arcade, among others, mainly focus on repetition activities. Although repetition is not necessarily negative, it may result insufficient for generations such as Gen-Z. In other words, this research is important due to the fact that it will help to understand the importance of using self-learning interactive materials for Pre A1 Beginner levels.

1.2.1. GEN Z: Analysis of a generation

As mentioned before, not only may different generations approach the learning process in different ways, there are also different sub-groups within the same generation. "True beginners" may require different approaches than "experienced beginners". Therefore, choosing the material needs to take into account the different needs of both groups.

Considering the generational learning characteristics presented by Barnes and Noble and an independent investigation by the Marketing department of CEC-EPN, the selected material needs to include certain specific components. The material needs to be designed for collaborative learning, due to the fact that 80% of the learners prefer to study with friends (Josuweit, 2018). In addition, this group of learners expects to have learning experiences outside of the classroom, mainly through technology. Both Josuweit (2018) and Bedoya (2019) talk about the desire of students to complement their learning through self-learning material. Although they both fail to explain if that material is only printable material, interactive material or both; therefore, the need for this research to focus on such an important issue and clarify the effect of interactive material.

1.2.2. Teaching expectations

As it was mentioned in section 1.1.2, the evolution of methodologies from Behaviorism to Constructivism and beyond, are not isolated issues. Most of these theories build-upon one or more previous theories (Jonassen, 1991). Nevertheless, theories are nothing without the human factor, represented by teachers. Therefore, it is of paramount importance to understand

that the application of some of these methodologies during this research is necessary. Simultaneously, teachers need to be considered a part of this equation, as they are the backbone to success.

Along with some other theories mentioned previously, and considering the interests and expectations of Gen-Z learners, we need to consider four different factors that may affect the outcome of this research and the understanding of the results. These additional theories being; he theory of proximal influence (McLeod, 2019; Vygotsky, 1978b), interlanguage (Richards & Schmidt, 2002), the theory of acculturation (Schumman, 1985), and the theory of motivation (Harmer, 2001). Although, all of these models will be addressed in depth in the following chapter, it is important to analyze motivation as a key factor.

Since students expect to be motivated to learn, both in and outside the classroom, teachers need to design a class that will positively affect learners in various aspects. Such aspects are defined as: affect, agency, achievement, attitude, and activities (Harmer, 2001). However, motivation does not only refer to learners, but also to teachers. Therefore, in order to come up with authentic materials, teachers also need to find the right motivation, and furthermore, the right training.

Many times, as it will be analyzed later on in Chapter 2 teachers are ignored or simply not taken into consideration when applying some of these methodologies within a classroom. Teacher training and socializing possible applications of any or all the techniques developed up-to-date may become useless without the participation and collaboration of the teacher. Therefore, teacher training may also play an important role in the use and application of authentic self-learning material with Gen Z students.

1.2.3. Technology and new methodologies in teaching

As explained earlier, the use of technology in classes that involve Gen-Z students is of uppermost importance, due to their expectations towards these tools. However, technology goes beyond the use of movies or downloadable activities. The use of interactive platforms and/or activities is key drawing the attention of learners, especially Gen-Z learners. Among many others, a platform that stands out from the pack is Moodle.

The use of a tested online platform such as Moodle is key in order to build a solid interactive system. The support for teacher training is also guaranteed, as there is a lot of free material to explain how to upload activities. Therefore, the complications stated by Richardson (2011), that will be analyzed further in Chapter II, are minimized. Minimizing the complications will generate a higher level of motivation in teachers; and ultimately, better results in the materials and activities that are uploaded to the platform.

On the other hand, the chosen interactive activities need to fulfill the expectations of the learners, and technology is a great mean to that end. Gen-Z learners expect different activities not, only inside the classrooms, but also outside of them as well. Due to this fact, the key factor is to take into account what they really want, which is additional exercises and enhancement activities, interactive games, podcasts, interactive lessons, and interactive videos (Bedoya, 2019; Josuweit, 2018).

1.3. Purpose of the Study

How to use interactive resources with technological platforms to help Generation Z Pre-A1-Beginner students develop self-learning skills for learning a second language at CEC-EPN.

1.3.1. General objective

To explore the possibility of using different interactive resources through technology to help Generation Z Pre-A1 Beginner students develop self-learning skills when learning a foreign language.

1.3.2. Specific objectives

Considering the general objective stated previously, the steps to be taken in order to achieve the suggested objective are defined by the following three specific objectives:

- To choose the activities, material and technological platform to be used during the research that are useful for self-learning using the flipped classroom or blended model.
- To organize self-learning material in an intuitive manner, which allows students to use it without a high level of participation from the teacher.
- To evaluate peer collaboration both inside and outside of the class.

1.4. Research Questions

In order to understand how self-learning using technology can help students and teachers, there are two questions that require to be answered:

1. How do interactive resources help Generation Z Pre-A1-Beginner students develop self-learning skills for learning a foreign language?
2. What is the teacher's perception on the dynamics change of a class for Generation Z Pre-A1-Beginner students using flipped method?

1.5. Significance

This research is significant on the grounds that it will help students that start learning a foreign language to attain short and long-term benefits. It is also significant for teachers who

want to develop material for their students, which will help them throughout their learning process. Both long-term and short-term advantages may result similar to those observed by Kuksenok, Brooks, Wang, and Lee (2013) or Chen, Chao, and Hung (2018)

In the long-term, students may develop self-learning skills and the ability to use interactive tools to enhance their own process based on their unique abilities. In addition, they will have an interactive study or review guide available for them at all times. Nevertheless, teachers may also have long-term advantages. Preparing classes may become easier as many activities are ready to use systematically and do not require much change or preparation.

On the other hand, short-term benefits for students may include, but not limit to, moving classes from a traditional classroom to their personal space, where they may feel more comfortable (Josuweit, 2018). This change may allow students to realize that learning can happen anywhere, keeping them alert all the time. Teachers, on the other hand, may also have access to immediate feedback and could solve problems faster and more efficiently. This could change the teaching process itself.

The process of teaching needs to adapt to the changes that are occurring daily, and one way to do so may be by entering the one place where information is always available, the internet. However, there must be guidance along the process. Online interactive activities are a connection between the classroom and the digital world. This study will address the research gaps mentioned earlier by using technological tools that may be used "on demand" by the students. It is important to consider the potential replicability that may occur from the outcomes of this research for other courses, levels, and institutions.

1.6. Definitions

The different learning theories from which all the methods and models evolve or are built upon are basically three: Behaviorism, Cognitivism, and Constructivism. ***Behaviorism*** is a

learning theory that believes that only observable behaviors are valid, any independent activities are not considered valid. Learning is based only on the acquisition of new behaviors based on surroundings (Baum, 2004). ***Cognitivism***, on the other hand, is related to the psychology of learning which focuses on human cognition or intelligence that allows human beings to develop intellectually (Feldman, 2016). ***Constructivism*** is a learning philosophy where the learner builds mental models based on the reflection of his/her own experiences and understanding of the world around him/her. (Brooks & Brooks, 2001).

From these three main streams, many new models have risen. For the purpose of this investigation, there are three models in particular that are important to define due to the close relationship with new generations, the Blended Model, Flipped learning, and Self-Regulated Learning. The ***Blended Model*** is a combination of classroom and online activities, which are usually internet based and help learners with a continuous process outside of the classroom (Evseeva & Solozhenko, 2015).Additionally, ***Flipped Learning*** refers to a pedagogical approach by which a person learns independently and exchanges activities with other learners through any given online learning management system. Learning moves from a group learning space to an individual learning space (Kim et al., 2014) (Ramirez, 2017). ***Self-Regulated Learning (SRL)*** is related to the ability of a person to understand and control his/her own learning environment (Zimmerman, 1989). For the purpose of this study, the Flip method was chosen to apply the concepts of Self Learning (SRL) throughout the research. Therefore, when referring to the flipped method or any application of it, it can be also interpreted as Self-Learning (SRL).

Although understanding the different methodologies is important, it is key to have a clear understanding of the learner to whom the methodology is applied to. For the purpose of this research, defining Generation Z learners and Pre-A1 CEFR level is the next step. ***Generation Z*** also referred as GEN Z, is known as a sharing generation and the generation which uses

technology all the time. They were born between 1995 and 2015 (Josuweit, 2018). According to the Council of Europe and their Common European Framework of Reference (CEFR), ***Pre-A1***, refers to a level of proficiency where the learner has no capacity to produce communication and all his understanding and interaction is limited to a basic repertoire of words and fixed expressions (Council of Europe, 2018, p. 46).

1.7. Limitations

Due to the type of investigation, the information gathered will have certain limitations inherent to the type of research. Among the most important limitations, the following three are of uppermost importance; lack of quantitative data, time restriction and a limited sample. The lack of quantitative data does not permit any kind of statistical analysis. Therefore, no control group will be used and any results will be focused on the specific target group. In addition, the short timeframe for the investigation implies that the analysis and data gathering must be very thorough in order to attain results. The sample, on the other hand, has to be carefully selected in order to minimize the limitation regarding the size of the sample. Further investigation will be required for generalizing and applying the methodology on a larger scale.

In addition, there are certain conditions related to the participants that may present possible limitations. From the learner's perspective; the ability to use a computer, having a computer at home, and assigning time for the activities present serious limitations that need to be considered. Moreover, the knowledge the teacher may have, or lack needs to be taken into account as well. If any or all these limitations are present, we might experience some complications during the research process.

Chapter II

Literature Review

The following research aims to explore further the possibility of using different interactive activities through technology to help Pre-A1 Beginner students to develop self-learning skills when learning English as a foreign language. The analysis focuses on the development of education in the use and application of technology in the classroom, as well as the new tendencies in education.

For a full comprehension, this main topic has been branched into three main research areas that were defined in Chapter One as GEN Z: analysis of a generation, Teaching expectations, and Technology in teaching. **GEN Z: analysis of a generation** includes statistical data on what people within this generation react to regarding different stimuli and what they expect from a class and their learning environment. This information will give an overview of what can be expected with the target group. **Teaching expectations** will include information regarding how people learn, and what type of factors affect them in their process. Factors such as behavior and motivation are some of the topics addressed in this section. **Technology and new methodologies in teaching**, on the other hand, addresses different options of using technology in a class. It also includes information on how teachers around the globe have used technology in the classroom. This area includes the use of any type of technology and it is not exclusively related to internet or software use. Finally, it will explain the use of technology in a Self-Regulatory Learning environment and how a flipped classroom will include material to develop self-regulatory learning in students. An explanation of the model and applications of it in real life classes will be analyzed in this section.

2.1. GEN Z: Analysis of a Generation

2.1.1. About Generation Z

Every generation has a name and certain characteristics that define it. G.I. (1901-1924), Silent (1925-1942), Boomers (1943-1960), 13er (1961-1981), Millennials (1982-1995) are some of the names used to define different generations (Fishman, 2015; Howe & Strauss, 1992). We are currently experiencing a new generation in the world. The biggest historical milestone lived by this generation is 9/11. Due to this particular event, technology started to invade their lives. Main changes between this generation and previous generations are defined by the use of technology from a very early age. Nowadays, they live a unique situation where everything they do is monitored through technology by their parents, making the generation overprotected (Fishman, 2015). On the other hand, the impact of technology, social media, and information access marks the road of this generation. They are known as Generation Z or the Centennial Generation. They are people born after 1995, which means that right now the early Gen Z´s are around 24 years old.

Generation Zers are people known to be a sharing generation and the generation exposed to technology all the time. The oldest members of this generation are now in high school and college. Their plans for education, careers and their personal lives are very ambitious and they expect to get meaningful experiences out of everything they do. Do to this search of meaningful experiences, Gen Z is the most independent generation up to now. Their known independence does not classify them as unsocial. On the contrary, they are always interacting with other people. Their decisions are independent but well informed, turning to internet in search of information that will help them improve their experiences and knowledge, allowing them to have better informed opinions and decisions (Josuweit, 2018).

Barnes and Noble College financed a research project on Generation Z in order to understand factors that must be taken into account, as they are the new generation of students. Some of the most important findings about Generation Z are that Generation Z are independent, motivated, creative, collaborative, energetic, practical and financially driven. Interviewees have strong opinions and preferences for how they learn and what they expect from their educational experience. They are independent and self-reliant, and are open to do things differently, working both in and beyond the classroom. They have an innate ability to self-educate and co-create content with peers, traditional learning materials may be supplemented and enhanced with digital opportunities. They are characterized by having good relations among themselves and with faculty members. Of all the members of this generation, 35% already have their own businesses. Please refer to Table 1 for student study preferences (Josuweit, 2018).

Table 1
Students Preferences for Study

Percentage	Answer given
80%	Prefer to study with friends
67%	Believe it is more fun to study together
60%	Like to exchange ideas with peers
52%	Like to help peers in their learning process
40%	Study with peers either in person or online

Source:(Josuweit, 2018)

In the same study, Josuweit (2018) mentions that interviewees are more engaged with interactive activities and need to feel empowered in their own learning. They expect to have technology as a main tool in this process rather than traditional textbooks and printed material. See Table 2 for a detailed summary of Gen Z's educational technology preferences. When analyzing the helpfulness of educational technology, "Smartboards" receives 84% and "Do it yourself" learning receives 81% of the total from those students who participated in the survey. See Table 3 for full results.

Table 2
Educational Technology in the Classroom

Technology in the classroom	Percentage
Websites with study materials	64%
Dvd	50%
Smartboards, digital textbooks	46%
Online videos	45%
Learning websites	42%

Source:(Josuweit, 2018)

Table 3
Helpfulness of Technological Tools in Class

Technology Helpfulness	Percentage
Smartboard	84%
DIYL "do it yourself learning"	81%
Digital textbook	81%
Website with study materials	81%
Online videos (YouTube, etc.)	80%
Game-based learning systems	79%
Textbook	77%
Social media/user-generated	74%
Skype	73%
Podcast	72%
DVD/movie	61%

Source: (Josuweit, 2018)

For the same purposes, the Marketing Department at CEC-EPN conducted a survey among their students from which 62% of the participants are in the Gen Z age group. Very important information may be extracted from this survey. First, learners would like to have virtual support, as 79% answered YES to the question concerning liking a virtual room, without an instructor, with additional exercises for their English course. Second, the most relevant information is what learners expect to have as additional material in a virtual environment, as 27% expect to find additional exercises, 19% want audios and 19% want interactive games. For the full chart, please refer to Table 4 and Appendix 2.

Table 4
Technology Reinforcement Expected at CEC-EPN.

Technology in the classroom	Percentage
Additional exercises and enhancement activities	27%
Interactive Games	19%
Podcasts (audio)	19%
Interactive lessons	18%
Interactive Videos	17%

Source: (Bedoya, 2019)

The results confirm the information presented by Barnes and Noble, giving credibility and contextual background, showing that the results are of generational origin and not of cultural origin, as many might think. Based upon this information, two conclusions arise immediately, it is very important to consider this data when choosing the sample in order not to add a new variable to the research, and the information attained could be the reflex of a generation and not just a specific case study referring to a specific environment.

2.2. Teaching Expectations

2.2.1. Relevant teaching theories and concepts

Since the beginning of what is now defined as formal teaching, many different theories and methodologies have emerged through times. Some of these methodologies have adapted through times and others have been discarded due to their obsolescence. This section will briefly introduce five of these current methodologies that may be relevant for the research: Motivation Theory, Skill Acquisition Theory, Proximal Influence Theory, and the Interlanguage and Acculturation Model.

2.2.1.1. Motivation theory – Jeremy Harmer

All parties involved with the learning process need to feel a connection with the class, their peers, and teacher in order to be productive and benefit from the class. In other words, learners and teachers need to feel motivated in order to maximize their learning/teaching experience. Motivation in learning is a theory developed by Jeremy Harmer in which the exchange of knowledge depends on the intention and desire to do something that will lead to success in this process. Motivation, according to this theory, has five main components: affect, agency, achievement, attitude, and activities(Harmer, 2001).

In order to motivate and influence learners positively in their own learning process, there must be an improvement in the five aspects of motivation. Affect can be improved by reducing

controlled teaching time and encouraging activities and class discussions. Furthermore, motivation may be improved with activities that have a balance between not being too easy and not being exhausting. Students may find repetitive activities to be boring. At the same time, achievement requires teachers to determine what type of achievement is important for their learners. Agency and attitude mainly come from outside the classroom; therefore, it is hard to motivate these aspects. Yet, teachers may want to allow learners to volunteer for certain tasks that will influence their motivation. Finally, attitude is not something that you can teach. Attitude has to be shown by the teacher in order to attain a response from the learners (Wyzant & F, 2014). Regardless of how the five previously mentioned aspects might influence motivation, there is another important issue that needs to be considered also as a very important factor, which is the sources of motivation.

Learners may attain motivation from four sources. First, society: what society thinks about the target language will affect learner motivation. Second, significant others: people who are close to the learner influence learning. Third, the teacher: motivation generated by the teacher is key for the learner, both inside and outside of the classroom. Finally, method: Both teacher and learner will develop confidence in the process if the method is mutually accepted by both parties.

There is no doubt motivation is important in the learning process. Therefore, it is of paramount importance to take into account motivation when designing the self-learning material for the platform. Considering the four factors from which learners find motivation: society, significant others, the teacher and the method; the chosen material should include different techniques that may motivate students.

2.2.1.2. Skill acquisition theory – Robert Dekeyser

Another important theory is Dekeyser's theory of skill acquisition. His theory is based upon three very specific stages: the cognitive, associative, and autonomous stages (DeKeyser, 2015). The first stage is the cognitive stage and it refers to the process in which the learner needs to think about the skill and how to execute it before doing any given activity. The second stage is the associative stage, in which the learner goes from asking "what" to asking "how"; in other words, learners experience fewer errors and are able to detect some of them on their own. Therefore, the person is able to focus more on the goal rather than the process of the activity. Finally, the autonomous stage occurs when the learner can manage the process naturally and effortlessly, without any need to think in order to achieve the goal (DeKeyser, 2015; Jackson, 2017).

Despite the previous explanation, according to DeKeyser, in order to acquire a full control over the skill, practice plays a very important role in the learning process. Practice will reduce the response time during the activity and it will also decrease error rate (Masumeh, 2014). Moreover, he explains that practice is not just a repetition of actions over a period of time, but also a type of exercise that helps improve performance. In other words, it is not a mechanical drill.

In conclusion, Dekeyser's theory can be applicable to this research because practice will allow a person to pass from one stage to the next, although not everyone may necessarily reach full mastery of the skill or skills being learned. The possibility of reaching such a level depends on fulfilling the three stages mentioned in his theory through continuous practice of the skill but not through repeating the same exercise over and over, as mastery depends on outperforming ourselves.

2.2.1.3. Proximal influence theory – Lev Vygotsky

Psychologists have studied the evolution of education for a long time; one of these psychologists is Lev Vygotsky. His studies on the learning processes align with Social Constructivism and led to understanding very important concepts such as assisted performance and the effects of peer collaboration in the process of learning. His theory of proximal influence proposes booth of these concepts.

Early studies in the field regarding the effect of interactions in learning can be seen in Jerome Bruner's instructional scaffolding. In a theory presented by Bruner in 1960, he states that learners can achieve knowledgeable experience from other individuals. Benefiting from other individual's knowledge allows learners to build up a stronger foundation for the new knowledge that they will attain later on (Seifert, 2011). In other words, Bruner believed that anybody could learn anything through a scaffolding process.

Yet, it was not until 1978 that a clearer theory was introduced when Lev Vygotsky explained his Theory of Proximal Influence. According to this theory, a child or novice is influenced by those who are considered better prepared or experts. Therefore, the support of being accompanied by an expert will increase the possibility of learning how to solve a situation or improve a learner's performance. For example, an experienced soccer player may teach a young player how to shoot a penalty better than if he tries to kick the ball by himself. According to Vygotsky, this performance difference, when a learner is assisted by an expert, is called the zone of proximal development (ZPD). In other words, ZPD is learning under assisted performance (Tharp & Gallimore, 1991).

Any person around the learner including him/herself can determine the zone of proximal development (ZPD). The key factor to define the ZPD is to know the current developmental status and what other skills to learn from that point on. Therefore, in order to determine ZPD

it is very important to evaluate the learner's capacities and understand what concepts or skills to develop next. The evaluation may take different forms such as asking and answering questions, pre-test, and observations. These evaluations will lead to define the adequate activities for enhancing the learning process in relation to the learners' ZPD (Vygotsky, 1978b).

ZPD is a valid theory regardless of the subject learnt. Understanding the fact that experts can influence learners lead to the possibility of learning success through collaborative learning. Collaboration as a tool for learning has appeared in many different investigations and papers, proving its efficacy. Nevertheless, Collaborative learning will be analyzed in more depth later on.

2.2.1.4. Interlanguage

Another topic that needs to be addressed further is Interlanguage. When a person learns a new language, a completely new linguistic system is activated in the brain that neither belongs to the first language nor belongs to the target language; this is known as interlanguage. According to Richards and Schmidt (2002) the language learning process is influenced by three sub processes that include borrowing molds from the first language, extending structures from the target language, and conveying meanings using known vocabulary and grammar. When these three processes activate, a whole new system emerges working in-between the two languages.

Interlanguage is a live system that evolves as the learner improves his/her knowledge on the target language. Moreover, this adaptation process transforms the interlanguage system closer to the target language system (Richards & Schmidt, 2002)., sometimes interlanguage overgeneralizes the target language rules. This overgeneralization may create obstacles that need to be addressed effectively in order not to affect the learning process. The interlanguage system is very similar to the process that babies create when learning their first language.

When a baby learns, he creates a system with a set of rules that gradually evolves until it becomes very similar to the system of an adult (Dürmüller, 2019), but some problems may be encountered on the way. During this process, the brain is constantly adapting rules according to new knowledge and new inferred or learned structures. However, sentences may still be incorrectly structured and inappropriate to use due to a factor called latent language structure. Latent language structure is defined by Selinker (1972) as a previously arranged structure in the brain that is activated when a person begins learning a different language. The second issue that affects learning is fossilization. Fossilization refers to certain structures or rules that a person will tend to keep from L1 to L2. Therefore, teachers need to keep in mind these issues for class planning.

When planning a class, it is important to remember the fact that behaviorist approaches use drills as the teaching method, and errors are equivalent to failure. Meanwhile, the interlanguage concept has opened a path towards communicative teaching methods. Mistakes are used as a reflection that modify the temporary coding generated within interlanguage and therefore a part of the learning process. Self-learning activities are possible, and group work and pair work are suitable means for language learning (Brown, 2007).

As teachers, identifying interlanguage and its issues is of uppermost importance in order to give proper feedback to our students. There are many mistakes that learners may have due to latent language or fossilization. Therefore, knowing these possible issues before hand, allows teachers to anticipate the situations and take proper measures to help learners. Students, on the other hand, have to allow themselves to make mistakes and let teachers help them in their learning process. Only working together, the learning process will be successful.

2.2.1.5. Acculturation model – John Schumman

Up to this point, four theories related to learning approaches have been analyzed. Yet, there is one more theory that must be addressed; the acculturation model. From all the theories reviewed up to this point, the acculturation model by John Schumman is probably the weakest and most controversial theory of all.

The acculturation model is a general explanation on how minorities may learn a second language. According to this theory, Schumann stated that the quality of contact between a learner and the community related to the target language depends on eight social variables: social dominance; assimilation, preservation and adaptation; enclosure; cohesiveness; size; congruence; attitude; and intended length of residence. There are also four psychological variables: language shock, cultural shock, motivation, and ego. Finally, from the motivational point of view, integrative and instrumental motivational factors are the two issues that also affect language acquisition (Chizzo, 2002).

This model has been severely criticized by other authors due to lack of clarity. Authors such as Larsen-Freeman and Long (1991) disagree with the Acculturation Theory because it does not explain how the combination of factors can affect the language learning process or how any of the psychological factors may predict language learning factors. Another thing that has not been considered in Schumann's model are the social and psychological changes that occur over time (Chizzo, 2002). Furthermore, there is no explanation on how factors vary from individual to individual, leaving an enormous gap between the theory and any possibility of testing or proving the model (Larsen-Freeman & Long, 1991).

The process of acculturation is not a fixed formula; it may have many different variations. Investigations show that individuals experience different levels and stages

when adjusting to another culture and elements may be combined in different ways. In addition the acculturation model does not include other personal factors such as age, family, migratory status, previous educational experiences, etc. (Coelho, 1998).

Because the variables are questionable, it is difficult to agree with Schumann's theory. Moreover, it is complicated to agree with the assumption that these factors can be generalized. Instead, the differences among individuals should be taken into account, something that the Acculturation Theory neglects to address. Also, globalization and technology have changed the perception of the need to learn a language (Josuweit, 2018). Therefore, it is more likely to come up with other explanations. A possible conclusion is that this model is a simple outline of the relationship between social and psychological variables when understanding second language acquisition.

2.2.2. Factors affecting ESL/EFL learning

This topic is very wide, and determining just a set of factors is very complex. Through the following pages, the researcher will try to summarize the findings of different authors that have established some of these factors. It is by no means the interest of the researcher to limit learning factors to the ones shown in this analysis. With that said, the analysis will start with motivation, since it is probably one of the most reviewed topics from different perspectives.

Students understand that English is useful for their future, new generations are interested in knowing the world, and for this reason they consider they need and would like to learn English. Lamb calls this understanding the Ideal L2 self, which is the first component of Dörnyei and Ushioda (2009) L2 Motivational Self System. Then, another fact to consider is that students are more eager to learn when they feel confident and positive about the whole learning process. In addition, it appears that the teacher has a very important role when referring to the generation of positive experiences and attitudes toward English. This finding is backed

up by the fact that motivation levels in different classes change and even contrast when analyzing different schools and different teachers. There is an increasing level of enjoyment towards outside school learning. A variety of interactive or non-interactive activities related to the four skills of language: listening, reading, writing and speaking may be applied. Watching or reading English language media has proven to be a contributory factor for such increase. Yet, there are some exceptions, such as Indonesia and China. In China it is not considered important for teachers to provide and motivate students with adequate material that may make the learning process more enjoyable. The same as in Japan, Iran, and Indonesia. The learning experience is considered the most important element of the L2 Motivational Self System (Lamb, 2012).

It was also observed that the Ideal L2 self contributes greatly to the learning effort of students, but it was not possible to determine it as a key factor in motivating language learners due to the differences observed among urban and rural settings. In this research, the strongest factor to attain L2 proficiency learning motivation was the positive view of the experience of learning. The Ideal L2 self could only be considered a significant factor among urban learners. Yet, it is not clear if rural area learners have less motivation to learn or that they do not have the possibility of doing so, due to a lack of educational possibilities. Finally, the possibility of a lack of motivation due to teachers' relationships and trust building with learners can be a motivational factor to attain results, both inside and outside of the classroom (Lamb, 2012).

Although the Ideal L2 self, probably the most relevant because it is the representation of the L2 attributes that one wishes to possess if one is able to master one's L2, is the first component of the model, it is important to mention the Ought-to L2 self and the L2 learning experience. The Ought-to L2 self, has to do with what other people close to the learner expect. Parents, family, significant others, and local authorities such as teachers or bosses are part of the Ought-to L2 self. The third component, which is the L2 learning experience, has to do with

the relationship of classroom, activities, distribution, and other issues related to the classroom; as well as teachers, class content, assessment and grades. All of these may also have an effect on the learner's final performance and outcome (Dörnyei & Ushioda, 2009; Lamb, 2012).

Analyzing from a teacher's perspective, Ho-ying (2014) considers teachers as an important factor in learning motivation, but at the same time expresses that teachers need to understand their students' needs, and personalities and review their pedagogical strengths and weaknesses in order to design a teaching plan that will obtain the desired results in motivating students. Teachers need to have a close relation between their motivational beliefs and their teaching practices. Without this alignment between beliefs and practices, no great improvement will emerge from a pedagogical point of view. The way to improve active motivation in students is to motivate teachers.

Motivation for faculty members is very important, even more so when the Institution has not developed a faculty motivation program. Education administrators need to see the strong relationship that exists between pedagogical belief, teaching practices, and actual execution of that practice within a classroom. Therefore, professional training for educators must be addressed, as well as a holistic review of educator behavior, and not just a review of their outcomes (i.e. evaluations) (Ho-ying, 2014). Teachers must be a part of the generation of these motivational beliefs. Motivation of faculty members is of uppermost importance in order to motivate students. Although, as shown by Ho-ying (2014), investigation on the relevance of how teacher motivation influences student motivation is very limited; especially when talking about second language higher education. As mentioned, some of the most relevant investigations regarding higher education learning come from Dörnyei & Ushioda (2009) and Sharabyan (2011), and second language learning come from Visser-Wijnveen, Stes, & Van Petegem (2012).

Ho-ying's research is based on the Self-efficacy theory (Bandura, 1978). Although the theory refers to the confidence a person has on his/her own abilities and these related to one self's possibilities of success; under the teaching scope, it refers to the perception a teacher has about his/her motivation to improve and evaluate the application of instructional techniques in a classroom (Ho-ying, 2014). The Self-Efficacy Theory also refers to the belief that a teacher has about his/her own abilities to overcome challenges in order to complete different tasks successfully (Akhtar, 2008). Nevertheless, Self-efficacy is not only about the learner, but about the teacher as well.

Self-efficacy in teachers refers mainly to the perception they have of themselves and the performance they expect from themselves. Yet, as explained by Ho-Ying (2014) the theory of self-efficacy also proves that, from a teachers point of view, knowing a methodology may work, does not guarantee its use. For this reason, it is very important to consider this fact when introducing a new process or methodology, as the teacher's perception of self-efficacy may affect his/her decision to adopt it or not.

According to Bandura's theory, there are four levels of teacher efficacy: a) Mastery experience, which refers to the perception of the level of their performance according to past experiences in similar situations and the changes of self-efficacy. b) Vicarious experience, which is defined as the perception of success based on the observation of other teacher's performance and how it changes self-efficacy perception. c) Social or verbal persuasion, which are the changes in self-efficacy based on the comments or feedback given by other people. d) Physiological feedback, which is the way feelings affect the concept of the self-efficacy of the teacher (Akhtar, 2008). These four sources are very helpful for this research as they show certain issues that may appear when dealing with teacher expectations and the response to the different activities needed for the success of the research. This knowledge

allows the researcher to take countermeasures that will avoid problems that may arise due to self-efficacy perceptions.

Other factors may also affect the results as teachers may resist change. Sometimes, teachers find it unnecessary to change due to the fact that their method is already effective (Ho-ying, 2014). In other words, teachers may be reluctant to change because they do not see the need to change something that already works. This type of resistance must be taken into account before carrying out the research in order to avoid unnecessary impasses between the teacher and the researcher

Language learning may be affected by globalization, in both positive and negative ways. First as an election to be offered, the variety of languages change due to globalization, sometimes leaving some other languages not included as they are not as attractive as others are. Mobility also affects the variety of languages offered and provided at any given moment. Multilingualism and hyperlingualism are more common now than before. Even though, the results of those investigations cannot be proven in practice, because researchers are not working together with language teachers. Despite this fact, teachers are getting very used to using ICT's and developing parallel material. Additionally, students are more technologically savvy and feel more comfortable within a technological environment when learning (Pauwels, 2014).

The results attained about factors that affect learning are very different depending not only on the person but also on the context. Findings, in the case of China, show that one possibility of why context affects learners is the limitation for learners to engage in real communication activities. In order to succeed, other factors, such as attitude and motivation are more relevant (Wang & Gao, 2018). Although it is not always possible, emotions must be kept outside of the classroom in order to avoid conflicts and/or negative interactions with

students. If this is not possible, teachers should work around the problem or problems together with learners. Harmonious relationships are key to students' performance and maintaining them is part of the teacher's responsibilities.(Cai, 2018)

2.3. Technology and new methodologies in teaching

Technology, especially in urban areas, has become an active participant of peoples' lives. It is possible to see technological interaction in every activity performed by a person, and classrooms are not the exception of this phenomena. In the United States many schools are implementing technological initiatives within the classrooms, where they even facilitate technological devices for the students to use or they incentivize the Bring Your Own Device (BYOD) initiative (Andrei, 2019). Mobile technology is changing the landscape of classroom activities in an accelerated manner and teachers are adapting their plans and curriculums to include technology and mobile devices in their classes. The involvement of technology inside classrooms is so strong that many companies already mention the word Education Technologies or EdTech (Elliott & Long, 2014).

Andrei (2019) analyzes how technology may be both positive and negative within the classroom environment. On the one hand, using technology may take some time, as it requires other types of knowledge from the learner and from the teacher. Also, some material may not be on-target, and therefore, become a distractor rather than a help (Sox & Rubinstein-Avila, 2009). Applying certain techniques may not be easy due to this fact and may require more adaptation and review time. On the other hand, students benefit from technology as they find these activities as more engaging than other types of activities done in the classroom (Billings & Mathison, 2012). As an example, we may consider a comparison between filling-in a section of a book vs. playing a questions and answers game in Kahoot®. The response is higher and the impact on students is better when interactive activities are used. However, the biggest

challenge is how to combine previous knowledge with new knowledge required and the target lesson.

Although technology has proven to be a very strong ally in teaching, not everything runs smoothly. There are some examples of complications: Richardson (2011) shows a case in Cambodia, based upon the theory of diffusion and innovations by Everett Rogers, where he identifies barriers, challenges, and successes when teachers need to adopt new technology training. Through qualitative-comparative research, which involved surveys, interviews, and the analysis of various documents, Richardson found several challenges that affect the adoption of new technologies. Such findings may be summarized in the following categories: hardware issues; language barriers; practice for trainees; and lack of electricity, computers, Internet access and/or knowledge about these technologies.

The perception about technology plays a key role in the adoption of such tools. Within this perception by teachers, the characteristics with higher results are: relative advantage, compatibility, and complexity, whereas the characteristics that apparently are not that important for teachers are: observability, and trialability. One of the findings of this research was that teacher trainers were continuously talking about complexity when referring to technology and its use. Yet, those teachers who started adopting technology earlier, were most often talking about the advantages found when using technology. Teachers also considered that relative advantage and compatibility had some kind of synergy between them. In general terms, adopters agreed upon the fact that their work styles and the use of ICT skills showed an improvement in their teaching methods and helped their students. Some also mentioned that the reception of updated information, allowed for a better and more modern way of teaching and learning.

Therefore, it is of uttermost importance to consider teacher perception when preparing research material. Teachers must feel that technology is going to be useful and easy to use, that it is not going to affect their performance or undermine their image in front of their class. Furthermore, it needs to prove that their knowledge goes far beyond the book and that technology will help them achieve their ultimate goal, teach their students.

Students, especially from Gen Z, mainly focus on interactions and communication; therefore, communicative pedagogy is the new trend for foreign language teaching. Communicative pedagogy is based on the immediate and real use of any knowledge attained. This communicative approach focuses on five aspects of communication, as identified by Savignon, none of which focuses on the common analytic and rule-based approach. These aspects can be defined as: (1) language arts, which focuses on vocabulary and grammar; (2) language for a purpose, which is communicating with a use in mind; (3) personalized language, referring to students using language for relevant opinions; (4) theater arts, which involves reading, roleplaying and representations; and (5) going beyond the classroom, that involves using authentic materials and cultural connections (Kuksenok et al., 2013). For Gen-Z students it is key to find interaction and communication in their learning process.

Kuksenok et al. (2013) conducted a qualitative research using semi-structured interviews and field notes to observe students in three different introductory Russian classrooms during a period of two months. Once the data was collected, they synthesized relationships among different variables that come down to a grounded theory of the relationship between artifact use and communication. Artifacts play a variety of roles within a classroom. These roles are: record, reference, structure, illustrate, and prop. Many times these roles overlap or one artifact may play more than one role but all of them support communicative language learning, and collaborative knowledge building.

Regarding technology, there is also a possibility of supporting social interaction under the following premises: a) Feedback as a negotiated process, not as an event, b) it helps teacher to redistribute time, c) it also enables negotiated feedback from peers, using repetition and correction and it is relatively intrusion free. The benefit that comes from that interaction is greater than that of similar minimally intrusive, example-based approaches. In other words, Authenticity vs. metalinguistic discussion.

In conclusion, students can benefit from the use of technology, as it will help them develop skills that will support language learning. Technology must be a balancing point between authenticity and the use of both foreign language and first language. It is very important to understand that two languages will be in use in an introductory classroom. Joy, creativity, and props, as well as technological artifacts can support creative and entertaining role-play, their performance is better if they are shared in small groups. Using a variety of activities will improve greatly the chance of success in the learning process.

2.3.1. Self-regulated learning and the flipped classroom

Self-regulated learning (SRL) is not defined as a capacity or an ability, it is not related with skills, self-learning is mostly the process to self-regulate. At the same time, self-regulation comes from a self-directive process by which a person can transform his/her capacities and abilities into performance skills. Under this view, learning becomes a proactive set of activities that involves self-participation rather than a reaction to teaching (B. J. Zimmerman & Schunk, 2001). The importance of self-learning has to do with the fact that students engage more easily in the classroom and due to this engagement, it is easier to complete that class, and any other classes following it. Retention and learning results can easily be observed as they run the path to success (Enomoto, 2012).

Regulation does not only refer to student's cognitive abilities, but also to motivational factors, behavior and assessment (Enomoto, 2012). Motivation is a very important issue as explained earlier. In the case of students, it has to do both with inside classroom and outside classroom motivation. Other investigations mention that self-regulation is not something that students either have or lack, but a complex selection process of SKA specific for each different task. Among these processes we may find: 1) setting specific personal goals, 2) applying strategies that allow the achievement of those goals, 3) looking for progress along the process, 4) modifying both physical and social contexts in order to align them with one's goal objectives, 5) efficient time management, 6) self-assessment of the methodology applied, 7) accepting the cause-result relationship, and 8) modifying methods for the future (B. J. Zimmerman, 2002). On the other hand, the Centre for Teaching Excellence states that the process to self-directed learning is a process that involves four steps: 1) evaluate learning readiness, 2) learning goals setting, 3) learning process engagement, 4) learning assessment (University of Waterloo, 2012).

In Self-Regulated Learning, not everything is about the student. Teachers also play an active role in this process. Teacher's roles involve: a) the ability to build a cooperative learning environment for students to feel comfortable, b) helping with student directions and motivation, in order to enhance their learning experience, c) supporting students' initiatives for learning, d) programming time for questions during the process, and e) playing the role of an advisor instead of a formal teacher (University of Waterloo, 2012). Besides these needed teacher skills, teachers also need to trigger motivation, behavior, and assessment through proper feedback (Enomoto, 2012; University of Waterloo, 2012; B. J. Zimmerman, 2002).

Timely and effective feedback can help students acquire self-regulated learning skills. It is very important to provide feedback to improve students' self-motivation and help them in their learning process. Teachers must also be very clear on how the students understand the

feedback given (Enomoto, 2012). In other words, teachers must provide usable and clear feedback for students to assimilate and then use it to learn and motivate themselves. However, one thing is what teachers visualize as feedback and a different matter is how students see it. According to Furnborough and Truman (2009) there is an investigation gap related to the way students receive feedback, and this situation is even more obvious in Beginner level students. Nevertheless, one thing is very clear, feedback is very important and the perception students may have of such feedback is crucial for self-motivation, self-engagement, and self-learning (Enomoto, 2012).

Self-learning can be approached through a large variety of techniques. This is what certain people refer to as a blended model (Graham, 2006). A blended model is a combination of a face-to-face class with a series of activities. These activities are usually internet based, and allow the student to continue with the learning process outside of the classroom (Evseeva & Solozhenko, 2015). In order to develop activities, most teachers and institutions will use some type of information and communication technology (ICT's). ICT's allow teachers to avoid a typical teacher-centered class and make it an interactive student-centered class. This transformation occurs mainly due to a concept known as the Flipped Model (Hamdan et al., 2013). The Flipped Model was first introduced by Jonathan Bergmann and Aaron Sams in 2000. The main idea of this concept is to invert the order of activities between the classroom and the house. This means that theory is learned at home. Then the classroom is used for production tasks and activities (Bergmann & Sams, 2007).

The flip model is based upon the concepts of the four pillars of FLIP: Flexible Environment, Learning Culture, Intentional Content, and Professional Educator. Flexible environment has to do with the possibility of adapting or accommodating the spaces for specific tasks, lessons or units. Creating flexible spaces in which students choose when and where they learn. Also, teachers are flexible in timelines and assessment for student learning. Learning

culture is related to the shift of roles where the class center changes from the teacher to the student and class time is dedicated to in-depth exploration of the topics. Students participate actively in knowledge construction. Intentional Content seeks to help students develop conceptual understanding and procedural fluency. Teachers define what to teach in class and what students should explore on their own. The intentional content helps teachers to develop active learning strategies, based on the level and subject. Finally, Professional Educator refers to the role the teacher plays within the learning process. Some of the activities they need to execute are to observe students constantly, provide relevant feedback and assess continually. Professional Educators need to be reflective, knowledgeable, accept constructive criticism, and tolerant under controlled chaos circumstances in their classrooms. (Flipped Learning Network, n.d.; Marshall, 2018)

The Flipped Classroom Model is no stranger to research. Many studies have taken place around this concept. Among many others, there are three very interesting investigations related to the use of the flipped classroom in universities for English classes. The experience of three flipped classrooms in an urban university (Kim et al., 2014), research on the application of the flipped classroom model in English teaching (Z. Li et al., 2017), and learning in a flipped English classroom from university students' perspectives (Chen et al., 2018). The findings of each are worth analyzing.

In "The Experience of Three Flipped Classrooms in an Urban University", Kim et al. (2014) explain a dynamic Self-Learning and teaching environment, where a broader definition of the flipped classroom is determined. The Flipped classroom is not only self-learning, but it is used to exchange activities among students using online learning management systems. The results observed were an improvement of the learning experience and the possibility of multi-disciplinary applications.

Nowadays, it is more common to use online learning management systems in undergraduate courses. In teacher-designed courses, most of the nine design principles proposed by the Flipped Model are present throughout. See Illustration I for a detailed description of the 9 principles. According to Kim et al. (2014), the results are more specific and tested strategies that offer students and the institution a more effective class environment and experience.

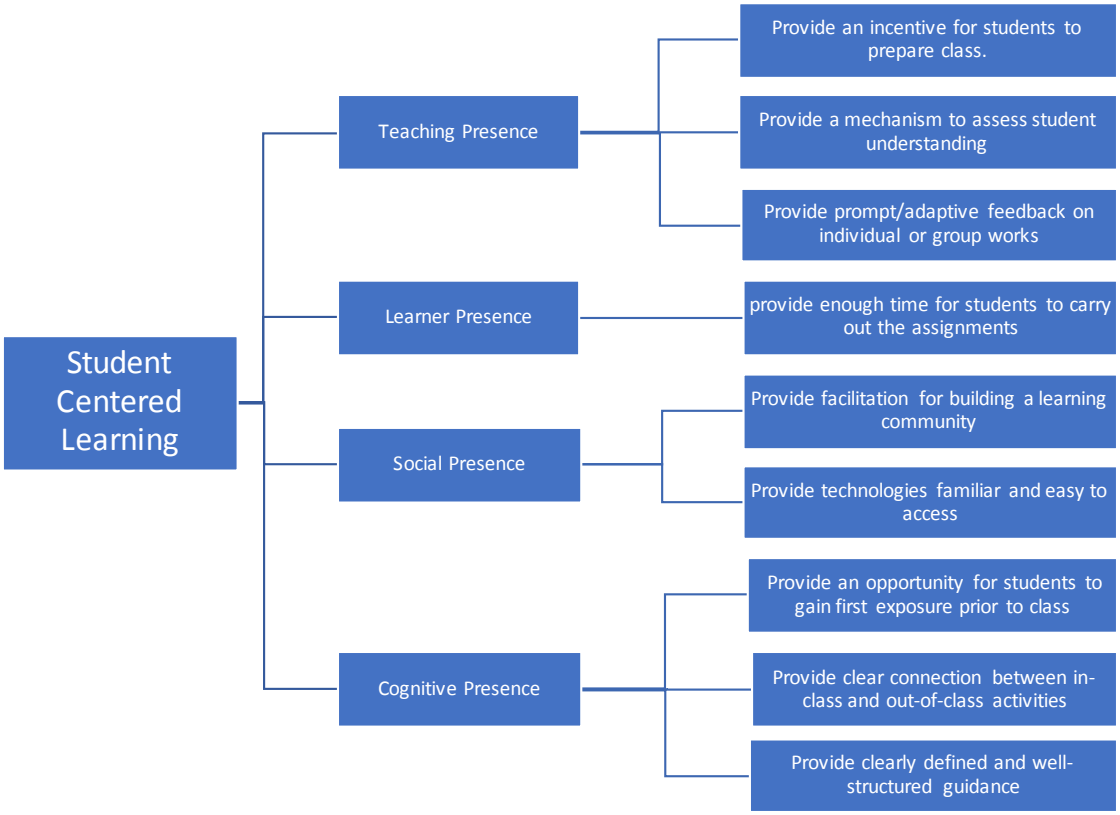


Figure 1. Nine design principles of the flipped classrooms Source: (Kim et al., 2014)

Analyzing the results of other studies shows that the flipped classroom model is a very good means to help students improve their academic achievement and helps them develop a sense of self-learning that will trigger learning efficacy. Both, teachers and students consider there is a benefit from the use of flipped classroom models (Chen et al., 2018; Li et al., 2017). Students perceive they can be more involved with class activities as long as there is good teacher guidance. Teachers, on the other hand, believe this model changes the perspective of

"teaching materials" to "using materials to teach", which, as they agree, enhances the learning experience for students. Although, more time investment is required for teachers to prepare all the material and make sure everything runs smoothly for learners. Time can be an issue for students as well, as they need to establish a schedule outside of the classroom to do the activities (Li et al., 2017). Flipped methodology proved to be positive in terms of attainment value, intrinsic value, utility value, and satisfaction. Increased use of time shows to be more effective as well. Students' attitudes toward the tasks also proved to be a factor affecting results as an increased amount of time using English in and out of class is observed. The use of a learning management system, Blackboard, increased the motivation of learning because activities are carried out in a flexible learning environment that shifts learning from a class to the world. Students' also showed improvement regarding confidence in learning and use of English. Apparently, the perception of flipped classroom activities as positive is greatly pushed by the fact that students improved their confidence regarding their progress when learning English (Chen et al., 2018).

A negative point of flipped learning tasks, as perceived by students, is the fact that some activities are very time consuming and time could be a problem. As explained by the principles of flipped classrooms, which define that a teacher must give enough time for students to carry out the assignments. Teachers also believe that the time required is greater both for doing the activities as well as for designing them. On the other hand, the use of English improved both in and out of class, as perceived by students. They think that flipped learning tasks, facilitated their English learning, enhanced English learning motivation, and improved confidence in using English. Teachers must be aware of the workload the activities will generate. Maybe a possibility is to flip only certain lessons, rather than the entire course (Chen et al., 2018).

Another affecting factor to the flipped model is the lack of interest of learners towards the activities used in the class. In a case study in China, the results showed that the flipped

model lasted for a little less than one month. Despite the fact that students were interested at first, when it was time to download the material, the downloading rate reached 25. From that point on, learners did not show the required preparation for the activities and their class performance dropped significantly (Y. Li, 2018). According to the author, the lack of cooperation from the students made it difficult for the planned activities to take place as they were organized by the teacher.

An incidence found repetitively among students is the low autonomy to use smart phones as a tool for self-study. Overestimating students' self-learning discipline and will to work with e-learning is a defining factor in order to design flipped classroom material. As explained by Josuweit (2018) Generation Z are good at using technology. Today's youth are good at using mobile phone to search for information. Nevertheless, this dependency on technology has also made teachers require phones, or any other technological device, to be handed in before an exam is administered (Y. Li, 2018). According to Li, academic laziness, plagiarism, and use of smart phones more for fun than for study, are some of the results of unmonitored use of technology.

In brief, some very important concepts must be considered during this research. Among the different generations, a very good option to consider as subjects for this research are students that belong to generation Z, due to the fact that they already know how to use technology and expect to use it as a tool for self-learning. Also, the Flipped Model, which is a self-learning model, can be applied for investigation under the premise that most investigations agree that it is a positive model to apply in ESL/EFL classes due to its values and satisfaction. Furthermore, another premise is that motivation, from both students and the teacher, is a determinant factor in the learning process. It is important to design class material in a learning management system. Since student cooperation is a key factor to the success of the flipped

program, it needs to be taken into account as well. Under this premises, the methodology of the research may be established.

Chapter III

Methodology

Determining gabs among students placed in the same level is not an easy task. At CEC-EPN, a placement exam designed by Cambridge University for the Interchange series is currently being used. Nevertheless, a student that should be placed at a Beginner (Pre A1-CEFR) level may have different needs than a peer who is placed in the same level. There could be generational gaps, meaning that Generation Z require different materials, strategies, methodologies and/or techniques when learning a foreign language. Also, to develop strategies, and techniques to help students by the teachers is needed. Finally, technology is already inside the classrooms and the use of new technology may not be optional anymore.

In order to understand the methodology selection, it is important to remember the objectives set for this research. There are three key components that need to be considered. The first component has to do with Generation Z. The second component has to do with the teaching expectations from teachers and learners. The third component regards technology in teaching.

As it was mentioned before, Pre A1 learners have gaps that affect their language learning process. These gaps are not only related with language knowledge but also to differences among generations. One of the biggest differences among generations is that Generation Z learners expect more interactivity and self-learning activities. Yet, in Ecuador, there is a lack of production and use of this type of material. In addition, methodologies used by teachers may not necessarily be adequate for the aforementioned generation.

Approaches that have led to theories such as Behaviorism, Cognitivism, and Constructivism, among others, are the building blocks for strategies and techniques designed for the class. By combining language theories and learning theories, new techniques have

emerged. For example, combining structuralism and behaviorism lead to audiolingualism. Nevertheless, techniques, such as dictation or writing on a board, are considered by many as outdated. But other strategies are gaining space in today's classrooms, as well as outside of them; blended learning and the flipped classroom are two examples, among many others. Some experts tend to separate all of these approaches as being different. Yet, the truth is that they build upon each other (Jonassen, 1991).

New tendencies shift learning methodologies and techniques towards Self-regulated learning (SRL). As it has been determined earlier, SRL is not a skill or ability, but rather a process for self-regulating a learning process. In order to apply in real life an SRL process, it is of paramount importance to understand how technology may adapt to this teaching environment.

Although technology has been used for quite some time inside the classroom, the level of interactivity that learners may experience has reached a higher level. Internet growth, social networks and internet based gadgets, such as cell phones and tablets, have led new generations to be technology dependent. Due to the fact that Centennials are native to technology, an effective way to approach their learning process is by using what is so familiar to them, technology. Unfortunately, classrooms are not necessarily ready to reflect these generational needs. That is the reason why the questions that need to be answered are:

- How do interactive resources help Generation Z Pre-A1-Beginner students develop self-learning skills for learning a foreign language?
- What is the teacher's perception on the dynamics change of a class for Generation Z Pre-A1-Beginner students using flipped method?

Therefore, the selection of a qualitative approach is key for this particular research.

A qualitative approach allowed the researcher to gather rich information that will allow to understand what learners and teachers experience with the proposed material. There were two main characteristics that were taken into account for choosing the type of research: First, a qualitative research uses data gathering and analysis to improve the research questions and discover new questions that may arise as the research develops (Hernández Sampieri et al., 2014). Second, as Is'haaq Akbarian (2017) mentions, the objectives of qualitative research are careful and detailed descriptions of the situation that is being researched. For the purpose of the research, data gathering was crucial in order to attain the desired results.

The method chosen is important because it helps building up credibility and reliability of the research (Nunan, 1992). For this research, the method applied was Action/ Participatory Research. The selected method allowed a deeper understanding of the current situation of beginner students at CEC-EPN. With this results, a route to understanding clearly the type of material that may work was set, and possible changes on the students' learning outcomes may be a result of these improved material. Action research seeks to change a given situation for the sake of the participants (Akbarian, 2017; Burns, 2010; Hernández Sampieri et al., 2014).

As it was mentioned earlier, self-learning can be applied through different methodologies. Due to the fact, the researcher chose the FLIP method for self-learning activities and for providing the required material to the students. In other words, for the purpose of this study, the FLIP method can also be understood as self-learning and vice versa.

3.1. Setting

The location and setting were fixed to fulfill the needs of the research. It was of paramount importance that the room chosen complied the needs of technological support, natural light, versatility and comfort for both, students and teachers.

The classroom is set with 21 individual desks and 21 chairs. The room has two whiteboards and one Box Light® Mimio Projector. The projector is equipped with new generation light source, known as HLD (High Lumen Density) and High Definition LED Color Spark which shows clear, bright, natural images; also a set of High Quality speakers are attached. The objective is to provide the users a particularly prominent experience. Another factor considered when choosing the room was the access to natural light. The room has a 4 meter long and 3 meter high window, which allows enough natural light to come in. Also, it has a black-out curtain if darkness is required for projecting purposes.

Also, the teacher had the required equipment. A desk with a desktop computer is installed in the room. There is internet access and full interactivity with the projector. Moreover, the room is equipped with a locker for the teacher's materials. It has enough space to adapt the classroom or the distribution of the tables and chairs as needed by the teacher

For this observation a video camera and a laptop were used to take notes and register what happened in the room during the class. The place that the observer took was on the right side of the classroom next to the window. The desks were set in groups of three facing the whiteboard. Audio and projector were functioning normally. Students who participated in the interviews were seated in the first second and third rows (see figure 2). The total time length of the class is two hours from which one hour was used for the observation.

Classes at CEC-EPN are divided into five cycles per year. Cycle 5-2019, which took place between the months of October to December, 2019 includes the following demographic data. There were a total of 6.219 registered students, from which 5.847 students registered for English. The courses are divided into 14 levels with aa total of 436 classes per day in 8 different schedules. The total number of registered students for Beginner level were 889 (Santos, 2019).

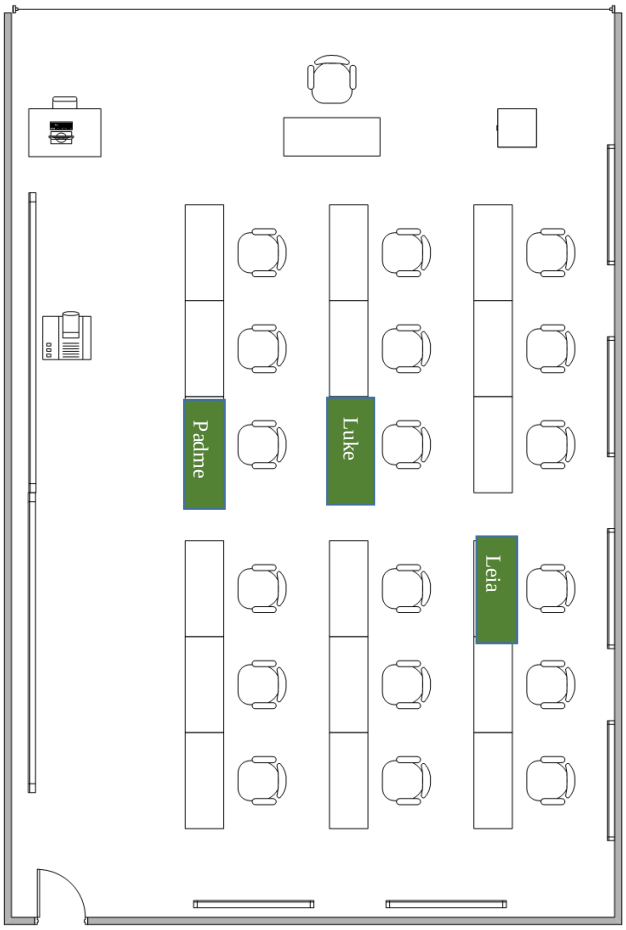


Figure 2. Room distribution and student location. Source: Author

3.2. Sample

For this investigation, the chosen sampling methodology was non-probabilistic (López, 2004) and the subjects were selected by specific criteria. The total population was made up of all the registered students for Beginner Level (889). The sample was selected deliberately from the population, choosing only one class following the same procedure of Arslanyilmaz (2014) and Evseeva and Solozhenko (2015). From the students registered for cycle 5-2019, a homogeneous sample (Hernández Sampieri et al., 2014) is expected and only one class was chosen based on their age range. The class is made up of fourteen students, eight students are male and five are female. Their age range was between 18 and 27 years old (view Table 5). The sample for the interviews involved three students from that specific class. The sample subjects were selected randomly (view Table 6 for demographical information). A key factor,

for the success of the research, was that students got to know each other within the class, because as explained by Arslanyilmaz (2014), the selected sample is important for the outcome of online modes, as participants work together in order to attain the final product.

Students in this age range are eager to cooperate with their peers and expect to have digital support to the traditional material used in classes. Due to their closeness to technology, the digital environment is the ideal place to fulfill their learning needs (Josuweit, 2018).

Table 5
Student demographic chart.

Sex	Age	# of Students
Male	18	3
	19	5
Female	18	2
	19	1
	20	1
	22	2
Total		14

Table 6
Sample demographic chart.

Sex	Age	# of Students
Male	18	0
	19	1
Female	18	1
	19	0
	20	0
	22	1
Total		3

3.3. Intervention Materials/Resources

Due to the interactive nature of the research, certain specific technology is required. A web based learning management system was used. For this investigation, Moodle 3.6, a free management system, has been chosen and installed in a privately owned online webpage. The address is www.translationlabpro.org/moodle. On this platform, all the material was uploaded and available for all the students. All the material uploaded was either self-designed and created, or used under authorization of the copyright owner, or under the Fair use act of 1976 (*Copyright Act of 1976, 17 U.S.C. §§ 101-1332*, 2016).

Also, a personal laptop was available during the whole investigation in order to upload material to the platform, activate such material and store all the information regarding the investigation. For confidentiality purposes, an Excel document contained all sensitive and private information regarding the participants. The use of pseudonyms was the constant for confidentiality purposes. The document is password protected for opening and/or editing and is stored in the computer with all the data from the investigation. Only the researcher has access to the document, password, and the computer.

Administration of oral interviews, both with teachers and students were saved on audio files. The transcription took place after the interview. No extraordinary costs came-up from this research.

3.4. Data Gathering

Many authors have explained the importance of choosing the right instruments in order to gather data. But the fundamental characteristic in a qualitative process is the researcher himself. The researcher is the one who, observes, interviews, reviews documents, conducts sessions, etc. Nevertheless, in qualitative research the instruments are not standardized but multiple data sources are used by the researcher. In addition, nonverbal language, observable behaviors and images may also be analyzed by the researcher (Lichtman, 2013).

From the various instruments that could have been used to gather information in a Qualitative research, such as: Field notes, observation, interviews, focus groups, documents, registers, surveys, biographies, and life stories (Hernández Sampieri et al., 2014), the instruments that were used during the course of this research were: interviews, and observations. For this particular research, data collection occurred inside the classroom, through observation aided with a video recording. Also, interviews were used in controlled environments.

3.4.1. Observation

Investigative observation goes far beyond the act of seeing what happens in a specific environment. For investigative purposes, observing requires using all the senses in order to explain all the different situations experienced during the investigation, as all details are important(Hernández Sampieri et al., 2014) Therefore, knowing the purpose of observation is key to use it correctly.

Many authors coincide that there are four purposes for qualitative observation. 1) Describe the physical environment as well as anything related to the aspects of culture and daily life. 2) Observe the processes and links among the people and events and the patterns developed during the process. 3) Identifying social problems. 4) Developing hypotheses for further studies (Hernández Sampieri et al., 2014).

3.4.1.1. Video recording

Video recordings as a research tool is a powerful data collecting method. Video recordings may register events that are not planned or practiced, but rather are spontaneous and natural. Such information can be very useful to understand certain situations that could have slipped even to the keenest observer. Nevertheless, video recording requires an accurate registration and analysis of all research procedures, as well as data collected. Such information needs to be analyzed from a human behavior point of view (Penn-Edwards, 2004).

Video recording may be affected by different factors. Some of the most important are the "self" and "personal space" perceptions. In addition, video recording may also be affected by gender, age and roles (Heath, 1997). Therefore, it is crucial to consider these factors in order to minimize the possibility of recording or interpreting false or altered data. The application of video recording needs to include a clear procedure, role and limitations as well.

3.4.2. Interviews

An interview is defined as a meeting to talk and exchange information between different actors in a given situation. It usually involves two or more people also called interviewer and interviewee(s). During the interview the actors construct a meaning on a specific topic through a set of questions and answers. The interview can be structured, semi-structured, and unstructured or open.

During a structured interview, the interviewer asks the questions according to a set guide. Semi-structured interviews involve certain guided questions but the interviewer may add any questions that deems necessary to clarify concepts or learn more. Open interviews, on the other hand, are based on general concepts and the interviewer decides how or what to ask (Hernández Sampieri et al., 2014). Therefore, choosing the right interview schema was the next step.

3.5. Data Collection/Procedures

The procedure followed during this investigation is similar to the one applied by the RISE Vietnam Country Research Team, where data is collected to understand pedagogical practices and the relationship with the learning outcomes and learning competencies. For the data gathering they are using a pre-interview with teachers, two hours of video recorded lessons for observation purposes, and a post-interview with the teachers (DeJaeghere et al., 2019). In addition, this research includes observations and interviews with the learners. It is important to state that these three instruments were used with the purpose of gathering information in order to triangulate the collected data to obtain a higher level of accuracy and reliability.

A corroboration of the information obtained through the research is done by comparing or contrasting with the information in Chapter II. As it was explained in that Chapter, there were three main areas that were analyzed: Generation Z, Teaching Expectations, and Technology in Teaching. This analysis includes a reflection of the author's own pedagogical

experience towards the investigated topics. The results will be analyzed in the following Chapter.

3.5.1. Observation

A risk that may be encountered during the observation process is when the participant is aware of the observer and feels the need to excel or perform in front of him/her. As mentioned earlier, the Heisenberg Effect may cause interference. In order to avoid this interference, it was very important to analyze and set priorities. A key objective during in-class observations was to obtain relevant and authentic data. This type of data comes from a classroom that feels comfortable with the presence of outsiders and do not feel the need to perform for the foreigner. Therefore, the researcher's presence was random in the room.

The procedure involved the presence of the researcher for 4 different days out of a total of 40 days of class. Nevertheless, the actual observation took place only once. The participants had time to adapt and feel comfortable with the presence of the observer; therefore, the participation was more authentic.

In order to fulfill the needs of the observation, there was some preparation required prior to the moment when the class was observed. The previous day the teacher reminded the students to watch a video about the present progressive, which was in the Moodle classroom. Reminding students is important during a flipped classroom session to minimize the effect of students not doing the activities before the class (Y. Li, 2018). The video is 6:32 minutes long and it can be found on Youtube under the following link: https://youtu.be/nUqXvEbRpWw.

For this research, the observation focused on the activities during class to monitor the progress and use of the Moodle virtual class with the flipped classroom activities assigned. In addition, the observation included the physical, social and human environments, as well as the

participants' characteristics in order to map the relationship networks. For a keener observation, a video recorder was used during the observation process.

3.5.1.1. Video Recording

As with any new object, a video recorder may draw attention from the participants and it may also provoke a certain level of acting or performing for the camera. This effect is known as the Researcher Effect or the Heisenberg Effect (Bogdan & Knopp Biklen, 2007). To reduce the possibility of enactment by the participants, the camera was installed during various days inside the classroom. The participants experienced an adaptation period with the foreign object and got used to its presence.

A Panasonic SDR S26 SD camcorder, set on a Vivitar Tripod were the chosen equipment. The procedure involved the presence of the camcorder for 5 days, out of a total of 40 days. The class was recorded only in one day and it students were not advised of the fact. The video recording is currently stored in a password protected MyCloud device. The content of the video recording was transcribed and described in detail for analysis purposes and the findings will be shared in the following chapter.

3.5.2. Interviews

Individual in-depth interviews are a widely used method by researchers to obtain meaningful qualitative information. These interviews involve a large spectrum of questions. stated in "The qualitative research interview" (DiCicco- Bloom & Crabtree, 2006), the basic research question may be used as the first interview question, and from that point on, from five to ten more questions may be used .

As mentioned before, interviews are a very helpful method to obtain first-hand information, for the purpose of this investigation, five full interviews were conducted; two with

the teacher and three with students. For the five interviews the process involved various validation stages.

The interview questions went through a three step process of validation. The first step was the review and approval by the thesis director. The second step was a review of the questions by an expert on the field, which was another teacher. The third step was a pilot test with a teacher and a student. In each step of the process, the questionnaires underwent modifications according to the observations of the three persons. Pilot tests helped determining if the questions were appropriate and the flow of the interview was adequate for each interview.

The interviews were conducted with one teacher and three students on different days and locations. The teacher participated in two interviews. The pre-stage interview was going to take place in a cafeteria, but due to a problem with the noise inside the location, the interview was relocated to the teachers' house. Noise was reduced drastically and a more comfortable and familiar background was set. For the post-stage interview the location was in a meeting room at CEC-EPN. The learners' interviews took place at the end of the class inside the classroom located at CEC-EPN.

The interviews had different questions according to the moment and participant. There were two interviews with the teacher. The first interview included ten questions and took around 6 minutes. The second interview had twelve questions and it took around ten minutes. Regarding learners' interviews, the same basic questionnaire was applied for the three participants. The interview included 13 questions and took an average time of 6 minutes each. All interviews flowed as expected and were digitally video recorded. The results will be analyzed in the next chapter.

3.6. Data Analysis

Data analysis can be approached in many different ways. For the purpose of this investigation, the first analysis was based on prior investigations through literature review. Then a video recording during the class observations were also used to obtain first-hand information of the situations experienced within the classroom. In addition, pre and post-application interviews were also applied. According to Miles and Huberman (1994), these three approaches are defined as: **non-participant observation strategies**, which include video recordings and observations; **interview strategies**, which are pre and post-stage interviews; and archival strategies, which refers to literature review.

Most of education research is analyzed from the social anthropology perspective. The main focus is to register behavioral regularities in language use, relationships patterns or rules. This social anthropology study of behavioral regularities is usually based on repeated observations and interviews, and has led to cross-cultural theories on language learning. Nevertheless, the type of activities used or required, due to the blended model applied, are the application of collaborative social research as well. Under this approach, collective action is a better suit for this research. Collaborative social research focuses on reflexivity, where the research keeps on a questioning level; or dialectics, where there may be opposing interpretations of the data (Miles & Huberman, 1994).

Data display is also a very important issue to consider, both for the data analysis as for the context of the investigation. Data analysis, in this research, requires to combine the analysis of the teacher and the learners' points of view. Therefore, the data analysis method that the researcher will use is a checklist matrix (Miles & Huberman, 1994, p. 95). Understanding the context in which the research took place is easier through a context chart. Which was then used to write thick descriptions of the results attained.

To analyze the information, a description of major themes and patterns will be used. Information will be separated into major themes according to the research questions. A thick description of the themes will show emotionality and the actors' feelings. It should also include history and experience and will include behavior and context in which the behavior occurred.

In conclusion, triangulation is very important during the data analysis procedures in order to validate the findings and compare them to the findings in other investigations. As it was mentioned before, the same type of data gathering can be found in other similar research investigations. The display and analysis of this research is based on proven techniques used on research on various topics throughout the educational field. Defining patterns, and using thick descriptions is how the obtained information will be presented in Chapter IV.

3.7. Ethical Considerations

In this section it was paramount to consider the following issues: a signed written consent, any potential risks to subjects, minimization of any potential risks, possible potential benefits for subjects, any additional costs to subjects, compensation to subjects and confidentiality of records (Bui, 2014). All the students who participated signed a written consent for the use of the gathered information and explaining any other issues found in this section. Due to the fact that students were over 18 years old, there was no need for parents' authorizations.

The first document needed was the informed consent format suitable for students. For this purpose, the format chosen initially was the World Health Organization Informed Consent Template for Qualitative Studies (World Health Organization, 2019) which has been attached in Appendix 3. This template was adapted in order to have the Informed Consent Form for a Qualitative Study that would be used during this and any further investigation related to it by the researcher. To ensure that the content of this consent was clear, it was reviewed by a

professional proofreader and its final version, as it was used in the research can be reviewed in Appendix 4.

Beginner learners will not have the sufficient knowledge to understand the text in English and this could be a serious risk from an ethical perspective. Therefore, a translation of the consent from English to Spanish was made in order for students to understand and sign the consent. The aforementioned document has been translated and proofread by Translators Lab Professional Translators. The final document can be reviewed in Appendix 5.

The institution also signed a letter of consent in which they accepted the research to take place within their facilities and at the same time they agreed to use and apply the methodology and results of said research.

For this research, no potential physical risks have been identified. However, there was a possibility of fatigue and frustration while performing different activities, which was also explained in the informed consent. Also, in order to minimize these potential risks, the interviews, surveys and activities did not exceed 10 to 15 minutes and they were advised that if they started experiencing these feelings, they may take a short break.

As of benefits to the subject, immediate understanding and practice of new concepts are possible. In a longer term, retrieving material to prepare for exams was also a benefit. There were no extra costs for the subject, except for the regular tuition and book cost, nor was there any financial compensation received by the subjects.

Finally, all the information is being kept confidential through acronyms used for this research. A password and copy protected Excel sheet stores the information. Real data of any encoded content will only be available to the researcher. Every point explained in this chapter is included in the Informed Consent Form.

Chapter IV:

Results

Two crucial points of view were considered to understand the use of interactive resources in a self-learning platform for Pre-A1 Beginner students: The teacher's perspective and the student's perspective. Therefore, two questions needed consideration for this research these questions are:

1) How do interactive resources help Generation Z Pre-A1-Beginner students develop self-learning skills for learning a foreign language?
2) What is the teacher's perception on the dynamics change of a class for Generation Z Pre-A1-Beginner students using flipped method?

For the first question, the information was gathered through interviews (see appendix 6) and an observation applied to the teacher and the students. Because students' perspectives are essential as well, three students were selected randomly for an interview. On the other hand, the teacher's participation focuses not only on what affects teachers, but also what they consider affects students.

For the second question, data gathering was performed through two interviews with the teacher. One interview before applying the flipped method with technological assistance (see Appendix 7), to understand the teacher's expectations; and another interview after applying the flipped method with technological assistance (see appendix 8), to understand the new perception after the application which helps understanding the new teacher's perspective. The following analysis includes the triangulation of the information by considering both perspectives and the researcher's observation.

From the data collected, the results show five main themes:

- Experience using self-learning models with technology
- Preferences and readiness for using the self-learning methods with the assistance of technological tools.
- Usefulness of self-learning methodology and technology
- Training required for using self-learning methodology and technological tools
- Motivation to use both techniques during the course.

All the themes derived from both teacher and students' perspectives.

4.1. Experience using self-learning models with technology

This topic divides into two subtopics; experience before the research and experience during the research. Prior experience refers to any contact or knowledge the learner and teacher may have had before the application of the flipped model with technological assistance to his/her class. Whereas, during the class experience is the experience of using the flipped model with technological assistance during the class.

4.1.1. Experience before the research

The person participating in this research has been a teacher for over 40 years and an English teacher for approximately fifteen years. She has been working with different age groups varying from 15 to 75 year-old students. Her experience in teaching has made her very conscious of the generational difference among students and the way each generation approaches the use of technology for learning. Therefore, she participated in two interviews during the investigation process.

Due to the teacher's experience with such variety of generations, during her first interview she was asked if anyone can learn English. The teacher said "Everyone can try but there are exceptions". She believes that some people may have difficulties that she even

considers as possible disabilities to learn. She also believes that there is a generational difference involved in the process of learning.

According to the teacher, new generations need technology to learn. Also, she considers there are problems with technology, because they receive thousands of pieces of information and they cannot validate from all that information. A graphic example she mentioned is a bowl with water. Students receive much information and they need to sort it out "it is like when you fill a bowl with water. You put water and more water and there is a moment when water is not (contained) in this bowl (overflows). So, how can they (students) choose what is important from not important information". The analogy defines how students can manage the information. Too much information eventually fills a student's capacity and confuses the learner. Therefore, it is essential to know how learners can select what is necessary from not necessary information and that may involve understanding the experience students have with technology.

Students have their own prior experience with the use of technology and flipped methods. The researcher asked the students "Have you used virtual classrooms before?" *Padme* and *Leia* reported that they had not used any virtual classroom before. On the other hand, *Luke* said that he has. The student said "In my school. They proposed a Moodle to see if we focused there and used it as support material and that is when I used it and realized that it was useful in many occasions". The follow up questions for *Luke* referred to the type of course where he used virtual classrooms and the if the type of classroom material was used for reinforcement, self-learning, support, or some other purpose. He had used virtual classrooms for school classes but all the material presented in it was exclusively for reinforcement purposes. In other words, from the three students, only one student had some kind of contact with virtual classrooms, but none of them had experienced a flipped model classroom before this research.

4.1.2. Experience during the research

Two questions were examined regarding the experience during the research. Questions on what experience they had using videos and concept maps as learning activities before the class? And, what teaching resources did they find most useful during the class development? The answers were very enriching for the results of this study. They clearly explained how they felt about the use of a method that was new to them.

In general terms, their experience using videos and concept maps before the class was positive. *Padme* found these materials very helpful. According to her, "videos and concept maps help to study better" and she also mentioned that she could self-learn the topics through these materials. *Leia* said that she liked "very much using the information on the platform because it is very complete and condensed". *Luke* said that at first he didn't understand the topics at first, but once he saw the material on the platform, he felt it was straightforward to learn on his own. The three students agreed that the material was advantageous.

The teacher also mentioned that the change was positive for her. "I feel very good with this new methodology and I think that it's a matter of time to get adapted with this kind of teaching. But I like it, I feel Ok" - the teacher explained, as she smiled, showing her happiness towards using the new methodology. Although, later on, she confessed that she still needs more training and preparation, but the initial response on using a new methodology showed her willingness to try new things and that she enjoyed experiencing new ways of teaching.

The conversation kept very casual with the students when talking about the teaching resources that they found most useful during the class. Very relaxed, the students gave two answers that define their experience when referring to useful material. *Padme* and *Leia* mentioned that they found the exercises very useful. At the same time, *Leia* and *Luke*

mentioned videos were useful material as well. In consequence, the students believe that exercises and videos play videos play an essential role in the learning process.

4.2. Preferences and readiness for using the self-learning methods with the assistance of technological tools

During the interview one of the topics addressed was the teacher's point of view about different generations. During the conversation, the main focus was Generation Z. "They can use technology in a very spontaneous way", the teacher mentioned; as she crossed the legs. "…it's like if they… I think they were born with this capacity" - she continued. The researcher explained to the teacher that students between 10 and 24 years of age were part of Generation Z to make sure that the teacher knew who Generation Z students were. The concept that the teacher has about these learners is that they can use technology in a very spontaneous way as if it were a natural-born capacity.

Understanding students' preferences may also help in understanding what type of materials can be used successfully with Generation Z students. During the interview, the students were given four options on what their preferences are: Lessons led only by a teacher, material to learn on their own (self-learning), a combination between face-to-face classes and virtual support material, and any other option they would like. The three students were given four options as to what their preferences are: Lessons led only by a teacher, material to learn on their own (self-learning), a combination between face-to-face classes and virtual support material, and any other option of their choosing. The three students were very confident when the researcher asked the question, and they mentioned that they prefer a combination of face-to-face classes and virtual support materials. Although the question focused on the virtual classroom as support material, they also mentioned earlier that watching the video before the class was helpful to them.

Technologies make a difference in teaching today. During this part of the conversation the teacher proved to be very confident about her response. The teacher believes that students "are like natives with these new technologies, so it is vital to give them these kind of tools for them to learn better and faster". These tools, according to the teacher, are "videos, games, images, colors, different sounds". Therefore, according to the teacher, the students' adaptability to new technologies, allow them to learn faster and better.

The students' interviews focused on the type of materials that learners prefer to use with the flipped model. The results showed that the three of them believe that videos are the best way to learn for them. *Padme*, leaned towards the interviewer while answering the question, and said that videos help her to understand better and that she can repeat the video as many times as she wants if she could not understand the first time. *Leia* was also relaxed as she mentioned that she likes videos because they are didactic. *Luke* also did not show any doubts as he said that videos are didactic, but he also mentioned that he can listen to them while he is doing other things, in some multitasking activities.

During classroom activities, the teacher asked her students; Who had watched the video? Six students mentioned watching the video, four students did not understand it in full, and the remaining four students confirmed that they did not watch the video. This information was corroborated with the registration log in Moodle. Also, on the video, it could be seen that students who said they had watched the video but did not understand it, were hesitating when answering. On the other hand, the six students that indicated watching the video had notes from the material they saw in the video and the mind map that that was in the virtual class. The notes were very explicit and complete regarding the topic presented. These students were seated in the first and last rows, three in each.

The topic for the virtual class of this research was the present progressive. The material presented on the platform was a video and a concept map (see Appendix 9 for material examples). The students answered the following question; What part did you like most, the video or the concept map? *Padme* and *Leia* chose the videos as the part they like the most. On the contrary, *Luke* chose the concept map. *Luke* also said that for him, it is easier to understand with the concept map and that he uses the video as support material rather than primary source for learning. Although, there was doubt in his voice as he explained the reason why he considered that the video is just support material.

The teacher decided to explain the topic again because she considered that the number of students that did not understand or saw the video and mind map were insufficient. During the teacher's lecture, all the students paid attention to her explanation in class, as they did earlier with the explanations from their peers. One of the students who saw the video remembered the explanation of double consonants from the video and explained it to her classmates. Her reaction was of joy, as she felt she had understood the new material on her own. The teacher interacted during the lecture with the students that saw the video to expand the knowledge on the topic and explained those ideas to everyone in the class.

The last question that the researcher asked was regarding students' preferences, and it focused on other materials that they would like to have in this virtual environment. Both *Padme* and *Leia* said that they would like to practice exercises or activities that involve the grammar learnt. *Padme* said "to practice with more examples", while *Leia* mentioned very calmly "maybe having more exercises in which I could answer as I watch the video". She emphatically affirmed that it would be helpful to "have some support exercises". *Luke* said that those two materials were enough. He is also a Polytechnic student, and due to that fact, he considers his time is limited. It is essential to explain that the video did include exercises at the end of the explanation. That, however, these exercises were not perceived as such by *Padme* and *Leia*.

In the first teacher interview, there was a moment when the topic switched from talking about the methodology used to the technology required; and then the answers varied radically. The teacher confessed she did not feel prepared to use the platform or any other technology involved in the research. She also explained that to use this technology, training the teacher would be essential for the success of the classes where it is used. The nervousness of the teacher regarding the adaptation process to use technology was evident during this moment of the interview.

During the second interview, which occurred after applying the virtual class with interactive material used for the purpose of the study, the teacher referred to her feelings about changing or adapting her usual methodology to the new one. "I feel very good with this new methodology and I think that it's a matter of time to get adapted with this kind of teaching. But I like it, I feel Ok.". Nevertheless, she considers that adapting to this new way of teaching requires time and training as well. This topic will be further analyzed in the following chapter.

Students did not show significant problems during the production stage of the class while working with review activities and exercises. Everyone followed the instructions and finished the exercises according to the teacher's planning. Even students that did not watch the videos had an excellent performance on their classwork. The teacher complimented and explained specific rules for the use of the Progressive and time expressions needed for the correct use of the tense, following the flipped method. This information was new for the students, as it was not part of the video or mind map included in the virtual classroom.

4.3. Usefulness of self-learning methodology and technology

The way Generation Z learners use the material and the platform is the core of this research. Therefore, most of the questions asked to the teacher and the students during the interview, were focused and related to the material included in the virtual classrooms. The three

students who were interviewed were very explicit about their preferences regarding the material. So were the answers given by the teacher about her perception regarding the materials used.

The first thing that the students were asked was regarding the order in which they prefer to see the material; in other words, before or after the on-campus class takes place. The three students confirmed that they prefer to access the materials before the class takes place. They like having previous knowledge of the material that is being covered during the class. *Luke* mentioned that he prefers to prepare himself before class to participate actively during the class with the teacher.

When asked about the educational resources that they find most useful within the virtual class, they all mentioned videos as their best option. Again they mentioned that videos are more didactic and that they can watch them "on demand", that is to say, every time they need or want to review their concepts. *Luke* confidently explained "videos are more didactic and easier because I do not have much time. I just play them and learn as I keep listening to it, while performing another activity".

The teacher answered three questions regarding the usefulness of the new tools and the flipped classroom as methodology to learn English. The first question asked for her belief if students can learn better using flipped classrooms or any other kind of method like it. The teacher mentioned that "everything new, everything with movement, with sound, is great" to incentivize learners of English. The teacher referred to the motivation that students may experience due to the use of these type of activities, this topic is further analyzed in 4.5. The other two questions explored the relationship between learning and the use of different tools to promote learning among students. The answer the teacher gave was that "technological tools available nowadays help students to learn faster and better through interactive material".

Students were asked if they used the virtual platform always, to understand their usage habits. *Padme* settled down in her chair zipping some water from her sports bottle and then said that she has not entered the platform regularly. "I recently entered the platform because I could not enter due to a problem with the logging process, so I was able to open it only recently" *Padme* explained. The other two students said that they had. According to the Moodle registration log, *Padme* has entered twice during the cycle, *Leia* usually enters every two days, while *Luke* enters once a week. Later on the interview, *Luke* indicated he preferred to enter once a week and check all the material at once, because of his university schedule and activities.

The interview then shifted to understanding if learners appreciate having a virtual classroom with self-learning material. The three students approve the method used during the course because they consider it helpful for their learning processes. *Padme* mentioned that "it helps a lot because through mind maps and videos, we can study on our own. Otherwise speaking, we study continuously on our own". She finds videos helpful. *Luke* said that he was eager to learn all the new concepts through this methodology.

During the second interview the teacher corroborated the students' perception by referring to the usefulness of the virtual class. She mentioned that virtual classes are very useful and that using the flipped model to have students practice and learn before the class is very good because they were motivated and curious to learn more during their on-campus class. The researcher asked, "Do you think it was useful to have students practice and learn before the class?" to which the teacher replied "Yes, because they are motivated and they came … with curiosity".

Another issue that required attention was if students needed help during the time they used the platform. None of the three interviewed students felt the need to ask their peers for help regarding any given topic. Furthermore, *Padme* mentioned that she was able to learn

everything on her own. On the contrary, other students who did not use the virtual classroom, requested help at least once in certain topics. *Luke* reported that one student asked for help when they were studying frequency adverbs. The three students confirmed that they could undoubtedly learn by themselves with the given material.

In general terms, the use of the platform was not a great challenge for the students. The three of them agreed upon the fact that using the platform was very easy for them. Nevertheless, two of them experienced problems with the first login password. When this problem came up, students asked instructions to the researcher and the problem was solved. Regardless of this minor setback, according to the students, platform use did not present any other type of difficulty.

From the student's point of view, the three mentioned that they find the use of a self-learning environment, which in this case was the Flipped Method, very useful. *Padme* explained that they can understand things on their own in advance. For *Luke*, because the learning process is easy, "it incentives to continue studying and learning". On a personal note, *Luke* mentioned that he is a Polytechnic student and that he does not have too much time. Therefore, with this methodology he can keep studying until the end of the chapter and he can watch the videos as many times as needed. Fully understanding the topics, in less time, is very important for him.

The students showed that they are at a level where they still need some further explanation in their mother tongue. They were not able to understand some of the explanations given in English. Therefore, some Spanish was used during the class, both by the teacher and the students. Following the precepts of the flipped model, a series of questions and answers were used mainly in English to assess the new knowledge comprehension. The translation was

used on a couple of occasions to clarify a word meaning or to clarify an instruction, not to explain grammar concepts. This process helped learners to assimilate the required instructions.

4.4. Training required for using self-learning methodology and technological tools

When talking about the flipped classroom model, the teacher seemed very uncomfortable with the topic, as if she was not sure of what the flipped classroom was. She moved the chair forward and then mentioned that her knowledge was limited. The teacher mentioned she "knew that students have a previous experience with the topics of a new class and then in the classroom they can ask questions and practice these contents"; but nothing else. Immediately the question that arose was if she had ever tried or used this model. To which she answered that she had not.

During the second interview, the teacher felt even more uncomfortable with the lack of training and said that it is needed. "I am not prepared for this new methodology. I want to have more training about this because we can get many results if we use this (methodology) but the training of the teacher is very important". There were also other questions which referred to the topic as well. One of these questions referred to the perception of what is important in order to understand the technology better. Even though the teacher knows that technology is the center of the flipped model, she could not pinpoint a specific need in that particular area. She agreed that technology is what training should focus on because teachers know methodologies, but they may lack knowledge on the use of that technology. She also explained that students would not have problems as long as the teacher is knowledgeable and prepared on the methodology and its technology use.

4.5. Motivation to use self-learning methodology and technological tools for the course

The motivational factor appeared in different moments of these interviews and also during the class observation. In the first interview, the question referred to what her

expectations were as a teacher during this new experience. The teacher answered that she felt glad and motivated because she is an old teacher, so this is a challenging experience for her. "First, I feel very glad and motivated because I am not a young teacher, I am old, so this is like a challenge for me to do this and it is an opportunity to use new methods, methodologies, things and it is good for an old lady to learn more and to be with my students as a part of this experience". She mentioned that it is an excellent opportunity for her, but at the same time, it is a challenge.

Motivation was talked about again during the second interview, but this time the focus was on the students. It was mentioned before that students came more motivated and curious to class; but, during the second interview, the teacher also said "they are motivated and they came in this case, in the future maybe come, with curiosity". Students enjoyed using new technology, "they like it very much… because they are very young and they are acquainted with technology and the devices". They enjoyed using technology in their classes due to their natural born ability to use it. The teacher was very confident of what she exposed during the interview. Nevertheless, motivation is something that works from both ends. The teacher needs to be motivated and also needs to motivate students in order to attain better learning results.

To sum up, five main issues were found during the course of the research. First, the experience using self-learning models with technology, which leads to the positive perception students and the teacher have about the experience of using the technology and flipped model in the classroom. Second, the preferences and readiness for using self-learning methods with the assistance of technological tools. There were particular preferences as to the type of material used, which included but did not limit to videos and mind maps. Third, is the usefulness of self-learning methodology combined with technology. Both students and teachers recognized the usefulness of the methodology and technology as positive support in their

learning-teaching process. Fourth, training for the use of self-learning methodology and technological tools is necessary. Finally, motivation to use any self-learning methodology and technological tools for the course are also crucial for a fully integrated learning process. Although the participants considered the first factors as positive, they also identified training and motivation as something that needs improvement. Further analysis of these topics will be presented in the following chapter.

Chapter V

Research Conclusions and Recommendations

Chapter One states the importance of understanding the use of interactive resources with technological platforms to help Generation Z Pre-A1-Beginner students develop self-learning skills for learning a second language at CEC-EPN. It was necessary to explore the possibility of using different interactive resources through technology to understand this concept and to help students learn in a more interactively. Adapting teaching to the way students expect to learn nowadays.

Learners from Gen Z are very distinct to other generations. This distinction is based upon the fact that their learning expectations and learning skills focus on the existence of technological support. Pre-A1-Beginner students can develop self-learning skills but need support and guidance from the teacher. Applying FLIP method requires useful and clear guidance from the teacher, with a good understanding of the learners' prior experience, preferences, and use of the flipped model.

The teacher's perspective is critical to understand the complexity of designing a class using technology and the FLIP Method. The teacher's knowledge of his/her students plays a crucial role in the type of materials and activities that are uploaded to the platform, but also impacts on motivation. From the teacher's point of view, the essential aspects indicated were the experience as defined in Chapter Four, as well as usefulness, readiness, training and motivation.

The research aimed at three main objectives. First, it focused on choosing the activities, material and technological platforms to be used during the research that are useful for self-learning using the flipped classroom or blended model. Second, intuitively organizing self-

learning material, allowing students to use it without a high level of participation from the teacher. Third, evaluating peer collaboration both inside and outside of the classroom.

The research focused on two distinct points of view, the teacher's perspective and the students' perspective. Two research questions were addressed from these perspectives:

1) How do interactive resources help Generation Z Pre-A1-Beginner students develop self-learning skills for learning a foreign language?
2) What is the teacher's perception on the dynamics change of a class for Generation Z Pre-A1-Beginner students using flipped method?

Chapter Three explains that there were two techniques used for gathering information; interviews and observation. The result of the interview, which involved individual interviews with three students and an observation during one particular class, responded to the first question. The answer to the second question, on the other hand, came from the results of the two interviews with the teacher. One occurred before the application of the new methodology and the second interview happened at the end of the research.

Considering the two perspectives mentioned before by students and teacher, there were three main topics extracted from the students and five topics obtained from the teacher. During the interviews, students mentioned issues related to the experience, preferences and use of the platform and the material. Furthermore, five topics were extracted from the teacher interviews; experience, readiness, usefulness, training, and motivation.

5.1. Experience using self-learning models with technology

The results show that experience may be divided into two very well defined subcategories; prior experience and during the class experience. Regarding prior experience, learners had some experience with online and interactive activities, but did not have experience with the FLIP model. Therefore, their online experience was something new for them.

Unfortunately, the FLIP model was not fully applied and students could not experience the whole concept. Students did see a repetition of certain activities, and motivation decreased due to such repetition. The same behavior was described by Y. Li (2018).

Most prior experience with the use of technology and virtual classrooms is limited to other type of activities. Usually, virtual classrooms are limited to reinforcing or supporting a lesson taught in class with the use of exercises and fill-in pages. There was no reference to FLIP model activities before the course. Therefore, the students' FLIP experience was new for them. As a consequence, their skills for self-learning are minimal and need to be developed further.

Although their self-learning skills are limited, the results show that activities involving videos and concept maps were very positive for their learning. Students found that watching videos and concept maps before the class helped them to understand in full all the concepts. As mentioned before, it also helped them with their self-confidence. In other words, students learned better with videos and concept maps uploaded to the platform, as these were useful in their learning process. Although it was not mentioned directly by the students, some watched the videos more than once, and that helped them to attain the concepts as well.

The teacher's experience was mainly proven during her classroom teaching, but not necessarily with the tools that were brought to her during the course of this investigation. The teacher knows how to teach in a traditional classroom environment. Her teaching experience is of over 40 years and with students of different ages. She has taught English for the past 15 years. Nonetheless, this was the first time she used the FLIP model and a virtual classroom in her classes. Therefore, the teacher's perception was beneficial.

The results also show that the teacher's perception helps determining the use and validity of the method. Her experience using videos, mind maps and virtual environments to teach,

instead of using class time, was very positive. The teacher is willing to use this methodology in further courses. Yet, the teacher must receive proper training both on the method and the use of the platform to optimize her class time completely.

5.2. Preferences and readiness for using the self-learning methods with the assistance of technological tools

When it comes to students' preferences for learning materials, the results prove that Generation Z learners have evident expectations. Gen Z learners, from the class that was the subject of this study at CEC, prefer a combination of face-to-face classes and virtual support materials over any other type of method and/or material. Also, they experienced the FLIP model through a Moodle online platform, which included videos and mind maps to explain the grammar points. Learners found it very useful and helpful to have these type of aid in advance to learn.

Self-learning was a new concept for the group of students, but they considered it useful for their learning process, as shown by the results. For self-learning the use of videos was most likely the technique they used the most due to the fact that they consider it more didactic. Also, it allows the learner to review the material if it was not clearly understood the first time. The option of multi-tasking, which is very common among the studied group, is also a valid reason to use videos over other type of activities.

Besides videos and mind maps, learners also want to have more practice exercises. The videos had exercises but the student did not understand these as such. The obvious conclusion to this issue, based on the results, is that exercises need to be specific and contain clear instructions on what to do. Considering that students are beginners, instructions should be given before the exercise, inside the classroom, and by the teacher. Then, students should be able to complete the activities.

Readiness refers to how prepared the students are to learn through the flipped model with technological support. Some people may experience difficulties, but those difficulties have to do with the way every person learns better. Generation Z, as explained in previous chapters, learns better with technology. The teacher is conscious of this fact and believes that using technology is a way to transmit new knowledge.

The teacher's job is to guide the student through the information that may be found online. The Internet is full of information, but choosing the right material to learn may be a difficult task. Since students are in the process of learning, it is very complicated for them to select the right material and avoid confusion. Therefore, the teacher has to help students to find the right information to learn.

Technology for Gen Z learners is a natural born ability. This generation has been in contact with technology since the day they were born, and they can use technology spontaneously. Therefore, teachers need to adapt their methodology to match the needs and expectations of different learners. In the particular case of Gen Z, students expect to find videos, games, images, colors, sounds, and any other prop that can be used inside and outside the classroom, through a virtual environment. Josuweit (2018) also supports this conclusion.

Again, referring to the readiness of the teacher, the situation is different. Teachers need to adapt their methodology and techniques to the needs of students, but training is crucial in this case. Both, method and technology need to be adapted, and therefore, learned by teachers as well. The results exposed that the teacher was also conscious that success in this process depends on the training and preparation the instructor receives before the application of the FLIP model and the technological support.

Students who saw the video showed more confidence during class activities. Most of the explanation that happened during the class was an interaction between the teacher and

classmates who watched the video. Students participated and showed their mastery on the topic through the explanation of topics that only occurred during the video and that were not analyzed explicitly during class. In other words, watching the video made students feel more comfortable when interacting during class, and doing review and exercises was not an issue for them.

5.3. Usefulness of self-learning methodology and technology

The use that Gen Z learners give to the material and platform was of uppermost importance for this research. First, it was possible to determine that students prefer the FLIP Method, as they want to have the material before the class to learn the content by themselves. Second, students find videos and mind maps a good didactic source for self-learning. Third, motivation is vital in order to maintain an adequate learning routine.

Gen Z students find self-learning as an excellent way to learn. During the research, students confirmed that having access to new concepts before the class was instrumental. Using the platform with different materials allowed students to fully understand the concepts and learn the language thoroughly. Learners appreciate having a fully accessible classroom environment and learning materials outside of the classroom; in their world. Students like to be ready for the class and be able to participate actively during the class.

Mind maps and videos are excellent learning resources because Gen Z learners are used to having information available when and where they need it. Students nowadays expect to have access to information at any time. Using a platform with material that can be accessed upon request contributes to satisfying these learners' needs. They can access the platform and watch, review, repeat or pause as they deem fit. The use of videos and mind maps for understanding the concepts help students in their learning process.

The results demonstrate that using the platform requires clear instructions and motivation from the teacher. Students mentioned during the interviews that they entered regularly, but the platform log proves differently. The first thing would be to clarify what is the concept of "regular" for each person. Students did not enter daily, but they did enter in ranges that went from two days to one week. Therefore, the teacher needs to clarify what students are expected to do in terms of accessing the platform and completing the activities that are programmed. Also, students need to be reminded that they may access more than once and to use the material for studying purposes as well. Nonetheless, all of these activities still need to be flexible enough in order to fulfill the concepts of the FLIP Method.

Students preferred to work on their own rather than with their classmates during their self-learning experience. Most of the students in the classroom did not ask for help or assistance to their peers. The only questions asked to other people, especially to the researcher, had to do with entering the platform and not with the subject itself. Although peer work is one of the concepts in FLIP models, and of paramount importance for learning, according to Vygotsky (1978a), this type of interaction was not visibly present during the investigation. None of the students tried to contact their peers or the teacher through the platform, this even knowing that they could do so through a forum. Students showed that they still believe the person to ask about the subject is the teacher, during class time.

Using the platform was easy for the students because the use of technology is an everyday thing for Gen Z. Using the FLIP method through a virtual platform was something that students felt comfortable with, as they can study and learn at their own pace in a familiar environment; which, as it was seen in Chapter Two, is something natural for this particular generational group. Because the learning process is easier for them, it incentives studying and learning, although some problems were experienced mainly on the first access to the platform.

Instructions on how to access need to be very clear to avoid this problem. Nevertheless, the use of a virtual platform is mostly positive.

Without any doubts, using an educational platform and a blended or FLIP model works. There are many examples of success using flipped models in universities, such as the cases explained by Chen et al. (2018) and Kim et al. (2014), among others. The results offered from the research support those cases as well. Nevertheless, the question that remains refers to the perception the teacher has about students learning through a blended model using technology. Even though the method may be new for many teachers, interactivity has proven to be effective in the learning process. Students during the research, as well as in other research analyzed in Chapter II, showed interest and felt the method helped them learn better. But motivation is a different thing and is addressed independently in 5.5.

5.4. Training required for using self-learning methodology and technological tools

As mentioned earlier, teachers may lack training regarding the flipped method. During the interviews it was mentioned that the teacher did not know for sure what the flipped classroom was. If the teacher does not have the expertise required to apply the model, it is likely that the process will at least show ineffective if it does not fail. Many teachers may have heard about the flipped model but have not used it or completely understand it. In consequence, training is needed for the model to be successfully applied at CEC.

This situation is consistent with the findings of the research, during the interviews. The teacher corroborated what was considered a possibility, and that is that there was no teacher's prior knowledge regarding the flipped model. Furthermore, the teacher explicitly mentioned that training in the FLIP model and technology was needed for her to perform better during the class and in her interaction with students. Although she thought her weakness was mainly on the technological part of the application, the need of a training regarding the four pillars of

FLIP and the different methodologies became evident with the results of the observation, where it could be seen that the concepts were either missing or unclear for the teacher to apply the model.

Technology training is also important for the outcome of the class. As stated in Chapter Two, EdTech is altering the classroom activities scope and teachers need to adapt their plans and curriculums to include technology in their classes (Elliott & Long, 2014). The lack of training or knowledge regarding technological tools may be a negative factor for the outcome of the course, as it may diminish the validity of the instructor as such.

5.5. Motivation to use self-learning methodology and technological tools for the course

It is not very easy to define who needs or when motivation is mostly needed as it requires to be present during the whole process of a Flipped classroom. Lack of motivation by the teacher will create a lack of motivation by the students. Despite a very highly motivated teacher, poor design of the material can also demotivate students to work on their own during the virtual sessions, bringing down the whole plan. As defined by Harmer (2001), knowledge can only be attained if there is intention and desire to do so, leading to success during the process.

When motivation is backed up by good instructional material plus a useful application of the method by the teacher, students will be motivated to learn and fulfill the requirements of the program. This motivation brings about mastery on the studied topic, creating a real learning experience that lasts and is distant from only learning for an exam and then forgetting everything.

Motivation is transferred from the teacher to the students. Consequently, it is imperative to motivate teachers for them to motivate students. One possible way to achieve this goal is by

training teachers both in the use of technology and the application of the flipped method. Choosing only one standardized platform is vital to attain this objective.

Many platforms are beneficial for creating virtual classes. Nevertheless, not all of them allow a variety of tasks, online assessment, and registration of achieved goals. CEC-EPN has been using Moodle® as their choice for virtual classes. The flexibility of the tool is impressive, and it is very user-friendly, as the students mentioned. Although that is the platform used by CEC-EPN, and it was used during the research, others show the same flexibility and usefulness as Moodle ® and may also be used for the same purpose. It is just a matter of setting objectives and analyzing how the chosen platform can adapt to the needs of the virtual classroom.

The design of the virtual classroom affects both the motivation and learning of the students. The available technological tools help students to learn faster and better because they feel motivated to go at their own pace, choose their preferred material, and practice as many times as learners think they need. Students and teachers believe practicing and learning before the class is decisive for their learning as they feel eager to learn more during their on-campus class. Also, one-to-one instruction happens a lot more frequently when in-time class is freed as many lectures are done outside of the class. All these are part of the principles and results of a FLIP model (Marshall, 2018).

Students in the observed classroom like to participate in class. All the students were working and reviewing their homework and doing the activities that the teacher assigned. Students talked, answered questions and interacted with their peers and teacher. Nonetheless, when the teacher asked who saw the video, the situation was different. Only six students said that they watched the video. Meanwhile, four students said that they could not understand the video, and the last four said that they did not watch the video. Less than half of the class saw and understood the video, which means that there was a lack of interest in watching the video.

This type of behavior, where the students do not collaborate with the activities required before the class, has been registered in another research. As reviewed in chapter 2, Yi Li (2018) explains the reluctance of learners to download material, which can be identified here as the reluctance to enter the platform and watch the videos or other available material. It has also been said that students' attitudes toward the activities are a factor that affects results. Even though the perception of flipped classroom activities may be positive, students perceive that some activities are very high time consuming (Chen et al., 2018).

Lack of collaboration or interest in students may be a reflex of a lack of motivation. Motivation in students depends on their willingness to learn and how useful they find the information. Also, students feel more motivated when activities are short and not very high time-consuming. Furthermore, motivation is transmitted from teachers to students. In this particular case, the videos are not long, but the teacher did not feel sure with the new methodology, and that reflected in the lack of interest and motivation transferred-on to the students.

Students know that when something is not understood, the teacher will explain it again. With this in mind, students do not seem to find the need to learn beforehand because everything can be reviewed again. This situation happens mainly because the teacher is not familiar with the flipped methodology and its application. To apply it well, activities done inside and outside the classroom need to be very clear and distinct. During the course of this research, this distinction was not clear, and specific activities happened more than once.

To sum up, five general concepts that are extracted from the research. Regarding the experience using self-learning models with technology, students at CEC-EPN do not have much prior knowledge on the use of these resources. Yet, students' preferences show that they expect to use technology and different self-learning models in their learning process. All the

actors who participated in the research agreed upon the fact that self-learning and technology in class are very useful. Nonetheless, training is required for using self-learning methodology and technological tools, for the teacher and the students. Motivation proved to be a determining factor in measuring a successful course, using self-learning and technological tools.

5.6. Limitations

The researcher found different issues that may have affected the results of the research to a certain degree, such limitations are: lack of qualitative data, limited participation of the participants, lack of teacher's knowledge, resource creation limitations and the application of a longitudinal approach.

As this investigation was a qualitative study, a lack of quantitative data reflects on the impossibility of generalizing certain factors that may be key to apply the model more effectively. Also, as there was no control group, it was not possible to determine if the behavior of the sample group reflects or not the behavior of the whole population.

The limited participation of the sample learners was another issue. The real reason for this phenomenon could not be determined, but the ability to use a computer, having a computer at home, and assigning time for the activities may have been some of the factors limiting students' participation. Due to this fact, the researcher analyzed the possibility of using additional subjects from the sample. However, the observation that took place during the research proved this possibility unnecessary, as the results would not show considerable variation compared to the results initially observed with the three students.

Also, the lack of knowledge of the teacher regarding the methodology required some participation from the researcher. Considering the nature of the investigation, action/participatory, the researcher's intervention was expected and did not present any type of alteration to the results. Furthermore, participation was required, up to a certain degree, in

order to improve the materials and use of resources for the class. However, the information given to the teacher to communicate the students may have been insufficient, vague, or confusing.

Resource limitations did not allow for full original material development. The author created some of the material, but due to lack of resources and time, some other materials were adapted from existing online materials. Under the 1976 Copyright Act, there is no violation to the use of copyrighted material in this research (*Copyright Act of 1976, 17 U.S.C. §§ 101-1332*, 2016). Nevertheless, the material needs to be improved and personalized for each class in order to have better results.

A longitudinal approach was not considered during the course of the research. The results were based upon a single observation and a change in the approach could lead to different results. Lack of the use of such approach may have led to the lack of information that may or may not change the perspective of the researcher.

5.7. Recommendations for future research

Future investigations may find it useful to obtain quantitative data, either through a quantitative method or mixed method research. Quantitative data helps and allows the researcher to generalize certain key factors that may be found during the study. It also allows the researcher to establish a control group to determine repetitive behaviors among learners of a specific generational group. With a mixed method approach, the researcher will attain both quantitative and qualitative data that may lead to a better understanding of the situation.

The limited participation of the sample must be considered since the beginning, by using a different method, like longitudinal research. Verifying individual technological skills, access to the technology and time availability to perform the activities are of great importance. Nonetheless, a more human component has to be analyzed and considered: the willingness to

participate. Even with an informed consent signed, the intention of doing all the activities may be affected later on. Controlling these variables may lead to a more significant amount of gathered information.

The level of knowledge that the teacher possesses is also essential. Before starting new research, the investigator must be sure that the process is transparent and that the teacher fully understands how the activities need to be informed and approached every day. This way, the need of the investigator to be involved is less evident, and information provided to the learners is enough for them to understand the expectations and performance required. The researcher must consider additional training for the instructors of the investigation. Chapter Six will present a solution to this particular issue.

The research focused on Gen Z students, which, as it was mentioned throughout the report, are highly motivated to self-learn and use technology in their learning process. However, it would be necessary to analyze if the same motivation and will are also shown in other generations such as Generation Y, Generation X and Baby Boomers.

New material needs to be created according to the students' needs. As mentioned in the limitations section, the material needs improving to attain better results, but it is also essential to adapt material according to specific needs. Not all of the students learn the same way, and the flipped method requires the material to be continuously adapted. Preparing this material requires a considerable amount of work and time from the teacher to develop it. Therefore, this time must be considered when designing a technologically supported course.

A longitudinal approach, especially during the observation phase may be found useful. A research design that includes observation of the same variables to study behavioral fluctuations may bring new data for the researcher. Including a longitudinal approach over a cross-sectional study may help to understand generational gaps and behaviors in the classroom.

5.8. Conclusions

Summarizing what was found when analyzing the use of the platform, it is safe to state that it was a bigger challenge for the teacher than for the students. Skills and abilities to develop, design and apply the material are needed. Nonetheless, these can be taught through an excellent training program and guided practice with the teachers. Training, on the other hand, motivates teachers, and the motivation is transmitted towards the students achieving the ultimate goal of teaching; the students' acquisition of the new knowledge. Therefore, the proposal that emerges from this research is a teacher training for flipped methodology classes with technological support that will be further explained in Chapter Six.

The research proved that Generation Z learners want to use technology as part of their learning. Also, learners are interested in using a method that allows them to be the main actors of their own learning. Contrastively, not all students at CEC are ready to apply a blended or flipped methodology, but not necessarily because they do not want to, but because they have not developed the required skills to do so. Traditional teacher centered education is still solid in many schools and other learning centers in Ecuador. Therefore, additional student training and adaptation processes may be required to develop the skills mentioned before.

Self-learning skills are not developed by simply using technology or interactive material alone, students need to nurture grow upon them. Although students may find the intention and will of using this type of methodology, self-learning is a process that evolves from the constant use and application during the class. The teacher plays a significant role in the acquisition of said skills, and the teachers' knowledge of the application of the method is vital to its success with students.

According to students, they wanted more exercises to practice. But as it was explained before, the video included exercises at the end of it. Two possibilities may explain this

phenomenon, students were not focusing on the video, or the video was not as self-explanatory as it should have been. Either way, exercises are an essential requirement in the process of learning. Consequently, the explanations on the activities expected with the video need to be more explicit and clear for the student.

The teacher believes the dynamics of a class applying the flipped method is very different to a regular teacher-centered class. The teacher mentioned that she was not prepared to use the platform. She also said that methodology was something that a teacher could adapt to quickly. Nevertheless, Technology has to be understood as a means to an end. Therefore, understanding the four Pillars of FLIP, explained earlier in Chapter Two, is the ground holds the program structure; Flexible Environment, Learning Culture, Intentional Content, and Professional Educator. Teacher training, on these four pillars and technology as an instrument, is mandatory for an effective and active Flipped Model Class proceeding. A training course for teachers needs to be planned and put into practice to succeed in such an endeavor.

The research on the use of interactive resources in a self-learning platform for Pre-A1 Beginner students has been a very enriching experience. It helped the author understand the complex processes in which students and teachers are engaged every day during the learning process. It also showed that within the educational field, there is not just one perfect methodology for teaching and that many times it requires a combination of methods and techniques to develop a complete learning program. Nevertheless, it is of paramount importance to train teachers in the use of technology and different methodologies as well. By helping both teachers and students, to build a self-learning structural foundation, the learning process becomes more dynamic and allows knowledge to settle-in permanently in the learner. The learner experience is vital for this settling to occur, by improving their personal experiences and allowing them to experiment on their own, their learning is likely to be permanent and of higher quality.

Interactive material helps Pre-A1 Beginner students to develop self-learning skills in a foreign language class. How? By understanding the concepts and being able to review the material as many times as needed, at their own pace, in their own time, and wherever they want, the learning process becomes an active activity that merges with the students' real life. The learner combines his/her new knowledge with the real world, allowing to create a relationship between theory and practice as a whole. This process validates the learning experience for the student.

The main implication of the use of self-learning methodologies and technology is that the classroom dynamics completely changes when applying the flipped model. Using interactive material before the class, and shifting from traditional teaching to self-learning, requires the preparation of other types of activities and techniques during the class. Nevertheless, students are more willing to participate when they already know what they are discussing. The teacher, on the other hand, needs to adapt the teaching process to become a guide for the students and, at the same time, keep continually evaluating the students to verify the students' mastery of the topic.

During the course of the investigation there was one unintended but significant discovery that was mentioned earlier, lack of motivation or will to participate in the activities. While revising other investigations, many success stories were told. Perhaps, these cases mentioned above also reflect a different reality that may include different training sessions for teachers, different cultural background for students, or different social trends. Regardless of the origin of these differences, motivation and willingness are two paramount factors to consider when applying a self-learning method with any technological support.

Practical Proposal Design

Introduction

6.1. Title:

Teacher Training for Flipped Methodology Classes with Technological Support.

6.2. Rationale:

To identify the reasons for the training it is necessary to understand the situation of the company and the environment. CEC-EPN students are mostly among the population known as Generation Y or Millennials, and Generation Z or Centenials. This target group is used to using technology in all their activities and currently very few instructors have the capacity and/or knowledge to prepare such courses. On the other hand, the competition has already taken their first steps in platform-based courses, however, they have not developed FLIP methodology on a large scale.

The technological requirements, facilities and possible methods of information transmission to participants will be through CEC-EPN's virtual area servers and computer labs. This course is based on research developed for this purpose through a thesis research at CEC.

Teacher training is very important to guarantee a good educational level in any institution. Through teacher training the quality level of education is raised, but also teachers become more loyal due to the sense of commitment experienced during the training process. Teachers consider training important. Even more so, if it introduces new methodology, such as the flipped classroom, and technological support. In other words, teachers applaud any methodology or support that helps them achieve their goal of being better as teachers and helping students learn.

Fassett (2020) states that for this type of training it is of uppermost importance to understand the four Pillars of FLIP and the way to apply these pillars in a classroom with technological support involved. These two components form the structural backbone of an effective FLIP model Class at CEC-EPN. All the topics regarding the following teacher training proposal are based upon the four pillars and the technological support of an online platform such as Moodle®.

6.3. Theoretical framework

6.3.1. Technology

Technology is a crucial component of our students' daily life; it has become an active participant of everyday activities. Technological interaction is not only present at home or work, but also at school. Andrei (2019) mentions that in the United States many schools are already implementing technological initiatives such as Bring Your Own Device (BYOD). Due to this accelerated change, teachers need to adapt plans and curriculums to include technology in their classes promoting Education Technologies or EdTech (Elliott & Long, 2014).

Some problems may be expected. Richardson (2011) shows a case in Cambodia where he found several challenges that affect the adoption of new technologies. Hardware issues; language barriers; practice for trainees; and lack of electricity, computers, Internet access and/or knowledge about these technologies. Also, Sox & Rubinstein-Avila (2009) explain that the use of technology takes some time to implement as it requires other types of knowledge from teachers to prepare and adapt material. Students benefit from technology with more engaging activities (Billings & Mathison, 2012). Fassett (2020) compares the use of a book with the use of an interactive game and states that the response and impact in students is higher with the use of interactive activities.

The teacher's perception regarding technology plays a very important role when using technology-based activities. These perceptions may be divided into five based upon their main characteristics; relative advantage, compatibility, and complexity, observability, and trialability. One of the findings by Billings & Mathison (2012) was that teacher trainers were always talking about complexity and technology as if those two belong together. At the same time, teachers who used technology in an earlier stage, usually talked about advantages. Nevertheless, adopters believe that ICT skills improved their teaching methods.

The material prepared for the classes need to be closely related to the teacher personal style and his/her technological skills. Teachers need to feel safe and confident with the technology and activities. They also need to feel that it is not going to affect or undermine their image as a teacher in front of their class. Namely, teachers need to prepare their own material according to their personal styles and adapted to their teaching techniques in order to maximize their own teaching potential.

Gen Z students believe on interactions and communication. Therefore, education is shifting towards a communicative pedagogy approach for foreign language teaching. This means that education is based on the immediate and real use of the new knowledge. The communicative approach involves five aspects of communication that moves away from the common analytic and rule-based approach (Kuksenok et al., 2013). These aspects are defined as 1) language arts, which is based on vocabulary and grammar; 2) language for a purpose, which means communicating with a use in mind; 3) personalized language, which refers to learners using language for opinions; 4) theater arts, which includes roleplaying, reading and performing; and 5) going beyond the classroom, which refers to the use of authentic material and cultural relationships (Fassett, 2020).

The relationship between artifact use and communication was established by Kuksenok et al. (2013). Artifacts play different roles during a class. The roles defined by Kuksenok include record, reference, structure, illustrate, and prop. Sometimes these roles may overlap or more than one role may be played by the same artifact. Nonetheless, all of them support on building collaborative knowledge and learning communicative language.

In conclusion, both teachers and students may benefit from the use of technology inside and outside of the classroom. They may develop new skills that will enhance language learning. Nevertheless, technology is a tool to bring authenticity to the activities used for foreign language learning. The use and application of technological artifacts can support creative and entertaining role-playing, which will allow a higher level of performance and knowledge acquisition.

6.3.2. Self-regulated learning

Self-regulated learning (SRL) is the process to self-regulate. This means that a person can transform his/her abilities into performance skills and learning becomes an active set of activities and it is not reactive to the teacher's explanation (Fassett, 2020). Students engage to the class and complete the activities, both inside and outside the classroom. The results are easily observed through the students' cognitive abilities, motivational factors, behavior and assessment, retention and in-class practice and participation (Enomoto, 2012).

Motivation in students has to do with inside and outside classroom motivation. Some investigations mention that self-regulation is not an ability but a selection process of skills and knowledge. In order to be motivated, a learner needs to set specific goals, apply strategies to fulfill those goals, observe progress, modify physical and social contexts to align them with the goals, manage time correctly, self-assess, accept the cause-result relationship, and modify methods for future learning (B. J. Zimmerman, 2002). According to the University of Waterloo

(2012), the process involves four steps, evaluate learning readiness, learn goals setting, learn process engagement, and learn assessment.

Teachers play an active role in the Self-Regulated Learning process. Teacher's need to develop the ability to build cooperative learning environments for students, help students with directions and motivation, support students' initiatives for learning, administer time for questions during the process, and play an advisor role instead of a teacher. They also need to ignite motivation and correct behavior, and assess through timely feedback (Enomoto, 2012; University of Waterloo, 2012; B. J. Zimmerman, 2002).

Many techniques may be used to approach a self-learning environment. All of these techniques are known as blended models. A blended model is a combination of a regular on-campus class with a series of activities that take place outside of the classroom. These are usually internet based, and motivate the learning process to happen also outside of the classroom (Evseeva & Solozhenko, 2015). Teachers will usually use some kind of information and communication technology (ICT's). ICT's help teachers to create an interactive student-centered class. Through this methodology shift, teachers may apply what is known as the FLIP model.

6.3.3. The FLIP model

The FLIP model was introduced by Jonathan Bergmann and Aaron Sams in 2000, and the main concept is to invert or flip the order of activities inside the classroom and outside of it. In other words, theory is learned at home, while production and activities take place inside the classroom (Bergmann & Sams, 2007). The flip model refers to the four pillars of FLIP which are a Flexible Environment, Learning Culture, Intentional Content, and Professional Educator.

Flexible environment means adapting the spaces inside the classroom for specific tasks, lessons or units. It also means to be flexible with timelines and assessment. Learning culture is about the role change that occurs between the teacher and the student, where class time is dedicated to production rather than learning. Intentional Content helps students with the development of conceptual understanding and procedural fluency. Intentional content allows teachers to prepare active learning strategies, depending on the level of the learner. Professional Educator refers to the teacher's role, which include observing students constantly, providing relevant feedback and assessing during the whole process (Fassett, 2020; Flipped Learning Network, n.d.; Marshall, 2018)

Many studies refer to the flip model. For example, Kim et al. (2014) explain that a Flipped classroom is not only self-learning, but it is an activity exchange between students usually through online learning management systems. According to the authors, specific results and tested strategies offer students and the institution a more efficient classroom environment. The results showed improvement in the learning experience and multi-disciplinary applications.

The FLIP model may be defined as a student-centered learning where the presence of four actors is definitive; teacher presence, learner presence, society presence, and cognitive presence. These actors influence nine principles which are explained in Fassett (2020). Teacher presence influences by providing an incentive for students to prepare class, student assessment, and prompt feedback during individual or group works. At the same time, learner presence provides enough time for students to carry out the assignments. Society presence provides the means for building a learning community, and easy to access and familiar technologies. Finally, cognitive presence gives an opportunity for students to have exposure prior to class, clear connections between in-class and out-of-class activities, and clear and well-structured guidance.

Teachers and students consider there is a benefit that comes from the use of flip models. Students believe they can participate more during the class activities if there is good teacher guidance. Teachers consider that using materials to teach improves the learning experience for students and enable them to learn better. Although, time is a factor to consider in this process as time investment is required by all participating actors (Chen et al., 2018; Fassett, 2020; Y. Li, 2018).

The flipped methodology has positive and negative factors perceived during the application of the model. According to Chen, et al. (2018) the flipped method is positive in terms of attainment value, intrinsic value, utility value, and satisfaction. Students' have a better attitude towards the tasks which increased the amount of time using English in and out of class. Students showed a higher level of learning and confidence because activities are carried out in a flexible learning environment both inside and outside the classroom. However, Some students perceive that activities may be very high time consuming and some others just lack interest in the activities (Chen et al., 2018; Fassett, 2020).

Li (2018) explained that students were interested at first, but later on, learners did not show the required preparation for the activities and their class performance dropped significantly due to the lack of cooperation (Y. Li, 2018). This is also seen in Fassett (2020), where the students did not use the platform on a regular basis. The lack of cooperation made it difficult to apply the model in full.

In brief, the FLIP model can be applied in ESL/EFL classes but it is very important to consider that students and teachers' motivation is a determinant factor in learning. Technology is also a key factor when designing class material in a learning management system. In order to attain student cooperation, teachers need to be prepared on the use of technology and the

pillars of FLIP as well. In order for the FLIP method to work, it is necessary to provide adequate teacher training.

6.4. Objectives

6.4.1. General Objective

Prepare instructors to teach a language course using flipped methodology with technological support.

6.4.2. Specific Objectives

To introduce and practice the six ways to design a course using flipped methodology with technological support to teach languages at CEC-EPN.

At the end of the course the teacher will be able to create a language course using flipped methodology with technological support.

To train instructors for 20 hours in this methodology and the corresponding practice to apply the methodology.

6.5. Beneficiaries

Within the analysis phase of the course, the researcher determined the characteristics of the target group. There are two direct beneficiaries of this teacher training program. First, all instructors working at CEC-EPN will benefit from it. Regardless of the level or language they teach, each CEC instructor will be able to complete this training course. The group includes male and female instructors between the ages of 28 and 78. The level of mastery of the technical language is very low, however, the motivation is very high among the target group (Fassett, 2020).

Secondly, the institution will benefit as it will have trained instructors on the latest trends in education, that will be able to use all the resources offered by the institution. Finally, students who will benefit from a frontline education for language learning.

6.6. Impacts

Fassett (2020) explains that teachers at CEC-EPN are not prepared for teaching under a flipped methodology, even less so to use all the technological support available. Teachers need to develop technological skills and new concepts regarding the flipped method. Both skills and knowledge are attainable through a teacher training.

This teacher training will allow the current staff to prepare for the combined challenges of the flipped method and the use of technology with it. This training answers the need of improving the knowledge of teachers and the use of all the technological support available at CEC. Although the equipment and infrastructure is there, many teachers do not have the skills required yet. Therefore, teachers need to be trained in order to exploit their full potential.

The expected impact is to have better trained teachers. This will impact in better classes and better trained students. The material will be easily shared and used by teachers. And our learners will benefit from a complete learning experience that will go beyond the classroom and into their real world. For now, the scope of this training is within the CEC-EPN campuses, but it could be used for training other teachers in the near future.

6.7. Development

According to Fassett (2020), the training should involve two main topics. First, the training must include components and explanations from the new methodology that CEC-EPN wants to implement; FLIP Method. Second, it should also include techniques on how to use the technology and software that will be used for the classes. The participants will receive a manual designed for this course (see Appendix 11). Also, after analyzing the class and material

from the observations and interview, the teacher training should take 40 hours in total and will cover different FLIP methodologies as explained in the following section.

6.7.1. Training needs diagnostic

6.7.1.1. Theme:

Teacher Training for Flipped Methodology Classes with Technological Support.

6.7.1.2. Training reasons identification

In order to identify the training reasons, it is necessary to understand the situation of the company and the environment. Currently, CEC-EPN students are mostly among the population known as Generation Y or Millennials, and Generation Z or Centennials. This target group uses technology in all their activities, and currently, very few instructors have the capacity or knowledge to teach such courses. On the other hand, the competition has already taken its first steps in platform-based courses. However, they have not developed FLIP methodology on a large scale.

The characteristics of the target group should also be taken into account. There are two direct beneficiaries of this teacher training program. First, all teachers working at CEC-EPN will benefit from it. Regardless of the language or level they teach, each CEC teacher will be able to complete this training course. The group includes male and female instructors between the ages of 28 and 78. The level of mastery of the technical language is deficient; however, the motivation is very high within the target group.

Secondly, the institution will benefit as it will have trained teachers. Instructors will receive first-hand information on the latest trends in education that they will be able to use in their classes, maximizing the resources used and that are offered by the institution. Finally, students will benefit from a frontline education for language learning.

The technological requirements, facilities, and possible information transfer methods to participants will be through CEC-EPN virtual area servers and computer labs. This course is based on research developed for this purpose at CEC.

6.7.1.3. Determining training objectives

6.7.1.3.1. General objectives:

To prepare material to design the teacher training on how to give a language course using FLIP methodology with technological support.

6.7.1.3.2. Specific objectives:

- To analyze the material required to design a course with FLIP methodology to teach languages at CEC-EPN. Theory and practice.
- Design a 40-hour training course for instructors regarding the FLIP methodology and the corresponding practice to apply it in their regular classes.

6.7.1.3.3. Data gathering tools

An interview with the CEC director and the Head of Linguistics will be conducted, in order to determine institutional requirements to fulfill training needs. In the case of instructors, a survey will be conducted to validate the previous knowledge each one has. A documentary analysis will be carried out to triangulate the information obtained and validate the course requirements.

6.7.1.3.4. Action plan

Considering that the goal is for instructors to be able to teach courses using the FLIP Learning model, the course will be designed in a mixed or blended format through which the instructor will experience first-hand the type of course that he/she will need to implement later

on. Through self-learning, the instructor will experience the concepts of blended learning, learning by doing, gamification and FLIP determined for this course.

6.7.1.3.5. Implementation of the action plan

For this course to be successful, it will be promoted to all the instructors through e-mails and sent via Whatsapp. The logistics of the course will be coordinated with the virtual area of CEC, as they already have the physical and technological infrastructure installed and working. The contents of the course should be distributed in a balanced manner to avoid overload or underload on a specific module that will affect the participants' interest in the course. Participants' and course progress will be monitored permanently to resolve issues that may arise. Finally, feedback will be given to participants and instructors. The deadline for this part of the process is 1 month from the date of approval and based on the investigation conducted by (Fassett, 2020)

6.7.2. Instructional macro design

6.7.2.1. Participants

6.7.2.1.1. Participants' demographic characteristics

Course participants are CEC-EPN English instructors with a university degree but not necessarily in education. They have at least one course in Teaching English as a Second Language or as a Foreign Language (TESL/TEFL). For other languages, they have teaching experience and proficiency. They are natives in the language they teach or have a C1 or higher level of proficiency according to the Common European Framework of Reference (CEFR). The participants' age range varies from 24 to 78 years.

6.7.2.2. Objective

6.7.2.2.1. General Objective:

Prepare instructors to teach a language course using FLIP methodology with technological support.

6.7.2.2.2. Specific objectives:

To introduce and practice the six ways to teach a course with FLIP methodology to teach languages at CEC-EPN.

At the end of the course the instructor will be able to create a language course using FLIP methodology with technological support.

Train instructors for 20 hours in this methodology and give them practice time to apply the methodology.

6.7.2.3. Contents

A. Introduction to the flipped method (2 hours) (Marshall, 2018)
    a. Four Pillars of Flipped Method
    b. Examples of applied Flipped
B. Six Models of Flipped (6 hours)
    a. Flipped Mastery (Bergmann & Sams, 2014)
    b. Explore-Flip Apply (Musallam, 2011)
    c. Peer Instruction (Berrett, 2012)
    d. In-Class Flip (Gonzalez, 2014)
    e. Online Flip (Honeycutt & Glova, 2014)
    f. SOFLA (Marshall & Rodriguez-Buitrago, 2017)
C. Using the flipped method practice and observations (12 hours)

6.7.2.4. Didactic strategy

This course is designed under a B-Learning scope and FLIP methodology. As the objective of this course is that the instructor applies the FLIP method, it is essential to experience first-hand what this type of course means and expects, both for the student and teacher. As CEC's priority is English language courses, the course will be taught in English.

Instructors will participate in a real FLIP course through a variety of activities that will take place during this course. In order to learn more about the student and the development of the course, instructors can follow a link created for this purpose, where they can fill out a questionnaire and watch an introductory video on the topic. The link to the online questionnaire is on Google forms and may be found at https://forms.gle/CUrA4PQRnEJiQZQN7. The video can be found on Youtube on the following address: https://youtu.be/s7_HqcEhMWY. There will also be a practical module where instructors will be able to design their lessons and receive feedback on them.

The course content is divided into modules and each module respects the following schema:

- Module overview
- Subject progress
- Unit summary
- Participants' activities
- Evaluation

In addition, the sequence organization goes from simple to complex, since each new methodology that is presented is based on additional information and built from a general framework that evolves into new topics.

Each section may have different approaches to presenting the specific method, which depends on the topic covered. The use of the following specific strategies, among others, will be applied:

No.	Topic	Strategy
1	Flipped Mastery	Video and comprehensive individual analysis.
2	Explore-Flip Apply	Comprehensive pair reading.
3	Peer Instruction	Collaborative activities.
4	In-Class Flip	In-class activities distributed by activity stations.
5	Online Flip	Video Collaborative asynchronous online activities.
6	Synchronous Online FLIP Learning Approach - SOFLA	Collaborative synchronous online activities.

6.7.2.5. Evaluation Tools

The evaluation tool also depends on the module. For modules one and two, online multiple-choice questionnaires, observations during class (with a rubric designed for the specific case), and an activity fulfillment checklist will be used. For module three, being more practical than theoretical, a competency evaluation and a rubric will be applied for the design of the lesson.

6.7.3. Instructional micro design

Instructional micro design is a detailed chart with the contents of the course. In this particular care, the instructional micro design is divided into 3 modules.

Name of Instructor:	Bernard George Fassett Velasco
Number of hours	Two hours in class, 2 hours in virtual class.
Module 1:	Introduction to FLIP Model
Learning objectives	To familiarize the instructor with the basic concepts of the FLIP model

Information Content	**Learning Activities**	**Evaluation**	**Additional Resources**
Topic 1: Introduction to FLIP model	Send a personalized email with the link to the first video the participant should watch individually in their home. Review of the Topics discussed in the forum	Online questionnaire with closed-ended questions Open-ended questions to be reviewed during class	Moodle-Youtube Online Video Online questionnaire with closed-ended questions to validate learning Open-ended questions forum for further analysis
The four pillars of FLIP	In-depth analysis of the four pillars of FLIP	Online questionnaire with closed-ended questions	Moodle self-learning interactive presentation. (Marshall, 2018)

FLIP method examples	Videos	Synchronous video conference forum (Rubric)	Video conference - webex

Name of Instructor:	Bernard George Fassett Velasco
Number of hours	Six hours in class, 6 hours in virtual class.
Module 2:	Six Models of FLIP method
Learning objectives	Introduce the instructor to 6 possibilities of designing a class with flipped methodology. Give tools to the instructor that will allow him/her how to differentiate the 6 models of flipped methodology and further apply them in a class

Information Content	**Learning Activities**	**Evaluation**	**Additional Resources**
Topic 1: Flipped Mastery	Video presentation about the topic prior to the class. Explanation about the activities required according to the topic	Online questionnaire about the video	(Bergmann & Sams, 2014) Video Powerpoint Presentation Lesson follows the Flipped mastery principles

Topic 2: Explore-Flip Apply	Video presentation about the topic prior to the class. Explanation about the activities required according to the topic	Discussion observation Rubric	(Musallam, 2011) Moodle-Youtube Video Powerpoint Presentation Lesson follows the Explore-Flip Apply principles
Topic 3: Peer Instruction	Video Conference Trainning sesión Teaching applying family groups and expert groups among peers	Online questionnaire Rubric	(Berrett, 2012) Video conference-Webex Moodle-Youtube Powerpoint Presentation Lesson follows the Peer Instruction principles
Topic 4: In-Class Flip	Topic access through working stations about the activities required according to the topic	Station participation observation Rubric	(Gonzalez, 2014) Moodle-Youtube Powerpoint Presentation

			Lesson follows the In-class Flip principles
Topic 5: Online Flip	Video presentation about the topic prior to the class. Explanation about the activities required according to the topic	Online questionnaire about the video	(Honeycutt & Glova, 2014) Moodle-Youtube Video Video conference Webex Powerpoint Presentation Lesson follows the Online Flip principles
Topic 6: Synchronous Online Flipped Learning Approach (SOFLA)	Video presentation about the topic prior to the class. Video Conferencia: Explanation about the activities required according to the topic	Online questionnaire Forum	(Marshall & Rodriguez-Buitrago, 2017) Moodle-Youtube Video Video conference Webex

			Powerpoint Presentation Lesson follows the SOFLA principles

Name of IInstructor:	Bernard George Fassett Velasco
Number of hours	Twelve hours in class, 12 hours in virtual class..
Module 3:	Using the FLIP method: Practice and observations
Learning objectives	Have the instructor practice using the six FLIP Models

Information Content	**Learning Activities**	**Evaluation**	**Additional Resources**
Topic 1: Flipped Mastery	Develop a lesson using the Flipped Mastery method	Rubric	(Musallam, 2011)
Topic 2: Explore-Flip Apply	Develop a lesson using the Explore-Flip Apply method	Rubric	(Berrett, 2012)
Topic 3: Peer Instruction	Develop a lesson using the Peer Instruction method	Rubric	(Gonzalez, 2014)
Topic 4: In-Class Flip	Develop a lesson using the In-Class Flip method	Rubric	((Honeycutt & Glova, 2014)

Topic 5: Online Flip	Develop a lesson using the Online Flip method	Rubric	(Marshall & Rodriguez-Buitrago, 2017)
Topic 6: Synchronous Online Flipped Learning Approach (SOFLA)	Develop a lesson using the SOFLA method	Rubric	(Musallam, 2011)

6.7.4. Storyboard

The design of the course involves an interactive platform that needs to be developed specifically for the purpose of this course. In this particular case, the developers will be the virtual area team at CEC-EPN. Nevertheless, the storyboard needs to be delivered by the Linguistics department. The following graphs are the storyboard designed for the interactive application of the FLIP course.

MULTIMEDIA DIDACTIC GUIDELINE (STORYBOARD)

Teacher Training for Flipped Methodology Classes with Technological Support

Designed by: Bernard Fassett

OBJECTIVES

Download document

#1. Hello my name is FLIP-O, your personal assistant, and I will help you durng this course.

#2. Before we start, I want you to know what we are going to acheive during this course.

#3. The objective of Module 1 is to familiarize the instructor with the basic concepts of the FLIP Model.

#4. You may download the presentation by clicking on the button located to my left. If you are ready to continue, click on Next.

Module 1 Objective:

To familiarize the instructor with the basic concepts of the FLIP model

Repeat audio

Previous

Next

Notes:

All along the presentation:

- Interface includes the unit title.
- EPN and CEC logos appear on the upper right corner
- An avatar named FLIP-O is always present. It has movement and it has a robotic voice.
- It has buttons to move forward and backward and for audio repetition on the right side of the screen.
- Graphic design that evoques a traditional class (pencils)

For the Objectives::

- The avatar speaks and gesticulates a Voice in off text greeting #1
- After 2-second pause Voice in off text #2
- The screen appears and unfolds from above
- The course objectives appear in futuristic letters
- The avatar speaks with voice in OFF text #3
- The avatar speaks with voice in OFF text #4 and the Download File button flashes, finally as the avatar says next, the next button flashes. The screen turns off.

INTRODUCTION

#1. During this module, I will explain to you about the basics of the FLIP model. What is it and how it works. And I will also show you some successful examples of the FLIP Model applied.

 # 2. I will lead you during the whole process, but remember that it is very important that you follow the activities order, as we will be applying the FLIP model during this process.

#3. Are you ready? Let's begin! Click on the NEXT button.

THE FLIP MODEL

Repeat audio

Previous

Next

Notes:

For introduction:

- The avatar speaks with voice in OFF text #1
- As the avatar speaks, the name of the course appears on the screen
- The avatar speaks with voice in OFF text #2
- The avatar speaks with voice in OFF text #3

WHAT IS THE FLIP MODEL?

#1. First of all, you need to know what the FLIP Model is.

#2 text que está en las viñetas de la pantalla

#3. Now click on the button under the screen

#4. After you finish the video, press on the NEXT button.

- The Flip Model was introduced by Jonathan Bergmann and Aaron Sams in 2000.
- The main idea is to invert the order of activities between classroom and house.
- Theory is learned at home.
- Classroom is used for production tasks and activities.
- The flip model is based upon the concepts of the four pillars of FLIP.

Repeat audio

Previous

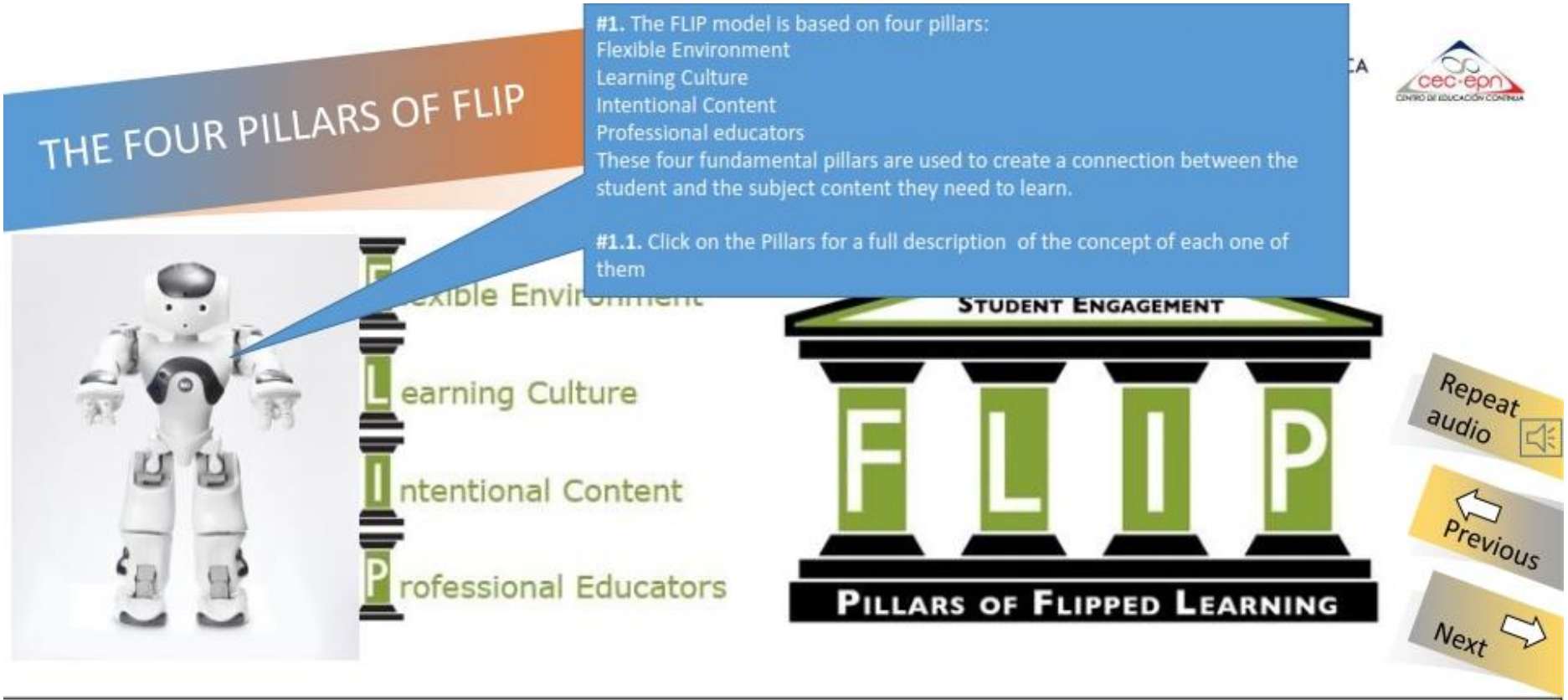
Next

PLAY VIDEO

Notes:

For topic trigger # 1 What is the FLIP model?

- The avatar speaks with voice in OFF text #1
- The screen turns on
- The avatar speaks with voice in OFF text #2 which is the text on the bullet points
- The bullet points appear and disappear one by one as the avatar speaks
- The avatar speaks with voice in OFF text #3
- The link flickers to draw attention
- Clicking PLAY VIDEO expands the video from the screen to full screen mode and plays the following video https://youtu.be/-hwu3xqbMKw
- When the video ends, the screen is compressed and turned off.
- The avatar continues with text #4



Notes: **Topic trigger # 2:**

- The screen compresses and stores itself as the infographic appears
- The avatar speaks with voice in OFF #1
- The side columns appear one by one as the avatar speaks
- The avatar speaks with voice in OFF text #2
- There are active links to each additional trigger on the left-side pillars

FLEXIBLE ENVIRONMENT

ESCUELA POLITÉCNICA NACIONAL

cec-epn CENTRO DE EDUCACIÓN CONTINUA

#1. FLEXIBLE ENVIRONMENT.

#1.1. FLIP Learning allows for a variety of learning modes, in other words, it presents a FLEXIBLE ENVIRONMENT.

#1.2. Read the definition and once you finish click on the button to play the video.

#1.3. When you finish watching the video, click on the next button.

Educators often physically rearrange their learning spaces to accommodate a lesson or unit, to support either group work or independent study. They create flexible spaces in which students choose when and where they learn. Furthermore, educators who flip their classes are flexible in their expectations of student timelines for learning and in their assessments of student learning.

Repeat audio

Previous

Next

PLAY VIDEO

Notes:

For entorno flexible:

- The avatar speaks with voice in OFF text #1
- The avatar speaks with voice in OFF text #2
- The avatar speaks with voice in OFF text #3
- Text appears on the screen
- The link flickers to draw attention
- Clicking PLAY VIDEO expands the video from the screen to full screen mode and plays the following video https://youtu.be/BvTPvUMd9b8
- When the video ends, the screen is compressed and turned off.

LEARNING CULTURE

#1. LEARNING CULTURE

#1.1. In the traditional teacher-centered model, the teacher is the primary source of information. The FLIP Model seeks to develop a LEARNING CULTURE among students.

#1.2. Read the definition and then you may click on the PLAY VIDEO button.

#1.3. Then click on NEXT

El modelo FLIP cambia deliberadamente la instrucción a un enfoque centrado en el alumno, donde el tiempo en clase se dedica a explorar temas con mayor profundidad y a crear oportunidades de aprendizaje enriqamong studentsas. Como resultado, los estudiantes participan activamente en la construcción del conocimiento a medida que participan y evalúan su aprendizaje de una manera que sea personalmente significativa.

Repeat audio

Previous

Next

PLAY VIDEO

Notes:

Para Learning Culture:

- The avatar speaks with voice in OFF text #1
- The avatar speaks with voice in OFF text #2
- The avatar speaks with voice in OFF text #3
- Text appears on the screen
- The link flickers to draw attention
- Clicking PLAY VIDEO expands the video from the screen to full screen mode and plays the following video https://youtu.be/ePeeza0iqQA
- When the video ends, the screen is compressed and turned off.

INTENTIONAL CONTENT

ESCUELA POLITÉCNICA NACIONAL

cec-epn CENTRO DE EDUCACIÓN CONTINUA

#1. INTENTIONAL CONTENT

#1.1. Flipped Learning Educators continually think about how they can use the Flipped Learning model to help students develop conceptual understanding, as well as procedural fluency.

#1.2. You know what to do, please move on.

Determinan lo que necesitan enseñar y qué materiales deben explorar los alumnos por su cuenta. Los educadores utilizan el Contenido Intencional para maximizar el tiempo en el aula con el fin de adoptar métodos de estrategias de aprendizaje activas centradas en los estudiantes, dependiendo del nivel de grado y la materia.

Repeat audio

Previous

Next

PLAY VIDEO

Notes:

For intentional content:

- The avatar speaks with voice in OFF text #1
- The avatar speaks with voice in OFF text #2
- The avatar speaks with voice in OFF text #3
- Text appears on the screen
- The link flickers to draw attention
- Clicking PLAY VIDEO expands the video from the screen to full screen mode and plays the following video https://youtu.be/narX6ipeKuM
- When the video ends, the screen is compressed and turned off.

PROFESSIONAL EDUCATORS

#1. PROFESSIONAL EDUCATORS

#1.1. The role of a Professional Educator is even more important, and often more demanding, in a Flipped Classroom than in a traditional one.

#1.3. Now read and then click on Play Video

#2. It is time to analize some succesful examples, click on next.

En la clase el instructor, observa a los alumnos, proporcionándoles comentarios relevantes en el momento y evaluando su trabajo. El educador profesional es reflexivo, se conecta con otros instructores para mejorar su instrucción, acepta críticas constructivas y tolera el caos controlado en su aula. El educador profesional toma un rol menos visible, pero sigue siendo el ingrediente esencial que permite que se produzca el aprendizaje FLIP.

Repeat audio

Previous

Next

PLAY VIDEO

Notes:

For Professional Educators:

- The avatar speaks with voice in OFF text #1
- The avatar speaks with voice in OFF text #2
- The avatar speaks with voice in OFF text #3
- Text appears on the screen
- The link flickers to draw attention
- Clicking PLAY VIDEO expands the video from the screen to full screen mode and plays the following video https://youtu.be/kFeCv1KUYCk
- When the video ends, the screen is compressed and turned off.
- The screen compresses and stores itself

THREE SUCCESSFUL EXAMPLES

#1. Now, we are going to watch three successful FLIP Model eaxamples in action to understand its application.

We are going to watch the following cases:

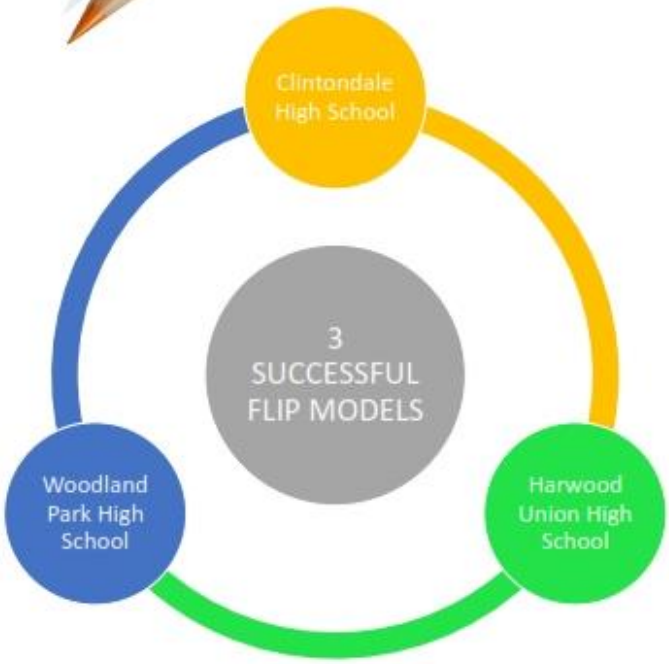
Clintondale High School

Hardwood Union High School and

Woodland Park High School.

Click on each video.

#2. Did you find it interesting? I'm sure you did. Now let's see how much you learned.



Repeat audio

Previous

Next

Notes:

For three successful examples:

- The avatar speaks with voice in OFF text #1
- The interactive concept map appears
- Clicking each button activates the corresponding video:
- https://youtu.be/G_p63W_2F_4
- https://youtu.be/gzQhiB2EOVE
- https://youtu.be/4a7NbUIr_iQ
- The avatar speaks with voice in OFF text #2
- The avatar speaks with voice in OFF text #3

NOW LET´S TEST YOUR KNOWLEDGE

#1. Are you ready to test your knowledge? Answer the following questions

#2. Congratulations! You have finished Module 1 You are one step closer to be a Master Flipper.

What year was the FLIP model introduced?
1)2000 2)2005 3)2008

What is the first Pillar of the FLIP model?
1)Foundational Planning 2)Flexible Environment 3)Flexible Grading

The objective of the FLIP model is:
1)invent new material to send as homework
2) reverse the order of activities between class and house.
3) Use the computer in class to work on tasks.

Repeat audio

Previous

Next

Notes:

For closing activities:

- The avatar speaks with voice in OFF text #1
- The screen returns and turns on with the first question
- The questionnaire is done in EXE
- The avatar speaks with voice in OFF the text of the questions
- The question appears on the screen
- The participant can choose the answer option.
- If the answer is correct the avatar says Correct, let's continue with the next one.
- A green check appears on the screen.
- If the answer is incorrect the Avatar says what the correct answer is
- On the screen a Red X appears.
- Continues with each question in the same way.
- The avatar speaks with voice in OFF text #3

References

Akbarian, I. (2017). Second Language Research: Methodology and Design. *RELC Journal*, 0033688217707630. https://doi.org/10.1177/0033688217707630

Akhtar, M. (2008, November 8). What is Self-Efficacy? Bandura's 4 Sources of Efficacy Beliefs. *PositivePsychology.Org.Uk*. http://positivepsychology.org.uk/self-efficacy-definition-bandura-meaning/

Andrei, E. (2019). Adolescent English Learners' Use of Digital Technology in the Classroom. *The Educational Forum*, *83*(1), 102–120. https://doi.org/10.1080/00131725.2018.1478474

Arslanyilmaz, A. (2014). Task-Based Language Learning and Teaching with Technology. *CALICO Journal*, *31*(1), 134-. Academic OneFile.

Bandura, A. (1978). Self-efficacy: Toward a unifying theory of behavioral change. *Advances in Behaviour Research and Therapy*, *1*(4), 139–161. https://doi.org/10.1016/0146-6402(78)90002-4

Baum, W. M. (2004). *Understanding Behaviorism: Behavior, Culture, and Evolution* (2 edition). Wiley-Blackwell.

Bedoya, P. (2019). *Encuesta de factibilidad para implementar aulas de soporte virtual para los cursos de inglés* (Quantitative survey No. 1; p. 20). CEC-EPN.

Bergmann, J., & Sams, A. (2007). *Flip Your Classroom: Reach Every Student in Every Class Every Day*. International Society for Tech in Ed. http://ebookcentral.proquest.com/lib/epn-ebooks/detail.action?docID=3317690

Bergmann, J., & Sams, A. (2014). Flipping for Mastery. In Getting Students to Mastery. *ASCD Educational Leadership*, *71*(4), 24–29.

Berrett, D. (2012). How "flipping" the classroom can improve the traditional lecture. *The Education Digest*, *78*(1), 36–41.

Billings, E. S., & Mathison, C. (2012). I Get to Use an iPod in School? Using Technology-Based Advance Organizers to Support the Academic Success of English Learners. *Journal of Science Education and Technology*, *21*(4), 494–503. https://doi.org/10.1007/s10956-011-9341-0

Bogdan, R., & Knopp Biklen, S. (2007). *Qualitative Research for Education: An Introduction to Theories and Methods, 5th Edition* (5th ed.). Pearson. /content/one-dot-com/one-dot-com/us/en/higher-education/program.html

Brooks, J., & Brooks, M. (2001). *In Search of Understanding: The Case for Constructivist Classrooms* (2nd edition). Pearson.

Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed). Pearson Longman.

Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners* (1. ed). Routledge.

Cai, M. (2018). The Influence of English Teachers' Emotional Behaviour on English Teaching. *Proceedings of the 2018 International Conference on Internet and E-Business - ICIEB '18*, 364–368. https://doi.org/10.1145/3230348.3230464

Chen, M.-H., Chao, Y.-C. J., & Hung, H.-T. (2018). Learning in a flipped english classroom from university students' perspectives. *Proceedings of the 6th International Conference on Information and Education Technology - ICIET '18*, 33–37. https://doi.org/10.1145/3178158.3178171

Chizzo, J. (2002). *Acculturation and Language Acquisition: A Look at Schumann's Acculturation Model*. Islamic Saudi Academy. https://gse.gmu.edu/

Coelho, E. (1998). *Teaching and Learning in Multicultural Schools: An Integrated Approach*. Multilingual Matters.

Copyright Act of 1976, 17 U.S.C. §§ 101-1332. (2016).

Council of Europe. (2018). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment Companion Volume with New Descriptors*. (1st ed., Vol. 1). Council of Europe.

Cronquist, K., & Fiszbein, A. (2017, September). *El aprendizaje de ingles en america latina* [News and investigation]. The Dialogue, Leadership for the Americas. https://www.thedialogue.org/wp-content/uploads/2017/09/El-aprendizaje-del-ingl%C3%A9s-en-Am%C3%A9rica-Latina-1.pdf

DeJaeghere, J., Dao, V., Luong, P., & Nguyen, L. P. (2019, April 12). *Qualitative Video Study of Teaching and Learning Competencies in Vietnam: Some Initial Findings | RISE Programme* [Research Improving Systems on Education]. RISE. https://www.riseprogramme.org/blog/qualitative-video-study-teaching-learning-competencies-vietnam

DeKeyser, R. (2015). SKILL ACQUISITION THEORY. In *Theories in Second Language Acquisition* (2nd ed., pp. 94–112). Routledge.

DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education, 40*(4), 314–321. https://doi.org/10.1111/j.1365-2929.2006.02418.x

Dörnyei, Z., & Ushioda, D. E. (2009). *Motivation, Language Identity and the L2 Self*. Multilingual Matters.

Dürmüller, U. (2019). *ESL: Interlanguage*. Blog. http://duermueller.tripod.com/interlanguage.html

Elliott, K., & Long, D. (2014). Third Annual Mobile Technology Study Provides Deep Insights, Pricing Data, and Promising Practices for Instruction. *Business Edition: National Survey on Mobile Technology for K-12 Education Offers Year-over-Year Trends Toeducational Technology Companies*, 2.

Enomoto, K. (2012). A Study Skills Action Plan: Integrating self-regulated learning in a diverse higher education context. In X. Song & K. Cadman (Eds.), *Bridging Transcultural Divides* (pp. 101–130). University of Adelaide Press; JSTOR. http://www.jstor.org/stable/10.20851/j.ctt1sq5w6k.10

Evseeva, A., & Solozhenko, A. (2015). Use of Flipped Classroom Technology in Language Learning. *Procedia - Social and Behavioral Sciences*, *206*, 205–209. https://doi.org/10.1016/j.sbspro.2015.10.006

Fassett, B. (2020). *Use of interactive resources in a self-learning platform for Pre-A1 Beginner students: A qualitative analysis*. Universidad Técnica del Norte.

Feldman, R. S. (2016). *Child Development* (7th ed.). Pearson. /content/one-dot-com/one-dot-com/us/en/higher-education/product.html

Fishman, A. A. (2015). *Who Comes After the Millennials?: A Case for 'Gen 9/11.'* https://www.ama.org/publications/eNewsletters/MarketingInsightsNewsletter/Pages/whats-after-the-millennials-a-case-for-gen-911.aspx

Flipped Learning Network. (n.d.). *Flip Learning* [Informativa]. Flipped Learning Network Hub. Retrieved December 13, 2019, from https://flippedlearning.org/

Furnborough, C., & Truman, M. (2009). Adult beginner distance language learner perceptions and use of assignment feedback. *Distance Education*, *30*(3), 399–418. https://doi.org/10.1080/01587910903236544

Gonzalez, J. (2014, March 24). *Modifying the Flipped Classroom: The "In-Class" Version*. Edutopia. https://www.edutopia.org/blog/flipped-classroom-in-class-version-jennifer-gonzalez

Gordin, M. D. (2015). *How did science come to speak only English?* [Essays]. Aeon. https://aeon.co/essays/how-did-science-come-to-speak-only-english

Graham, C. (2006). *Blended learning systems: Definition, current trends, and future directions*. ResearchGate. https://www.researchgate.net/publication/258834966_Blended_learning_systems_Definition_current_trends_and_future_directions

Hamdan, N., McKnight, P., McKnight, K., & Arfstrom, K. M. (2013). *A review of flipped learning*. 16.

Harmer, J. (2001). *The Practice of English Language Teaching* (3rd ed.). Addison Wesley Publishing Company.

Heath, A. (1997). The Proposal in Qualitative Research. *The Qualitative Report*, *3*(1), 1–4.

Hernández Sampieri, R., Fernández Collado, C., & Baptista Lucio, P. (2014). *Metodología de la investigación*. McGraw-Hill Education.

Honeycutt, B., & Glova, S. (2014, March 31). *Can You Flip an Online Class?* [Education]. Faculty Focus. https://www.facultyfocus.com/articles/blended-flipped-learning/can-flip-online-class/

Howe, N., & Strauss, W. (1992). *Generations: The History of America's Future, 1584 to 2069* (Reprint edition). Quill.

Ho-ying, H. C. (2014). *An Interpretative Phenomenological Analysis of English-as-a-Second-Language (ESL) Teachers' Motivational Beliefs in Developing Different Pedagogical Strategies*. College of Professional Studies Northeastern University.

Internet Live Stats. (2019). *Google Search Statistics* [Blog]. https://www.internetlivestats.com/google-search-statistics/

Jackson, D. (2017). Stages of skill acquisition. *HSC PDHPE*. https://www.pdhpe.net/factors-affecting-performance/how-does-the-acquisition-of-skill-affect-performance/stages-of-skill-acquisition/

Jonassen, D. H. (1991). Objectivism versus constructivism: Do we need a new philosophical paradigm? *Educational Technology Research and Development*, *39*(3), 5–14. https://doi.org/10.1007/BF02296434

Josuweit, A. (2018). *Barnes & Noble College Insights Gen Z research report featured in Forbes*. Barnes & Noble College Brand Partnerships. https://partnerships.bncollege.com/2018/03/barnes-noble-college-insights-gen-z-research-report-featured-in-forbes/

Kim, M. K., Kim, S. M., Khera, O., & Getman, J. (2014). The experience of three flipped classrooms in an urban university: An exploration of design principles. *The Internet and Higher Education*, *22*, 37–50. https://doi.org/10.1016/j.iheduc.2014.04.003

Kuksenok, K., Brooks, M., Wang, Q., & Lee, C. P. (2013). Challenges and opportunities for technology in foreign language classrooms. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems - CHI '13*, 1011. https://doi.org/10.1145/2470654.2466129

Lamb, M. (2012). A Self System Perspective on Young Adolescents' Motivation to Learn English in Urban and Rural Settings: Adolescents' Motivation to Learn English. *Language Learning*, *62*(4), 997–1023. https://doi.org/10.1111/j.1467-9922.2012.00719.x

Larsen-Freeman, D., & Long, M. H. (1991). *An Introduction to Second Language Acquisition Research* (1st ed.). Routledge. https://doi.org/10.4324/9781315835891

Li, Y. (2018). Current problems with the prerequisites for flipped classroom teaching—A case study in a university in Northwest China. *Smart Learning Environments*, *5*(1), 2. https://doi.org/10.1186/s40561-018-0051-4

Li, Z., Qian, J., & Gao, S. (2017). Research on the Application of Flipped Classroom Model in English Teaching. *Proceedings of the International Conference on Digital*

Technology in Education - ICDTE '17, 49–53. https://doi.org/10.1145/3134847.3134859

Lichtman, M. (2013). *Qualitative Research in Education* (3rd ed.). Sage.

López, P. L. (2004). POBLACIÓN MUESTRA Y MUESTREO. *Punto Cero*. https://www.scienceopen.com/document?vid=1b1bbebf-484c-40ea-986b-9e64dd658382

Marshall, H. W. (2018, March 28). *Six Models of Flipped Learning Instruction* [Conference]. International TESOL Convention, Cicago Il, USA.

Marshall, H. W., & Rodriguez-Buitrago, C. (2017). The synchronous online flipped learning approach. *TEIS News TESOL 2017*, *1*(1).

Masumeh, T. (2014). Skill Acquisition Theory and Its Important Concepts in SLA. *Theory and Practice in Language Studies*, *4*(9), 1971–1976. https://doi.org/10.4304

McLeod, S. (2019, updated). *Zone of Proximal Development and Scaffolding | Simply Psychology*. Simply Psychology. https://www.simplypsychology.org/Zone-of-Proximal-Development.html

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis A Methods Sourcebook* (2nd ed.). Sage.

Ministerio de Telecomunicaciones y de la Sociedad de la Información. (2018b). *El Internet cada día es más usado en el mundo* [Ministerio de Telecomunicaciones y de la Sociedad de la Información]. https://www.telecomunicaciones.gob.ec/internet-dia-mas-usado-mundo/

Ministerio de Telecomunicaciones y de la Sociedad de la Información. (2018a). *Incrementa el consumo de Internet móvil en Ecuador* [Government page]. Ministerio de Telecomunicaciones y de la Sociedad de la Información.

https://www.telecomunicaciones.gob.ec/incrementa-el-consumo-de-internet-movil-en-ecuador/

Musallam, R. (2011). *Explore-Flip-Apply Example*. Cycles of Learning. http://www.cyclesoflearning.com/9/post/2011/09/explore-flip-apply-example.html

Neeley, T. (2012, May). *Global Business Speaks English* [Magazine]. Harvard Business Review. https://hbr.org/2012/05/global-business-speaks-english

Nunan, D. (1992). *Research Methods in Language Learning*. Cambridge University Press.

Paredes, A., Miller, K., Watson, J., Knight, B., & Welling, J. (2015). *Ministerio de Educación, Socialización a Docentes Fiscales, Universidad Andina Proyecto National EFL Curriculum*. https://educacion.gob.ec/

Pauwels, A. (2014). Rethinking the Learning of Languages in the Context of Globalisation and Hyperlingualism. In D. Abendroth-Timmer & E.-M. Hennig (Eds.), *Plurilingualism and Multiliteracies* (pp. 41–56). Peter Lang AG; JSTOR. https://www.jstor.org/stable/j.ctv2t4b81.5

Penn-Edwards, S. (2004). *Visual Evidence in Qualitative Research: The Role of Videorecording.The Qualitative Report*. *9*(2), 266–277.

Ramirez, M. (2017, May 28). *What is Flipped Learning?* Flipped Learning Network Hub. https://flippedlearning.org/syndicated/what-is-flipped-learning-video/

Richards, J. C., & Schmidt, R. (2002). *Dictionary Of Language Teaching And Applied Linguistics* (Third). Pearson Education Limited. ihttp://archive.org//DictionaryOfLanguageTeachingAndAppliedLinguistics

Richardson, J. W. (2011). Challenges of Adopting the Use of Technology in Less Developed Countries: The Case of Cambodia. *Comparative Education Review*, *55*(1), 008–029. https://doi.org/10.1086/656430

Santos, E. (2019). *CYCLE 4-2019, informe final* (p. 25) [Classes available for the cycle with number of students per class and level]. CEC-EPN.

Schumman, J. (1985). An Acculturation Model for Second Language Acquisition. *Journal of Multilingual and Multicultural Development*, *7*(5), 379–392. ResearchGate.

Seifert, K. (2011). *Educational Psychology*. Rice University. http://www.opentextbooks.org.hk/ditatopic/6151

Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics in Language Teaching*, *10*(3), 209–231.

Sharabyan, S. K. (2011). An investigation into Iranian language teachers' motivation with respect to their job satisfaction and second language pedagogy. *Procedia - Social and Behavioral Sciences*, *30*, 1071–1075. https://doi.org/10.1016/j.sbspro.2011.10.209

Sox, A., & Rubinstein-Avila, E. B. (2009). Webquests for english-language learners: Essential elements for design. *Journal of Adolescent and Adult Literacy*, *53*(1), 38–48. https://doi.org/10.1598/JAAL.53.1.4

Tharp, R. G., & Gallimore, R. G. (1991). *The Instructional Conversation: Teaching and Learning in Social Activity*. *Research Report: 2* (Research No. 2; p. 12). University of California. https://www.researchgate.net/publication/234710717_The_Instructional_Conversation_Teaching_and_Learning_in_Social_Activity_Research_Report_2

University of Waterloo. (2012). *Self-Directed Learning: A Four-Step Process*. Centre for Teaching Excellence. https://uwaterloo.ca/centre-for-teaching-excellence/teaching-resources/teaching-tips/tips-students/self-directed-learning/self-directed-learning-four-step-process

Visser-Wijnveen, G. J., Stes, A., & Van Petegem, P. (2012). Development and validation of a questionnaire measuring teachers' motivations for teaching in higher education. *Higher Education*, *64*(3), 421–436. https://doi.org/10.1007/s10734-011-9502-3

Vygotsky, L. S. (1978a). Interaction between Learning and Development. *Readings on the Develo*, 34–40.

Vygotsky, L. S. (1978b). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Wang, J., & Gao, X. (2018). Examining the Key Variables in Foreign Language Learning—A Case Study. *GSTF Journal on Education (JEd)*, *4*(1). http://dl6.globalstf.org/index.php/jed/article/view/1589

World Health Organization. (2019). *WHO | Informed Consent Form Templates*. WHO. https://www.who.int/rpc/research_ethics/informed_consent/en/

Wyzant, & F. (2014). *Jeremy Harmer's Theory of Motivation* [Teaching]. Wyzant Tutoring. https://www.wyzant.com/resources/blogs/270515/jeremy_harmer_s_theory_of_motivation

Zimmerman, B. (1989). Self-Regulated Learning and Academic Achievement: An Overview. *Educational Psychologist*, *25*(1), 3–17.

Zimmerman, B. J. (2002). Becoming a Self-Regulated Learner: An Overview. *Theory Into Practice*, *41*(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2

Zimmerman, B. J., & Schunk, D. H. (Eds.). (2001). *Self-Regulated Learning and Academic Achievement: Theoretical Perspectives* (2 edition). Lawrence Erlbaum Associates, Publishers.

Appendixes

8.1. Appendix 1 - CEFR Pre-A1 Descriptors (Council of Europe, 2018)

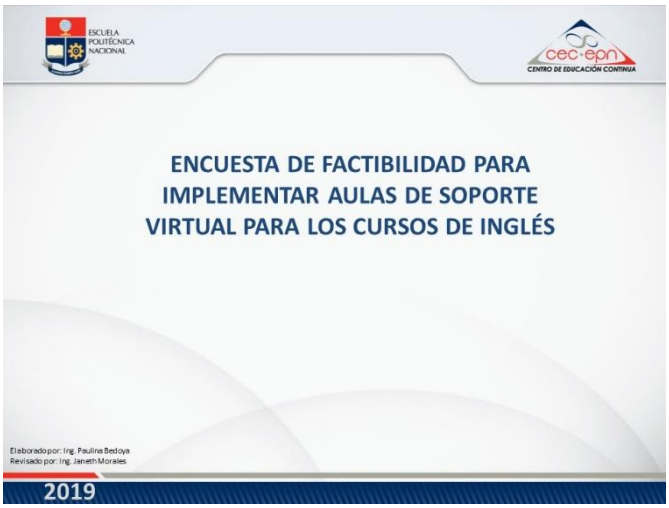
SPOKEN RECEPTION	
OVERALL LISTENING COMPREHENSION	Can recognize concrete information (e.g. places and times) on familiar topics encountered in everyday life, provided it is delivered in slow and clear speech. Can understand short, very simple questions and statements provided that they are delivered slowly and clearly and accompanied by visuals or manual gestures to support understanding and repeated if necessary. Can recognize every day, familiar words, provided they are delivered clearly and slowly in a clearly defined, familiar, everyday context. Can recognize numbers, prices, dates and days of the week, provided they are delivered slowly and clearly in a defined, familiar, everyday context.
UNDERSTANDING CONVERSATION BETWEEN OTHER SPEAKERS	No descriptors available
LISTENING AS A MEMBER OF A LIVE AUDIENCE	No descriptors available
LISTENING TO ANNOUNCEMENTS AND INSTRUCTIONS	Can understand short, simple instructions for actions such as 'Stop,' 'Close the door,' etc., provided they are delivered slowly face-to-face, accompanied by pictures or manual gestures and repeated if necessary.
LISTENING TO AUDIO MEDIA AND RECORDINGS	Can recognize words, names and numbers that he/she already knows in simple, short recordings, provided that they are delivered very slowly and clearly
WRITTEN RECEPTION	
OVERALL READING COMPREHENSION	Can recognize familiar words accompanied by pictures, such as a fast-food restaurant menu illustrated with photos or a picture book using familiar vocabulary
READING CORRESPONDENCE	Can recognize times and places in very simple notes and text messages from friends or colleagues, for example 'Back at 4 o'clock' or 'In the meeting room,' provided there are no abbreviations.
READING FOR ORIENTATION	Can understand simple everyday signs such as 'Parking,' 'Station,' 'Dining room,' 'No smoking,' etc. Can find information about places, times and prices on posters, flyers and notices.
READING FOR INFORMATION AND ARGUMENT	Can understand the simplest informational material that consists of familiar words and pictures, such as a fast-food restaurant menu illustrated with photos or an illustrated story formulated in very simple, everyday words
READING INSTRUCTIONS	Can understand very short, simple, instructions used in familiar, everyday contexts such as 'No parking,' 'No food or drink, etc., especially if there are illustrations.
READING AS A LEISURE ACTIVITY	No descriptors available
AUDIO-VISUAL RECEPTION	
WATCHING TV, FILM AND VIDEO	No descriptors available
RECEPTION STRATEGIES	
IDENTIFYING CUES AND INFERRING (SPOKEN & WRITTEN)	Can deduce the meaning of a word from an accompanying picture or icon.
SPOKEN PRODUCTION	
OVERALL SPOKEN PRODUCTION	Can produce short phrases about themselves, giving basic personal information (e.g. name, address, family, nationality).
SUSTAINED MONOLOGUE: DESCRIBING EXPERIENCE	Can describe him/herself (e.g. name, age, family), using simple words and formulaic expressions, provided he/she can prepare in advance. Can say how he/she is feeling using simple words like 'happy', 'tired', accompanied by body language.
SUSTAINED MONOLOGUE: GIVING INFORMATION	No descriptors available
SUSTAINED MONOLOGUE: PUTTING A CASE (E.G. IN A DEBATE)	No descriptors available
PUBLIC ANNOUNCEMENTS	No descriptors available

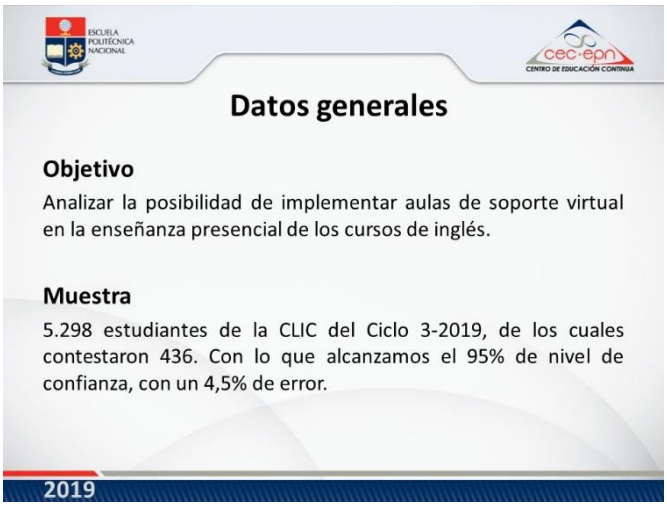
ADDRESSING AUDIENCES	No descriptors available
WRITTEN PRODUCTION	
OVERALL WRITTEN PRODUCTION	Can give basic personal information in writing (e.g. name, address, nationality), perhaps with the use of a dictionary.
CREATIVE WRITING	No descriptors available
WRITTEN REPORTS AND ESSAYS	No descriptors available
PLANNING	No descriptors available
COMPENSATING	Can point to something and ask what it is.
MONITORING AND REPAIR	No descriptors available
SPOKEN INTERACTION	
OVERALL SPOKEN INTERACTION	Can ask and answer questions about him/herself and daily routines, using short, formulaic expressions and relying on gestures to reinforce the information.
UNDERSTANDING AN INTERLOCUTOR	Can understand simple questions which directly concern him/her, for example about name, age and address or similar things, if the person is asking slowly and clearly. Can understand simple personal information (e.g. name, age, place of residence, origin) when other people introduce themselves, provided that they speak slowly and clearly directly to him/her, and can understand questions on this theme addressed to him/her, though the questions may need to be repeated. Can understand a number of familiar words and greetings and recognize key information such as numbers, prices, dates and days of the week, provided speech is delivered very slowly, with repetition if necessary.
CONVERSATION	Can understand and use some basic, formulaic expressions such as 'Yes,' 'No,' 'Excuse me,' 'Please,' 'Thank you,' 'No thank you,' 'Sorry.' Can recognize simple greetings. Can greet people, say his/her name and take leave of them.
INFORMAL DISCUSSION (WITH FRIENDS)	No descriptors available
FORMAL DISCUSSION (MEETINGS)	No descriptors available
GOAL-ORIENTED CO-OPERATION	No descriptors available
OBTAINING GOODS AND SERVICES	Can make simple purchases and/or order food or drink when pointing or other gesture can support the verbal reference.
INFORMATION EXCHANGE	Can tell people his/her name and ask other people their name. Can use and understand simple numbers in everyday conversations. Can ask and tell day, time of day and date. Can ask for and give a date of birth. Can ask for and give a phone number. Can say and ask people about their age. Can ask very simple questions for information, such as 'What is this?' and understand 1- or 2-word answers.
INTERVIEWING AND BEING INTERVIEWED	No descriptors available
USING TELECOMMUNICATIONS	No descriptors available
WRITTEN INTERACTION	
OVERALL WRITTEN INTERACTION	Can write short phrases to give basic information (e.g. name, address, family) on a form or in a note, with the use of a dictionary
CORRESPONDENCE	Can write short phrases and sentences giving basic personal information with reference to a dictionary.
NOTES, MESSAGES AND FORMS	Can fill in very simple registration forms with basic personal details: name, address, nationality, marital status.
ONLINE CONVERSATION AND DISCUSSION	Can post online short simple statements about him/herself (e.g. relationship status, nationality, occupation), provided he/she can select them from a menu and/or refer to an online translation tool.
GOAL-ORIENTED ONLINE TRANSACTIONS AND COLLABORATION	Can make selections (e.g. choosing a product, size, color) in a simple online purchase or application form, provided there is visual support.
TAKING THE FLOOR (TURN TAKING)	No descriptors available

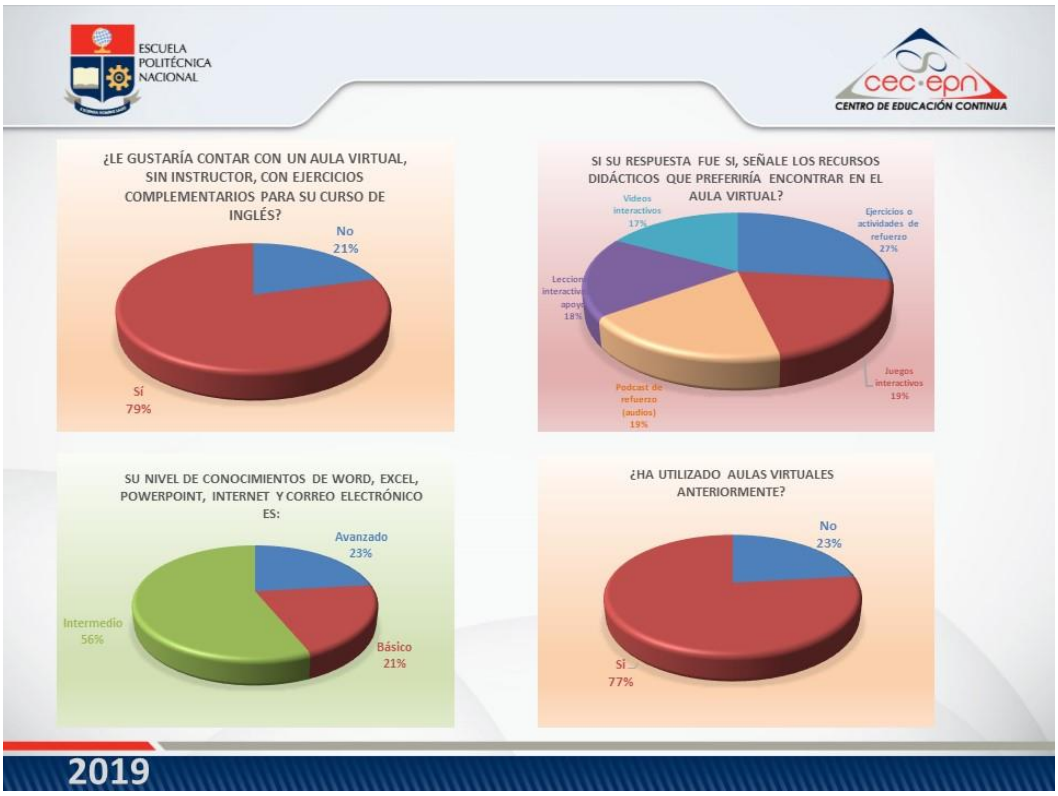
COOPERATING	No descriptors available
ASKING FOR CLARIFICATION	No descriptors available
MEDIATION	No descriptors available
OVERALL MEDIATION	No descriptors available
RELAYING SPECIFIC INFORMATION IN SPEECH	Can relay (in Language B) very basic information (e.g. numbers and prices) from short, simple, illustrated texts (written in Language A).
RELAYING SPECIFIC INFORMATION IN WRITING	Can list (in Language B) names, numbers, prices and very simple information from texts (written Language A) that are of immediate interest, that are written in very simple language and contain illustrations.
EXPLAINING DATA IN SPEECH (E.G. IN GRAPHS, DIAGRAMS, CHARTS ETC.)	No descriptors available
EXPLAINING DATA IN WRITING (E.G. IN GRAPHS, DIAGRAMS, CHARTS ETC.)	No descriptors available
PROCESSING TEXT IN SPEECH	No descriptors available
PROCESSING TEXT IN WRITING	No descriptors available
TRANSLATING A WRITTEN TEXT IN SPEECH	No descriptors available
TRANSLATING A WRITTEN TEXT IN WRITING	No descriptors available
NOTE-TAKING (LECTURES, SEMINARS, MEETINGS ETC.)	No descriptors available
EXPRESSING A PERSONAL RESPONSE TO CREATIVE TEXTS (INCLUDING LITERATURE)	No descriptors available
ANALYSIS AND CRITICISM OF CREATIVE TEXTS (INCLUDING LITERATURE)	No descriptors available
COLLABORATING IN A GROUP	
FACILITATING COLLABORATIVE INTERACTION WITH PEERS	No descriptors available
COLLABORATING TO CONSTRUCT MEANING	No descriptors available
LEADING GROUP WORK	
MANAGING INTERACTION	No descriptors available
ENCOURAGING CONCEPTUAL TALK	No descriptors available
FACILITATING PLURICULTURAL SPACE	No descriptors available
ACTING AS INTERMEDIARY IN INFORMAL SITUATIONS (WITH FRIENDS AND COLLEAGUES)	No descriptors available
FACILITATING COMMUNICATION IN DELICATE SITUATIONS AND DISAGREEMENTS	No descriptors available
STRATEGIES TO EXPLAIN A NEW CONCEPT	
LINKING TO PREVIOUS KNOWLEDGE	No descriptors available
ADAPTING LANGUAGE	No descriptors available

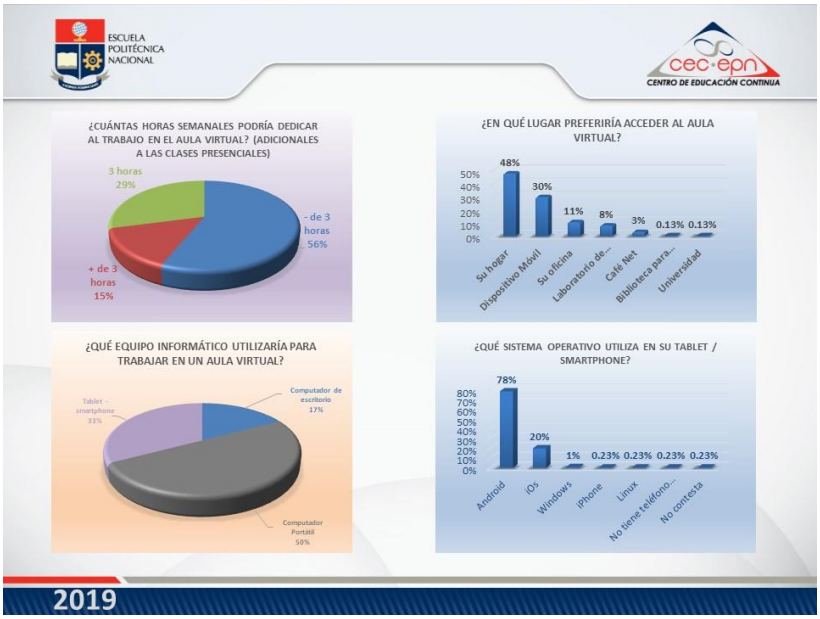
BREAKING DOWN COMPLICATED INFORMATION	No descriptors available
STRATEGIES TO SIMPLIFY A TEXT	
AMPLIFYING A DENSE TEXT	No descriptors available
STREAMLINING A TEXT	No descriptors available
LINGUISTIC	
GENERAL LINGUISTIC RANGE	Can use isolated words and basic expressions in order to give simple information about him/herself.
VOCABULARY RANGE	No descriptors available
GRAMMATICAL ACCURACY	Can employ very simple principles of word order in short statements.
VOCABULARY CONTROL	No descriptors available
PHONOLOGICAL CONTROL	
OVERALL PHONOLOGICAL CONTROL	No descriptors available
SOUND ARTICULATION	No descriptors available
PROSODIC FEATURES	No descriptors available
ORTHOGRAPHIC CONTROL	No descriptors available
SOCIOLINGUISTIC APPROPRIATENESS	No descriptors available
FLEXIBILITY	No descriptors available
TURN TAKING	No descriptors available
THEMATIC DEVELOPMENT	No descriptors available
COHERENCE AND COHESION	No descriptors available
PROPOSITIONAL PRECISION	Can communicate very basic information about personal details in a simple way.
SPOKEN FLUENCY	Can manage very short, isolated, rehearsed, utterances using gesture and signaled requests for help when necessary.

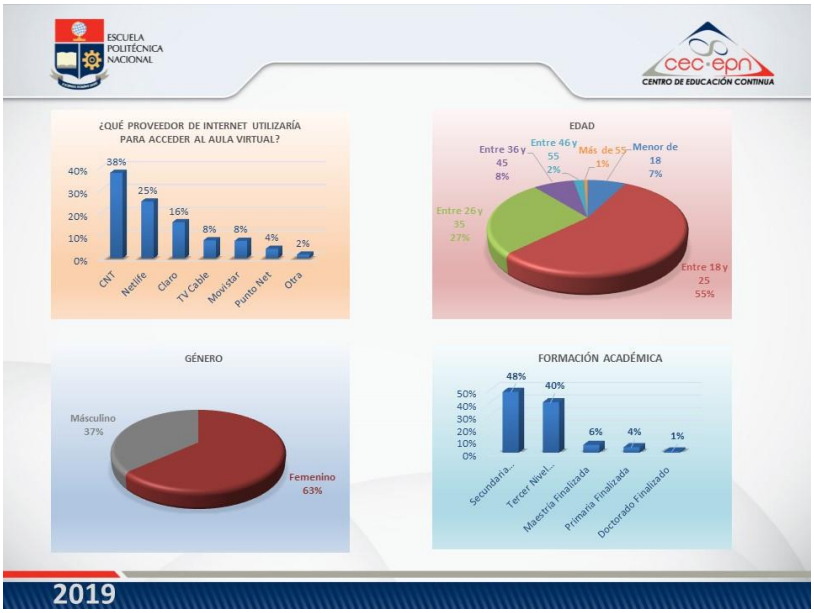
8.2. Appendix 2 – Full results from the CEC-EPN survey source (Bedoya, 2019)








ESCUELA POLITÉCNICA NACIONAL
cec·epn
CENTRO DE EDUCACIÓN CONTINUA
¿CUÁNTAS HORAS SEMANALES PODRÍA DEDICAR AL TRABAJO EN EL AULA VIRTUAL? (ADICIONALES A LAS CLASES PRESENCIALES)
3 horas 29%
- de 3 horas 56%
+ de 3 horas 15%
¿EN QUÉ LUGAR PREFERIRÍA ACCEDER AL AULA VIRTUAL?
48% 30% 11% 8% 3% 0.13% 0.13%
Su hogar
Dispositivo Móvil
Su oficina
Laboratorio de...
Café Net
Biblioteca para...
Universidad
¿QUÉ EQUIPO INFORMÁTICO UTILIZARÍA PARA TRABAJAR EN UN AULA VIRTUAL?
Computador de escritorio 17%
Computador Portátil 50%
¿QUÉ SISTEMA OPERATIVO UTILIZA EN SU TABLET / SMARTPHONE?
78% 20% 1% 0.23% 0.23% 0.23% 0.23%
Android
iOs
Windows
iPhone
Linux
No tiene teléfono...
No contesta
2019


ESCUELA POLITÉCNICA NACIONAL
cec·epn
CENTRO DE EDUCACIÓN CONTINUA
¿QUÉ PROVEEDOR DE INTERNET UTILIZARÍA PARA ACCEDER AL AULA VIRTUAL?
38% 25% 16% 8% 8% 4% 2%
CNT
Netlife
Claro
TV Cable
Movistar
Punto Net
Otra
EDAD
Entre 36 y 45 8%
Entre 46 y 55 2%
Más de 55 1%
Menor de 18 7%
Entre 26 y 35 27%
Entre 18 y 25 55%
GÉNERO
Másculino 37%
Femenino 63%
FORMACIÓN ACADÉMICA
48% 40% 6% 4% 1%
Secundaria...
Tercer Nivel...
Maestría Finalizada
Primaria Finalizada
Doctorado Finalizado
2019


ESCUELA POLITÉCNICA NACIONAL
cec·epn
CENTRO DE EDUCACIÓN CONTINUA
NIVEL / ACTIVIDAD QUE DESEMPEÑA
57% 13% 8% 7% 4% 3% 3% 2% 1.4% 1.1%
Estudiante
Administrativa
Técnica
Docente
Operativa
Gerencial
Servicios Generales
Atención médica
Independiente
Otros
¿EN QUÉ TIPO DE INSTITUCIÓN TRABAJA?
44% 26% 17% 7% 5% 0.5%
Estudiante
Privada
Pública
Independiente
Desempleado/a
ONG
2019

ESCUELA POLITÉCNICA NACIONAL

cec·epn CENTRO DE EDUCACIÓN CONTINUA

Conclusiones

- Al 79% de los encuestados si le gustaría contar con un aula virtual para complementar el aprendizaje de inglés.
- Los encuestados manifestaron que los recursos didácticos que quisieran encontrar en el aula virtual son:

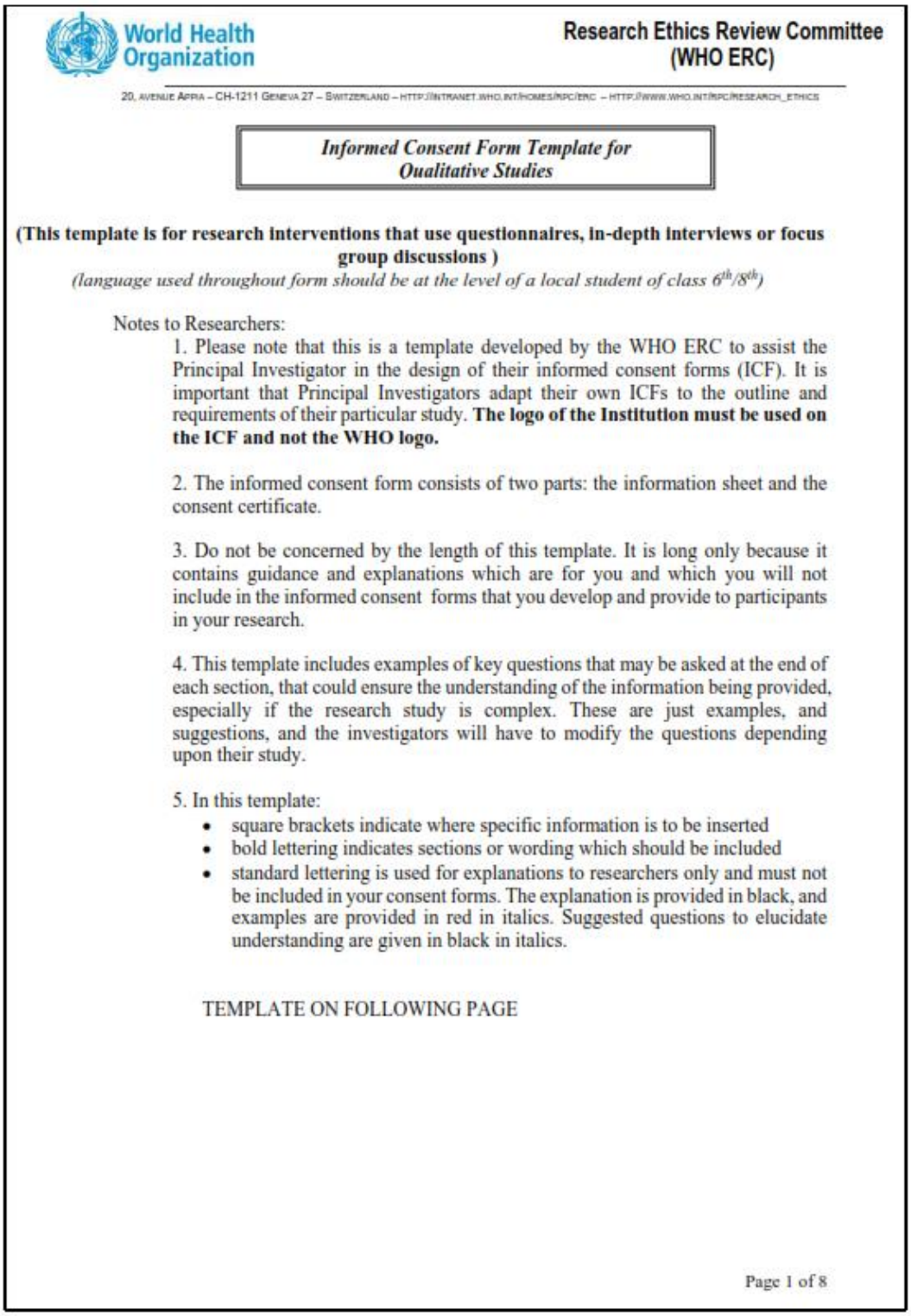
Recurso didáctico	Porcentaje
Ejercicios o actividades de refuerzo	27%
Juegos interactivos	19%
Podcast de refuerzo (audios)	19%
Lecciones interactivas de apoyo	18%
Videos interactivos	17%

- Los conocimientos de Word, Excel, Power Point, internet y correo electrónico en su mayoría es intermedio (56%), seguido de avanzado (23%) y básico (21%).
- El 77% de los encuestados si ha utilizado aulas virtuales.
- La mayoría, el 53% de los encuestados podrían dedicar menos de 3 horas al trabajo en el aula virtual, el 29% 3 horas y el restante 15% más de 3 horas.
- El 48% de los encuestados prefieren acceder al aula virtual desde su hogar, seguido con el 30% de un dispositivo móvil, el 11% desde su oficina.
- El equipo informático que utilizaría para trabajar en el aula virtual es el 50% desde un computador portátil, el 33% desde su Tablet / Smartphone y el 17% desde un computador de escritorio.
- En su mayoría el sistema operativo que utilizan en su Tablet / Smartphone es Android (78%) e iOs (20%).
- Los proveedores de internet que utilizarían en su mayoría son CNT 38%, Netlife 25%, Claro 16%, TV Cable y Movistar 8%, Puntonet 4% y otras 2%.
- El 63% de los encuestados son mujeres y el 37% hombres.
- El 55% están entre la edad de 18 a 25 años, el 27% entre 26 y 35 años, el 8% entre 36 y 45 años, el 7% menor de 18 años, el 2% entre 46 y 55 años y el restante 1% más de 55 años.
- El 48% de los encuestados tienen el nivel de estudios de secundaria, el 40% tercer nivel, el 6% maestría, 4% primaria y el restante doctorado.
- De los encuestados el 57% es estudiante, el 13% es profesional en áreas administrativas, el 8% técnicas, el 7% docente, 4% operativa, 3% gerencial y servicios generales, 2% atención médica, 1,4% independientes y el restante 1,1% otras.
- El 44% son estudiantes, el 26% trabajan en instituciones privadas, el 17% en públicas, el 7% es independiente, el 5% es desempleado/a y el 0,5% en ONG.

Índice

2019

8.3. Appendix 3 - Informed Consent Model from the World Health Organization (World Health Organization, 2019)



World Health Organization

Research Ethics Review Committee (WHO ERC)

20, AVENUE APPIA – CH-1211 GENEVA 27 – SWITZERLAND – HTTP://INTRANET.WHO.INT/HOMES/RPC/ERC – HTTP://WWW.WHO.INT/RPC/RESEARCH_ETHICS

Informed Consent Form Template for Qualitative Studies

(This template is for research interventions that use questionnaires, in-depth interviews or focus group discussions)

(language used throughout form should be at the level of a local student of class 6th/8th)

Notes to Researchers:

1. Please note that this is a template developed by the WHO ERC to assist the Principal Investigator in the design of their informed consent forms (ICF). It is important that Principal Investigators adapt their own ICFs to the outline and requirements of their particular study. **The logo of the Institution must be used on the ICF and not the WHO logo.**

2. The informed consent form consists of two parts: the information sheet and the consent certificate.

3. Do not be concerned by the length of this template. It is long only because it contains guidance and explanations which are for you and which you will not include in the informed consent forms that you develop and provide to participants in your research.

4. This template includes examples of key questions that may be asked at the end of each section, that could ensure the understanding of the information being provided, especially if the research study is complex. These are just examples, and suggestions, and the investigators will have to modify the questions depending upon their study.

5. In this template:
   - square brackets indicate where specific information is to be inserted
   - bold lettering indicates sections or wording which should be included
   - standard lettering is used for explanations to researchers only and must not be included in your consent forms. The explanation is provided in black, and examples are provided in red in italics. Suggested questions to elucidate understanding are given in black in italics.

TEMPLATE ON FOLLOWING PAGE

Page 1 of 8

[YOUR INSTITUTIONAL LETTER HEAD]
Please do not submit consent forms on the WHO letter head

[Informed Consent Form for _____]

Name the group of individuals for whom this consent is written. Because research for a single project is often carried out with a number of different groups of individuals - for example counselors, community members, clients of services - it is important that you identify which group this particular consent is for.

(Example: This informed consent form is for social service providers in the community X and who we are inviting to participate in research Y, titled "The Community Response to Malaria Project".)

You may provide the following information either as a running paragraph or under headings as shown below.

[Name of Principle Investigator]
[Name of Organization]
[Name of Sponsor]
[Name of Project and Version]

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the study with you)**
- **Certificate of Consent (for signatures if you choose to participate)**

You will be given a copy of the full Informed Consent Form

Part I: Information Sheet

Introduction
Briefly state who you are and that you are inviting them to participate in research which you are doing. Inform them that they may talk to anyone they feel comfortable talking with about the research and that they can take time to reflect on whether they want to participate or not. Assure the participant that if they do not understand some of the words or concepts, that you will take time to explain them as you go along and that they can ask questions at anytime.

(Example: I am X, working for the Y organization. I am doing research on the disease malaria which is very common in this country and in this region. I am going to give you information and invite you to be part of this research. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research.
This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can ask them of me or of another researcher.)

Purpose of the research
Explain the research question in lay terms which will clarify rather than confuse. Use local and simplified words rather than scientific terms and professional jargon. In your explanation, consider local beliefs and knowledge when deciding how best to provide the information. Investigators however need to be careful not to mislead participants, by suggesting research interests that they do not have. For example, if the study wants to find out about treatments provided by local practitioners, wording should not suggest that they want to find out about how the practitioners are advertising themselves. Misleading participants may be essential and justified in certain circumstances, but that needs to be carefully argued, and approved by an ethics committee.

(Example: Malaria is making many people sick in your community. We want to find ways to stop this from happening. We believe that you can help us by telling us what you know both about malaria and about local health practices in general . We want to learn what people who live or work here know about the causes of malaria and why some people get it. We want to learn about the different ways that people

try to stop malaria before someone gets it or before it comes to the community, and how people know when someone has it. We also want to know more about local health practices because this knowledge might help us to learn how to better control malaria in this community.)

Type of Research Intervention

Briefly state the type of intervention that will be undertaken. This will be expanded upon in the procedures section but it may be helpful and less confusing to the participant if they know from the very beginning whether, for example, the research involves a vaccine, an interview, a questionnaire, or a series of finger pricks.

(Example: This research will involve your participation in a group discussion that will take about one and a half hour, and a one hour interview).

Participant Selection

Indicate why you have chosen this person to participate in this research. People wonder why they have been chosen and may be fearful, confused or concerned.

(Example: You are being invited to take part in this research because we feel that your experience as a social worker (or as a mother, or as a responsible citizen) can contribute much to our understanding and knowledge of local health practices.)

- ***Example of question to elucidate understanding:*** *Do you know why we are asking you to take part in this study? Do you know what the study is about?*

Voluntary Participation

Indicate clearly that they can choose to participate or not. State, only if it is applicable, that they will still receive all the services they usually do if they choose not to participate. Explanation: It may be more applicable to assure them that their choosing to participate or not will not have any bearing on their job or job-related evaluations. This can be repeated and expanded upon later in the form as well. It is important to state clearly at the beginning of the form that participation is voluntary so that the other information can be heard in this context. Although, if the interview or group discussion has already taken place, the person cannot 'stop participation' but request that the information provided by them not be used in the research study.

(Example: Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate all the services you receive at this Centre will continue and nothing will change.
OR
The choice that you make will have no bearing on your job or on any work-related evaluations or reports. You may change your mind later and stop participating even if you agreed earlier.)

- ***Examples of question to elucidate understanding:*** *If you decide not to take part in this research study, do you know what your options are? Do you know that you do not have to take part in this research study, if you do not wish to? Do you have any questions?*

Procedures

A. Provide a brief introduction to the format of the research study.

(Example: We are asking you to help us learn more about malaria in your community. We are inviting you to take part in this research project. If you accept, you will be asked to….:)

B. Explain the type of questions that the participants are likely to be asked in the focus group, the interviews, or the survey. If the research involves questions or discussion which may be sensitive or potentially cause embarrassment, inform the participant of this.

(Example 1 (for focus group discussions)
take part in a discussion with 7-8 other persons with similar experiences. This discussion will be guided by [name of moderator/guider] or myself.

The group discussion will start with me, or the focus group guide or moderator (use the local word for group discussion leader), making sure that you are comfortable. We can also answer questions about the research that you might have. Then we will ask you questions about the malaria and give you time to share your knowledge. The questions will be about malaria in your community, how is it recognized, what people do to stop it from spreading to other people, who people go to for help and what happens when people become sick with it.
We will also talk about community practices more generally because this will give us a chance to understand more about malaria but in a different way. These are the types of questions we will ask.....
We will not ask you to share personal beliefs, practices or stories and you do not have to share any knowledge that you are not comfortable sharing.
The discussion will take place in [location of the FGD], and no one else but the people who take part in the discussion and guide or myself will be present during this discussion. The entire discussion will be tape-recorded, but no-one will be identified by name on the tape. The tape will be kept [explain how the tape will be stored]. The information recorded is confidential, and no one else except [name of person(s)] will have access to the tapes. The tapes will be destroyed after _____number of days/weeks.

Example 2 (for interviews)
participate in an interview with [name of interviewer] or myself.
During the interview, I or another interviewer will sit down with you in a comfortable place at the Centre. If it is better for you, the interview can take place in your home or a friend's home. If you do not wish to answer any of the questions during the interview, you may say so and the interviewer will move on to the next question. No one else but the interviewer will be present unless you would like someone else to be there. The information recorded is confidential, and no one else except [name of person(s)] will access to the information documented during your interview. The entire interview will be tape-recorded, but no-one will be identified by name on the tape. The tape will be kept [explain how the tape will be stored]. The information recorded is confidential, and no one else except [name of person(s)] will have access to the tapes. The tapes will be destroyed after _____number of days/weeks.

Example 3 (for questionnaire surveys)
fill out a survey which will be provided by [name of distributor of blank surveys] and collected by [name of collector of completed surveys].OR You may answer the questionnaire yourself, or it can be read to you and you can say out loud the answer you want me to write down.
If you do not wish to answer any of the questions included in the survey, you may skip them and move on to the next question. [Describe how the survey will be distributed and collected]. The information recorded is confidential, your name is not being included on the forms, only a number will identify you, and no one else except [name of person(s) with access to the information] will have access to your survey.)

Duration
Include a statement about the time commitments of the research for the participant including both the duration of the research and follow-up, if relevant.

(Example: The research takes place over ___ (number of) days/ or ___ (number of) months in total. During that time, we will visit you three times for interviewing you at one month interval and each interview will last for about one hour each. The group discussion will be held once and will take about one and a half hour.)

- ***Examples of question to elucidate understanding:*** *If you decide to take part in the study, do you know how much time will the interview take? Where will it take place? Do you know that we will be sending you transport to pick you up from your home? Do you know how much time will the discussion with other people take? If you agree to take part, do you know if you can stop participating? Do you know that you may not respond to the questions that you do not wish to respond to? Etc. Do you have any more questions?*

Risks
Explain and describe any risks that you anticipate or that are possible. The risks depend upon the nature and type of qualitative intervention, and should be, as usual, tailored to the specific issue and situation.

(If the discussion is on sensitive and personal issues e.g. reproductive and sexual health, personal habits etc. then an example of text could be something like "We are asking you to share with us some very personal and confidential information, and you may feel uncomfortable talking about some of the topics. You do not have to answer any question or take part in the discussion/interview/survey if you don't wish to do so, and that is also fine. You do not have to give us any reason for not responding to any question, or for refusing to take part in the interview"
OR If for example, the discussion is on opinions on government policies and community beliefs, and in general no personal information is sought, then the text under risks could read something like "There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics. However, we do not wish for this to happen. You do not have to answer any question or take part in the discussion/interview/survey if you feel the question(s) are too personal or if talking about them makes you uncomfortable.)

Benefits
Benefits may be divided into benefits to the individual, benefits to the community in which the individual resides, and benefits to society as a whole as a result of finding an answer to the research question. Mention only those activities that will be actual benefits and not those to which they are entitled regardless of participation.

(Example: There will be no direct benefit to you, but your participation is likely to help us find out more about how to prevent and treat malaria in your community).

Reimbursements
State clearly what you will provide the participants with as a result of their participation. WHO does not encourage incentives beyond reimbursements for expenses incurred as a result of participation in the research. These may include, for example, travel costs and reimbursement for time lost. The amount should be determined within the host country context.

Example: You will not be provided any incentive to take part in the research. However, we will give you [provide a figure, if money is involved] for your time, and travel expense (if applicable).

- ***Examples of question to elucidate understanding:*** *Can you tell me if you have understood correctly the benefits that you will have if you take part in the study? Do you know if the study will pay for your travel costs and time lost, and do you know how much you will be re-imbursed? Do you have any other questions?*

Confidentiality
Explain how the research team will maintain the confidentiality of data with respect to both information about the participant and information that the participant shares. Outline any limits to confidentiality. Inform the participant that because something out of the ordinary is being done through research, any individual taking part in the research is likely to be more easily identified by members of the community and therefore more likely to be stigmatized. If the research is sensitive and/or involves participants who are highly vulnerable - research concerning violence against women for example - explain to the participant any extra precautions you will take to ensure safety and anonymity.

(Example: The research being done in the community may draw attention and if you participate you may be asked questions by other people in the community. We will not be sharing information about you to anyone outside of the research team. The information that we collect from this research project will be kept private. Any information about you will have a number on it instead of your name. Only the researchers will know what your number is and we will lock that information up with a lock and key. It will not be shared with or given to anyone except [name who will have access to the information, such as research sponsors, DSMB board, your clinician, etc])

The following applies to focus groups:
Focus groups provide a particular challenge to confidentiality because once something is said in the group it becomes common knowledge. Explain to the participant that you will encourage group participants to respect confidentiality, but that you cannot guarantee it.

(Example: We will ask you and others in the group not to talk to people outside the group about what was said in the group. We will, in other words, ask each of you to keep what was said in the group confidential. You should know, however, that we cannot stop or prevent participants who were in the group from sharing things that should be confidential.)

- ***Example of question to elucidate understanding:*** *Did you understand the procedures that we will be using to make sure that any information that we as researchers collect about you will remain confidential? Do you understand that the we cannot guarantee complete confidentiality of information that you share with us in a group discussion Do you have any more questions?*

Sharing the Results
Your plan for sharing the findings with the participants should be provided. If you have a plan and a timeline for the sharing of information, include the details. You may also inform the participant that the research findings will be shared more broadly, for example, through publications and conferences.

(Example: Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. The knowledge that we get from this research will be shared with you and your community before it is made widely available to the public. Each participant will receive a summary of the results. There will also be small meetings in the community and these will be announced. Following the meetings, we will publish the results so that other interested people may learn from the research.)

Right to Refuse or Withdraw
This is a reconfirmation that participation is voluntary and includes the right to withdraw. Tailor this section to ensure that it fits for the group for whom you are seeking consent. The example used here is for a community social worker. Participants should have an opportunity to review their remarks in individual interviews and erase part or all of the recording or note.

(Example: You do not have to take part in this research if you do not wish to do so, and choosing to participate will not affect your job or job-related evaluations in any way. You may stop participating in the [discussion/interview] at any time that you wish without your job being affected. I will give you an opportunity at the end of the interview/discussion to review your remarks, and you can ask to modify or remove portions of those, if you do not agree with my notes or if I did not understand you correctly.)

Who to Contact
Provide the name and contact information of someone who is involved, informed and accessible - a local person who can actually be contacted. State also the name (and contact details) of the local IRB that has approved the proposal. State also that the proposal has also been approved by the WHO ERC.

(Example: If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact any of the following: [name, address/telephone number/e-mail]
This proposal has been reviewed and approved by [name of the local IRB], which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact _____ .)

This proposal has been reviewed and approved by [name of the local IRB], which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact [name, address, telephone number.]). It has also been reviewed by the Ethics Review Committee of the World Health Organization (WHO), which is funding/sponsoring/supporting the study.

- ***Example of question to elucidate understanding:*** *Do you know that you do not have to take part in this study if you do not wish to? You can say No if you wish to? Do you know that you can ask me questions later, if you wish to? Do you know that I have given the contact details of the person who can give you more information about the study? Etc.*

You can ask me any more questions about any part of the research study, if you wish to. Do you have any questions?

Part II: Certificate of Consent

This section must be written in the first person. It should include a few brief statements about the research and be followed by a statement similar the one in bold below. If the participant is illiterate but gives oral consent, a witness must sign. A researcher or the person going over the informed consent must sign each consent. Because the certificate is an integral part of the informed consent and not a stand-alone document, the layout or design of the form should reflect this. The certificate of consent should avoid statements that have "I understand…." phrases. The understanding should perhaps be better tested through targeted questions during the reading of the information sheet (some examples of questions are given above), or through the questions being asked at the end of the reading of the information sheet, if the potential participant is reading the information sheet him/herself.

Example: I have been invited to participate in research about malaria and local health practices.

(This section is mandatory)
I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study

Print Name of Participant_____
Signature of Participant _____
Date _____
Day/month/year

If illiterate [1]

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

Print name of witness_____ **Thumb print of participant** ☐

Signature of witness _____

Date _____
Day/month/year

Statement by the researcher/person taking consent

I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:

[1] A literate witness must sign (if possible, this person should be selected by the participant and should have no connection to the research team). Participants who are illiterate should include their thumb print as well.

1.
2.
3.

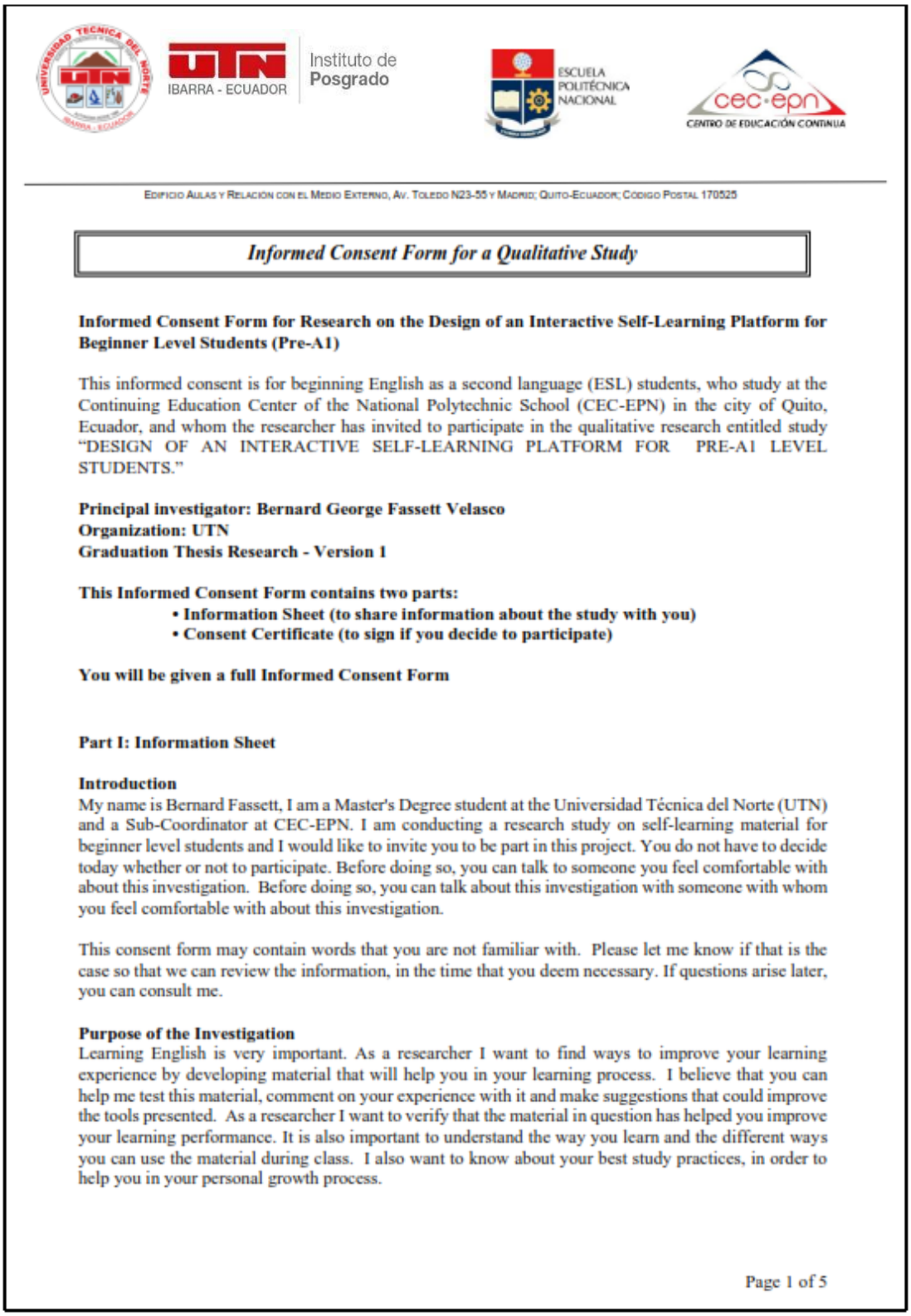
I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.
Print Name of Researcher/person taking the consent_____

Signature of Researcher /person taking the consent_____

Date _____
Day/month/year

8.4. Appendix 4 - Informed Consent for Students (English)



IBARRA - ECUADOR Instituto de Posgrado

ESCUELA POLITÉCNICA NACIONAL

cec·epn CENTRO DE EDUCACIÓN CONTINUA

EDIFICIO AULAS Y RELACIÓN CON EL MEDIO EXTERNO, AV. TOLEDO N23-55 Y MADRID; QUITO-ECUADOR; CÓDIGO POSTAL 170525

Informed Consent Form for a Qualitative Study

Informed Consent Form for Research on the Design of an Interactive Self-Learning Platform for Beginner Level Students (Pre-A1)

This informed consent is for beginning English as a second language (ESL) students, who study at the Continuing Education Center of the National Polytechnic School (CEC-EPN) in the city of Quito, Ecuador, and whom the researcher has invited to participate in the qualitative research entitled study "DESIGN OF AN INTERACTIVE SELF-LEARNING PLATFORM FOR PRE-A1 LEVEL STUDENTS."

Principal investigator: Bernard George Fassett Velasco
Organization: UTN
Graduation Thesis Research - Version 1

This Informed Consent Form contains two parts:

- **Information Sheet (to share information about the study with you)**
- **Consent Certificate (to sign if you decide to participate)**

You will be given a full Informed Consent Form

Part I: Information Sheet

Introduction

My name is Bernard Fassett, I am a Master's Degree student at the Universidad Técnica del Norte (UTN) and a Sub-Coordinator at CEC-EPN. I am conducting a research study on self-learning material for beginner level students and I would like to invite you to be part in this project. You do not have to decide today whether or not to participate. Before doing so, you can talk to someone you feel comfortable with about this investigation. Before doing so, you can talk about this investigation with someone with whom you feel comfortable with about this investigation.

This consent form may contain words that you are not familiar with. Please let me know if that is the case so that we can review the information, in the time that you deem necessary. If questions arise later, you can consult me.

Purpose of the Investigation

Learning English is very important. As a researcher I want to find ways to improve your learning experience by developing material that will help you in your learning process. I believe that you can help me test this material, comment on your experience with it and make suggestions that could improve the tools presented. As a researcher I want to verify that the material in question has helped you improve your learning performance. It is also important to understand the way you learn and the different ways you can use the material during class. I also want to know about your best study practices, in order to help you in your personal growth process.

Page 1 of 5

Type of Research Intervention
This investigation will involve a series of observations during your regular class period. It will also include two questionnaires, one at the beginning and one at the end of the course, which I will ask you to fill out. Completing the questionnaires will not take more than ten minutes. We will also have interviews of no more than 30 minutes. The topics for the interview will be randomly selected.

Selection of Participants
You have been invited to participate in this investigation because of your level of English. This will be your first contact with our methodology and your participation will help us develop innovative and effective materials. It will also contribute to our understanding and knowledge of self-learning materials.

- *Do you know why the investigator is asking you to participate in this study?*
  YES □ NO □
- *Do you know what the study is about?*
  YES □ NO □
- *¿Do you understand how the information will be collected?*
  YES □ NO □

Voluntary Participation
Your participation in this research project is entirely voluntary. It is your choice to participate or not. The choice you make will not have any relation with your class participation or any assessment or report related to the class. You can change your mind later and stop participating even if you accepted earlier.

- *If you decide not to participate in this research study, do you know what your options are?*
  YES □ NO □
- *Do you know that you do not have to participate in this research study if you do not want to?*
  YES □ NO □
- *¿Do you have any questions?*
  YES □ NO □

Procedures
The requested requirement is to help us understand how to design activities that can contribute to the students' self-learning process. If you accept this invitation, you will be asked to use a virtual classroom and carry out the activities corresponding to the grammatical points you will learn. This activity will take between five and ten minutes every day, but you are allowed to use the activities as many times as you want during the course. All the information you provide will be digitally stored in a password-protected document on my MyCloud device and a copy will be stored in a personal *flash* drive. The recorded information is confidential and no one, except me, will have access to the recordings.

Twice during the cycle, I will ask you to fill out a survey that will be provided by Google forms and compiled by me, Bernard Fassett, through Google forms. If you do not want to answer any of the questions included in the survey, you can omit them and move on to the next question. The information registered is confidential, your name is not included in the forms, only a number will identify you, and no one else except Bernard Fassett will have access to the information provided through the survey.

In my role as a researcher I might also ask you to participate in an interview. Only two people in the group will be present at the time, the interviewer and the interviewee.

During the interview, I will sit with you in a comfortable place in the Center or at a coffee shop located near the Center. If you do not want to answer any one of the questions during the interview, you can say so and I will continue on to the next one. No one except me will be present, unless you want someone else to accompany you. The recorded information is confidential and only I will have access to the information documented during your interview. The entire interview will be digitally recorded, but no one will be identified by name on the recording. The recording will be kept in a digital version in a password protected MyCloud device and a copy will be stored in a personal flash drive. The recorded

information is confidential and only I will have access to the recordings. The recordings will be destroyed after 52 weeks.

Duration

The investigation will take place during 40 days (approximately two months) in total. During that time, I will visit the class as an observer on about ten occasions. I will also ask you to fill out two surveys with a six-week interval and each survey will take approximately ten minutes. The interview, if you are chosen to participate, will be carried out once and take approximately 30 minutes.

- *If you decide to take part in the study, do you know how long the activities will take?*
  YES □ NO □
- *Do you know how the activities will be carried out?*
  YES □ NO □
- *If you decide to take part in the study, do you know how long the interview will take?*
  YES □ NO □
- *Do you know where it will take place?*
  YES □ NO □
- *If you agree to take part, do you know if you can stop participating?*
  YES □ NO □
- *Do you know you can refuse to answer questions that you do not want to answer?*
  YES □ NO □
- *Do you have any other questions?*
  YES □ NO □

Risks

There is a risk that you may share personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics. Neither will I as a researcher nor the objective behind this investigation allow this to happen. You do not have to answer any questions or take part in the activities, interview or survey if you feel that the questions are too personal or if talking about them makes you uncomfortable.

Benefits

There will be a direct benefit for you as you will be able to use the material being tested for your learning process. It is also likely that your participation will help us learn more about how to develop material that will help other students benefit from the potential of future activities designed after the research and, therefore, will constitute a contribution to the Community.

Reimbursements

You will not be given any economic incentive to be part of the investigation. However, if you participate in the interview, you will be offered refreshments and *snacks* for your time (if applicable).

- *Can you tell me if you have correctly understood the benefits you will receive if you take part in the study?*
  YES □ NO □
- *Is it clear that you will not receive any type of economic compensation for your participation in the study?*
  YES □ NO □
- *Do you have any other questions?*
  YES □ NO □

Confidentiality

The research carried out in the classroom may draw attention and if you participate it may be that other people within the CEC-EPN community ask you questions. The investigator will not share your information with anyone outside the research team. The information obtained in this research project will be kept private. Any reference about you will be marked with a number instead of your name. Only

I will know your identity and will protect your personal data under lock and key, without sharing it with anyone else.

- *Do you understand the procedures that I will use to make sure that any information I collect about you will remain confidential?*
  YES □ NO □
- *Do you have any other questions?*
  YES □ NO □

Sharing Results

Nothing you tell me, regardless of the means of obtaining it, will be shared with anyone outside the research team, and nothing will be attributable to you personally by name. The knowledge that I, Bernard Fassett, obtain from this research will be shared with you and your community before it is widely available to the public. Each participant will receive a summary of the results by email. The results will be published in a thesis and eventually in an article in order for other interested people to may know about, use, and learn from this research.

The Right to Refuse or Withdraw

You are not obligated to participate in this research study if you do not wish to do so, and your choice to participate or not will not affect your learning-related classes or evaluations. You may stop participating in the interview, survey or activities at any time that you want without your learning process being affected. If you participate in the interview, you will be given the opportunity to review your observations at the end of the interview, and you may ask to modify or delete parts of it if you disagree with my notes or if I have not understood you correctly.

Who to Contact

If you have any questions, you may ask now or later. If you would like to ask questions later, you may communicate with the following contact:

Bernard Fassett
0995021281
bgfassettv@utn.edu.ec

This proposal has been reviewed and approved by the Scientific Review Council of the UTN, which is a committee whose task is to ensure that the investigation is valid and that the research participants are protected against any type of damage. It has also been reviewed by the CEC-EPN Coordination Team, who support the study.

- *Do you know that you are not obligated to take part in this study if you do not wish to do so?*
  YES □ NO □
- *Do you know that you can ask me questions later, if you wish to do so?*
  YES □ NO □
- *Do you know that I have given you my contact information and that I can give you more information about the study?*
  YES □ NO □

Parte II: Certificate of Consent

I have been invited to participate in a research investigation that seeks to design self-learning material as part of a thesis project. I have read the aforementioned information, or have had it read to me. I have had the opportunity to ask questions and have had them responded satisfactorily. I agree to voluntarily be a participant in this study.

Name of the participant (in print) _____

Signature of the participant _____

Date _____
Day/ month/ year

If illiterate [1]

I have witnessed the precise reading of the consent form for the potential participant and he/she has had the opportunity to ask questions. I confirm that the person in question has freely given his/her consent.

Name of the witness in print _____ **Participant's Thumb print**

Signature of the Witness _____

Date _____
Day /month /year

Statement made by the Researcher / person taking the consent

I have accurately read the fact sheet for the potential participant and I have made sure that he/she understands that the following will be carried out:

1. Observations
2. Questionnaires
3. Interview

I confirm that the participant was given the opportunity to ask questions about the research study, and that all questions posed by the participant have been answered correctly and to the best of my ability.

I confirm that the person has not been forced to give his/her consent, and that it has been given freely and voluntarily. Due to the fact that the student, at the time of the signing of the consent, does not speak English fluently, the same form was provided in Spanish. The Spanish version of this consent was translated, reviewed and certified by a professional Translation Lab Pro translator. The aforementioned translation is true to the original to the best of my knowledge and belief.

The participant has been given a copy of this FCI as well as a Spanish version.

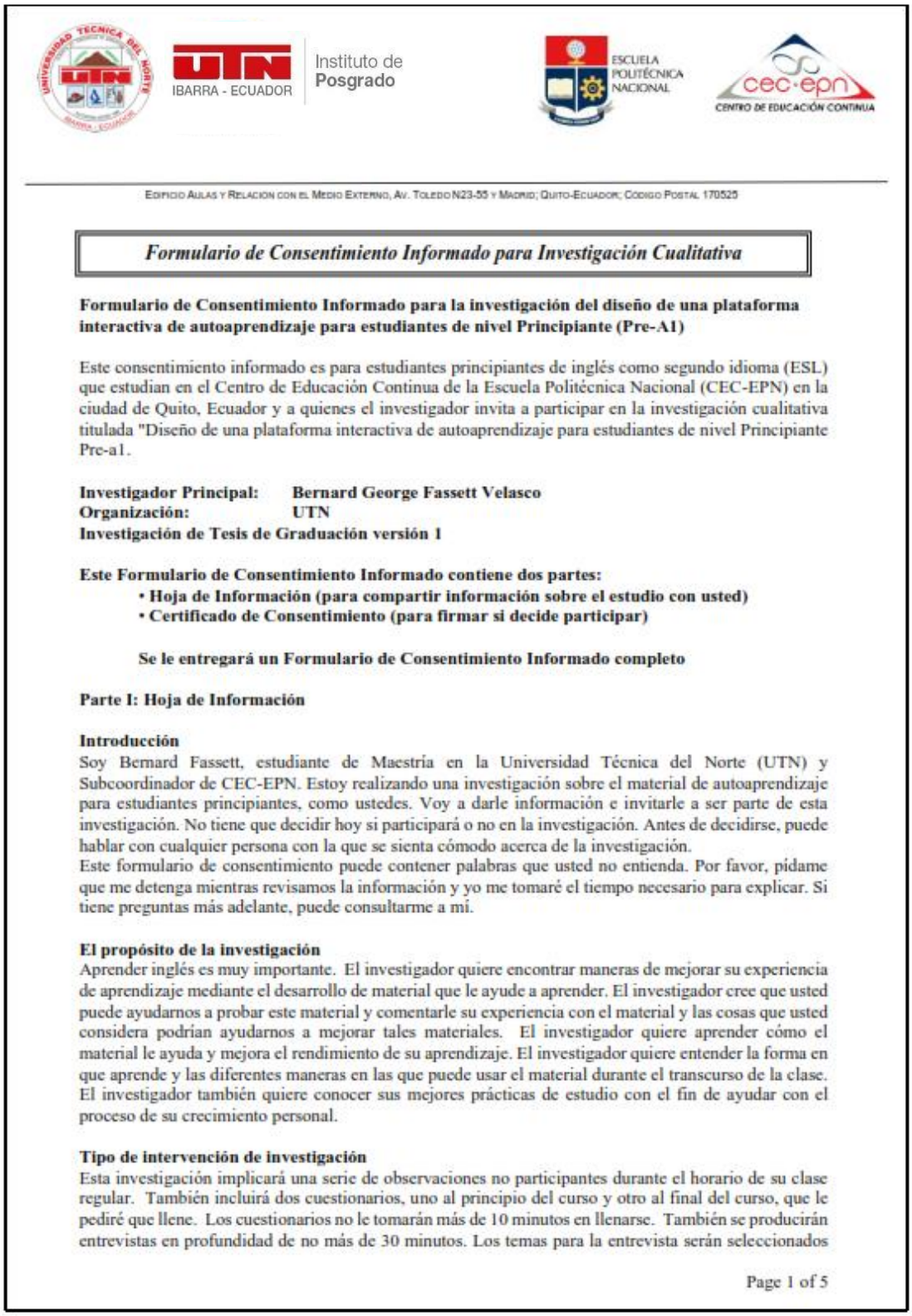
Name of the researcher/person taking the consent: Bernard George Fassett Velasco

Signature of the researcher /person taking the consent: _____

Date: _____
Day/month/year

[1] Witness signing, must be literate (if possible, this person must be selected by the participant and must not have any connection with the research team). Participants who are illiterate must include their thumb print.

8.5. Appendix 5 - Informed Consent for Students (Spanish)



Instituto de Posgrado

IBARRA - ECUADOR

ESCUELA POLITÉCNICA NACIONAL

cec-epn CENTRO DE EDUCACIÓN CONTINUA

EDIFICIO AULAS Y RELACION CON EL MEDIO EXTERNO, AV. TOLEDO N23-55 Y MADRID; QUITO-ECUADOR; CODIGO POSTAL 170525

Formulario de Consentimiento Informado para Investigación Cualitativa

Formulario de Consentimiento Informado para la investigación del diseño de una plataforma interactiva de autoaprendizaje para estudiantes de nivel Principiante (Pre-A1)

Este consentimiento informado es para estudiantes principiantes de inglés como segundo idioma (ESL) que estudian en el Centro de Educación Continua de la Escuela Politécnica Nacional (CEC-EPN) en la ciudad de Quito, Ecuador y a quienes el investigador invita a participar en la investigación cualitativa titulada "Diseño de una plataforma interactiva de autoaprendizaje para estudiantes de nivel Principiante Pre-a1.

Investigador Principal: **Bernard George Fassett Velasco**
Organización: **UTN**
Investigación de Tesis de Graduación versión 1

Este Formulario de Consentimiento Informado contiene dos partes:

- **Hoja de Información (para compartir información sobre el estudio con usted)**
- **Certificado de Consentimiento (para firmar si decide participar)**

Se le entregará un Formulario de Consentimiento Informado completo

Parte I: Hoja de Información

Introducción
Soy Bernard Fassett, estudiante de Maestría en la Universidad Técnica del Norte (UTN) y Subcoordinador de CEC-EPN. Estoy realizando una investigación sobre el material de autoaprendizaje para estudiantes principiantes, como ustedes. Voy a darle información e invitarle a ser parte de esta investigación. No tiene que decidir hoy si participará o no en la investigación. Antes de decidirse, puede hablar con cualquier persona con la que se sienta cómodo acerca de la investigación.
Este formulario de consentimiento puede contener palabras que usted no entienda. Por favor, pídame que me detenga mientras revisamos la información y yo me tomaré el tiempo necesario para explicar. Si tiene preguntas más adelante, puede consultarme a mí.

El propósito de la investigación
Aprender inglés es muy importante. El investigador quiere encontrar maneras de mejorar su experiencia de aprendizaje mediante el desarrollo de material que le ayude a aprender. El investigador cree que usted puede ayudarnos a probar este material y comentarle su experiencia con el material y las cosas que usted considera podrían ayudarnos a mejorar tales materiales. El investigador quiere aprender cómo el material le ayuda y mejora el rendimiento de su aprendizaje. El investigador quiere entender la forma en que aprende y las diferentes maneras en las que puede usar el material durante el transcurso de la clase. El investigador también quiere conocer sus mejores prácticas de estudio con el fin de ayudar con el proceso de su crecimiento personal.

Tipo de intervención de investigación
Esta investigación implicará una serie de observaciones no participantes durante el horario de su clase regular. También incluirá dos cuestionarios, uno al principio del curso y otro al final del curso, que le pediré que llene. Los cuestionarios no le tomarán más de 10 minutos en llenarse. También se producirán entrevistas en profundidad de no más de 30 minutos. Los temas para la entrevista serán seleccionados

Page 1 of 5

aleatoriamente.

Selección de los participantes
Usted está siendo invitado a participar en esta investigación porque el investigador siente que debido a su nivel en inglés, y siendo este su primer contacto con nuestra metodología, nos ayudará a desarrollar materiales innovadores y efectivos y su participación puede contribuir mucho a nuestra comprensión y conocimiento de los materiales de autoaprendizaje.

- *¿Sabe por qué el investigador le está pidiendo que participe en este estudio?*
  SI □ NO □
- *¿Sabe de qué se trata el estudio?*
  SI □ NO □
- *¿Entiende cómo se va a recopilar la información?*
  SI □ NO □

Participación voluntaria
Su participación en esta investigación es totalmente voluntaria. Es su elección si participa o no. Si decide no participar todos los servicios que recibe en este centro continuarán y nada cambiará. La elección que usted haga no tendrá relación con la participación de su clase o con cualquier evaluación o informe relacionado con la clase. Puede cambiar de opinión más tarde y dejar de participar incluso si aceptó antes.

- *Si decide no participar en este estudio de investigación, ¿sabe cuáles son tus opciones?*
  SI □ NO □
- *¿Sabe que no tiene que participar en este estudio de investigación si no lo desea?*
  SI □ NO □
- *¿Tiene alguna pregunta?*
  SI □ NO □

Procedimientos
El investigador le está pidiendo que le ayude a entender cómo diseñar actividades que puedan ayudar a los estudiantes en su proceso de autoaprendizaje. El investigador le invita a participar en este proyecto de investigación. Si acepta, se le pedirá que use una aula virtual y haga las actividades correspondientes a los puntos gramaticales que va a aprender. Esta actividad tomará entre 5 a 10 minutos todos los días, pero se le permite utilizar las actividades tantas veces como desee durante el curso. Toda la información proporcionada por usted será almacenada digitalmente en un documento protegido con contraseña en mi dispositivo MyCloud y una copia se almacenará en una unidad flash personal. La información registrada es confidencial, y nadie más excepto yo tendrá acceso a las grabaciones.

Dos veces durante el ciclo, el investigador le pedirá que llene una encuesta que será proporcionada por Google Forms y recopilada por Bernard Fassett a través de formularios de Google. Si no desea responder a ninguna de las preguntas incluidas en la encuesta, puede omitirlas y pasar a la siguiente pregunta. La información registrada es confidencial, su nombre no se incluye en los formularios, sólo un número lo identificará, y nadie más excepto Bernard Fassett tendrá acceso a la información proporcionada a través de la encuesta.

El investigador también puede pedirle que participe en una entrevista. Sólo dos personas del grupo estarán presentes en el momento, el entrevistador y el entrevistado.

Durante la entrevista, me sentaré con usted en un lugar cómodo en el centro o una cafetería ubicada cerca del centro. Si no desea contestar ninguna de las preguntas durante la entrevista, puede decirlo y yo seguiré con la siguiente pregunta. Nadie más que el entrevistador estará presente a menos que usted quiera que alguien más esté allí. La información registrada es confidencial, y nadie más excepto yo tendrá acceso a la información documentada durante su entrevista. Toda la entrevista será grabada digitalmente, pero nadie será identificado por su nombre en la grabación. La grabación se mantendrá en una versión digital dentro de una contraseña protegida en mi dispositivo MyCloud y una copia se almacenará en una unidad flash personal. La información registrada es confidencial, y nadie más excepto yo tendrá acceso a las grabaciones. Las grabaciones serán destruidas después de 52 semanas.

Duración
La investigación se lleva a cabo durante 40 días (aproximadamente 2 meses) en total. Durante ese tiempo, el investigador visitará la clase como observador hasta 10 veces, el investigador le pedirá que llene dos encuestas con un intervalo de seis semanas y cada encuesta durará unos 10 minutos. La entrevista, si usted es elegido para participar, se llevará a cabo una vez y tomará unos 30 minutos.

- *¿Si decide tomar parte en el estudio, ¿Sabe cuánto tiempo durarán las actividades?*
  SI □ NO □
- *¿Cómo se realizan las actividades?*
  SI □ NO □
- *Si decide tomar parte en el estudio, ¿sabe cuánto tiempo tomará la entrevista?*
  SI □ NO □
- *¿Dónde se llevará a cabo?*
  SI □ NO □
- *Si acepta participar, ¿sabes si puedes dejar de participar?*
  SI □ NO □
- *¿Sabe que puede negarse a responder las preguntas que no desea responder?*
  SI □ NO □
- *¿Tiene más preguntas?*
  SI □ NO □

Riesgos
Existe el riesgo de que pueda compartir información personal o confidencial por casualidad, o que usted pueda sentirse incómodo hablando de algunos de los temas. Sin embargo, el investigador no quiere que esto suceda. No tiene que responder a ninguna pregunta o tomar parte en las actividades, entrevista o encuesta si siente que las preguntas son demasiado personales o si hablando le hace sentir incómodo.

Beneficios
Habrá un beneficio directo para usted, ya que tendrá la posibilidad de usar el material sometido a prueba para su proceso de aprendizaje. También es probable que su participación es nos ayude a conocer más acerca de cómo desarrollar material que ayudará a otros estudiantes a beneficiarse del potencial de futuras actividades diseñadas después de la investigación y por lo tanto, ayudar a la comunidad.

Reembolsos
No se le proporcionará ningún incentivo para ser parte de la investigación. Sin embargo, si usted participa en la entrevista, se le dará aperitivos y bebidas por su tiempo (si corresponde).

- *Me puede decir si ha entendido bien los beneficios que tendrá si usted forma parte del estudio?*
  SI □ NO □
- *Está claro que no recibirá ningún tipo de compensación por su participación en el estudio?*
  SI □ NO □

- *Tiene alguna otra pregunta?*
  SI □ NO □

Confidencialidad
La investigación realizada en el aula puede llamar la atención y si participa puede ser que otras personas dentro de la comunidad del CEC-EPN le hagan preguntas. El investigador no compartirá su información a nadie fuera del equipo de investigación. La información que el investigador recoge de este proyecto de investigación se mantendrá privada. Cualquier información sobre usted tendrá un número en él en lugar de su nombre. Sólo el investigador sabe lo que su número significa y el investigador protegerá esa información bajo llave. No se compartirá ni se entregará a ninguna otra persona excepto el investigador Bernard Fassett.

- *Usted entiende los procedimientos que el investigador va a utilizar para asegurarse de que cualquier información que el investigador recoja sobre usted permanecerá confidencial?*
  SI □ NO □
- *Tiene alguna otra pregunta?*
  SI □ NO □

Compartir los resultados

Nada de lo que me diga, sin importar el medio de obtención, será compartido con nadie fuera del equipo de investigación, y nada será atribuible a título personal por nombre. El conocimiento que el investigador obtiene de esta investigación se compartirá con usted y su comunidad antes de que sea ampliamente disponible al público. Cada participante recibirá un resumen de los resultados por correo electrónico. Los resultados se publicarán en una tesis y finalmente en un artículo donde el investigador publicará los resultados para que otras personas interesadas pueden aprender de la investigación.

Derecho a rechazar o retirarse

No tiene la obligación de participar en esta investigación si no desea hacerlo, y la elección de participar no afectará en sus clases o evaluaciones relacionadas con el aprendizaje de ninguna manera. Usted puede dejar de participar en la entrevista, encuesta o actividades en cualquier momento que desee sin que su proceso de aprendizaje se vea afectado. Si usted participa en la entrevista, se le dará la oportunidad de revisar sus observaciones al final de la entrevista, y usted puede pedir modificar o eliminar partes de las mismas si usted no está de acuerdo con mis notas o si no le he entendido correctamente.

A quién contactar

Si usted tiene alguna pregunta, puede preguntar ahora o más tarde. Si usted desea hacer preguntas más adelante, puede comunicarse con el siguiente contacto:

Bernard Fassett
0995021281
bgfassettv@utn.edu.ec

Esta propuesta ha sido revisada y aprobada por el Consejo de Revisión Científico de la UTN, que es un Comité cuya tarea es asegurarse que la investigación es válida y que los participantes de la investigación están protegidos contra cualquier tipo de daño. También ha sido revisada por el equipo de coordinación del CEC-EPN, quienes apoyan el estudio.

- *Sabe usted que no esta obligado a formar parte en este estudio si usted no lo desea?*
  SI □ NO □
- *Sabe usted que me puede hacer preguntas más adelante, si desea?*
  SI □ NO □
- *Sabe usted que le he dado los datos de contacto de mi persona y puedo darle más información sobre el estudio?*
  SI □ NO □

You can ask me any more questions about any part of the research study, if you wish to. Do you have any questions?

Parte II: Certificado de Consentimiento

He sido invitado a participar en una investigación que busca diseñar material de autoaprendizaje como parte de un proyecto de tesis. He leído la información anterior, o me ha sido leída. He tenido la oportunidad de hacer preguntas sobre él y cualquier pregunta que he preguntado allí ha sido contestada a mi satisfacción. Consiento voluntariamente ser un participante en este estudio.

Nombre del participante en letra imprenta_____

Firma del participante_____

Fecha _____
Día/mes/año

Si es analfabeto [1]

He sido testigo de la lectura precisa del formulario de consentimiento para el participante potencial, y el individuo ha tenido la oportunidad de hacer preguntas. Confirmo que el individuo ha dado su consentimiento libremente.

Nombre del testigo en letra imprenta _____ **Thumb print of**

Firma del testigo _____

Fecha _____
Día/mes/año

Declaración del investigador/persona que toma su consentimiento

He leído con precisión la hoja informativa al participante potencial, y a lo mejor de mi capacidad me aseguré de que el participante entienda que se realizará lo siguiente:

1. Observaciones
2. Cuestionarios
3. Entrevista

Confirmo que al participante se le dio la oportunidad de hacer preguntas sobre el estudio, y todas las preguntas planteadas por el participante han sido contestadas correctamente y a lo mejor de mi capacidad.

Confirmo que el individuo no ha sido forzado a dar su consentimiento, y el consentimiento se ha dado libre y voluntariamente. Debido al hecho de que el estudiante, en el momento de la firma del consentimiento, no habla inglés a un nivel fluido, el mismo formulario se proporcionó en español. La versión en Español de este consentimiento fue traducida, revisada y certificada por un traductor profesional de Translation Lab Pro. La traducción mencionada es fiel al original a lo mejor de mi conocimiento y creencia.

Una copia de este FCI y la versión en español se le ha proporcionado al participante.

Nombre del investigador/persona que toma el consentimiento: Bernard George Fassett Velasco

Firma del investigador /persona que toma el consentimiento:_____

Fecha _____
Día/mes/año

[1] Un testigo alfabetizado debe firmar (si es posible, esta persona debe ser seleccionada por el participante y no debe tener ninguna conexión con el equipo de investigación). Los participantes analfabetos también deben incluir su huella del pulgar.

8.6. Appendix 6 - Student Interview – Post-Investigation Questionnaire/Transcript

Instituto de Posgrado
IBARRA - ECUADOR
ESCUELA POLITÉCNICA NACIONAL
cec·epn CENTRO DE EDUCACIÓN CONTINUA
EDIFICIO AULAS Y RELACIÓN CON EL MEDIO EXTERNO, AV. TOLEDO N23-55 Y MADRID; QUITO-ECUADOR; CÓDIGO POSTAL 170525

Cuestionario de investigación para estudiantes - TRANSCRIPT

CÓDIGO ESTUDIANTE BC5-002 **AKA *Padme***

1. Género Femenino
2. Edad 18

Investigador: Antes de esta experiencia que tuviste, ¿has tenido o has utilizado aulas virtuales anteriormente?

Estudiante: No precisamente.

Investigador: Ya

Estudiante: Porque no sabía precisamente de eso.

Investigador: OK, ahora, ahora que ya lo hiciste, al aprender sobre un tema nuevo que prefieres: Lecciones dirigidas por un profesor; Material como el que tuvimos de auto-aprendizaje; Combinación entre clases presenciales y material de apoyo o alguna otra alternativa.

Estudiante: Eh, yo preferiría clases como estamos teniendo así en el aula e igualmente virtualmente porque nos ayuda mucho.

Investigador: Ya. ¿Qué tipo de materiales prefieres utilizar para este tipo de aprendizaje?

Estudiante: Mmmm, ¿de qué forma sería?

Investigador: Osea, en esa clase tenías dos formas, la una era el video y la otra era el mapa conceptual ¿Cuál de las dos te gustó más o alguna otra que te gustaría?

Estudiante: Claro… El video porque osea nos hace entender un poco más acerca del tema e igualmente porque si ya vamos a la casa y no entendemos el tema en clase, nos podemos guiar mediante el video.

Investigador: Ya. ¿Qué recursos didácticos te hubiera gustado tener en su clase virtual, aparte de los que tuviste?

Estudiante: Mmmm, ¿Cómo sería?

Investigador: Cualquier otra cosa que te hubiera gustado, osea, ¿qué más hubieras esperado ver ahí aparte del video y del mapa?

Estudiante: Eh, hacer ejemplos sobre el tema.

Investigador: Ok, Eh, ¿haz utilizado constantemente el aula virtual para tu clase?

Estudiante: No porque recientemente lo abrí porque no me ingresaba entonces recién lo abrí.

Investigador: Ok, Eh, ¿Te gustó contar con un aula virtual, sin instructor, con el material de

aprendizaje para su curso de inglés?

Estudiante: Si, porque los videos nos ayudan muchísimo.

Investigador: Ya, Durante el tiempo que utilizaste la plataforma, ¿preguntaste o solicitaste ayuda a tus compañeros sobre los temas tratados?

Estudiante: No, estaba chequeando el aula virtual

Investigador: Ya, Ok. Durante el tiempo que utilizaste la plataforma, ¿alguien te preguntó o te consultó sobre los temas?

Estudiante: No.

Investigador: Eh, ¿Cuál fue la experiencia tuya utilizando videos y mapas conceptuales previos a la clase cómo actividad de aprendizaje?, es decir, lo que hiciste ese día.

Estudiante: Bueno, si nos ayuda full porque mediante mapas y los videos, osea, nos damos a estudiar, osea, los estudiamos constantemente cada uno. Osea, es un auto-aprendizaje.

Investigador: Ya, ¿Qué recursos didácticos te parecieron más útiles durante el desarrollo de la clase? En general, no solamente ese día.

Estudiante: ¿Cómo sería?. ¿Didáctico? Osea ¿Cómo?

Investigador: Osea materiales que hayas utilizado en la clase, no necesariamente el video.

Estudiante: Las oraciones que nos daba la licenciada.

Investigador: Ok, ¿Qué tan fácil o complicado fue utilizar la plataforma?

Estudiante: Eh, No, si estaba super fácil.

Investigador: Ya, Desde su punto de vista, ¿Consideras útil el uso de este tipo de metodología de aprendizaje? Es decir, ¿te parece adecuado poder aprender el tema antes de la clase?

Estudiante: Si, porque ya así ya damos como entendido un poquito sobre el tema que la licenciada nos va a dar.

Investigador: Ok, ¿alguna cosa extra que quieras compartir de tu experiencia?

Estudiante: No, ahí.

Investigador: Ok, perfecto muchas gracias.

CÓDIGO ESTUDIANTE BC5-009 **AKA *Leia***

3. Género Femenino
4. Edad 22

Investigador: Previo a la clase que estas teniendo ahorita, ¿alguna vez habías tenido experiencia con aulas virtuales?

Estudiante: No.

Investigador: Ninguna?

Estudiante: No.

Investigador: OK, al aprender sobre un tema nuevo, ya después de esta experiencia, que prefieres:

Lecciones dirigidas por un profesor osea tradicionales; Material para aprender solo, auto-aprendizaje; ó una combinación entre clases presenciales y material de apoyo virtual.

Estudiante: El tercero, el apoyo virtual y la presencia en clase.

Investigador: Ya. Las dos.

Estudiante: **Aja**

Investigador: Ya. ¿Qué tipo de materiales prefieres utilizar en las clases para este tipo de aprendizaje?

Estudiante: Mmmm, ¿como?

Investigador: Osea, que tipo de material te gusta, te gustaron los videos, te gustaron los ejercicios, osea que es lo que más sientes que te sirve a ti.

Estudiante: Eh, los videos.

Investigador: Los videos.

Estudiante: Mhm.

Investigador: Ok. ¿Qué recursos didácticos te hubiera gustado tener en su clase virtual, que no hayan estado ahí?

Estudiante: Eh, a ver, talvez tener algunos que otros ejercicios en los que uno pueda responder y verse y mientras ve el video poder responder algunos ejercicios, tener algunos ejercicios de apoyo.

Investigador: Ya, Ok, Ahora, esto es tu experiencia dentro de la clase ya? ¿utilizaste la plataforma virtual para tu clase?

Estudiante: Para ese día que iba a haber la clase nueva, si.

Investigador: Ya, Eh, ¿Te gustó contar con un aula virtual, sin instructor, con el material de aprendizaje para tu curso de inglés?

Estudiante: Si.

Investigador: Ya, Durante el tiempo que utilizaste la plataforma, ¿preguntaste o solicitaste ayuda a tus compañeros sobre los temas tratados?

Estudiante: No.

Investigador: Eh, durante el tiempo que utilizaste la plataforma, ¿algún compañero tuyo te preguntó o te solicitó ayuda sobre alguno de los temas?

Estudiante: No.

Investigador: Ya, ¿Cuál fue la experiencia tuya utilizando videos y mapas conceptuales previos a la clase cómo actividad de aprendizaje?

Estudiante: Eh, fue buena porque si nos, bueno en lo personal si me ayudó demasiado. Osea porque si está bien resumido, cosas importantes.

Investigador: Ok, eh, ¿Qué recursos didácticos te parecieron más útiles durante el desarrollo de tu

clase? En general, no solamente en la virtual.

Estudiante: Eh, los ejercicios, los videos, eso.

Investigador: Ok, ¿Qué tan fácil o complicado fue utilizar la plataforma?

Estudiante: Mmm, Al principio fue un poco complicado porque no se me abría, después ya fue más fácil.

Investigador: Y una vez que ya le pudiste abrir, dentro de la plataforma, ¿estaba fácil ubicar las cosas?

Estudiante: Si, ajá.

Investigador: Ya, eh, desde tu punto de vista, ¿Consideras útil el uso de este tipo de metodología de aprendizaje?

Estudiante: Si.

Investigador: Es decir, ¿te parece adecuado poder aprender el tema antes de la clase?

Estudiante: Si.

Investigador: Ok, ¿alguna cosa que quieras añadir de tu experiencia durante este tiempo?

Estudiante: La verdad no, toda la experiencia ha sido muy buena.

Investigador: Ok, muchas gracias.

CÓDIGO ESTUDIANTE BC5-011 **AKA *Luke***

1. Género Masculino
2. Edad 19

Investigador: Antes de esta clase ¿habías utilizado aulas virtuales?

Estudiante: Si.

Investigador: Ya, ¿En qué tipo de curso habías utilizado aulas virtuales?

Estudiante: Se refiere aparte de la universidad u otros cursos?

Investigador: Exacto, fuera de este, en otros que hayas utilizado.

Estudiante: En mi colegio. Habían propuesto un Moodle para ver si nos enfocábamos ahí y lo utilizamos como material de apoyo y ahí fue un momento en que lo utilicé y me di cuenta que si me sirvió en muchas ocasiones.

Investigador: Ya, en ese caso específico, en tu colegio, las aulas virtuales que habías utilizado habían sido solo para refuerzo o para auto-aprendizaje.

Estudiante: Solo para refuerzo.

Investigador: Solo para refuerzo.Osea tu tenías la clase normal y luego tenías videos o ejercicios extras aparte.

Estudiante: Si.

Investigador: Ya, Ok, ahora, para aprender un tema nuevo que prefieres: Lecciones dirigidas por un profesor; Material para aprender solo de auto-aprendizaje o una combinación

entre clases presenciales y material de apoyo virtual.

Estudiante: La verdad, que yo creo que una combinación de apoyo y clases presenciales.

Investigador: Ya. Te hago una pregunta: ¿En qué orden prefieres que vaya ese material?, ¿prefieres que vaya, digamos, que tu veas anticipadamente, antes de la clase o prefieres verlo después de la clase?

Estudiante: Anticipadamente, porque así me da más oportunidad de participar en clase.

Investigador: Eh, ¿que tipo de materiales prefieres para este tipo de aprendizaje?

Estudiante: ¿Por ejemplo?

Investigador: Osea, por ejemplo videos, ejercicios, no sé. Cualquier cosa que se te pueda ocurrir.

Estudiante: Yo prefiero en la gran mayoría videos.

Investigador: Ya, ¿por qué prefieres los videos?

Estudiante: Porque son más didácticos y cuando no tengo tanto tiempo yo solo reproduzco y lo que voy escuchando como que lo voy cogiendo más mientras hago otra actividad.

Investigador: Ya, En el caso de la clase virtual que tuvimos la clase pasada, el miércoles, ¿Qué parte te gustó más? ¿La parte del video, como actividad o el mapa conceptual para poder entender?

Estudiante: El mapa conceptual.

Investigador: ¿El mapa conceptual?

Estudiante: Si.

Investigador: Eh. ¿Qué recursos didácticos te hubiera gustado tener en su clase virtual, que no hayan estado ahí?

Estudiante: Mmmm, Creo que se ha expresado todo, no pienso que haya hecho falta algo.

Investigador: Ok, Am, Fuera de ese día, ¿utilizaste la plataforma virtual para otros días?

Estudiante: Si.

Investigador: Ya, Eh, ¿Te gustó contar con un aula virtual, sin instructor, con el material de aprendizaje para su curso de inglés?

Estudiante: Si, me sentía como con voluntad para para estudiar.

Investigador: Ya, Durante el tiempo que utilizaste la plataforma, ¿preguntaste o solicitaste ayuda a tus compañeros sobre los temas tratados?

Estudiante: No.

Investigador: Ya, Durante el tiempo que utilizaste la plataforma, ¿alguien te preguntó o te consultó sobre los temas?

Estudiante: Si.

Investigador: Que tema o más o menos cómo te preguntaron del tema?

Estudiante: Eh, que si le podía explicar el funcionamiento de los adverbios de frecuencia, el orden, cuando colocarlos, eso.

Investigador: Eh, ¿Cuál fue tu experiencia utilizando videos y mapas conceptuales previos a la clase cómo actividad de aprendizaje?

Estudiante: Me repite (la pregunta)? Bueno, si nos ayuda full porque mediante mapas y los videos, osea, nos damos a estudiar, osea, los estudiamos constantemente cada uno. Osea, es un auto-aprendizaje.

Investigador: Si, osea, ¿Cuál fue tu experiencia utilizando videos y mapas conceptuales previos a la clase? Osea, ¿qué sentiste cuando tu veías la clase antes de la clase?

Estudiante: Me sentía como que todavía desconocía del tema pero una vez que lo traté se me hizo fácil aprender y una vez que llegué a clase fue como que un refuerzo la clase.

Investigador: Ya, perfecto. ¿Qué tan fácil o complicado fue utilizar la plataforma?

Estudiante: Para mi, fácil un poco la contraseña (risas) fue un problema.

Investigador: Pero ya después no tuviste problemas. Osea dentro de la plataforma como tal fue fácil moverte y ver que te tocaba hacer.

Estudiante: Si, realmente estuvo fácil.

Investigador: Eh, desde tu punto de vista, ¿Consideras útil el uso de este tipo de metodología de aprendizaje? Es decir, ¿te parece adecuado poder aprender el tema antes de la clase?

Estudiante: Si, yo lo considero como útil porque es una plataforma muy fácil de usar entonces me provoca seguir viendo, sino que hay un stop.

Investigador: Exacto, si de hecho eso es parte de ese aprendizaje porque claro, en teoría yo podría o podríamos activar todas las actividades de aquí hasta el final pero si te pongo todas las actividades puede que no sea necesariamente pedagógico para ti porque vas a tener tanta información que terminas confundiéndote, por eso es un poco la idea de ir paso a paso y se te va abriendo y claro te quedas un poco con esa pica de que va a pasar la próxima semana.

Estudiante: Es que como yo soy, soy estudiante politécnico, a veces no tengo tiempo y no he revisado la plataforma entonces como que se me antoja ir revisando los temas.

Investigador: Ya, muchas gracias.

8.7. Appendix 7 - Teacher Interview – Pre-Investigation Questionnaire/Transcript

IBARRA - ECUADOR
Instituto de Posgrado
ESCUELA POLITÉCNICA NACIONAL
cec·epn CENTRO DE EDUCACIÓN CONTINUA
EDIFICIO AULAS Y RELACIÓN CON EL MEDIO EXTERNO, AV. TOLEDO N23-55 Y MADRID; QUITO-ECUADOR; CODIGO POSTAL 170525

Pre-Investigation Questionnaire for Teachers -TRANSCRIPT

Bernard: So, how are you? And please tell me about your experience as a teacher.

Teacher 1: Ok, Thank you. I'm fine. My experience as a teacher is…very long. More than 40 years, but as an English teacher just 15 years.

Bernard: Ok, interesting.
What type of groups have you taught?

Teacher 1: We are talking about ages, maybe?

Bernard: [agrees].

Teacher 1: In CEC, my students are from 15 to 75 years old.

Bernard: OK. So, a wide range.
Do you think… because you have this experience with so many different groups, different ages, and different generations. Do you think everyone can learn English?

Teacher 1: Everyone can try…

Bernard: OK [laughs]

Teacher 1: But I think that there are exceptions. But it is not about… I think that it is about some... maybe disability?

Bernard: OK

Teacher 1: maybe disability.

Bernard: Right.
Do you think there is a difference? A generational difference when learning?

Teacher 1: Yes. Definitely yes.

Bernard: What do you think about new generations when learning English?

Teacher 1: This is a… New generations need technology to learn. It is different, but we have problems also with technology, Because they are… how can I say…they receive and receive information. Mhm, and thousands of pieces of information and they can not.. how.. how do you say discernir.

Bernard: Like separate?

Teacher 1: Separate, yes, the different kinds of information, so it is like when you fill a bowl with water Ok. You put water and more water and there is a moment when water is not (contained) in this bowl. Ok.

Bernard: Ok.

Teacher 1: So, How can they choose what is important from not important Information.

Bernard: Ok. Mhm. Of course, talking about these generations, the latest generation is Generation Z. If you are not familiar with it, basically we are talking about students that are right now between 10 years old and 24 years old. In your experience, what do you think about this particular generation?

Teacher 1: They are so… they can use technology in a very spontaneous way, it's like if they… I think they (were) born with this capacity.

Bernard: Do you think they need specific tools to learn better?

Teacher 1: Yes. They are like natives with these new technologies, so it is important to give them tools of these kinds so they can learn better and faster.

Bernard: Do you know any of these tools that you can think of that you can use with your students in this particular group?

Teacher 1: Oh, we have videos, games, images, colors, different sounds, everything. They are like natives with these new technologies, so it is important to give them tools of these kinds so they can learn better and faster.

Bernard: Ok. Are you familiar with the flipped classroom model?

Teacher 1: Not exactly.

Bernard: Ok. What have you heard about this model?

Teacher 1: Ok, they… students have a previous experience with the topics of a new class, for example, and then in the classroom they can ask questions and practice these contents.

Bernard: Ok. Perfect. Have you ever tried or used this model?

Teacher 1: No.

Bernard: No?

Teacher 1: No.

Bernard: Ok. Do you think students can learn better not only using flipped classroom but any kind of method like this one?

Teacher1: Of course. Everything new, everything with movement, with sound, with all these things, are… are like do we say incentives in English? Or motivation?

Bernard: Thank you for answering the questions. One last thing, I would like you to tell me, now that you are going to be part of these research, what do you expect from this experience? What are your expectations as a teacher?

Teacher 1: First, I feel very glad and motivated because I am not a young teacher, I am old, so this is like a… how do we say like a desafio…

Bernard: Challenge

Teacher 1: Challenge, challenge for me to do this and it is an opportunity to use new… new methods, methodologies, things and it is good for an old lady to learn more and to be with my students as a part of this experience.

Bernard: Ok. Great! Thank you very much and we will be in touch after the research that we are going to do in your class to check for more information and probably get a better feedback on what you found also during this process. Ok? Thank you very much teacher number 1.

Teacher 1: Thank you Bernard.

8.8. Appendix 8 - Teacher Interview – Post-Investigation Questionnaire/Transcript

Instituto de Posgrado
IBARRA - ECUADOR
ESCUELA POLITÉCNICA NACIONAL
cec-epn
CENTRO DE EDUCACIÓN CONTINUA

EDIFICIO AULAS Y RELACIÓN CON EL MEDIO EXTERNO, AV. TOLEDO N23-55 Y MADRID; QUITO-ECUADOR; CÓDIGO POSTAL 170525

Post-Investigation Questionnaire for Teachers

This questionnaire is designed for Beginner instructors of English as a second language (ESL) teaching at the Centro de Educación Continua de la Escuela Politécnica Nacional (CEC-EPN) in the city of Quito, Ecuador. The questionnaire is part of the qualitative research titled "Designing a self-learning interactive platform for Pre-A1 Beginner students.

Researcher: Hello Teacher, as we spoke last time, we are going to do the final interview with you, to see exactly what you think about the methodology that we were using.

Teacher: OK.

Researcher: So, let's start Tell me how you felt about changing or adapting your way of teaching to this new methodology?

Teacher: Ok I feel very good with this new methodology and I think that it's a matter of time to get adapted with this kind of teaching. But I like it, I feel Ok.

Researcher: Ok, How prepared do you think you were for this new technology?

Teacher: I am not prepared for this new methodology. I want to have more training about this because we can get many results if we use this (methodology) but the training of the teacher is very important.

Researcher: Ok, so you think that teacher training is needed?

Teacher: Yes.

Researcher: Ok, do you consider it was useful to use a virtual class?

Teacher: Definitely yes. It's very useful.

Researcher: What would be important for you to understand better this technology?

Teacher: What would be important for me to understand? For me it's easy to understand that we have to use technology. Technology is the center of this new methodology in my opinion.

Researcher: OkWhat do you consider important to learn in order to understand the use of the new technology?

Teacher: I don't understand very well this question.

Researcher: For example, do you think that you need to learn something about the technology or do you think you need to learn more about the methodology to use it.

Teacher: No, about the technology.

Researcher: The technology.

Teacher: Yes. Because methodology is especially for the teachers. So, we know how to give the classes, to prepare the classes. The students, no matter what kind of methodology the teachers use, if there is a good method, and the teacher is well trained, it's going to be OK.

Researcher: What problems did you fin don using a virtual class.

Teacher: Mmm, Idon't know, maybe… it's difficult to answer this… what problems?... I don't see any problems.

Researcher: Let's talk a Little bit about your students. Do you think it was useful to have students practice and learn before the class?

Teacher: Yes.

Researcher: Why?

Teacher: Because they are motivated and they came in this case, in the future maybe come, with curiosity.

Researcher: Do you think that students enjoyed using this new technology?

Teacher: Yes. They like it very much.

Researcher: Do you think they can use this methodology?

Teacher: Yes, because they are very young and they are acquainted with technology and the devices, etc.

Researcher: Perfect, What do students need in order to use the methodology?

Teacher: To have the devices, the computer, and the correct information to get in. This platform

Researcher: Just one more thing, talking about students as well. Do you think they were motivated to enter the platform?

Teacher: They need more motivation, yes, but it's the first time.

Researcher: Ok, Any other comments or things you want to share with us?

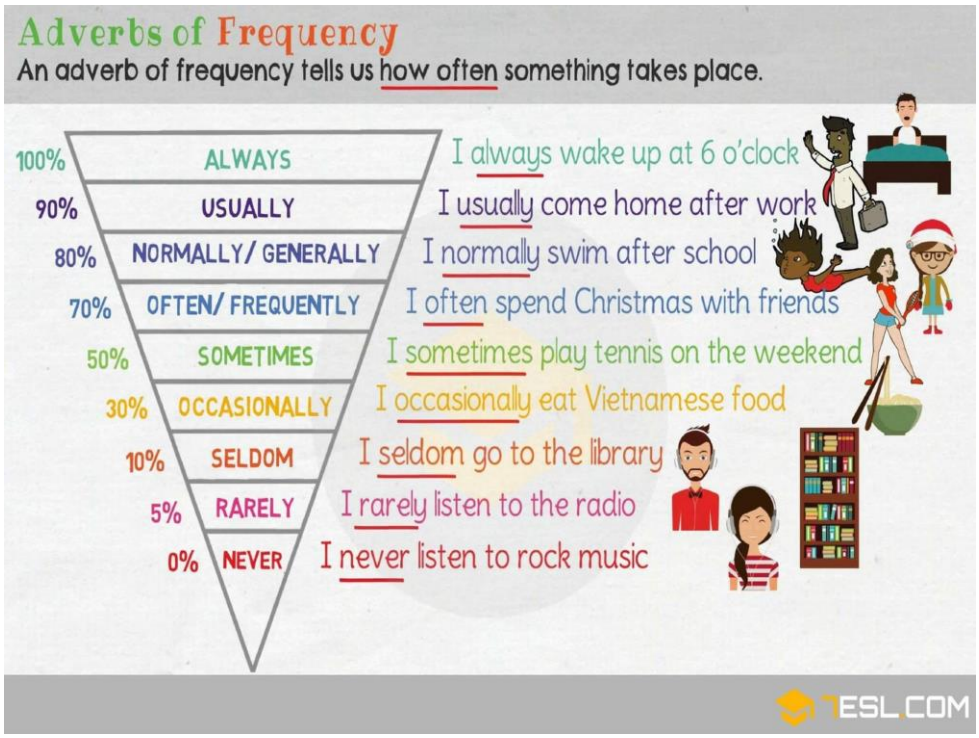
Teacher: Yes. To congratulate this mew experiment because I think that it can give the students and the teachers new ways to work.

Researcher: Ok, thank you very much.

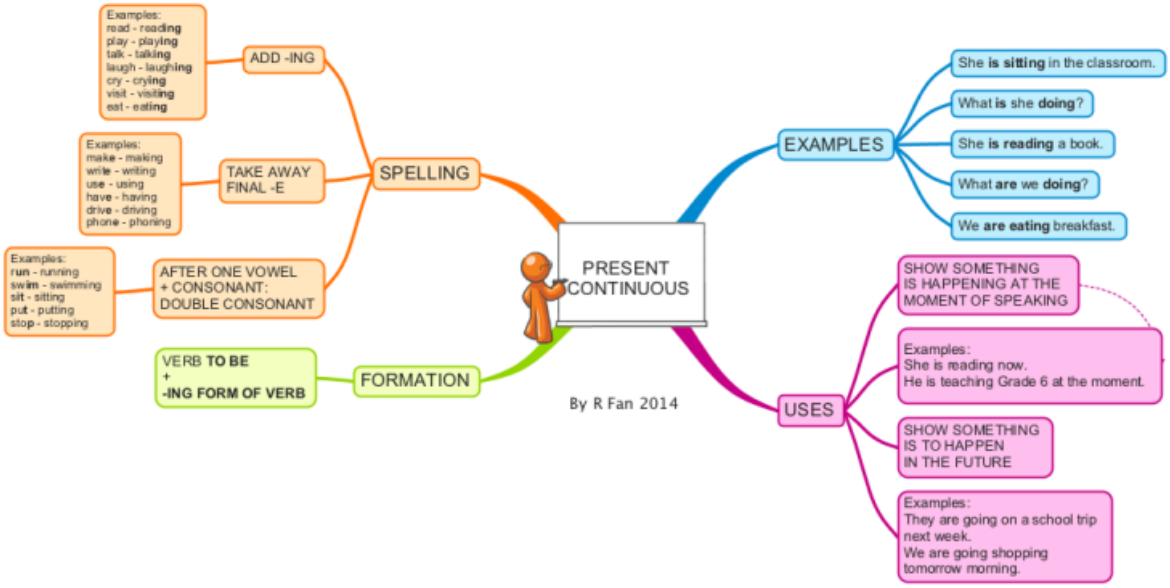
8.9. Appendix 9 - Moodle Classroom Example Material

Person	Personal Pronouns	Object Pronouns
1st person (sing.)	I	me
2nd person (sing.)	you	you
3rd person (male)	he	him
3rd person (female)	she	her
3rd person (thing)	it	it
1st person (pl.)	we	us
2nd person (pl.)	you	you
3rd person (pl.)	they	them

8.9.1 Concept Charts



8.9.2 Examples



8.9.3 Mind Maps

8.9.4 Videos

8.9.5 Vocabulary lists

8.10. Appendix 10 - Flipped Session Pre-Work Questionnaire

https://docs.google.com/forms/d/e/1FAIpQLSe_y8NUOfwvsw1G8Ddmqnk64CjZu18ZgoIzyRSQZRcOgfAPSA/viewform

Flipped Session Pre-Work

Getting Started on "6 Models of Flipped Learning"

* Required

Email address *

Your email

Prior knowledge and experience with Flipped Learning *

- ◯ None, what did you say this is?
- ◯ I have heard of it and want to know more
- ◯ Attended some training or read about it on my own
- ◯ Started flipping less than two years ago
- ◯ Experienced flipper - have flipped for more than two years
- ◯ Experienced flipper - have flipped for more than two years
- ◯ Train others to flip and/or present on Flipped Learning at conferences

Most of my students are: *

- ◯ Children up to 10
- ◯ 11 to 17
- ◯ 18 to 24
- ◯ 25 to 62
- ◯ Older learners

Models of Flipped Learning I know something about (check all that apply) *

- [ ] Traditional Flipped Learning
- [ ] Mastery Flipped Learning
- [ ] Explore-Flip-Apply
- [ ] In-Class Flip
- [ ] Blended/Online Flipped Learning
- [ ] SOFLA - Synchronous Online Flipped Learning Approach

What I really want to know about Flipped Learning is: *

Your answer

Flipped Learning Basic Guide Video
Here is a one-hour lecture. Feel free to flip through it! :)

Find out more about Flipped Learning
Explore the site: http://flippedlearning.org

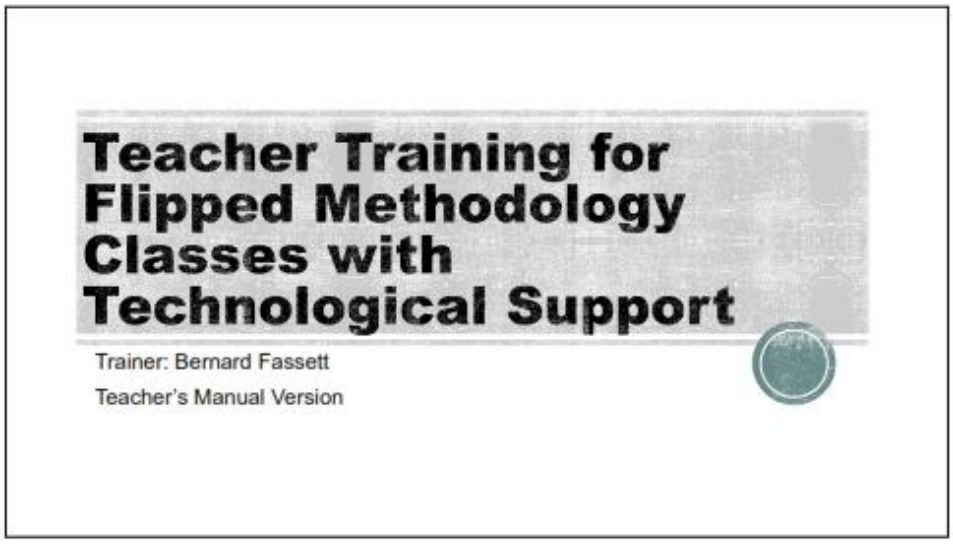
Send me a copy of my responses.

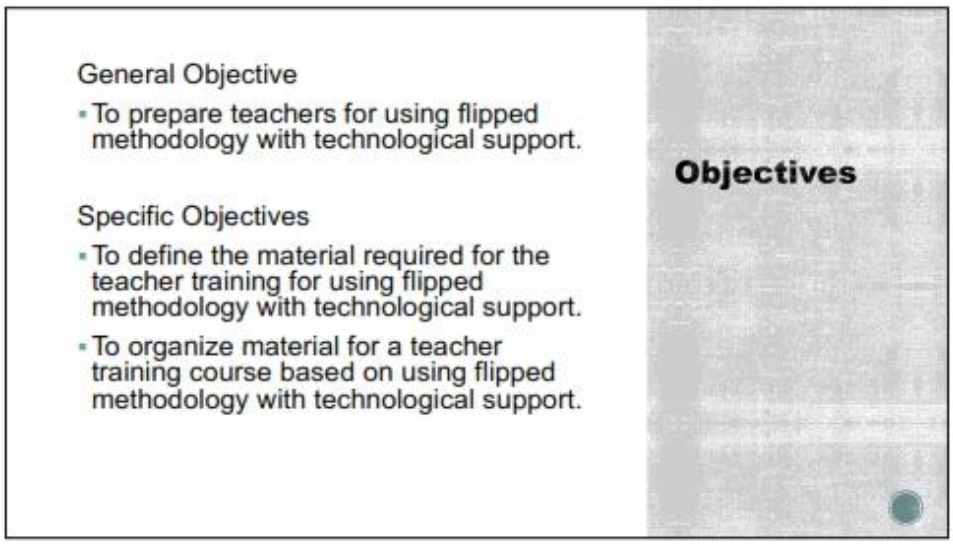
Submit

Never submit passwords through Google Forms.

reCAPTCHA
Privacy Terms

8.11. Appendix 11 - Flipped Session Training – Teacher´s Manual





1

Simplifying Flipped Learning

- Youtube video:
- https://youtu.be/-hwu3xqbMKw

Source (TIE, 2017)

What is FLIP?

- The Flip Model was introduced by Jonathan Bergmann and Aaron Sams in 2000.
- The main idea is to invert the order of activities between classroom and house.
- Theory is learned at home.
- Classroom is used for production tasks and activities.
- The flip model is based upon the concepts of the four pillars of FLIP.

2

The Four Pillars of FLIP?

The four pillars of FLIP are:

- **F**lexible Environment
- **L**earning Culture
- **I**ntentional Content
- **P**rofessional Educators

Source (Marshall, 2018)

Flexible Environment

- Flipped Learning allows for a variety of learning modes; educators often physically rearrange their learning spaces to accommodate a lesson or unit, to support either group work or independent study. They create flexible spaces in which students choose when and where they learn. Furthermore, educators who flip their classes are flexible in their expectations of student timelines for learning and in their assessments of student learning.

Source (Marshall, 2018)

Extracted from: Flipped Learning Network, n.d.)

3

- In the traditional teacher-centered model, the teacher is the primary source of information. By contrast, the Flipped Learning model deliberately shifts instruction to a learner-centered approach, where in-class time is dedicated to exploring topics in greater depth and creating rich learning opportunities. As a result, students are actively involved in knowledge construction as they participate in and evaluate their learning in a manner that is personally meaningful.

Learning Culture

Source (Marshall, 2018)

Extracted from: Flipped Learning Network, n.d.)

- Flipped Learning Educators continually think about how they can use the Flipped Learning model to help students develop conceptual understanding, as well as procedural fluency. They determine what they need to teach and what materials students should explore on their own. Educators use Intentional Content to maximize classroom time in order to adopt methods of student-centered, active learning strategies, depending on grade level and subject matter.

Intentional Content

Source (Marshall, 2018)

Extracted from: Flipped Learning Network, n.d.)

4

- The role of a Professional Educator is even more important, and often more demanding, in a Flipped Classroom than in a traditional one. During class time, they continually observe their students, providing them with feedback relevant in the moment, and assessing their work. Professional Educators are reflective in their practice, connect with each other to improve their instruction, accept constructive criticism, and tolerate controlled chaos in their classrooms. While Professional Educators take on less visibly prominent roles in a flipped classroom, they remain the essential ingredient that enables Flipped Learning to occur.

Professional Educator

Source (Marshall, 2018)

Extracted from: Flipped Learning Network, n.d.)

- Youtube video:

- https://youtu.be/BCIxikOq73Q

FLIP Model

Source (TJE, 2017)

5

- Youtube video:

- https://youtu.be/G_p63W_2F_4
- https://youtu.be/qzQhiB2EOVE

Flipped classroom examples

Source:
PBS NewsHour (PBS, 2013)
TEDxStowe (Cadwell, 2018)

1. Flipped Mastery
2. Explore-Flip Apply
3. Peer Instruction
4. In-Class Flip
5. Online Flip
6. SOFLA

SIX ways to Flip it!

Source:
(Marshall, 2013)

6

- All the models of flip will:

Provide a strong instruction

that maximizes the benefits of technology

CREATING SOLID BASES

SIX ways to Flip it!

Source:
(Marshall, 2013)

Creator:

Jon Bergmann & Aaron Sams

HOW?

WHY?

FOR WHOM?

Flipped Mastery

Source:
(Bergman & Sams, 2014)

7

- Usually Flipped is seen as:
  - Video, content creation and delivery
  - Recuperation of class time.
  - Making videos for students to watch before class, provides:
    - More one-on-one time with students during class.
    - Higher student achievement
    - Increased engagement.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- What about teachers who want to take FL further?
  - Students watch our direct instructional videos before coming to class.
  - In class, students do more engaging activities, such as interactive practice.
  - Then, a new student enters the course.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

8

- Why?
  - In a real case, a new student with no background in the subject could enter the course.
    - Due to videos created for each lesson the student could
      - Enter the class
      - Work at his/her own pace
      - Learn

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- Result
  - In one semester the student completed 80% percent of the course.
- But
  - What if all students, had that opportunity to work through content at their own pace?
  - What if all students had to master the content before they moved on?
  - What if they fail?

Flipped Mastery

Source:
(Bergman & Sams, 2014)

9

- The flipped-mastery model of education
  - Students work through course content at:
    - Flexible pace
    - Receiving direct instruction
    - At the end of a unit, they demonstrate mastery of the learning objectives.
    - After that, they move to the next unit.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- Two Problems, Two Solutions
  - Usually two constants
    - Amount of learning depends on
    - Fixed period of time.
  - While it should be
    - Learning should be the constant
    - Time, should be the variable

Flipped Mastery

Source:
(Bergman & Sams, 2014)

10

- Two Problems, Two Solutions
  - Result
    - Students learn what they are expected to learn
    - They do so in the amount of time each one needs

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- Bloom's mastery learning is difficult to implement due to two logistical issues
  - When do teachers deliver direct instruction if students are all at a different place in their learning?
  - How many versions of a summative assessment can a teacher realistically create?

Flipped Mastery

Source:
(Bergman & Sams, 2014)

11

- Imagine what this means for the teacher
  - Multiple versions of exams and grade them manually
  - Technologies: online video and learning management systems.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- Imagine what this means for the teacher
  - Material: Online videos solved the problem of direct instruction.
  - Assessment: Teachers can create online tests using learning management systems and online quizzing modules. The assessments can differ each time a student takes an exam.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

12

- How to Organize a Flipped-Mastery Model
  - Teacher begins by organizing content around specific objectives
  - Learning objectives
  - Learning objects available for students to use
  - Required activities that students had to complete to demonstrate mastery for each objective

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- With the list of objectives
  - Create one video for each objective
    - These work better if they are short
  - Develop worksheets to help students practice
  - Assign hands-on activities that support the learning objectives
  - Develop summative assessments.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

13

- Consider
  - Creating a video for every objective
  - Direct instruction is not always the best way for students to learn
  - Add inquiry activities and projects that help students understand content more deeply
  - Teaching is about human interaction

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- Consider the issue in terms of a continuum
  - About the teacher–student relationship
    - When teachers create their own videos, students recognize their teacher is taking the time to "teach" them.
  - Teachers should create more videos and other learning objects than using others materials.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

14

- Jonathan Bergmann talks about Flipped Mastery
  - https://youtu.be/nEfojG9ckYA
- Introduction to Flipped Mastery Class
  - https://youtu.be/Z5txqv8yDnw

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- How to Pace
  - Students would master content at their own pace and move on when they've done so.
  - All students would not be self-starters and would not be genuinely interested in all subjects.
  - Set benchmarks
  - Allow students to work at a flexible pace.
  - Tell students what they needed to accomplish by the end of the week.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

15

- How to Pace
  - Give them guidance about how much time the various activities would take so they could plan their week.
  - For slower learners give a list of essential objectives for each grading period
  - Then give the "nice to know" objectives for the end of the grading period
  - This requires modifying a self-paced ideal into a flexible-paced reality.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- How to Assess
  - How do teachers honor the institutions grading system and still maintain the integrity of an approach that was driven more by competencies and mastery?
  - Creating a system for both formative and summative assessments.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

16

- **Formative Checks**
  - Simple conversations with your students
  - When students feel they had mastered an objective, they bring as with their evidence:
    - Worksheets
    - Experiment write-ups
    - Notes from their interaction with an instructional video.
  - Ask some key questions about what they learned

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- **Formative Checks**
  - That way you can determine the understanding of the topic
  - Through formative checks you see if students have a misconception or are missing a crucial point.
  - If students misunderstood a concept, tell the student to re-watch a video, practice a few more problems, or dig deeper through more investigation.
  - Push your more advanced students to do deeper work.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

17

- **Formative Checks**
  - Make sure struggling students master essential objectives by remediating with them one-on-one or in small groups, working with them until they got it.
  - Individualized assessment is one of the greatest benefits of the flipped-mastery system.
  - You talk to every student in every class, every day, and most of the discussions take place in these formative-checkconversations.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- Summative Retakes
  - In a flipped-mastery system, students can attempt a summative assessment as many times as needed to demonstrate mastery
  - But if a teacher gives the same test over and over, students simply memorize the test
  - A flipped-mastery summative assessment can be a logistical nightmare.
  - How many versions of an exam can a teacher have in the filing cabinet, and how many hours will it take to grade each new attempt?
  - Technology helps solve this problem.
  - You can generate thousands of different versions of tests that assessed the same objectives.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- Summative Retakes
  - Students take their summative assessments in class after mastering each objective.
  - For each of the objectives you create multiple questions that assessed each objective.
  - The computer randomly picks one to two questions from each bank and generates a test.
  - The software also grades the majority of the questions.
  - Then apply one more conversation with the students before they move on to the next topic.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- Summative Retakes
  - During that conversation, go over the questions they answered incorrectly and provided remediation and assistance to help them master the objectives
  - These face-to-face interactions take a lot of time
  - In the flipped-mastery model, teachers are more valuable
  - Their time in the class is maximized
  - The teacher's main role is to be a facilitator of learning

Flipped Mastery

Source:
(Bergman & Sams, 2014)

19

- Students as the center
  - The flipped-mastery model allows innovation but maintains integrity of content standards
  - Leverages technology to overcome logistical hurdles
  - This enables teachers to individualize learning for each student putting student learning at the center of each classroom.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- How to Create Multiple Versions of a Single Test
  - Not all learning management systems can create thousands of versions of the same test
  - Step 1: Create a list of discrete objectives you want to assess. This list forms the basis of your questions to come
  - Step 2: Create a bank of questions for each objective. From 8 to 12 questions.
    - Writing good, meaningful questions that assess the same objective is hard.
  - Step 3: Let the learning management system or web tool randomly select questions. You don't need to create long tests; a good exam can be short.
  - Step 4: Have students take the exam. Each student's exam will be different.

Flipped Mastery

Source:
(Bergman & Sams, 2014)

20

- Video Bonus

- http://youtu.be/BV2PL19JomM

Flipped Mastery

Source:
(Bergman & Sams, 2014)

- **Video for flip session**

  - https://youtu.be/KsVaiPsigkM

Explore-Flip-Apply

Source:
(Musallam, 2011)

21

- Background Information
  - Class-time was used for student problem-solving
  - Video responses and reflections were amplified by using google forms as an assessment device
  - Students seemed to be passively learning the material.
  - Benefits of flip teaching: use of class-time
  - Drawback: Not flip teaching as a pedagogy, but simply the order of learning activities.

Explore-Flip-Apply

Source:
(Musallam, 2011)

- Previous model focuses in:
  - Using class-time effectively
  - Fails at giving students an opportunity to access their prior knowledge, tackle their misconceptions actively, and work to construct their own meaning
- To address this issue:
  - RE-ORDER the way the class is structured
  - Give students an opportunity to construct their own ideas and models BEFORE learning.

Explore-Flip-Apply

Source:
(Musallam, 2011)

22

- Time-shifting benefits:
  - Added classroom time
  - Catalog of basics
  - Focus on problem solving
  - Merge inquiry learning with flip teaching to promote knowledge construction
  - Opening up class-time by off-loading any aspects of direct instruction as homework via annotated screencasts.
  -

Explore-Flip-Apply

Source:
(Musallam, 2011)

- Make a list of needed material:
  - Facts
  - Definitions
  - Formulas
  - Equations
  - Examples
- Then create:
  - Instructional videos around those ideas.
  - All other forms of learning are incorporated in a Explore-Explain-Apply learning cycle, which because the "explain" portion is off-loaded to the homework setting, it can be called "Explore-Flip-Apply".

Explore-Flip-Apply

Source:
(Musallam, 2011)

23

- The goal of this process is:
  - "Students need enough freedom to be cognitively active in the process of sense making, and students need enough guidance so that their cognitive activity results in the construction of useful knowledge." (Mayer, 2004)
  - The teacher still controls certain teaching activities but does not use class-time to teach those concepts.
  - Teacher plays an active role in the "flip" phase of the cycle, by giving them at least one opportunity to form their own models first.

Explore-Flip-Apply

Source:
(Musallam, 2011)
(Mayer, 2004)

- Results:
  - Students seem to be much more invested in the class activities
  - Are more motivated to apply their knowledge towards complex problem solving given an initial phase of exploration.
- Therefore, Flip Teaching is:
  - Sustainable
  - Effective
  - Respects the way students naturally all "want" to learn.

Explore-Flip-Apply

Source:
(Musallam, 2011)

24

- How to make an "Explore-Flip-Apply" cycle:
  - Explore-Flip-Apply (Example 1)
    - Day 1: Explore
    - Night 1: Flip
    - Day 2: Apply
    - Night 2: Prepare for Quiz
    - Day 3: Quiz and new cycle begins

Explore-Flip-Apply

Source:
(Musallam, 2011)

- Day 1: Explore
  - Step 1: Opener (~ 10 minutes)
    - Process
    - Start with a question
    - Use grougroupwork to facilitate this process
      - a) Students work for 3 minutes to answer the question individually
      - b) Students then group up (3 or 4) and share their responses and agree on a collective answer.
      - c) One student gives the answer (you may use technology)
      - d) Display the data and s a class
      - Investigate all answers
      - Discuss trends
      - Commonalities
      - Etc.

Explore-Flip-Apply

Source:
(Musallam, 2011)

25

- Day 1: Explore
  - Step 2: Exploration (~ 65 minutes)
    - Process
    - Students are given a worksheet. After a pre-class discussion, they work in groups to develop and outline or procedure to answer a research question.
    - In the "data" section of the worksheet, students provide data and a graph.
    - Students work together to write conclusions and provide and "explanation" of the phenomena in their worksheet.
    - Explanations are shown in class and the last 10-15 minutes of class discussing their explanations group by group. This becomes the "application" phase the following day.

Explore-Flip-Apply

Source:
(Musallam, 2011)

- Day 1: Explore
  - Step 2: Exploration (~ 65 minutes)
    - Process
    - Guide this process without revealing the correct answer to the initial question.
    - Various group procedures are highlighted and trends between groups are noted.
    - This process might continue into the next day
    - Allow time for an opener and group presentations.

Explore-Flip-Apply

Source:
(Musallam, 2011)

26

- Night 1: Flip (Instructional Video)
  - Step 1: Watch the video
    - Process
    - Students watch a screencast instructional video. Include additional:
      - Concepts
      - Definitions/equations
      - Provide two problem-solving examples that relate to the exploration of that day.
    - The purpose is to build on their exploration by:
      - Introducing more structured concepts
      - Providing any mechanical knowledge
      - Privide definitions and equations
      - Model a few exercises using technology.

Explore-Flip-Apply

Source:
(Musallam, 2011)

- Day 2: Apply
  - Activities on the "application" day vary from more directed application tasks, to individual/group sessions, to challenge problems and class competitions.
  - Students have exercise sets or "Learning Packets"
- Step 1: Opener (~ 10 minutes)
  - Process
    - Follows the same peer model described earlier
    - Question is more specific
    - After individual attempts and group discussion, analyze answers collectively
    - Go over responses

Explore-Flip-Apply

Source:
(Musallam, 2011)

27

- Day 2: Apply
  - Highlight groups who obtained the correct answer and keep track of as a motivational tool for the opener.
  - Critique wrong answers and discuss logic behind the construction (good and bad distractors, etc.)
- Step 2: Class Application (~ 65 minutes)
  - Process
    Students are given a blank sheet of paper to show their work in route to answering questions regarding the concepts they learned in the night's lecture
  - This requires a merger of skills constructed in the exploration phase and applications learned in the instructional video

Explore-Flip-Apply

Source:
(Musallam, 2011)

- Day 3: Quiz and new cycle begins
  - Step 1
    - Assess
    - Give opportunity to learn and reassess
    - Scaffold the "application" day to provide additional resources and challenge problems.

Explore-Flip-Apply

Source:
(Musallam, 2011)

28

- Links you may find interesting:
  - Just-in-time teaching (JiTT)
  - Guided Inquiry

Explore-Flip-Apply

Source:
(Musallam, 2011)

- Video
  - https://youtu.be/Z9orbxoRofI
- Links
  - Peer Instruction (PI)

Peer Instruction

Source:
(Bernd, 2012)

29

- Introduction
  - Peer instruction (PI) is a student-centered approach in which the progression of any given class depends on the outcome of real-time student feedback to ConcepTests—multiple-choice conceptual questions.
  - More teachers are using as it has proven to be an effective method.
  - Research shows significant increase in students' conceptual understanding in comparison to traditional lecturing method.

Peer Instruction

Source:
(Lasry et.al., 2008)

- Introduction
  - However, there are few studies concerning the efficacy of PI within other student populations
  - Most PI users report high conceptual gains in courses
  - PI is used in two-year colleges such as John Abbott College in Montreal Canada, as well as Harvard University.

Peer Instruction

Source:
(Lasry et.al., 2008)

30

- Structure

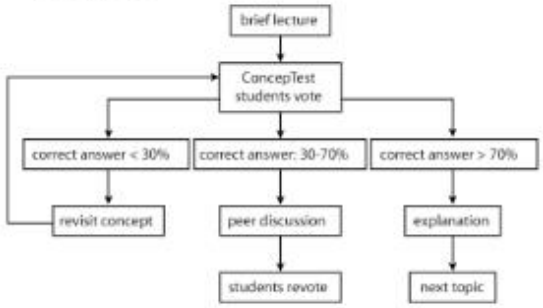


Fig. 1. The peer instruction implementation process. Note that the recommended percentages of correct answers for each step are estimates—how an instructor decides to proceed is highly dependent on the content and student population.

Peer Instruction

Source:
(Lasry et.al., 2008)

- Effectiveness of PI
  - PI is more effective at developing students' conceptual understanding than traditional lecture-based instruction.
  - The benefits of PI on students' conceptual learning extend from the university to the two-year college.
  - PI implicates greater interactive engagement methods than traditional instruction.
  - PI class time is devoted to conceptual learning and less time to traditional problem solving

Peer Instruction

Source:
(Lasry et.al., 2008)

31

- Effectiveness of PI
  - PI students obtain better grades on their final examination than other students
  - Providing a solid conceptual background allows students to be more effective in problem solving
  - Time spent on basic concepts does not reduce students' traditional problem solving ability

Peer Instruction

Source:
(Lasry et.al., 2008)

- Dependence of PI effectiveness on background knowledge
  - Higher background knowledge students display larger gains
  - Students with lower scientific reasoning ability or cognitive skills are more likely to be influenced by prior knowledge
  - There is a relationship between scientific reasoning and gains

Peer Instruction

Source:
(Lasry et.al., 2008)

32

- Dependence of PI effectiveness on background knowledge
  - PI should be not only be used only with higher background knowledge students
  - PI increases learning for all students regardless of background knowledge
  - Lower background knowledge students taught with PI achieve greater conceptual gains

Peer Instruction

Source:
(Lasry et.al., 2008)

- Dependence of PI effectiveness on background knowledge
  - Students achieve learning gains that match the gains of higher background knowledge students
  - PI is more effective than traditional instruction with both lower and higher background students.

Peer Instruction

Source:
(Lasry et.al., 2008)

33

- Peer instruction decreases student attrition
  - Active and cooperative learning methods are useful in reducing student attrition
  - Competitive, rather than cooperative, atmosphere and the focus on skill performance instead of conceptual understanding are reasons for attrition
  - Peer instruction is also helpful in reducing failure rates by decreasing the number of students who drop-out

Peer Instruction

Source:
(Lasry et.al., 2008)

- Peer instruction decreases student attrition
  - Engaging students through ConcepTests during a class and throughout a semester encourages students to stay in the course.

Peer Instruction

Source:
(Lasry et.al., 2008)

34

- **CONCLUSION**
  - Peer instruction is an effective instructional approach
  - PI increases conceptual learning and traditional problem solving skills.
  - Both higher and lower background-knowledge students benefit from the approach when compared to traditional lecture-based teaching.
  - Finally, by engaging students in the course, PI reduces the number of students who drop the course.

Peer Instruction

Source:
(Lasry et.al., 2008)

- **Video for flipping**
  - https://youtu.be/hhq3Yn_QqIA

In-Class Flip

Source:
(Gonzalez, 2014)

- **The In-Flip Class**
  - If you tried flipping your class, and it did not go well, or you want to try the approach, but you are pretty sure it will not work in your school.
  - Do a slight twist, and flipping might be possible!
  - Flipped classrooms are where direct instruction happens via video at home, and "homework" takes place in class

In-Class Flip

Source:
(Gonzalez, 2014)

- **The In-Flip Class**
  - In 2013 the Flipped Learning Network reported that teachers who practice flipping have seen "higher student achievement, increased student engagement, and better attitudes toward learning and school."
  - Flipping has one big catch, the at-home learning absolutely must happen
  - Teachers have zero control over what happens at home

In-Class Flip

Source:
(Gonzalez, 2014)

36

- **The In-Flip Class**
  - To fix it, here are some options:
  - Arranging access before and after school
  - Lending out devices
  - Sending recorded lectures home on flash drives or DVDs

In-Class Flip

Source:
(Gonzalez, 2014)

- **The In-Flip Class**
  - These are useful solutions. But, the extra work may not be attractive for teachers
  - Even if the technology issue is resolved, a chaotic home environment or students who do not do homework could affect

In-Class Flip

Source:
(Gonzalez, 2014)

37

- **Modifying the Flipped Classroom Concept**
  - Jennifer Gonzalez called this new option the "In-Class Flip."
  - The teacher pre-records a lecture or direct instruction
  - Instead of having students view the content at home, that video becomes a station in class that small groups rotate through.

In-Class Flip

Source:
(Gonzalez, 2014)

- **Modifying the Flipped Classroom Concept**
  - The rest of the time is spent on other activities
    - Independent work
    - Group work
    - With activities related to the lesson and others focusing on different course content.
  - As with a traditional flip, the direct instruction runs on its own, which frees the teacher for more one-on-one time with students.

In-Class Flip

Source:
(Gonzalez, 2014)

38

- **Advantages**
  - Besides the fact that it avoids the home-related problems of a traditional flip, the In-Class Flip has other advantages as well:
  - The teacher can observe whether students are really watching.
  - When attention is not on the video, the instructor can get students back on track immediately

In-Class Flip

Source:
(Gonzalez, 2014)

- **Advantages**
  - The initial exposure to the video content has a better chance to be understood
  - The teacher can answer questions immediately
  - For students who struggle, the instructor can send them back to the video for a refresher.
  - Hardware is safer
  - Less risk of a device getting broken or lost if it remains in the classroom
  - Students go to a station for the lecture

In-Class Flip

Source:
(Gonzalez, 2014)

39

- Challenges
  - It does not work for tidy one-period lesson plans
  - In short daily class periods, you won't be able to do a single-day flip.
  - Create enough stations to provide work for students who haven't seen the video and some for those who have.
  - Rotation takes time.
  - Plan in bigger chunks of time where students have weekly goals and can reach them at their own pace, in any order.

In-Class Flip

Source:
(Gonzalez, 2014)

- Challenges
  - More preparation is required at the beginning
  - Setting up and fine-tuning stations takes time
  - Once you've been flipping for a few years, you'll have stations and videos that can be recycled.
  - Technically, you don't "gain" class time

In-Class Flip

Source:
(Gonzalez, 2014)

40

- Challenges
  - But think about those cases where traditional flipping results in unevenly prepared classes -- in these scenarios, the teacher has to catch up students who didn't do the home viewing, so the net gain may ultimately be pretty low.
  - Flipping is a great way to take advantage of new technologies, and it is still in its infancy.
  - If you have not been able to apply it yet, try an In-Class Flip.

In-Class Flip

Source:
(Gonzalez, 2014)

- Video for flipping
  - https://youtu.be/smBJOhdTI-o

Online Flip

Source:
(Honeycutt & Glova, 2014)

41

- How do you think today's classroom is different than when you were an undergraduate student?
- What is the most significant change you've noticed?"
- The number one answer? Technology.

Online Flip

Source:
(Honeycutt & Glova, 2014)

- Technology
  - Surprise is that many of these graduate students were undergraduates just a few years ago
  - They still see technology as the most significant change in the classroom.

Online Flip

Source:
(Honeycutt & Glova, 2014)

42

- Why?
- Shouldn't students be used to it by now?
- Shouldn't we?

Online Flip

Source:
(Honeycutt & Glova, 2014)

- Two possibilities:
  - Technology is changing so rapidly that we always see it as "new"
  - We are still struggling to integrate technology effectively and seamlessly into the learning experience

Online Flip

Source:
(Honeycutt & Glova, 2014)

43

- Education seems to be 'the last frontier' for technological disruption
- Is the culture of education resistant to change?
- Are we waiting for research to show how this change influences learning?
- Are we receiving support to implement technology effectively?

Online Flip

Source:
(Honeycutt & Glova, 2014)

- Are we worried about education automatization?
- Do we struggle to use technology because it wasn't available when we were students?
- Are we seeing technology as a barrier between the students and us?

Online Flip

Source:
(Honeycutt & Glova, 2014)

44

- There are challenges and benefits of teaching and learning with technology.
- Learning experiences shared with our students in the face-to-face classroom cannot be replicated with technology.
- We should find the technological tools that allow us to adapt the strategies we use in our face-to-face classes to engage with and connect to our students in the online environment

Online Flip

Source:
(Honeycutt & Glova, 2014)

- Apply the flipped philosophy to the online classroom.
  - Designing more interactive and engaging online learning experiences
  - Online classes can help us expand on what it means to flip. Certainly there is something to learn by combining these two conversations.

Online Flip

Source:
(Honeycutt & Glova, 2014)

45

- What happens when we apply the flipped model to an online class?
  - The "in" and "out of class" terminology doesn't work.
  - Flip means shifting the focus from the instructor to the students.
  - Invert the design of the course so students:
    - Engage in activities
    - Apply concepts
    - Focus on higher-level learning outcomes

Online Flip

Source:
(Honeycutt & Glova, 2014)

- What happens when we apply the flipped model to an online class?
  - The flip moves away from being something that happens in class vs. out of class.
  - Focus on what students are doing to construct knowledge, connect with others, and engage in higher levels of critical thinking and analysis.
  - The real flip is about flipping the focus from you to your students.

Online Flip

Source:
(Honeycutt & Glova, 2014)

46

- What flipped strategies could we integrate into an online class?
- **1. Create a scavenger hunt**
- **2. Create a hashtag just for your course.**
- **3. Develop a low stakes assignment to encourage self-reflection and analysis.**

Online Flip

Source:
(Honeycutt & Glova, 2014)

- **1. Create a scavenger hunt**
  - On your course web site, ask students to locate important information, announcements, and deadlines. Offer an incentive for the first one to submit the completed scavenger hunt activity. Incentives may include the first choice on presentation topics, the chance to drop a low quiz grade, or the opportunity to gain an extra credit point on the final project.
- **Why it works:**
  - Students are actively locating information and constructing their own mental models of the course rather than just reading the course web site or listening to a video as you describe the structure and organization of the course.

Online Flip

Source:
(Honeycutt & Glova, 2014)

47

- **2. Create a hashtag just for your course.**
  - Encourage students to use this hashtag if they find course-related items in different social media spaces or elsewhere on the web. Make sure the hashtag is unique to your course. Consider reviewing the posts and then sharing an item a week with the entire class.
- **Why it works:**
  - Students are actively contributing to the conversation by sharing resources and information they find rather than just reviewing the content you have collected.

Online Flip

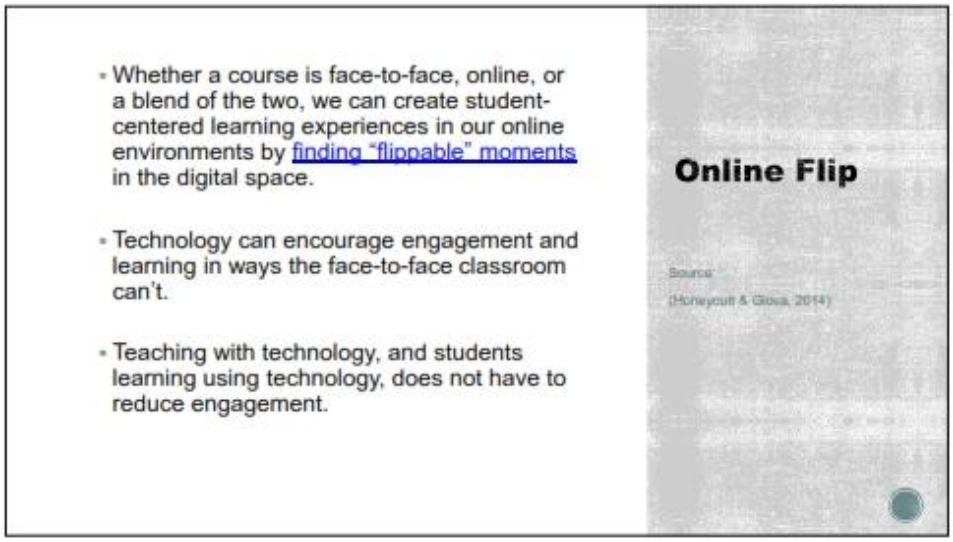
Source:
(Honeycutt & Glova, 2014)

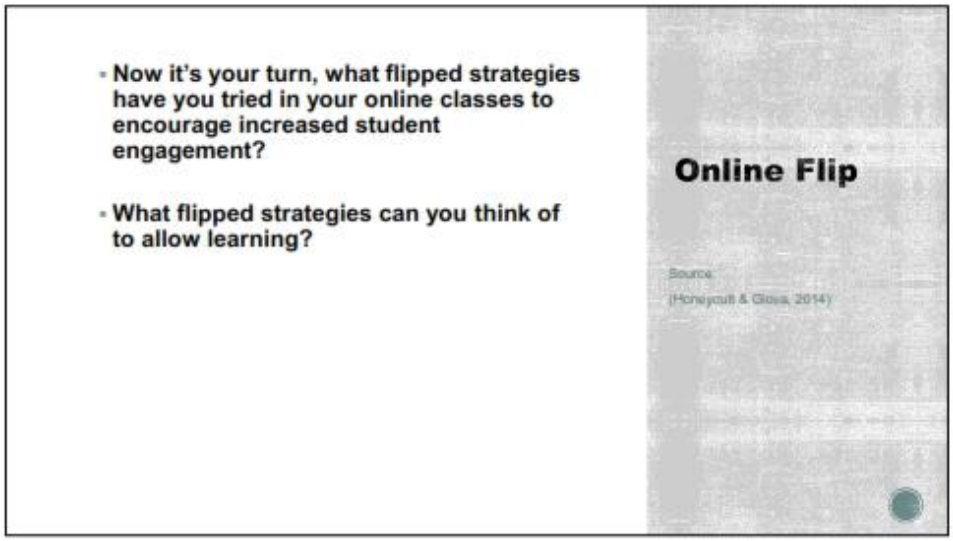
- **3. Develop a low stakes assignment to encourage self-reflection and analysis.**
  - Ask students to reflect on their learning styles or personality in the online environment before beginning the semester. This might help them to prepare for the online environment as they analyze their strengths, weaknesses, challenges, etc. Supplement this activity by making it a private forum requirement, then post a global response to students afterward with suggestions on how to succeed in the online environment.
- **Why it works:**
  - Students are asked to analyze and evaluate their strengths and weaknesses in regards to a course, activity, or assignment. This can help build students' capacity to advance towards higher levels of critical thinking.

Online Flip

Source:
(Honeycutt & Glova, 2014)

48


Whether a course is face-to-face, online, or a blend of the two, we can create student-centered learning experiences in our online environments by finding "flippable" moments in the digital space.
Technology can encourage engagement and learning in ways the face-to-face classroom can't.
Teaching with technology, and students learning using technology, does not have to reduce engagement.
Online Flip
Source:
(Honeycutt & Glova, 2014)


Now it's your turn, what flipped strategies have you tried in your online classes to encourage increased student engagement?
What flipped strategies can you think of to allow learning?
Online Flip
Source:
(Honeycutt & Glova, 2014)

49

- Video for flipping:
- https://youtu.be/nNuYcAHVALM

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

- SOFLA stands for:
- Synchronous Online Flipped Learning Approach

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

50

- Online TESOL teacher education is now quite common; however, there are few such programs that embrace flipped learning as an integral part of online learning.
- Online flipped instruction can lead to "a more resource-rich, student-centered approach to teacher education classrooms"

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

- A model for online flipped teacher education that leverages:
  - Technology
  - Procedural knowledge
  - Instructional strategies
  - Not declarative knowledge

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

51

- There are possible benefits for preparing language teachers using flipped learning
- The problem is that most models are asynchronous, these do not fully realize the potential of this approach for an online learning environment

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

- Instructional Model
- Not only face-to-face courses can be flipped, online environment could also be flipped
- A course can be delivered in either a flipped or online format
- Flipped learning and synchronous online learning were used together in 2016

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

52

- Synchronous Online Flipped Learning Approach, or SOFLA.
  - Video lectures, created interactive video software (e.g. PlayPosit), which enables question insertion throughout the lecture
  - Students need to respond before the video restarts.
  - Responses are visible to the instructor and downloadable for assessment purposes.

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

- Synchronous Online Flipped Learning Approach, or SOFLA.
  - Individual accountability is maintained
  - The instructor can see which aspects of the material were challenging for the class.
  - Learner analytics informs subsequent instruction.

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

53

- Synchronous Online Flipped Learning Approach, or SOFLA.
  - Implement :
    - Traditional flipped learning with out-of-class content delivery
    - Peer instruction with in-flip component, in which students teach each other through video lessons they create
    - Real-time question-and-answer sessions, and quizzes

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

- Synchronous Online Flipped Learning Approach, or SOFLA.
  - Everything takes place in the virtual classroom synchronously.
  - You can see the immediate results through the quiz administered

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

54

- Synchronous Online Flipped Learning Approach, or SOFLA.
  - Also, you need software to store the materials for easy accessibility and 24/7 communication, a repository for announcements, resources, recorded material, assignments, discussion boards, and wikis.
  - Where students can interact asynchronously between class meetings and post questions for peer response or for clarification from the instructor.

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

- Synchronous Online Flipped Learning Approach, or SOFLA.
  - The virtual classroom, where synchronous communication takes place periodically, holds the following schema:
    - Students join the session and "sign in" on a whiteboard contributing their ideas about the instructional video they had watched in preparation for the session.

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

55

- Synchronous Online Flipped Learning Approach, or SOFLA.
  - Students collaborate on exercises that apply the concepts from the video lecture, guided by the instructor
  - Students move into the virtual breakout rooms, where they work in small groups, either to do a task assigned by the instructor or to conduct the peer instruction in-flip lessons referred to earlier

SOFLA

Source:
(Marshall & Rodriguez-Bultrago, 2017)

- Synchronous Online Flipped Learning Approach, or SOFLA.
  - Finally, the students return to the "main room" for sharing each other's group work and write an individual take-away on a whiteboard for reflections
  - All sessions are recorded for further review by absentees

SOFLA

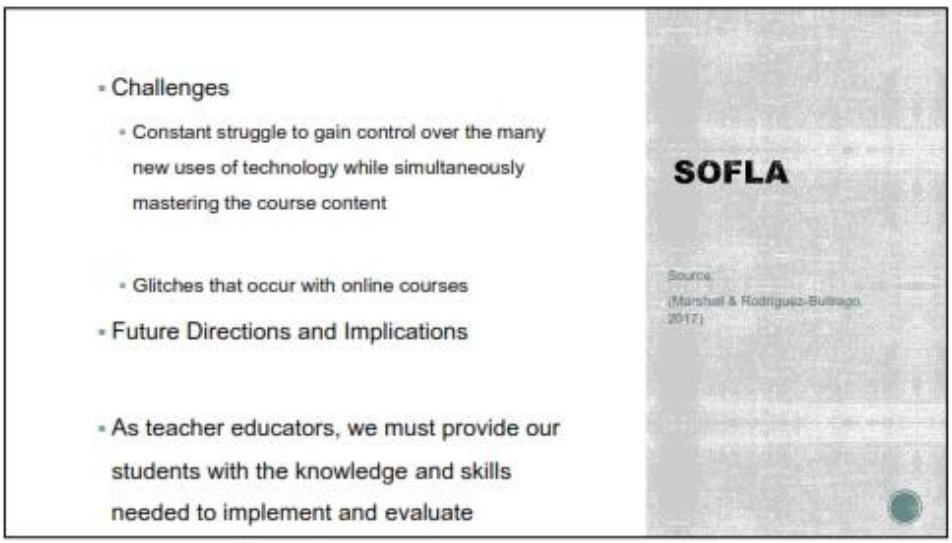
Source:
(Marshall & Rodriguez-Bultrago, 2017)

56

- Challenges
  - Constant struggle to gain control over the many new uses of technology while simultaneously mastering the course content
  - Glitches that occur with online courses

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)



57

- Some students comments about SOFLA
  - "I have taken online courses before but not with as much interaction as this one."
  - "I am currently taking an online course through another institution that doesn't have a specific meeting time and I am not enjoying it as much."
  - "The webcam and audio are amazing and the breakouts are engaging. It is truly technology at its best for learning."

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

- Some students comments about SOFLA
  - "I really enjoyed learning how to use Screencast-o-Matic. I plan to use this technology with my own students."

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

58

- In Conclusion
  - As educators, we must provide our students with the knowledge and skills through innovative approaches.
  - There is a need to look at the affordances and the challenges of flipped learning with a view to gaining insight into what makes it more or less effective in various teaching contexts

SOFLA

Source:
(Marshall & Rodriguez-Buitrago, 2017)

59