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Planning to Implement ICT Room Resources as a Motivational Strategy

Graduation Seminar

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Introduction

Motivation plays a key role in language learning. In fact, the literature on the effects of motivation on language acquisition and language learning is overwhelming. Research suggests that motivation can be dealt with properly in the classroom. This indicates that teachers can play a decisive role in fostering students' motivation or, what is more, in obstructing students' motivation. As researchers, it is our belief that teachers should not shy away from the challenge of keeping a motivated class and should, instead, find ways to engage students who may not seem interested in learning the language.

Throughout the process of teaching and learning English in recent years the same problem has been seen, the disinterest that students have in learning a new language, this is mainly due to the performance that a teacher and students completes and to what extent it can encourage interest in the class. The researches wanted to find out some strategies that can help to increase 9th grade student's motivation during the English class at Modelo Monimbó secondary school.

In society there are more and more technologies, which presents for many teachers' new challenges that in turn are advantages, since technological tools can be used to motivate students to learn English. It is for these reasons that it has been decided to do this research and study the impact that technological tools have on the motivation of eight grade students of Modelo Monimbó during the second semester of the year 2021.

Nowadays, many teachers are still using the traditional method. According to Kadhom Faroun, Ibraheem (2020) The traditional method of teaching is when a teacher directs students to learn through memorization and recitation techniques thereby not developing their critical thinking problem solving and decision-making skills. Furthermore, they do not want to get out of their comfort zone by using this method; the students are in a passive mode and don't improve their critical thinking skill. Also, the educators do not care about the environment or student's feeling or emotion. As a result, many of the learners' lack of motivation, they are not focused on the class, moreover, they don't have the teacher-student/ student- student interaction.

Certainly, most of the secondary schools have an ICT room in which are tablets, computers and even internet; however, the majority of learners are carrying a smartphone everywhere. Unfortunately, teachers do not use these great resources properly because they still prefer “traditional teaching” in which they just ask the students for memorizing the grammar or the vocabulary. Consequently, educators do not catch the student’s curiosity and that is why many students are not interested in English class.

General Topic

Planning to implement ICT Room Resources as a Motivational Strategy

Specific Topic

Planning to implement ICT rooms Resources as a strategy to avoid demotivation in 9th grade students of the secondary school "Instituto Héroes y Mártires de la Reforma", Masaya (INMHARE) during the second semester of the 2021 school year.

1.1 Background information

Given the rising difficulty that English language teachers face today as a result of students' decreasing interest in the subject, there is a need to encourage pupils, which ICT tools can help accomplish. According to Amores Valencia & De Casa Moreno, (2019, 37-49). The teacher must be the guide through these new media, providing a high quality and professional performance. The formation of competencies is an imperative need in the educational curriculum, especially if we refer to the digital competencies to make use of ICTs.

(U.K Uni Assignment Centre, 2016) published a literature review on different types of ICT tools in education. According to this essay, Information and Communication Technology consists of various tools and systems that can be exploited by capable and creative teachers to improve teaching and learning situations. (Lim & Tay, 2003, 425-451) classification of ICT tools as:

- 1) Informative tools: Internet, Network Virtual Drive, Intranet systems, Homepage, etc.
- 2) Resignation devices: CD-ROM, etc.
- 3) Constructive tools: MS Word, PowerPoint, FrontPage, Adobe Photoshop, Lego Mindstorms, etc.
- 4) Communicative tools: e-mail, SMS, etc.
- 5) Collaborative tools: discussion boards, etc. forum

ICT classrooms are a tool that aids processes in all areas of knowledge, allowing for systematic planning, directing, executing, and controlling, and the area of English, of course, is not exempt from these advances and tools. According to (Hashmi et al., 2019, 196) the importance of the ICT in the students learning

1. Provide access to a large quantity of learning resources.
2. Quick access to information.
3. Gives multimedia approach to education
4. Provide valid and up to date information

5. Provide access to online libraries
6. Gives opportunities for the instructive data storage
7. Provides access to the wide source of information.

AVA (Audio Visual Aids) promotes interaction between teachers and students, as well as among students themselves, with technological tools that help them to develop their skills and at the same time to enhance their knowledge in the foreign language. (AMMANNI & APARANJANI, 2016, 1-7) States that in the 21st century the use of AVA has become inevitable. It has started a new genre in the field of teaching and learning language. Apart from traditional teaching, teachers must adopt the topical and innovative teaching techniques.

- 1 The use of AVA makes the students active.
- 2 Students can get rid of their boredom and dullness in the class.
- 3 Provide attentiveness and enthusiasm.
4. They help to nurture the power of surveillance and independent judgment.
- 5.. They give clarification about the content in the textbook.

(Rivera, 2018) Indicates that the teacher-researcher concludes from the collected data that ICT use plays an important role for language learning, given that technology is a source of motivation that helps to capture the interest of students and support learning through teaching. It definitely provides a space to negotiate learning and scaffold language through reading and writing. Apart from all the above-mentioned indications, it is important to keep in mind that since education has recently been moving towards bilingual education, we should not limit ourselves to the classroom, there are countless activities that can be done outside of it and this helps the student's motivation because their learning environment changes and they do not fall into monotony.

In the research, the effectiveness of using TBL (task-based learning) along with ICT for the development of speaking in 10th grade at Reino de Suecia Institute in Estelí during the first semester, 2019 was presented different types of ICT tools and their role in education, which according to Lopez, Rugama and Gutierrez, ICT consist of various tools and systems that can be exploited by capable and creative teachers to improve teaching

and learning situations (2019). those tools are divided in five sections, which are informative tools (internet, network virtual drive, etc.), resignation devices (CD-ROM), constructive tools (MS word, Power Point, Front Page, etc.), communicative tools (e-mail, SMS) and collaborative tools (discussion boards, forum), Lim and Tay (2013). In those tools we found good resources that contribute in a big way to this investigation, because of the reason, that the simple fact to add different ways to teach in virtual classes but also motivate students in the process, demonstrates how important education really is.

1.2 Objectives:

General Objective:

- To describe the students' attitude towards the use of ICT rooms as dynamic and innovative methodologies in the process of teaching and learning English.

Specific objectives:

- To determine the effects of planned virtual activities using ICT rooms as an innovative teaching and learning tool for the English language.
- To describe how virtual activities planned in ICT classrooms help to boost students' motivation in the teaching and learning process.
- To suggest resources in ICT classrooms to improve students' motivation in the process of teaching and learning English.
- To simulate virtual activities in ICT classrooms to improve students' motivation in the process of teaching and learning English.

1.3 Rationale

Several years ago, in Nicaragua, it was decided to take education to another level with the use of TIC rooms and with this common objective in mind, Technology Centers (INATEC) were built nationwide. Thus, ICT rooms were built within the Public Education Centers and Institutes. The demand for these new classrooms for students, led active teachers in the Ministry of Education (MINED), to begin to improve their strategies, based now, in more technology environment rooms.

ICT rooms are considered a tool that impacts almost all areas of student development. Thus, it is considered pertinent to show the impact they have as a strategy to reduce demotivation in the ninth-grade students of the Heroes and Martyrs of the Reform Institute in the Municipality of Masaya, achieving through them the application of innovative methodologies in the teaching-learning process of English. Although it is a very good tool for learning and student motivation, it is often limited to the educational center only, since many of the students do not have a connection facility or a device to help them continue with their studies, researches or assignments provided by the teacher.

The purpose of this work is located in the role of the students in the classrooms, because the simple fact of learning another language in an ICT room will help the students to use this valuable tool and not to see English as a difficult or boring subject. Besides, helping students see English as a valuable tool rather than a tough or uninteresting subject. It also, shows the challenges that teachers must face in order to implement different activities that can help their students to get a better learning experience.

1.4 Research Questions

1. What are the positive effects of the use of ICT room as a tool to improve motivation in the English teaching-learning process?
2. How would the implementation of strategies help to increase students' motivation?
3. By using ICT, what strategies could be implemented to improve student motivation in learning English?
4. How does the implementation of resources with the use of ICT help to improve student's motivation in learning English?

1.5 Problem Statement

The most recent research in the field of education has determined a highly relevant fact that professionals (psychologists and pedagogues) refer to as the following “burnout teacher syndrome”. According to this research, "the origin of this problem is found in the motivational deficit of the teacher towards his professional activity" (Silvero, 2007), in which the teacher manages the classroom environment, resulting in a failure to achieve meaningful learning in which the student can acquire skills/ competences that will support his or her professional development. On the other hand, not setting the environment in which students learn does not encourage the prevention and mitigation of disruptive behaviors in a preventive manner.

Therefore, in Nicaraguan secondary education teachers show a clear lack of classroom management in the subject of foreign language (English), this may be due to motivational factors as mentioned above, however, another aspect is mental health (both teachers and students) that plays an important role in the teaching-learning process of the contents covered in the program of the subject. This causes young people to become demotivated very quickly and easily. Furthermore, the lack or misuse of the didactic material provided by the corresponding institutions. For these reasons, the work performed at the Instituto Heroes y Martires de la Reforma, Masaya (INMHARE) requires an intervention able to achieve significant learning, in an environment of peace, tranquility and confidence, presenting situations where dynamism, creativity and desire to improve are demanded from the student.

To summarize, the challenge for English teachers is to offer a quality class to avoid demotivation, despite the fact that in most cases classes are shortened for various reasons, such as extracurricular events, school events, among others. This prevents us from meeting the objectives of language teaching, as lesson plans are often not completed on time. As well as avoiding discouragement and indiscipline of the students; in order to create and maintain a learning environment that allows them to develop or complete the objectives of the lesson, using strategies and methods suitable for today's youth.

1.6 Variables Operationalization

General Objective:

To describe the attitude of students in relation to the use of ICT as dynamic and innovative methodologies to boost motivation in the process of teaching and learning English.

| Variables | Conceptual | | Ítem |
|---|---|--------------------------------------|--|
| | Research | Dimensions | Indicators |
| Attitude of learners regarding ICT in the teaching and learning of English language. | Physical and mental state of disposition of students through experience, which exerts a dynamic directive influence on the student's response to all kinds of objects and situations. | Affective Component | Be interested in the use of ICT in the classroom. Willingness to use ICTs |
| | | Behavioral (or cognitive) component: | Teacher/student synergy ICT and student interaction |
| Use of Information and Communication Technologies (ICT) components as a strategy to boost motivation. | Set of technologies that allow the acquisition, production and storage of information. | Hardware | Computer Data input and output devices |
| | | Software | Educational Software Operating System |

| | | | | |
|--|--|--|-----------------------------------|--|
| | | | Open Source | |
| | | | Software Platforms | |
| | | | Multimedia Tools and Applications | |

Dependent variable:

The dependent variable in this case would be the students' attitude toward ICT in English language teaching and learning.

Independent variable:

The independent variable on the other hand would be the information and communication Technologies (ICT) as a strategy to boost motivation.

Chapter II. Theoretical Framework

Nowadays, learning a second language is of utmost importance, in this case English, which has become a necessity in every training process. As Hernández (2014) says: "English is undoubtedly the most taught language in the world...", making this language the key to the development of the world's social systems, therefore, the educational systems of many countries have managed to integrate the English language in the different educational levels with the intention of training competent professionals worldwide, but it has not achieved an adequate quality to the needs of society or establish it at each educational level. Universities prepare future professionals in the teaching-learning of the English language, being a requirement to finish with an adequate level to enter the employment arena and face the new challenges demanded by the national educational systems.

2.1 Contextualization of English Language Teaching

The discipline of English as a foreign language are linguistic and sociolinguistic skills that allow students to relate effectively with people in their environment using language as a tool. The usefulness of the teaching-learning of this language lies mainly in being part of globalization, since it is a language that is present in almost all the nations of the world. Its usefulness for the students goes beyond communication, being a bridge that allows interculturality, in addition to providing more and better job opportunities inside and outside the country.

However, the teaching-learning process of this discipline has presented difficulties in its development because it is linked to many factors that hinder it, factors such as: the age of students to start learning (generally late), the environment that must be provided for its acquisition and the influence played by the socioeconomic conditions of the school-age population which are closely linked to the acquisition of means to facilitate learning.

The aforementioned factors are substantial elements that should be taken up again in order to improve the teaching-learning of this discipline, thus contributing to the

improvement of its management in the search to comply with the general objective of the Basic National

Curriculum and to raise the quality of education in our country. The Basic National Curriculum contemplates this discipline as a process where the student acquires and develops linguistic skills forming the communicative area, stating that: "The teaching and learning of English as a foreign language is to develop linguistic and sociolinguistic skills that allow him/her to turn it into a useful tool for life" (Mined. 2009:37). (MINED. 2009:37).

These skills should be developed throughout the five years of secondary school; however, the reality is totally different. The problem begins in adolescence, a stage that coincides with the entrance of children to seventh grade, a very sensitive stage for the student population, where boys and girls are not highly motivated to learn a second language, as stated by Wakefield (2005).

This late teaching of the language, without giving them the opportunity to learn the language before reaching secondary school, limits the process of acquiring the communicative skills of the language in students who have not been exposed to that environment of knowledge and management of a new language, causing two groups of students, the first is made up of those who have no interest in learning the new language and those who already bring the motivation to seventh grade. Thus, it is eminent the need to provide students with knowledge about the language before entering the seventh grade to achieve in them a significant learning, where according to Ausubel (1977) this knowledge is necessary because it serves the student as a bridge between the knowledge he brought and the new ones, called by this cognitive psychologist previous or anticipated organizers when officially integrating the study of the English language since elementary school.

2.2 Analysis of Methodological Strategies

Torres, M; & Giron, D. (2009). States that methodological strategies are a set of procedures with a specific objective, meaningful learning. The use of methodological strategies helps the students to learn in an easy way. Catch learners' curiosity and

attention, as well as get them engaged, avoiding the boredom in English classes. Using different methodological strategies encourage the students to be active learners (Alba & Parrales, 2019, #) discusses about an interactive methodological guide which can help the teachers to make the teaching- learning process fun. Through the implementation of technological tools that produce motivation to study, besides, get the students attention and encourage them to participate in classes. The interactive methodological guide allows the students to develop their cognitive skills, for instance: critical thinking, reading, learning, logical reasoning, remembering and paying attention. Teachers must implement strategies in order for kids to be able to face the world and solve real life situations. Thanks to technological apps students get new experiences of learning through webpages, interactive chats, online conferences, and debates. The traditional mythology is no longer relevant because students' motivation has changed due to the impact of the use of interactive tools. Nowadays, many teachers are still using the traditional method.

According to Kadhom Faroun, Ibraheem (2020) The traditional method of teaching is when a teacher directs students to learn through memorization and recitation techniques thereby not developing their critical thinking problem solving and decision-making skills. By using this method, the students are in a passive mode and don't improve their critical thinking skills. As a result, many of the learners lack motivation, they are not focused on the class, moreover, they don't have the teacher-student/ student- student interaction.

2.3 Infrastructure of Public Centers

Years ago in public schools were almost impossible to go outside of the classroom to learn something new or acquire more knowledge, adding the bad conditions of the center and the big quantity of students in just a classroom, regardless to those inconvenient, nowadays thanks to the new advances into the curricular distribution and the implementation of technology students do not have to spend all the time in just a classroom with a lot of people or a bad environment, now students can learn everywhere they are, this in order to obtain better results in students. Starting from this, taking in

account technology, which plays an important role into education, it is more than necessary for teachers to pay attention to their students' learning since they learn most of the time outside of the classroom. That is why in the short time that teachers have with their classes, they must approach to teach and feedback what they cannot learn by themselves, everything in the classroom. To reinforce this, in an investigation made by The Organization for Economic Co-operation and Development (OECD) in 2015, they presented that the use of technology must be aligned with the pedagogies used in centers, and this itself is an area on which there are many contested views and moreover that school building has to be planned and designed around educational requirements in order for it to be effective as a third teacher (Barret, P., Treves, A., Shmis, T., Ambasz, D. & Ustinova, M., 2015).

2.4 Technological Aspect

According to AIMS (2021). Information and Communication Technologies (ICTs) is a broader term for Information Technology (IT), which refers to all communication technologies, including the internet, wireless networks, cell phones, computers, software, middleware, videoconferencing, social networking, and other media applications and services enabling users to access, retrieve, store, transmit, and manipulate information in a digital form. It also refers to the integration of media technology which are hardware, software or useful tools that are used to make, create or manage. They include games, photos, audios, information, videos, broadcast, digital art, networks, etc.

The components of ICT rooms are:

Cloud computing: The term is generally used to describe data centers available to many users over the internet E., A. (2019). It is a technology that allows remote access to software, file storage and data processing over the Internet, thus being an alternative to running on a personal computer or local server. Private clouds, public clouds, hybrid clouds, and multi clouds are the four basic types of cloud computing.

Hardware: computer hardware is the physical components that a computer system requires to function. Technology, M. (2017). It is the physical part of a computer or computer system. It consists of the electrical, electronic, electromechanical and

mechanical components, such as wiring and lighting circuits, single-board computer (SBC), memory, hard disks drive, peripheral devices and any other material in a physical state that is necessary to make the equipment work. It also includes the motherboard, graphics card, CPU (Central Processing Unit), ventilation fans, webcam, power supply, and other circuit board components that work within a PC or laptop.

Software: instructions that tell a computer what to do. Software comprises the entire set of programs, procedures, and routines associated with the operation of a computer system. Britannica, The Editors of Encyclopedia (2021). Software is a computer phrase that refers to a program or combination of programs, as well as data, protocols, and instructions, that enable a computer system to perform numerous operations. There are 2 sorts of software, system software and application software.

Types of ICT:

Collective representations: these are the tools most commonly used to deliver content to students; however, we must not overlook the importance of transparency. However, we must not forget that transparencies were once widely used. Previously, these were simply graphics, photographs, or diagrams printed on a screen or projector displayed on a screen or projector.

The interactive whiteboard: is a screen on which the computer screen is projected, and it is interactive because we can write on it and control the computer programs, command and control the computer programs the interactive whiteboard is a tool that opens a window to the world (Marques Graells, 2004).

2.5 Aspects of Teaching Learning Process

Since ICT room has become to be part of everyday life in education, in addition to the lack of engagement by a considerable part of the educational system, the efficiency of teachers has also been affected, being so, it is more common to see teachers indicating only orientations and leaving their students to learn by themselves, affecting their learning. Without teachers' competence and expertise of ICT integration, which is appropriate to their needs, ICT could not be used appropriately for teaching delivery.

Because of this, teachers need to have a range of technical and communication skills such

as including the use of chat rooms, word processing, and the use of various types of ICT tools, such as file transfer protocol (FTP), file compression and decompression, etc. (Barker, 2002). Recognizing that ICT classrooms are only a resource for learning will greatly increase the performance of teachers and students and even go beyond what is established in the curriculum system.

Despite new technological advances, an education without the pedagogical foundations of a teacher is nothing more than poor learning.

2.6 Globalization and ICT rooms in education

(You matter, 2020) states that globalization means the speedup of movements and exchanges (of human beings, goods, and services, capital, technologies or cultural practices) all over the planet. Our society has faced a long history of changes in the world, because of this the knowledge has been constantly growing through these phenomena specially the second half of 20th century and 21st century. Nowadays people are interconnected through many platforms. Technological globalization has had a huge impact on education with ICT rooms in which students are motivated and interested in classes enabling them to develop their creativity, teamwork, communication, adaptation and customization.

2.6.1 Globalization and ICT devices

According to (N.G., 2019) Globalization is a term used to describe how trade and technology have made the world into a more connected and interdependent place. Nowadays, thanks to modern technology and globalization, many schools have been implementing ICT rooms. (IGT, 2021) shows a series of technological tools that an ICT room has such as: computers, laptops, desktops, data projector, software programs, tablets, etc. These devices provide not just the students, but the teachers as well different kinds of useful tools that allow them to do both, to have access to information and a student – teacher interaction in the classroom in a proper and interesting way. Also, it gives the learners and educators the opportunities to go beyond their knowledge and get new experiences focused on their teaching and educational aspects working through these

great devices. Unfortunately, not all schools are equipped with sufficient or adequate electronic devices for all the students. That means that the lack of devices can affect the teacher's lesson plan development and in the process of the student's learning.

2.6.2 Globalization and Technological Development in the Classroom

(Cigdemoglu & Akay, 2016, 5318-5322) states that Information Communication Technology (ICT) tools contribute to high quality lessons since they have potential to increase students' motivation, connect them to many information sources, and support active in-class and outclass learning environments. Thanks to technology and globalization, the teaching learning process has been easier in many aspects because of the wide range of tools. For instance, programs, websites, online educational games, apps, and software, which are implemented as assets in the educational process in order to improve and reinforce the teaching learning process. (Hussain, 2008, 8-16) explains that teachers are focused on the individual and group's acquisition of knowledge through different kinds of online activities by using ICT rooms. It also reports that collaborative learning has some effects on students' performance.

Furthermore, gives the learners and educators the opportunity of interacting among them, in order to have an active participation in the classes. The new learning environment allows the teachers to use new approaches of knowledge creation and new ways of learning by being supported by these tools and material, which encourage the students to interact and complete the assignments through exploring and investigating a problematic situation and finding a solution in order to make them active learners.

2.7 The use of ICT in English Language Teaching

Information and communication technology (ICT) has transformed the different aspects in the society including education making the teaching learning process interactive, that is why many schools have been equipped with technological devices. Today's generation are well versed in technology; that means that some teachers take advantage of this fact and get the student's attention by implementing technology in the classroom, in that way

students are more interested in the lesson and motivated by using programs or apps that better suit the student's level of English. However, it is important that teachers support their activities with important learning material. Furthermore, (Rebeka Lerga et al., 2017, 836-841) proves that some students are not accustomed with ICT classes therefore, they don't feel comfortable using these devices. On the other hand, the rest of the students are more interested and motivated by using technology to complete the task assigned by the teacher than using textbooks.

2.7.1 ICT as a tool for teacher

(Drigas & Charami, 2014, 4-10) argues that many teachers are constantly changing their strategies, activities, and materials in order to adapt to their lesson plan to the new technological era. Since there have been lots of technological changes in the world, many teachers have been accustomed to the ICT classrooms as they can get better results in the English teaching lessons by using these useful tools. However, it is the duty of the teacher to instruct the students about the proper use of ICT classrooms and the tools they will be using to develop their English skills. The article also explains that the educator must find ICT dynamics which can do both, engage/ motivate the students in the lesson and help them to enhance their skills achieving the teacher's performance indicators. Moreover, teachers are going to provide the proper material that suits English language learners' level focus on the skills they want students to develop. It is important that learners feel comfortable by doing the assignments with the devices to have a good experience with ICT classrooms.

Consequently, the educators and learners can benefit from the use of ICT.

2.7.2 ICT as a tool for students

The wide range of ICT tools allows the teacher to get the student motivated and interested by gaming with different kinds of educational resources that let them to improve their skills and sub skills, as well as improve their personality, abilities, and attitudes. (English Teaching 101, 2021) suggests a series of activities and programs/apps that teachers can use to develop their class in a fun way. For instance,

1. Write illustrated stories: it lets the student use their imagination in order to create unique stories. This activity helps the learners to reinforce their writing skills.
2. Kahoot: Teachers can create funny quizzes through this awesome app and test the students' knowledge. It gives the learners real-time results and feedback, also the students improve their vocabulary and critical thinking.
3. Produce Book Trailers: this activity develops reading skills. It encourages students to read and to create a short video to persuade the people to read the book they have read.
4. Sing with lyrics training: it is a website that enhances listening skills. Students must find the missing words in the lyrics of the song by listening to the song a few times.
5. Publish an E-Newsletter or E-Magazine: it encourages the students to develop their teamwork, creativity, vocabulary and speaking as well, by making an attractive E-Newsletter or E-Magazine.

2.8 Commitment to Learning

During the teaching-learning process different variants usually arise and achieving a true commitment from both parts is often difficult, not only because it is difficult to get a student to commit to the class nowadays, but also because the teacher's needs are often not taken into account. A strategy to achieve a strong engagement heather recommend no just provide access to technology and present information visually, but also, make it meaningful, talk and collaborate (Wolpert-Gawron, 2020). Pay attention to the engagement, will give the opportunity to achieve a complete engagement, due to permit students be more focused in what are they learning.

Chapter III. Methodological Design

3.1 Type of Research

A cross-sectional study consists of examining data from a population at a given point in time. Participants in this type of study are selected based on certain variables of interest. Cherry, K. (2019). Therefore, this is a cross-sectional research because the process was through observation and data analysis of variables collected from a sample population over a period of time. It was conducted from August 14 to the month of September. In addition, the results were based on the description of processes, therefore the research is mixed.

3.2 Population

There was a population of 57 high school students in 9th grade and a teacher in charge of the English Class.

3.3 Sampling

Judgmental sampling, also called purposive sampling or authoritative sampling, is a nonprobability sampling technique in which the sample members are chosen only on the basis of the researcher's knowledge and judgment. Fleetwood, D. (2020). The sample was drawn from 57 students of 9th grade and the English teacher from INHMARE public school. To obtain more diversified data, we attempted to assemble a sample of persons from various backgrounds. We firmly chose those who we thought would be a good fit for the study. We decided to apply the instruments to 57 students from 9th grade since they have more experience and knowledge by using ICT classrooms than 7th grade students. As well as the teacher who is the one who implements activities through ICT tools. There were 46 students from 9th grade that filled out the survey, 24 females and 22 males. The rest of the students were unable to attend school for various reasons.

They were given the information and the purpose of our investigation and told them that the participation was entirely voluntary and that they had the right to refuse participation. Besides, they were informed that the information they provided during the interview and survey will be kept confidential as well. It should be noted that they did not need to write their personal information on the sheet. After their consent, the instruments were carried

out in a period of 3 days, the first day we used the observation guide in the 45 minutes of the class, the second day we applied the teacher interview in 10 minutes, and the third day we applied the students survey.

3.4 Data Collection Techniques

In order to collect data and information about their knowledge of ICT classrooms, we apply a structure observation that is a collection technique in which we collect information without having direct contact with the participants. Furthermore, an observation guide was made that allowed us to observe the activities and the behavior of the teacher and students in a more detailed way. Subsequently, we apply a personal interview to the teacher in a direct way. For this, an interview guide was made in order to take notes of the answers (comments or points of view). Finally, we implement a paper survey (multiple choice questions) which allows our participants to choose one or more than one option from the list of answers that we did. In the second semester of 2021, all of the instruments were used to collect reliable information from students and the teacher at INHMARE Public School in Masaya.

3.4.1 Data Collection Tools's Validation

To validate the Class Observation Guide, Student's Survey and Teacher's Interview some experts were requested from the English department who are Sandra Rios Sotelo M.A in teaching English as a Foreign Language and ELT & Reading and Writing, Ricardo Mendieta M.A in Teaching English as a Foreign Language and ELT Practicum and Erasmo Antonio Torrez Herrera M.A in English Language Learning and Research and Educational Research, Cooperative learning English Learning and Curriculum Design, English Online Major Coordinator.

The experts used the following table as a rubric to validate the Class Observation Guide, Student's Survey and Teacher's Interview. In that table there are four categories that are coherence, clarity, relevance and sufficiency. Also, they had the option to validate each item from one to four in which number one represents the item does not meet the criterion, number two the item has low level, number three the item has a moderate level and number four the item has a high level. In addition, it can be seen on the table indicators from one to four for each qualification.

| CATEGORY | QUALIFICATION | INDICADOR |
|---|--|--|
| <p>COHERENCE The item is logically related to the dimension or indicator you are measuring.</p> | <ol style="list-style-type: none"> 1. Does not meet the criterion 2. Low level 3. Moderate level 4. High level | <ol style="list-style-type: none"> 1. The item has no logical relation to the dimension 2. The item has a tangential relationship with the dimension. 3. The item has a moderate relationship with the dimension it is measuring. 4. The item is completely related to the dimension you are measuring. |
| <p>CLARITY Extent to which the item is written in a clear and precise manner, facilitating its comprehension by the subjects surveyed.</p> | <ol style="list-style-type: none"> 1. Does not meet the criterion 2. Low level 3. Moderate level 4. High level | <ol style="list-style-type: none"> 1. Item is not clear 2. The item requires quite a few modifications or a very large modification in the use of the words according to their meaning or by their order. 3. A very specific modification of some of the terms of the item is required. 4. The item is clear, has semantics and adequate syntax. |
| <p>RELEVANCE The importance that the item has with respect to the contribution that it can provide for a better understanding of the characteristic or situation measured.</p> | <ol style="list-style-type: none"> 1. Does not meet the criterion 2. Low level 3. Moderate level 4. High level | <ol style="list-style-type: none"> 1. Does not meet the criterion. 2. The item can be deleted without affecting the dimension measurement. 3. The item has some relevance, but another item may be including what it measures. 4. The item is essential or important, i.e. it must be included. |

| | | |
|--|--|---|
| <p>SUFICIENCY Items belonging to the same dimension are sufficient to obtain the measurement of this dimension.</p> | <p>1. Does not meet the criterion 2. Low level 3. Moderate level 4. High level</p> | <p>1. The items are not sufficient to measure the dimension 2. Items measure some aspect of the dimension but do not correspond to the overall dimension. 3. Some items must be increased in order to fully assess the dimension. 4. Items are sufficient</p> |
|--|--|---|

The following table shows the total percentage for each category in the validation. We used a simple rule of three.

The Class Observation Guide, Student’s Survey and Teacher’s Interview were reviewed and corrected taking into account the experts’ correction and this is the final version.

| Coherence From 0 to 100% | Clarity From 0 to 100% | Relevance From 0 to 100% | Sufficiency From 0 to 100% |
|-----------------------------|---------------------------|-----------------------------|-------------------------------|
| 98% | 95% | 97% | 99% |

3.4.2 Class Observation

This report includes teaching schedule and the strategies/ activities she implemented, and the background information of the students and teachers about their knowledge of ICT classrooms. The types of activities done were mainly focus on speaking and writing skills rather than reading and listening. As resources teacher use the whiteboard and markers.

Firstly, the teacher was neither enthusiastic nor unmotivated. She treated students equitably, showing mutual respect. At the beginning she catches student’s attention but then the majority of the students lost their attention while the others were focused on the lesson. She showed a good level of knowledge of the topic covered and reviewed the previous class by asking the students to make oral sentences using the future tense “Going To” in affirmative, negative and interrogative form; in this speaking activity were participating just few students.

During the development of the class, the teacher reinforced students' knowledge by working on "unscramble the sentences" activity. The task was easy and appropriate to learners' English level and the teacher explained the activity well. She gives the students a few minutes in order to put the sentences in the correct order; after that the educator implements "hot potatoes' game" to encourage the students to complete the unscrambled sentences on the board. Following this, the teacher encouraged the learners by cheering them to pass to the whiteboard. 50% of the students were motivated while the rest of them lack of motivation because they did not complete the task on time due to their failure to carry out the activity.

As a consolidation activity teacher writes 4 words on the board for them to make sentences on their notebooks in the 3 forms (interrogative, affirmative, and negative); she gives them 5 minutes. Again, the educator encourages the students to make oral sentences by using different verbs. Eventually, just the same students were participating in the speaking activity.

Finally, teacher provided students with accurate and clear explanations, and clarification of misconceptions. She spoke English most of the time with some exceptions as the students did not understand well some words, phrases or the activities they were going to develop. Moreover, she was good at encouraging the students to participate in the activities. Nevertheless, most of the students did not participate or make questions about the topic because of many factors, for instance: they are shy, or do not feel confident to speak the language, they are not interested in English classes at all, or are afraid of making mistakes. Therefore, the teacher could not answer questions related to the topic. To my way of think teacher must give the students a brief feedback of their strengths and weaknesses in order for them to study or practice on them.

3.4.3 Teacher Interview

We interviewed the English teacher, who teaches in 3rd year of the secondary school INHMARE about the knowledge she has about ICT classrooms and her experience using ICT classrooms. The purpose of the interview is to get a clear idea, if the use of ICT classrooms is helpful in the teaching- learning process in order to get a meaningful learning or if it's a challenge for the teacher to teach using ICT rooms.

According to the teacher, she does not know a lot about ICT rooms but even if her experience is less than other teachers, she sometimes implements ICT classroom activities in order to get out of her comfort zone and also catches students' curiosity and motivation. Secondly, she likes to use the ICT room because she wants to share their experience using it with her students and see the different reactions of her students towards this experience learning with technological tools.

Her motivation to use ICT classrooms is to show her students the importance of knowing about ICT rooms and the advantages they can have using them, for instance: they can interact among them, develop their creativity by using different programs, enhance their English skills by using useful apps, etc. Some activities that she has implemented in her classes are infographics creation, film making, online research, watching videos, group presentations, and PowerPoint Presentations. It should be noted that students are motivated carrying out the activities by using these interesting programs and doing both, learn and fun. Nevertheless, because of students' backgrounds not all of them have the same knowledge about technologies and their functions causing some learners are not interested in the class, as a result: they prefer not to participate in the activities rather than learn step by step.

One common disadvantage that impacts in a negative way the English teacher's student is the ICTs' room environment. INHMARE is a huge secondary school in which "MINED Municipal" is located, thus, most of the time they use the ICT classroom for their meetings causing teachers cannot use it. Teacher Francis states that the times she has been using the ICT room is another teacher using it as well; in that case students do not feel comfortable sharing with unknown students and eventually they feel shy, they do not want to participate, they are afraid of making mistakes, or they are nervous. As a result, students prefer taking classes in their own classroom.

The English teacher has been self-taught and has discovered information and interesting activities related to ICT rooms by herself, but she thinks is not enough knowledge. Sometimes she has to ask for help because she doesn't know how to use certain programs or devices. What she suggests is to have more training courses about ICT classrooms in order to provide quality education and clarify doubts that could have her students.

3.4.4 Students Survey

To obtain more information in the research, a survey was conducted to the students present during the class. The class was supposed to start at 10 am, but it had to wait about 20 minutes due to an earthquake drill, which delayed the class (evidence shown in annexes). Being in the classroom the teacher told the students that a survey would be conducted, some students were disbeliever about what was the real purpose of that survey, at the first stance, they thought they would be evaluated by the school, so it was explained and they were given information on why the survey was being conducted, indications were given about how to respond to the survey and a maximum of 15 minutes was given to respond. After giving the indications, students were very collaborative about the activity.

3.4.5 Teaching Plan Proposal: "Computer Science Training for English Teachers"

I. Description and contextualization

| Identification and characteristics of the matter | | |
|--|--|-----------|
| Title and code | Fundamentals of Computer Science (FCS) | |
| Course and Degree | 1st Course of Computer Science for English Teachers (MINED-Masaya) | |
| Area | Computer Technology | |
| Department | Computing – INMAHRE Masaya | |
| Type | Required | |
| Level | Beginners | |
| Length | 12 months | 340 hours |
| Distribution | Morning/Afternoon/Saturday Shifts | |

| | |
|-------------------------|---|
| Saturday Shift | From 10:30 am to 1:30 p.m. (Computer Lab INMAHRE) |
| Morning Shift | Mondays, Tuesdays and Wednesdays from 9:30 to 11:30 a.m. (Computer Lab INMAHRE) |
| Afternoon Shift | Mondays, Thursdays and Fridays from 2:30 to 4:30 p.m. (Computer Lab INMAHRE) |
| Coordinator -Teacher(s) | MSc. Daniel Urbina & Lic. Beatriz Rojas |

Introduction to the Computer Science Curriculum

The Computer Science degree prepares teachers for professional practice, research, development and innovation, and teaching in the field of Telecommunications. It also prepares teachers for the analysis, conception and development of solutions in which the use of a telecommunications system is required in various fields of application, teaching, finance, consulting, etc. It prepares its graduates professionally for insertion in interdisciplinary teams in educational centers and consultancies, oriented both to the development and operation of networks and services as well as to research and technological development and innovation within work teams.

The degree in Computer Science is a regulated profession and its professional attributions are supervised by the Nicaraguan Ministry of Education. In particular, the most common professional profiles are:

- "Audiovisual systems": emphasizing the treatment of audio and video signal, the design of components and acoustic or image systems, and the analysis of solutions in real environments.

- Telematics": emphasizing the analysis, design, implementation, planning and management of protocols, networks and data and multimedia services and multimedia services.

- "Telecommunication systems": emphasizing the analysis, design and planning of a complete communications system and the integrated design in convergent communications system and integrated design in convergence of fixed and mobile networks and multimedia communications.

- "Electronics for communications": emphasizing the knowledge and design of communications equipment and advanced instrumentation advanced instrumentation.

Although the subject "Fundamentals of Informatics" (FI) is currently being taught to professionals with the profile "Audiovisual Systems", the current situation is that the subject is being taught to professionals with the profile "Audiovisual Systems".

Although the subject "Fundamentals of Computer Science" (FCS) is currently being taught for professionals with the profile "Audiovisual Systems", the reality is that the objectives of the subject are linked to several of the competences related to the 4 professional profiles indicated above related to the 4 professional profiles indicated. It is, therefore, an important subject in all 4 profiles.

Objectives

✓ Apply and describe with interest the basic elements of a computer system, peripheral equipment and functions of the operating systems, identifying the control panel, window manager, basic tools, folder organization and screen configuration, in order to make proper use of the software and hardware. screen, to make proper use of the Software and Hardware.

✓ Critically analyze and describe the contributions of ICT in different labor, academic and social areas, identifying their effects on the respect for intellectual property, use of free Software, development of science and ethical issues in order to harmonize with the provisions of the intellectual property law.

✓ Explain and apply the different types of leadership, the roles in a work team, and the elements, phases, and criteria for assigned academic or work projects with interest and cooperation.

Contents

| | |
|--|--|
| Introduction to Computer Science. The computer | Resources |
| 1.1 Preliminary concepts. 1.2. Hardware organization of a computer. 1.3. Software definition and classification. 1.4. The operating system. General structure. 1.5. Historical background. | Personal Computer Operating System Data Show Notebooks |
| Operation of Computer | Resources |
| 2.1 The computer hardware 2.2. The computer software. 2.3. The operating system. | Operating System Personal Computer Windows 10 Notebooks |
| Social, Ethical, Human and Technology | Resources |

| | |
|--|--|
| <p>3.1 Information and Communication Communication Technology (ICT) and problem solving.</p> <p>3.2 Digital divide, connectivity, technological waste and human development.</p> <p>3.3 Use of Data show as an audiovisual medium in the classroom</p> | <p>Data Show</p> <p>Civics Books</p> <p>Data Show</p> <p>Notebooks</p> |
| <p>Word Processor (WORD)</p> | <p>Resources</p> |
| <p>4.1 Word processor: basic tools and parts.</p> <p>4.2 Word document processing. documents.</p> <p>4.3 Tools of the editing and formatting and formatting toolbars.</p> <p>4.4 Views of a text document.</p> <p>4.5 Insert menu: symbol, image, text box, number.</p> <p>4.5 Insert menu: symbol, image, text box, page number. page number.</p> | <p>MS Office Word</p> <p>Projector</p> <p>Notebooks</p> <p>Data Show</p> |

| | |
|---|---|
| Spreadsheets (EXCEL) | Resources |
| <p>5.1 Basic tools and parts of a spreadsheet program. spreadsheet program.</p> <p>5.2 Data structure: text, numbers and dates.</p> <p>5.3 Editing and formatting bars.</p> <p>5.4 Templates and wizards.</p> | <p>MS Office Excel</p> <p>Projector</p> <p>Notebooks</p> <p>Data Show</p> |
| Multimedia Presentations (Power Point) | Resources |
| <p>6.1 Basic tools and parts of a multimedia presentation program.</p> <p>6.2 Multimedia presentation and Program Wizard.</p> <p>6.3 Slides.</p> <p>6.4 Animation and sound effects.</p> <p>6.5 Hyperlinks.</p> | <p>MS Office Power Point</p> <p>Data Show</p> <p>Notebooks</p> |
| Internet and E-mail | Resources |
| <p>7.1 Brief history of the Internet.</p> <p>7.2 Search engines: Google, Yahoo, Ask and others.</p> | <p>Microsoft Outlook</p> <p>Windows 10</p> <p>Gmail</p> <p>Microsoft Edge</p> |

| | |
|--|--|
| <p>7.3 WWW, http, html, domains, TPC/IP protocols and others.</p> <p>7.4 E-mail account.</p> <p>7.5 Educational Portal, Blog, Forums, Chat and other communication tools.</p> <p>7.6 E-mail management program Microsoft Outlook or other. or other.</p> | <p>Google Browser</p> |
| <p>Digital Media</p> | <p>Resources</p> |
| <p>8.1 Programs and tools for managing digital images and photographs.</p> <p>8.2 Image file formats.</p> <p>8.3 Music playback programs.</p> <p>8.4 Sound and music file formats.</p> <p>8.5 Integration Project: creation of a music CD.</p> | <p>Groove Music</p> <p>DTS Audio Control</p> <p>Speakers</p> |

Evaluation

| <p>Evaluation criteria</p> | <p>Rating Criteria</p> |
|--|------------------------|
| <p>1. Demonstrate the acquisition, understanding and mastery of the main concepts of the subject matter.</p> | <p>20%</p> |

| | |
|---|-----|
| 2. Solve problems by applying theoretical knowledge and based on experimental results - experimental results. | 50% |
| 3. Develop and adequately defend the practices related to the syllabus of the first four-month period /first four-month period. | 15% |
| 4. Develop and adequately defend the practices related to the agenda of the second four-month period /second semester. | 15% |

| Evaluation Activities and Instruments | | |
|---------------------------------------|---|-----|
| Laboratory - Seminar | For each internship, the quality of the technical documentation delivered will be evaluated (theoretical sections to be done at home, non-classroom activity). at home, non-attendance activity), as well as the attendance to the practice and the | 30% |

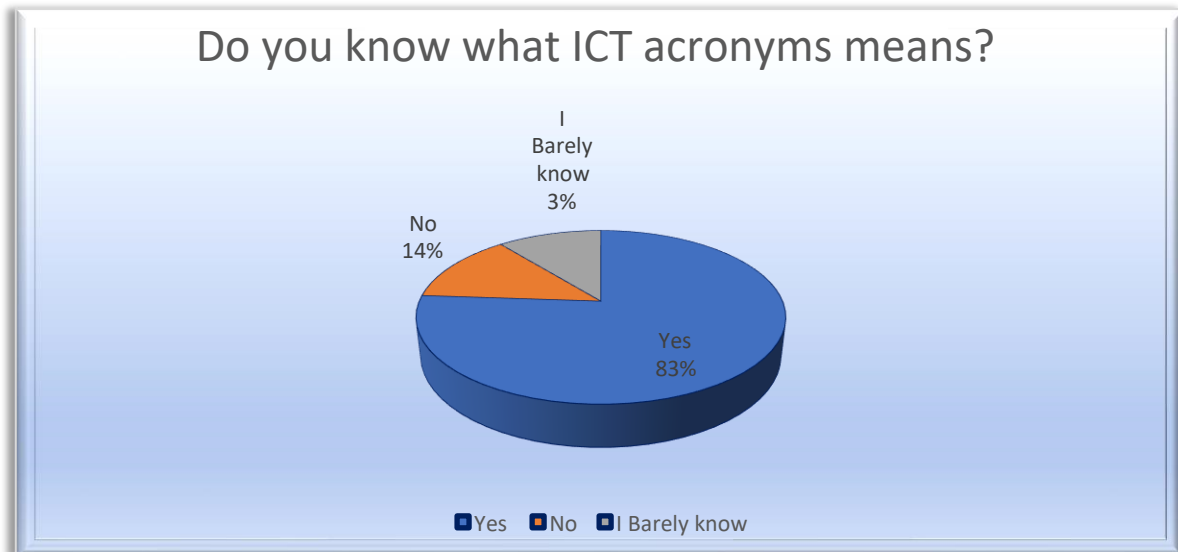
| | | |
|--|--|--|
| | <p>performance of the same. the same.</p> <p>The student who regularly (only one absence per term is allowed) attends the practical, works on them during the face-to-face sessions of the Seminar-Laboratory, and brings the theoretical sections from home.</p> <p>To improve the grade in practices (grade higher than a pass) it is necessary to take a practical exam (performance test), demonstrating the knowledge and mastery of the practices developed by (execution test), demonstrating the knowledge and mastery of the practices developed per four-month period.</p> | |
|--|--|--|

| | | |
|-------------------|--|------------|
| | <p>It will be necessary to have passed the internships of both semesters in order to pass the course.</p> | |
| <p>Final Exam</p> | <p>Written development test and problem solving. For each term it usually includes 1 theoretical question and 3 problems.</p> <p>The theoretical question allows the acquisition, understanding and mastery of the concepts to be assessed. The evaluate the correct application of these concepts, in a creative and safe way, to practical situations of a practical nature.</p> | <p>70%</p> |

3.4.6 Results and Application Process

The survey was performed with 46 students, in which 24 were women and 22 were men. This survey was divided in 8 multiple choice questions, in which the most relevant that was obtained more results were the following:

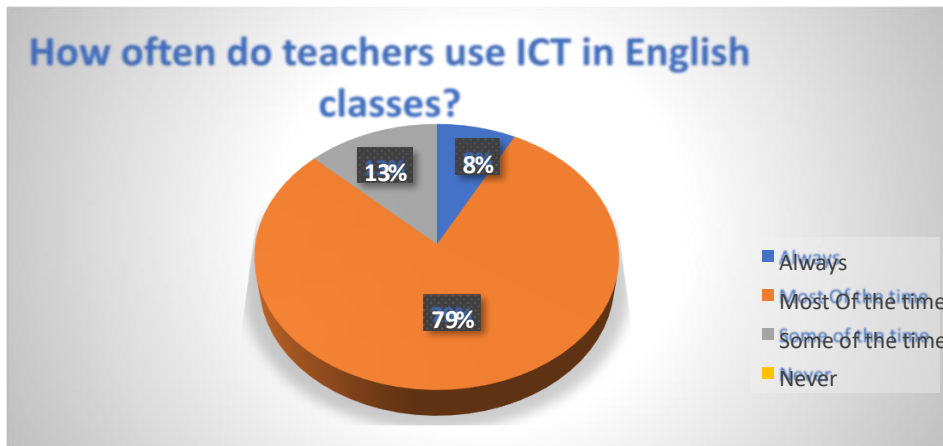
Question number 1, which was based on whether the students had knowledge about the acronym ICT. The following graph shows the results.



Graphic I

According to the graph it can be seen that 83% of the respondents which is equivalent to 35 students have knowledge about these acronyms, 14% which are 6 respondents had no knowledge and only 5 students which is equivalent to 3% have very little knowledge about the acronyms, thus showing that the students are informed about the ICT rooms in the school.

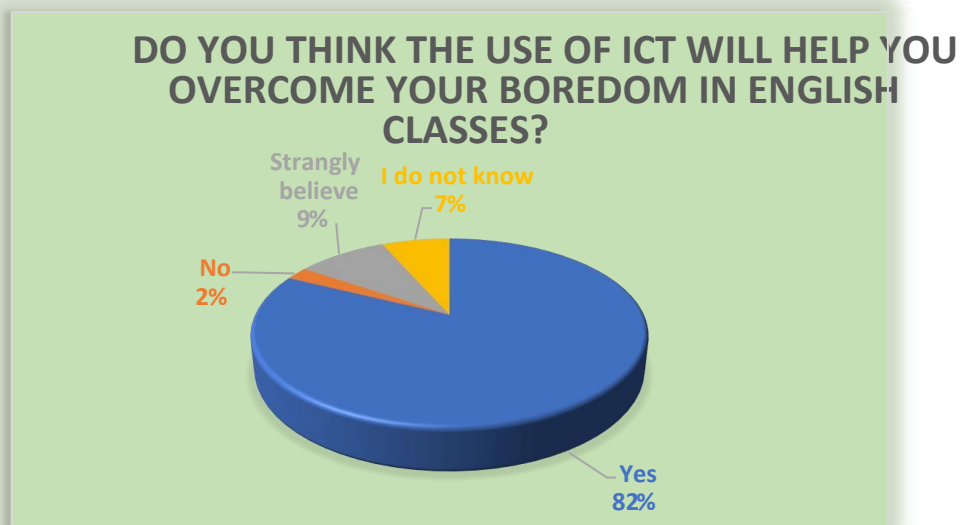
Question number 2 was related about what was the frequency that teacher and students use the ICTs room.



Graphic II

The most relevant thing shown by the graph is that 79% which is equivalent to 31 students indicate that they only visited the classrooms on some occasions, since there is only one classroom in the whole school and every time the teacher tried to use it, it was always full of students, affecting their students (this, according to the teacher and the students).

The graph shows the respondents' answers to **question 3**.



Graphic III

Question number 3 was focused on whether students believed that the use of ICTs classrooms would help them to overcome boredom in English classes, yielding an impressive result of 82% being convinced that it would help them, 9% being totally convinced, 7% did not know and only 2% responded that it would not help them.

Sample Validation

This study contains all the essential elements of a qualitative research (if applicable), the entire application protocol, and a description of how the information would be analyzed once extracted from the informants. However, collecting all the information would take more than six months, therefore, we only present preliminary findings based on a simulation or piloting.

Expert Judgment

Respected judge:

You have been requested to evaluate the Instruments "*Questionnaire on use of ICT rooms as dynamic and innovative methodologies to boost motivation in the process of teaching and learning English*" that is part of the research: **“Planning to implement ICT Room Resources as a Motivational Strategy”**

The evaluation of the instruments is of great importance to ensure that they are valid and that the results obtained from them are used efficiently.

We appreciate your valuable collaboration.

NAMES AND SURNAMES OF THE JUDGE: _____

ACADEMIC TRAINING _____

AREAS OF PROFESSIONAL EXPERTISE

TIME

CURRENT POSITION _____

INSTITUTION _____

Objective of the research:

To analyze the students' attitude towards the use of ICT rooms as dynamic and innovative methodologies to boost motivation in the process of teaching and learning English.

Objective of the expert trial:

Validate the content of this Interview

Objective of the questionnaire: To gather critical information about students' as well as teachers' behaviors and knowledge of virtual classrooms (ICTs).

| CATEGORY | QUALIFICATION | INDICATOR |
|--|--|--|
| <p>COHERENCE The item has a logical relationship with the dimension or indicator you are measuring.</p> | <ol style="list-style-type: none"> 1. Does not meet the criterion 2. Low level 3. Moderate level 4. High level | <ol style="list-style-type: none"> 1. The item has no logical relationship with the dimension 2. The item has a tangential relationship with the dimension. 3. The item has a moderate relationship to the dimension you are measuring. 4. The item is completely related to the dimension you are measuring. |
| <p>CLARITY Degree to which the item is written clearly and precisely, facilitating its understanding by the subjects surveyed.</p> | <ol style="list-style-type: none"> 1. Does not meet the criterion 2. Low level 3. Moderate level 4. High level | <ol style="list-style-type: none"> 1. The item is not clear 2. The item requires quite a few modifications or a very large modification in the use of the words according to their meaning or by the ordering of them. 3. A very specific modification of some of the terms of the item is required. 4. The item is clear, has semantics and appropriate syntax. |
| <p>RELEVANCE Importance of the item with respect to the contribution it can provide for a better understanding of the characteristic or situation measured.</p> | <ol style="list-style-type: none"> 1. Does not meet the criterion 2. Low level 3. Moderate level 4. High level | <ol style="list-style-type: none"> 1. It does not meet the criteria. 2. The item can be removed without affecting the measurement of the dimension. 3. The item has some relevance, but another item may be including what this one measures. 4. The item is essential or important, that is, it must be included |
| <p>SUFFICIENCY The items that belong to the same dimension are enough to obtain the measurement of this.</p> | <ol style="list-style-type: none"> 1. Does not meet the criterion 2. Low level 3. Moderate level 4. High level | <ol style="list-style-type: none"> 1. Items are not enough to measure dimension 2. Items measure some aspect of the dimension but do not correspond to the total dimension 3. Some items must be increased in order to fully evaluate the dimension. 4. Items are sufficient |

According to the following indicators, rate each of the items as appropriate

| Dimensi on | Sources | Description | Items | Coherence (From 1 to 4) | Clarity (From 1 to 4) | Relevance (From 1 to 4) | Sufficiency (From 1 to 4) |
|---|--|---|--|------------------------------------|----------------------------------|------------------------------------|--------------------------------------|
| Data Collec tion – Stude nts Surve y | IGT GLOBAL. (2021, October 1). | Knowledge of ICT check | 1) Do you know what ICT acronyms means? | | | | |
| | Rebeka Lerga, Candrlic, S., & Holenko Dlab, M. (2017, 01 05). | Frequency of use of technological tools | 2) How Often do teachers use ICT in English classes? | | | | |
| | Hashmi, Z., Dahar, M., & Sharif, A. (2019, January 4). | Motivational Tool | 3) Do you think ICT are important to improve your motivation? 4) Do you think the use of ICT will help you overcome your boredom in English Classes? 5) Do you agree about using ICT as motivational tool? | | | | |
| | | Types of technological tools | 6) Which of these resources do teacher use in English Classes? | | | | |

| | | | | | | | |
|---|-------------------------------|----------------------------|---|--|--|--|--|
| | U.K, E. (2016, November n.d). | | | | | | |
| | Rivera, A. (2018, June 4). | Select the best strategies | <p>7) Which of these activities do you consider more interesting?</p> <p>8) Do you consider ICT makes learning English interesting and funny?</p> | | | | |
| Alternative commentary/formulation | | | | | | | |

| Dimension | Sources | Description | Items | Coherence (From 1 to 4) | Clarity (From 1 to 4) | Relevance (From 1 to 4) | Sufficiency (From 1 to 4) |
|--|--|--------------------------------|--|------------------------------------|----------------------------------|------------------------------------|--------------------------------------|
| Data Collecti on – Observ | <i>How to Present a Lesson Plan.</i> (2021, June 8). | Introductory part of the class | <ul style="list-style-type: none"> • Teachers' mood at the beginning of the class • Students are interested in the lesson • Brief review of the previous knowledge • Student reaction toward the introduction of the new topic • The teacher explains the new topic in a proper and organized way | | | | |

| | | | | | | | |
|------------------------|--|-----------------------------------|---|--|--|--|--|
| ation Guide | (Developme nt of Lesson Plans by the Lesson Study Approach for the 6th Grade Students in Social Study Subject Based on Open Approach Innovation, 2019) | Developme nt of the class | <ul style="list-style-type: none"> • The content is appropriate to the student's level • The teacher performs speaking activities to reinforce knowledge of the new topic • The resources the teacher uses are both attractive and appropriate • Explains the assignments clearly <ul style="list-style-type: none"> • The activities were appropriate to the objective of the class • The teacher introduces a variety of activities • Teacher includes more than one skill in each proposed activity • The timing for each activity was satisfactory for accomplishing them • Students work in an organized and efficient manner • The teacher gives the opportunity to think and learn independently • The teacher is listening to the students' questions/ doubts • The teacher encourages student participation | | | | |
| | (Koeller et al., 1980, 673-675) | Consolidati on of the class | <ul style="list-style-type: none"> • The teacher performs assignments in order to enhance their knowledge • The teacher asks for questions on the topic before the lesson ends • Teacher assigned homework | | | | |

Alternative commentary/formulation

| Dimension | Sources | Description | Items | Coherence (From 1 to 4) | Clarity (From 1 to 4) | Relevance (From 1 to 4) | Sufficiency (From 1 to 4) |
|---|---|---|--|----------------------------|--------------------------|----------------------------|------------------------------|
| Data Collection – Teacher Survey | Rebeka Lerga, Candrlic, S., & Holenko Dlab, M. (2017, 01 05). | Knowledge and Experience with ICT tools | 1) How much do you know about ICT classrooms? 2) Do you have any experience using ICT classrooms? 3) Do you like to use ICT tools? Why? | | | | |
| | Rivera, A. (2018, June 4). | Motivational Facts about ICT tools for teachers | 4) What are the factors that motivate you to use ICT rooms? What are the factors that motivate you? 5) What are the activities that you commonly develop by using ICT devices? 6) (According to your experience) do you think students are motivated when they use ICT devices? Why? | | | | |

| | | | | | | | |
|--|--------------------------------------|--|---|--|--|--|--|
| | English Teaching 101. (2021, May 4). | Advantages, Disadvantages and Improving Aspects of ICT rooms | <p>7) Do ICT devices make your teaching process easier?</p> <p>8) Which are the advantages and disadvantages of using ICT classrooms?</p> <p>9) What aspects would need to be improved in the school related to ICT classrooms?</p> | | | | |
| | | | Alternative commentary/formulation | | | | |

Conclusions

After having carried out the entire research process, the following conclusions were reached.

1. It is necessary to use methodological strategies focused on the development of the creative part of the brain through educational software to motivate students to learn a new language, regardless of grade level. There are many programs and websites available today that can assist not only teachers but also students in having a better teaching and learning process.
2. The observation guide and survey of ninth grade students revealed the main demotivating agents in English learning, laying the groundwork for the development of a future didactic proposal based on ICT rooms for English teaching and learning. Additionally, gain an understanding of some aspects that can be improved during the lesson class by utilizing various types of online activities to encourage students to participate.
3. The interview with the teacher allowed us to reaffirm the most important challenge that future teachers must overcome: the use of technology. Both the student and the teacher will benefit greatly from this. Intentional, thoughtful integration of technology into public learning environments can ensure that all students have the opportunity to learn and develop skills that will allow them to reach their full potential, regardless of ethnicity, socioeconomic status, language status, special education status, or other characteristics.
4. All of the data acquired was used to help create a course that would prepare English teachers for jobs in the areas of research, development, and innovation as well as teaching in the telecommunications industry. Additionally, it trains them for problem-solving activities like analysis, conception, and development that call for the use of ICT classrooms in a variety of contexts, particularly in instruction.

Recommendations

Given the results of the research, the following recommendations are made:

1. To apply the teaching plan made to train English teachers on how to use ICT as a tool to boost students' motivation on each lesson.
2. To use the virtual activities based on the use of ICTs as a strategy in the development of motivational skills of teachers as well as students.
3. To give continuity to this research, until it reaches the stage of proposal, application and evaluation, with the purpose of improving the motivation of students in the classroom.

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VII. Annexes



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Annex I. Observation Guide

Dear students, the objective of the following observation guide is to obtain information about the methodologies used by the teacher in each of the moments of the development of the class and how this affects their motivation to learn English as a second language. This information is completely confidential and contributes to research to solve problems in education. **General data**

Institute:

Topic:

Teacher:

Date:

| AREA OF OBSERVATION | 1 | 2 | 3 | 4 | 5 |
|--|----------|----------|----------|----------|----------|
| INTRODUCTION | | | | | |
| Teachers' mood at the beginning of the class | | | | | |
| Students are interested in the lesson | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| Brief review of the previous knowledge | | | | | |
| Student reaction toward the introduction of the new topic | | | | | |
| The teacher explains the new topic in a proper and organized way | | | | | |
| DEVELOPMENT | | | | | |
| The content is appropriate to the student's level | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| The teacher performs speaking activities to reinforce knowledge of the new topic | | | | | |
| The resources the teacher uses are both attractive and appropriate | | | | | |
| Explains the assignments clearly | | | | | |
| The activities were appropriate to the objective of the class | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| The teacher introduces a variety of activities | | | | | |
| Teacher includes more than one skill in each proposed activity | | | | | |
| The timing for each activity was satisfactory for accomplishing them | | | | | |
| Students work in an organized and efficient manner | | | | | |
| The teacher gives the opportunity to think and learn independently | | | | | |
| The teacher is listening to the students' questions/ doubts | | | | | |
| The teacher encourages student participation | | | | | |
| CONSOLIDATION | | | | | |
| The teacher performs assignments in order to enhance their knowledge | | | | | |
| | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| The teacher asks for questions on the topic before the lesson ends | | | | | |
| Teacher assigned homework | | | | | |

Annex II. INTERVIEW WITH INHMARE TEACHERS



Dear teachers, the purpose of the following interview is to obtain information about the knowledge and use of technological tools in the teaching and learning of English as a way to motivate your students. This information is completely confidential and contributes to research to solve problems in the educational field.

General data

Name's Teacher:

Date:

Grade:

Years of teaching:

Introduction

Listen carefully to the following questions and answer at your own discretion. We ask you to be honest in answering the questions as this will help to obtain reliable information for our research.

1. How much do you know about ICT classrooms?
2. Do you have any experience using ICT classrooms?
3. Do you like to use ICT tools? Why?

4. What are the factors that motivate you to use ICT rooms? What are the factors that demotivate you?
5. What are the activities that you commonly develop by using ICT devices?
6. (According to your experience) Do you think students are motivated when they use ICT devices? Why?
7. Do ICT devices make your teaching process easier?
8. Which are the advantages and disadvantages of using ICT classrooms?
9. What aspects would need to be improved in the school related to ICT classrooms?



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Annex III. Survey of ninth grade students at INHMARE secondary school

Dear students, the objective of the following survey is to obtain more information about their knowledge of the use of technological tools in English language learning, and how this affects their motivation. This information is completely confidential and contributes to research to solve problems in the educational field.

General data

Sex: Male: Female: Date:

Grade: 9th A B C D

1. Do you know what ICT acronyms means?
 - a). Yes
 - b). No
 - c). I barely know
2. How often do teachers use ICT in English classes?

- A). Always
 - b). Most of the time
 - c). Some of the time
 - d). Never
3. Do you think ICT are important to improve your motivation?
- a). Strongly believe
 - b). Yes
 - c). I do not know
 - d). No
4. Do you think the use of ICT will help you overcome your boredom in English classes?
- a). Strongly believe
 - b). Yes
 - c). I do not know
 - d). No
5. Do you agree about using ICT as motivational tool?
- a). Strongly agree
 - b). Agree
 - c). Neither agree or disagree
 - d). Disagree
6. Which of these resources do teacher use in English classes? (mark with a check the ones that your teacher use)
- a). Computers
 - b). TV
 - c). DVD
 - d). Projector

e). Tablets

7. Which of these activities do you consider more interesting? (mark with a check the ones you like) .

a). Watch videos

b). Watch short films/ series

c). Listen to podcast

d). English games programs/apps

e). Slideshows

8. Do you consider that “ICT makes learning English interesting and funny”?

a). Strongly agree

b). Agree

c). Neither agree or disagree

d). Disagree

Annex IV: Photographs



Photograph I



Photograph II



Photograph I II



Photograph IV



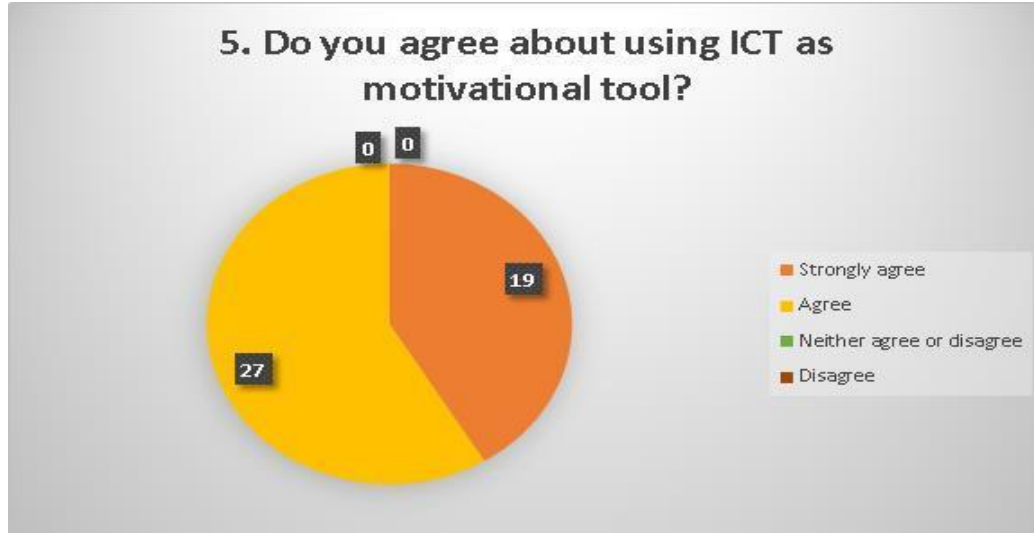
Photograph V

Annex V: Graphics based on the surveys

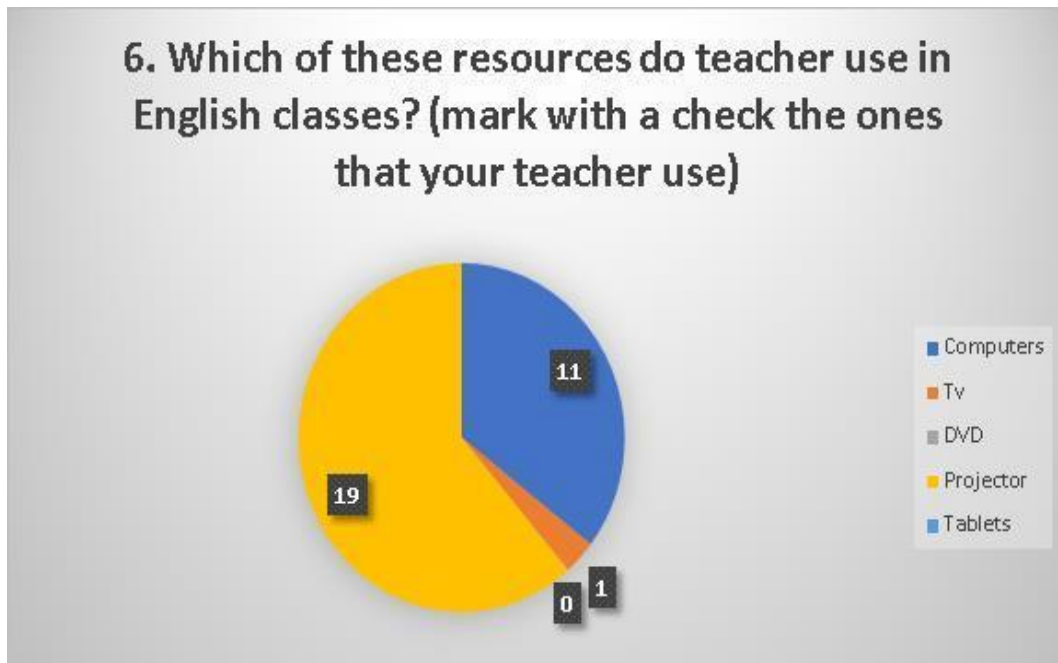
Number of participants: 46 students



Graphic IV



Graphic V



Graphic VI

7. Which of these activities do you consider more interesting? (mark with a check the ones you like)



Graphic VII

8. Do you consider that "ICT makes learning English interesting and funny"?

