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Paulina Aguagüiña

DEDICATION

Con todo mi Amor a mi familia y amigos por el apoyo que siempre me brindaron en el transcurso de este posgrado.

Paulina Aguagüiña

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COHORTE 2021

TEMA

EL USO DE ESTRATEGIAS BASADAS EN INTELIGENCIAS MÚLTIPLES MEJORA LA MOTIVACIÓN INTRÍNSECA PARA APRENDER INGLÉS

MODALIDAD DE TITULACIÓN: *Proyecto de Titulación con Componentes de Investigación Aplicada y Desarrollo*

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RESUMEN EJECUTIVO

El presente trabajo versa sobre la aplicación de estrategias didácticas dirigidas a las inteligencias múltiples para el mejoramiento de la motivación intrínseca por el aprendizaje del idioma inglés de los estudiantes de nivel A2 del Tecnológico Universitario Vida Nueva. Se desarrolló un estudio cuasiexperimental en el que se establecieron dos grupos de estudiantes, el primero, de control, dirigido a la utilización de estrategias de enseñanza tradicionales y el segundo, experimental, en el que se aplicó la propuesta de aplicación de actividades de gamificación, que es el aprendizaje basado en el juego orientadas a trabajar sobre las inteligencias múltiples. Para evaluar el nivel de la motivación intrínseca de los estudiantes se aplicó una encuesta al inicio del estudio y posterior a la aplicación de la propuesta. Inicialmente se detectó que el nivel de motivación intrínseca de los estudiantes expresada a través de las dimensiones de competencia, disfrute, autoconfianza, desafío, curiosidad y cooperación era deficiente. Con el fin de aportar en el fortalecimiento del deseo de superación personal se diseñó e implementó un manual de actividades de gamificación dirigidas a trabajar sobre las inteligencias múltiples de los estudiantes del TUVN, particularmente sobre la musical, lingüística, visual-espacial, lógico-matemática, corporal-cinestésica, intrapersonal e interpersonal. Las actividades de gamificación fueron completación de

letras de canciones, acertijos, operaciones matemáticas, trivias, simetría de figuras en 3D, descripciones, entre otras; las cuales permitieron desarrollar las habilidades de lectura, escritura, habla y escucha en el nivel A2 de acuerdo al Marco Común Europeo de Referencia para las lenguas. Para el desarrollo de las mencionadas actividades se utilizaron diferentes herramientas tecnológicas, como los websites Genially y LyricsTraining, y las apps educativas Kahoot y Train your brain. Una vez aplicada la propuesta y mediante la aplicación de la prueba de hipótesis estadística t de Student para muestras relacionadas se observó que mejoró la motivación intrínseca por el aprendizaje del idioma inglés.

DESCRIPTORES: *APRENDIZAJE DEL IDIOMA INGLÉS, AUTOCONFIANZA, COMPETENCIA, COOPERACIÓN, CURIOSIDAD, DESAFÍO, DISFRUTE, ESTRATEGIAS DIDÁCTICAS, GAMIFICACIÓN, INTELIGENCIAS MÚLTIPLES, MANUAL DE ACTIVIDADES, MOTIVACIÓN INTRÍNSECA.*

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THEME

THE USE OF STRATEGIES BASED ON MULTIPLE INTELLIGENCES IMPROVE INTRINSIC MOTIVATION TO LEARN ENGLISH

DEGREE MODALITY: *Graduation Project with Applied Research and Development Components*

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ABSTRACT

The present work deals with the application of didactic strategies directed to the multiple intelligences for the improvement of intrinsic motivation for the learning of the English language by A2 level students at the Tecnológico Universitario Vida Nueva. For this purpose, a quasi-experimental study was developed in which two groups of students were established, the first, control, aimed at the use of traditional teaching strategies, and the second, experimental, in which the proposal was applied, consisting of the application of gamification activities, which is learning based on the game oriented to work on multiple intelligences. To evaluate the level of intrinsic motivation of the students, a survey was applied at the beginning of the study and after the application of the proposal. Initially, it was detected that the level of intrinsic motivation of the students expressed through the dimensions of competence, enjoyment, self-confidence, challenge, curiosity, and cooperativeness was deficient. To contribute to the strengthening of the desire for self-improvement in English language learning of TUVN students, a manual of gamification activities was designed and implemented to work on the students' multiple intelligences, particularly musical, linguistic, visual-spatial, logical-mathematical, bodily-kinesthetic, intrapersonal, and interpersonal. The gamification activities were the completion of song lyrics, riddles,

mathematical operations, trivia, 3D figure symmetry, and descriptions, among others, which allowed the development of reading, writing, speaking, and listening skills at level A2 according to the Common European Framework of Reference for Languages. For the development of these activities, different technological tools were used, such as the websites Genially and LyricsTraining, and the educational apps Kahoot And Train your brain. Once the proposal was applied and through the application of the Student's t statistical hypothesis test for related samples, it was observed that intrinsic motivation for learning English improved.

KEYWORDS: *CHALLENGE, COMPETENCE, COOPERATION, CURIOSITY, DIDACTIC STRATEGIES, ENGLISH LANGUAGE LEARNING, ENJOYMENT, GAMIFICATION, HANDBOOK OF ACTIVITIES, INTRINSIC MOTIVATION, MULTIPLE INTELLIGENCES, SELF-CONFIDENCE.*

CHAPTER I

THE PROBLEM

1.1. Introduction

One of the most important aspects in the way human beings act and develop in life is motivation, even more so if we take it to the educational field and particularly in the learning of a second language. However, in the educational reality of students in Ecuadorian higher education institutions, this does not happen. It is usual to find young people who show a lack of interest in learning English (Hernández & Cordero, 2021). In response to the learning problems observed in learners of English as a foreign language (EFL), teachers often adapt different teaching strategies of various kinds. These include those aimed at addressing multiple intelligences, which lead to good learning outcomes (Astutie, 2017).

Based on the context indicated in the previous paragraph, the present work deals with the use of multiple intelligences in English language teaching for the improvement of intrinsic motivation in English language learning. The research aims to apply games strategies based on multiple intelligences to help a group of A2-level students of a higher education institution to improve their intrinsic motivation to learn EFL.

A quasi-experimental type of research is carried out for this purpose, which consists of the application of a lesson plan with the use of strategies based on multiple intelligences, which are applied to a group of students (experimental), and at the same time, traditional teaching strategies are applied to another group (control). The aim is to compare the level of intrinsic motivation and English language learning between the two groups of students, to evaluate the effectiveness of the teaching strategies. For this purpose, a survey was applied to a group of students of the regular modality at TUVN before and another after the application of the strategies. However, before the development of the research process itself, the following questions arise:

- What are the reasons to have lack of intrinsic motivations about learning the English language related to the group of second semester in technical collages students?
- What is impact of using multiple intelligences in order to learn English as a second language?
- Why students from technical careers are demotivated at learning English?

The work is made in four chapters which include: the contextualization of the problem, theoretical framework, methodology with an application of the proposal, and results obtained concerning the development of students' intrinsic motivation as well as improve their English domain. In the development of the research, there is the limitation that the students' level of the English language knowledge which is uneven, some of them have an acceptable command and others have a great difficulty in learning it.

1.2. Justification

In technical careers like automotive and industrial mechanics, teaching, business administration, tourism management, and accounting students should be involved in e- learning activities in English language classes and seminars at a technical institute, in order to improve their communication skills for future professional success. Demonstrating the value of a long career to adopt flexible, diplomatic, and politically acceptable approaches in the workplace, professional environment, and social environment, lifelong learning and e- learning are required.

Recognizing the importance of multiple intelligences and behavior skills for successful job interviews and careers in our multicultural society, this document argues that foreign language courses at a technical university should establish and achieve the goal of developing students' linguistic competence, as well as their technical competence, their awareness of the need to learn how to act and behave in a work environment, relying on traditional and e-learning, which are the prerequisites for winning a labor market competition and succeeding in a job interview.

The present research will focus on the impact of multiple intelligences as innovative teaching strategies which are supportive to students in order to motivate them in the classroom. The importance of this research stands out in the implementation of strategies based on multiple intelligences, intending to make the most of the students' different cognitive and non-cognitive potentialities, to measure their effect on the intrinsic motivation they have for learning EFL. The expected impact will be observed in the improvement of intrinsic motivation.

The beneficiaries of the research will be students from the second level A2 from Tecnológico Universitario Vida Nueva, who are going to be part of the experiment. They will be chosen from any age because it is a technical institution, students have people of different ages. The findings will be exposed to the general public, once the present work is hosted in the repository of the Universidad Técnica de Ambato. In this way, it will serve as a source of reference so that teachers interested in applying innovative strategies can apply them with their students.

1.3. Objectives

1.3.1. General

To determine the effectiveness of using multiple intelligences to get students' intrinsic motivation to learn English as a second language.

1.3.2. Specific

- To identify the importance of intrinsic motivation in English learning process.
- To measure through the application of a survey the intrinsic motivation when using the new method based on multiple intelligences.
- To implement strategies based on multiple intelligences to develop intrinsic motivation.

CHAPTER II

THEORETICAL FRAMEWORK

2.1. Investigative background

“Multiple-intelligence-based teaching tactics include a variety of teaching activities that promote motivation, student engagement in courses, and the development of an active teaching environment in which all students feel like they have a place in the classroom, regardless of their rank” (Derakhshan & Faribi, 2015). The main types of multiple intelligences are: musical, linguistic, visual-spatial, logical-mathematical, bodily-kinesthetic, intrapersonal, and interpersonal. According to what has been described above, there is a variety of multiple intelligences that students possess, which can be worked on with different activities that promote motivation to learn.

Linguistic Intelligence involves sensitivity to spoken and written language. The ability to learn languages, and the capacity to use the language to accomplish certain goals. Intrapersonal Intelligence involves the capacity to understand oneself, to have an effective working model of one and to use such information effectively in regulating one’s own life. “Naturalistic Intelligence is the ability to recognize and classify both the animal and plant kingdoms, to make other consequential distinctions in the natural world and to use this ability productively” (Díaz-Posada et al., 2017).

Teachers have paid close attention to motivation over the years since it is the backbone of the learning process. Learning is a complex and dynamic process that is completed in the real world through motivation. “Motivation is a vital step on the route to learning because one of the primary principles of learning is the desire to learn” (Asmali, 2016). According to the author, the learning process cannot be separated from motivation, since the latter is the engine that drives students' desire to learn. However, students' motivation and enthusiasm in lessons may wane at times, posing a significant challenge to efficient language learning.

Overall, learning a language takes time and effort. The majority of the time, negative feelings such as poor self-confidence and esteem, excessive worry, teachers' harsh and

discouraging attitudes, and psychologically unstable classroom environments cause students to lose interest and passion for language study. However, increasing pupils' willingness to learn is not difficult. “Teachers may nurture students' attention and take sound efforts toward raising motivation by making lessons more engaging through diverse activities, creating supportive surroundings, and reinforcing students favorably” (Dolati & Tahriri, 2017). As expressed by the author, the teacher has the responsibility to foster motivation among his students, for which he must make the teaching-learning process attractive and enjoyable.

2.2. Independent variable

2.2.1. Didactic strategies

Didactic strategies are “procedures, methods, techniques, and activities through which teachers and students consciously organize the actions of the training process to build and achieve intended and unintended goals in the teaching and learning process, adapting to the participants in a meaningful way” (Casas, 2018). Among the main teaching strategies to promote learning are: problem-based learning, case studies, project-based learning, seminars, and game-based learning.

Problem-based learning is a student-centered approach in which students learn about a topic, working in groups to solve a problem that may have multiple solutions. This strategy often uses case scenarios; its objective is not to solve the problem itself, but to use it for learning development. The final product can be either tangible or a proposed solution to the problem. The case study consists of providing a series of cases that describe a situation or problem similar to the reality that contains actions to be assessed and lead to a decision-making process. The case study seeks to create a real simulated world through which the student can obtain adequate feedback to refine his or her performance model.

Project-based learning is a learning model in which students actively work on, plan, implement, and evaluate projects that have real-world application beyond the classroom. “Project-based learning seeks to enable students to learn by doing and applying ideas. Students participate in real-world activities that are similar to activities

performed by professionals" (Daniel & Cooc, 2018). Generally, a project results in a final product or artifact that provides an answer to the problem posed.

The seminar is an active didactic strategy in which a group of people converges under the direction of someone who intercommunicates in the common task of production, reconstruction, or evaluation of knowledge or the action of creative explanation on a theme or object-process. Its main purpose is to provide a collective space for the meeting where each participant assumes a role in the training process and acts in a dynamic of discussion and exchange of ideas in which debate and controversy allow for re-examination and analysis. Whereas game-based learning "is a mode of learning that is characterized by boosting the motivation of learners and facilitating them to engage in active learning experiences" (Shortt et al., 2021). This learning is classified as a branch of gaming that deals with taking on learning objectives from other environments.

According to what has been explained in the previous paragraphs, there are some types of didactic strategies that can be applied to ensure the fulfillment of the didactic objectives. This situation is beneficial because, teachers have the option to test among the available options and determine the one that is most effective for each of the cases. However, sometimes it is possible for teachers to try, since the guidelines are usually predetermined in advance by the educational institutions.

2.2.2. Activities to implement the strategies

Various activities are used to apply didactic strategies in the teaching-learning process of the English language, ranging from those based on the development of the four basic language skills (writing, reading, speaking, and listening), to playful activities and activities based on the use of ICTs. In the particular case of play activities, the use of games in English classes allows the establishment of a cooperative and pleasant learning environment, facilitating the development of communicative skills and competencies, and placing the student at the center of the process. "The usefulness of play activities in school environments has been widely recognized, in the sense of the psychological development of individuals and groups" (Chumaña et al., 2018).

The didactic activities in the teaching of English as a foreign language are generally developed based on the use of activities established in texts, which address certain topics according to the level of learning according to the Common European Framework of Reference for Languages. Nowadays, the activities are often combined with the application of technological tools such as specialized web and mobile applications. Additionally, the activities can be for the classroom, home, and school reinforcement. The activities also tend to be focused on individual, pair, group, and whole student work tasks.

Finally, it should be noted that activities can focus on specific human abilities, both cognitive and non-cognitive. In fact, teaching strategies can focus on tapping into people's multiple intelligences. In this way, the different capabilities of people can be targeted, recognizing that each individual has special and remarkable capabilities concerning others. Therefore, the application of teaching strategies based on multiple intelligences helps teachers to recognize the potential of each learner.

2.2.3. Multiple intelligences

To sum up the multiple intelligence theory has the potential to re-engage pupils in learning. When you use many intelligences to teach a concept, you give each of your students a chance to succeed. Drawing and puzzles are good for the learner who has a strong visual-spatial intelligence. Those who thrive at linguistic intelligence would benefit from a written report rather than a reading assignment, but students who excel at interpersonal intelligence flourish at classroom discussions of what was read. Problem conduct lessens as kids achieve academic accomplishment. “Teaching to a student's strengths can help them learn more effectively. The instructor can assess or quantify student learning by using a range of instructional tactics across the different intelligences” (Díaz-Posada et al., 2017).

Howard Gardner described intelligence from the pluralistic point of view rather than the unitary system. He described the intelligence as “the ability to solve problems or create products that are valued within one or more cultural settings’’ (Rizqiningsih & Hadi, 2019). On the contrary of his contemporaries, he claims that humans have more than only linguistic intelligences. In his work Frames of Mind, Gardner (1983)

describes seven intelligences and later on he added the eighth one (Derakhshan & Faribi, 2015).

According to the previous paragraphs, the work on multiple intelligences implies a pluralistic sense, which is manifested in the recognition of the different skills that students have. In view of this, the focus of the teaching process and the strategies used is centered on taking advantage of the different ways that exist to reach the cognitive and non-cognitive part of the learners, which is very important, especially in the teaching of English as a foreign language.

According to Gardner (2003), "each person possesses the eight intelligences. The theory of multiple intelligences presents a new definition of the human being from the cognitive point of view, confirming that each person has capacities in the eight intelligences", which function in a particular way in each individual. Although we are all born with these intelligences, no two people have the same ones and are in the same combinations. Most people can develop each intelligence to an adequate level of competence. All normal individuals possess each of these abilities to some degree, and also the capacity to develop all intelligences to a reasonable level of performance if given the right stimuli and education.

The intelligences generally work together in complex ways. Although the intelligences are independent of each other, each separate intelligence need not be independent of the others; in fact, the intelligences always work in concert and any activity in a cultural context requires a combination of intelligences. "Intelligence can be expressed in various ways within each category" (Arboleya, 2016, p. 8). For this reason, it is not possible to standardize in a general way the attributes that a person must possess to be considered intelligent in a specific area.

The theory emphasises "the diversity of human ability that is generated through how people show their aptitudes within each intelligence, as well as between intelligences since an individual may not be particularly gifted in any one intelligence", and yet, because of a particular combination or mix of abilities, may be able to fulfil a function

uniquely (Dolati & Tahriri, 2017, pp. 2-3). It is inferred that it is possible to achieve the learning objectives by taking advantage of the sum of skills that students have.

2.3.1.1 Musical intelligence

For Gardner, musical intelligence "is the ability to appreciate, discriminate, transform, and express musical forms, in addition to sensitivity to rhythm, pitch, and timbre" (García & Maldonado, 2017). That means, people with this ability are able to process musical information, detect melodic nuances and harmony with greater precision. They can also express themselves through music, compose, distinguish instruments more easily or follow different rhythms.

"Musical perception and production are located in the right hemisphere, although their location is not as precise as that of the language area. It is known that the brain areas that activate music and emotions are practically the same" (Snyder, S. 1997). Music has been used for a long time to work on emotions. This is the case with the use of music therapy, which allows children to identify different melodies with different emotions.

A teacher can ask the following question of their students in order to work on the musical intelligence: What can we do as teachers to enhance musical intelligence? The types of activities that can be included under the musical intelligence approach in the classroom are following "the rhythm of different types of music, learning to sing, and completing the words of songs, among others" (Hu, P., et al. 2022). Actions that foster musical intelligence and ensure that it is used for English language learning include establishing a musical rhythm, completing the lyrics of songs, and singing; so that students speak and learn to understand the messages of the songs.

2.3.1.2 Linguistic intelligence

This intelligence involves "a particular sensitivity for spoken and written language, and the ability to master other languages and use language to achieve certain goals" (García, 2016, p. 188). People with high linguistic intelligence include lawyers, orators, writers and poets. Labelling linguistic ability as intelligence is consistent with

traditional psychology. Language ability is universal and develops throughout childhood in similar patterns across cultures. Even deaf people who have not been taught sign language build up their manual language. This fact confirms that intelligence can operate independently of a stimulus modality or output channel.

Linguistic intelligence also meets neuropsychological criteria. When certain areas of the brain are damaged, people suffer from certain alterations in linguistic activity: they may understand the language but not produce it, they may produce meaningless language with multiple paraphrases, they may read and not be able to write; they may have problems with reading, and so on. While other mental processes remain preserved (Erlina et al., 2019, p. 2145).

To work on the linguistic intelligence of his or her students, a teacher can ask the following question: How can I use the spoken and written word? “The types of activities that can be included under the linguistic intelligence approach in the EFL classroom are word games, creative writing, linguistic riddles, word searches, poems, and phonetic aspects” (Mieles & Moya, 2021, p. 118). As indicated, linguistic intelligence is very complex, since it requires a good neuropsychological capacity of the students. That is why teachers should diversify the activities directed towards linguistic intelligence, using word games, creative writing, linguistic riddles, word searches, poems, phonetic aspects, and others.

2.3.1.3 Visual-spatial intelligence

Spatial problem solving has been use in navigation and map interpretation such as a notation system. Another type of spatial problem solving appears in the visualisation of an object seen from a different angle and in the game of chess. The visual arts also employ this intelligence in their use of space. “The evidence from neural research is clear and persuasive. Just as the left hemisphere has been chosen as the seat of linguistic computation in right-handed people, the right hemisphere proves to be the most important seat of spatial computation” (García, 2016, p. 198). Lesions in the right posterior region lead to impairments in the ability to orientate oneself in a place, recognise faces or scenes or appreciate small details.

“The abilities to accurately perceive the visual world, to make transformations and modifications to one's initial perceptions, and to recreate aspects of one's visual experience even in the absence of appropriate physical stimuli are central to spatial intelligence” (Gholam-Shahbazi, 2019, p. 748). One may be asked to produce shapes or just to manipulate those that have been provided. It is clear that these abilities are not identical: an individual may be acute, for example, in visual perception, while having little ability to draw, imagine or transform an absent world. Even as musical intelligence consists of rhythmic and pitch abilities that are sometimes dissociated from each other, and linguistic intelligence consists of syntactic and pragmatic abilities that may also be decoupled, so too spatial intelligence emerges as an amalgam of abilities.

“To work on the visual-spatial intelligence of their students, a teacher can ask the following question: How can I use visual aids, visualisation, colour, art or metaphors?” (García, 2016, p. 482). As for the types of activities that can be encompassed under the visual-spatial intelligence approach within the EFL classroom, they include Jigsaw-type activities, mind maps, split sentences, maps and diagrams, pictorial dictation, those involving visualisation, imagination, drawing, and design of some kind.

2.3.1.4 Logical-mathematical intelligence

Alongside linguistic ability, logical-mathematical intelligence has been the most widely accepted and studied through IQ tests. A person's ability to reason logically and solve problems has been considered a paradigm of general intelligence, and a requirement for success in certain studies and professions. “Logical-mathematical intelligence has been extensively studied in developmental psychology. Its analysis has especially occupied the Piagetian tradition” (Tyagi, 2017, p. 213).

Logical-mathematical intelligence also meets neuropsychological requirements. Certain areas of the brain are involved in mathematical reasoning and calculation. There are child prodigies in mathematics. There are “idiot savants” who carry out complex calculations and are profoundly deficient in other mental processes. Logico-

mathematical intelligence quickly becomes remote from the world of material objects. The individual becomes more able to appreciate the actions one can perform on objects, the relations that obtain between these actions, the statements (or propositions) one can make concerning actual or potential actions, and the relations between these statements. It is an intelligence of a non-verbal nature (Sarani & Malmir, 2020, p. 188).

This intelligence also "meets the aforementioned empirical requirements. Certain areas of the brain are more prominent for mathematical computation than others. There are idiot savants who perform great feats of calculation even though they are profoundly deficient in most other areas" (Rizqiningsih & Hadi, 2019, p. 128). Mathematical child prodigies abound. The development of this intelligence in children has been carefully documented by Piaget and other psychologists. A view of logic and mathematics across cultures shows that the many systems of numbering and calculation that have evolved in different parts of the world prove that this kind of intelligence must exist.

"To work on the logical-mathematical intelligence of his or her students, a teacher may ask the following question: How can I introduce numbers, calculations, logic, classifications or critical thinking?" (Zainuddin et al., 2020, p. 19). In terms of the types of activities that can be included under the logical-mathematical intelligence approach in the EFL classroom, the following activities can be included logical quizzes, puzzles, lateral thinking exercises, number games and problem-solving.

2.3.1.5 Bodily-kinesthetic intelligence

Control of body movement is located in the motor cortex, with each hemisphere dominating or controlling the body movements corresponding to the opposite side. In right-handed people, the left hemisphere is usually responsible for the control of body movement. The ability to perform voluntary movements may be impaired, even in individuals who can execute the same movements reflexively or involuntarily. "The existence of specific apraxia constitutes a line of evidence in favour of a kinaesthetic-bodily intelligence" (Nemat, 2016, p. 203).

The evolution of specialised body movements is of obvious importance to the species, and in humans, this adaptation extends to the use of tools. Body movement follows a clearly defined development in children. And there is no doubt of its universality across cultures. Thus, it appears that kinaesthetic-bodily knowledge satisfies many of the criteria required for intelligence. A characteristic of this type of intelligence is the ability to use the body in highly differentiated and skilful ways and for expressive or goal-oriented purposes. “Equally characteristic is the ability to work skilfully with objects, both those involving fine motor movements of the fingers and hands and those exploiting gross motor movements of the body” (Gabarrón-Pérez, 2019, p. 21).

To work on the kinaesthetic-bodily intelligence of their students, “a teacher can ask the following question: How can I involve the whole body or use tactile experiences?” (García, 2016, p. 482) As for the types of activities that can be encompassed under the kinaesthetic-bodily intelligence approach within the EFL classroom, they include Jigsaw puzzle readings, activities involving the speed of completion of a given task, activities borrowed from the TPR (Total Physical Response) method. In the same way, activities using mime, activities carried out in circles formed by the students in the classroom, traditional activities such as dictation carried out with a physical activity component, writing or drawing on the walls, pair work with movement within the classroom and all kinds of role-playing, and role-playing.

2.3.1.6 Intrapersonal intelligence

Intrapersonal intelligence is the capacity to activate your own talents and to fulfil your potential abilities. It allows one to understand and work with oneself. In the individual sense of self, there is a mixture of interpersonal and intrapersonal components. Indeed, the sense of self emerges as one of the most wonderful human inventions: a symbol that represents all kinds of information about a person and is, at the same time, an invention that all individuals construct for themselves (Sarani & Malmir, 2020, p. 188).

Intrapersonal intelligence corresponds to the ability to understand oneself, keep an effective working model, and use this information to regulate one's own life. It points to a person's ability to know his or her inner world, his or her own innermost emotions

and feelings, as well as his or her strengths and weaknesses. “Intrapersonal intelligence is a compendium of intimate thoughts and feelings that facilitate the relationship between the inner world and the outer experience of the subject” (Astutie, 2017, p. 251). Critical self-observation and self-analysis are actions that increase one's inner awareness, a valuable habit to explore, and have a better understanding of ourselves, our desires, and goals.

“To work on the intrapersonal intelligence of his or her students, a teacher may ask the following question: How can I evoke personal feelings or memories or give choices to the students? ” (García, 2016, p. 482). In terms of the types of activities that can be encompassed under the intrapersonal intelligence approach within the EFL classroom include those of mediation, reflective thinking, silent reading, journal writing, and self-focused activities.

2.3.1.7 Interpersonal intelligence

Interpersonal intelligence is the ability to perceive, transform and activate relationships with others. This type of intelligence is related to being able to understand other people, observe, and understand the background of their actions and intuit their motivations, ideas, and emotions. Interpersonal intelligence is the ability to understand and work with other people. It requires an ability to perceive and respond to the mood, temperament, intentions and desires of others. “This intelligence is necessary for the development of cooperative work and harmonious coexistence. People with good leadership skills tend to have a high degree of interpersonal intelligence” (Sarani & Malmir, 2020, p. 188).

“To work on the interpersonal intelligence of his or her students, a teacher may ask the following question: How can I encourage students to share, learn cooperatively or practice simulation in large groups?” (Derakhshan & Faribi, 2015, p. 65). In terms of the types of activities that can be encompassed under the interpersonal intelligence approach within the EFL classroom include activities involving pair work, group work, information seeking and sharing activities, cooperative learning and other-centred activities.

2.3. Dependent variable

2.3.1. Intrinsic motivation

Teachers have paid close attention to motivation over the years since it is the backbone of the learning process. Learning is a complex and dynamic process that is completed in the real world through motivation. “Motivation is a vital step on the route to learning because one of the primary principles of learning is the desire to learn” (Castillo et al., 2019, p. 149). However, students' motivation and enthusiasm in lessons may wane at times, posing a significant challenge to efficient language learning. According to the author, motivation is a fundamental aspect that directly affects the openness of students to the acquisition of new knowledge; without it, the success of the teaching-learning process is very difficult.

Overall, learning a language takes time and effort. The majority of the time, negative feelings such as poor self-confidence and esteem, excessive worry, teachers' harsh and discouraging attitudes, and psychologically unstable classroom environments cause students to lose interest and passion for language study. However, increasing pupils' willingness to learn is not difficult. “Teachers may nurture students' attention and take sound efforts toward raising motivation by making lessons more engaging through diverse activities, creating supportive surroundings, and reinforcing students favorably” (Luna-Hernández, 2016, p. 36).

“Lack of motivation is in advance inside the English classroom, the structure and quantity of rewards demotivates students” (Sarani & Malmir, 2020). The classroom climate does not appear to be supportive to students. Other demands on students' time and attention must be balanced. Individual students may be dealing with physical, mental, or other personal issues that are interfering with their motivation.

“Intrinsic motivation is the impulse that students have to learn new things such as a new language, which comes from an inner force that drives the desire for personal development” (Oga-Baldwin et al., 2017, p. 141). In this sense, intrinsic motivation is understood to be the driving force behind learners' desire to learn a new language. However, in practice, it is common to observe a lack of interest in learning in some

students, which is because teaching strategies do not have a favorable impact on all learners.

Intrinsic motivation is the motivation that drives us to do things for the sheer joy of doing them; it is born in the individual. It is based on autonomy and competence, satisfaction and enjoyment. It is an important element to consider when analysing a language learner's learning. “Emotions play an important role in their manifestation, as excellent stimuli for achievement during the process of language acquisition and learning and its proper development” (Hernández & Cordero, 2021, p. 154).

In other words, this type of motivation is based on autonomy and competence, leading to satisfaction and enjoyment with the goals achieved through intrinsic motivation. An example of intrinsic motivation is the enjoyment a learner has when studying the English language by acquiring new knowledge and developing basic language skills. “This fact is due to the interest and joy associated with the student's learning”. Finally, this type of intrinsic motivation is related to achieving goals and obtaining better results (Castillo et al., 2019, p. 149).

The aforementioned authors emphasize that intrinsic motivation stems from the individual, although it can be stimulated through the recognition of the capacity for personal autonomy, the use of activities that encourage competition among students, and games that foster satisfaction and enjoyment.

2.3.2. Games to develop intrinsic motivation

The ludic component through games helps considerably to disinhibit and increase student participation, especially creative participation. The game has been defined as “action and effect of playing for entertainment. Recreational or competitive exercise subject to rules, and in which one wins or loses” (Chumaña et al., 2018). The usefulness of play in educational contexts has been studied in its different stages, including its evaluative dimension, recognizing that it influences the achievement of an invisible evaluation environment that generates greater well-being and allows overcoming the tension and boredom produced by traditional tests.

The use of games for English language teaching aims to solve the lack of motivation and interest of students, the uncertainty in learning, and other distortions. Some studies show the preference of university students for the use of playful activities in the process of teaching English, recognizing a direct relationship between play and learning. Likewise, Fernández (2015) "proposes an educational proposal with an interdisciplinary approach that, from the subject of Physical Education, aspires to the development of language skills based on games and playful activities" (Fadhli et al., 2020). In relation to the interdisciplinary approach, the literature recognizes the difficulties in curricular practice regarding the integration of objectives, contents and evaluation methodologies of certain sciences and English.

2.3.3. Gamification activities to develop intrinsic motivation

The word gamification comes from the Anglo-Saxon word gamification. The term was first used in 2002 by Nick Pelling, a computer game programmer, although the concept of gamification came to the fore in 2010 with the increase in rewards in digital environments. Numerous definitions have been given to gamification. One of the best known is provided by Deterding et al. (2011) cited by Zainuddin et al. (2020), who consider gamification as the use of game elements in non-game contexts to make something more attractive, motivating and fun (p. 2).

Through the use of gamification elements, players increase their time commitment and become more involved in the execution of a given activity. "Gamification increases the psychological predisposition to remain active, attentional capacity, performance, and effort. In short, gamification refers to the use of game elements that influence aspects such as the motivation and involvement of the subject in the tasks performed" (Zichermann & Cunningham, 2011, p. 15). This fact means considering gamification as a powerful tool in education since student motivation and involvement in the teaching-learning process are key to achieving meaningful learning.

Because gamification involves the use of game elements, it sometimes tends to be confused with the use of serious games or game-based learning. However, while serious games or game-based learning is based on the use of finished products (games)

designed or adapted for specific learning content, gamification is an activity spiced with game components that are open to modification. “Different benefits and certain difficulties have been identified in the use of gamification in education, highlighting as the main advantage of using gamified strategies in the classroom is the increase in motivation” (Pérez-Rivera, 2021, p. 10).

However, “it is necessary to distinguish between intrinsic motivation, which is inherent to the person and is activated by self-interest (gaining status, access to skill and so on), and extrinsic motivation, which is external to the person and is activated by rewards” (Shortt et al., 2021, p. 2). In this sense, the aim of a gamification strategy should be to favour the intrinsic motivation of students and to activate their involvement in the learning process. It has been shown that gamification in the classroom enhances attention and meaningful learning.

There are some types of gamification activities that can be applied to English language teaching to work on learners' multiple intelligences and promote their intrinsic motivation (García, 2016, pp. 481-482). The following are some of the most common activities:

2.3.3.1. Gamification for Musical intelligence

Music is exhibited as an opportunity to generate that experience of learning a foreign language, which allows direct communication with the culture in which the language is spoken. Through this tool, learners can access concepts, expressions and other cultural uses of a language, as well as the relationship between words, just as when learning to speak or write their own language. For this reason, the use of songs in other languages has the potential to enrich the mastery of a foreign language. “Songs and musical genres have different effects on people's performance in learning activities and have an impact on learners' intrinsic motivation during the cognitive and language comprehension process” (López-Montañez, 2019). From a gamification point of view, didactic activities can be developed that focus on the completion of song lyrics. For this purpose, it is possible to work through the use of the internet, for example through the Lyricstraining website (es.lyricstraning.com, 2022).

2.3.3.2. Gamification for Linguistic intelligence

Riddles are very useful activities for teaching and learning a foreign language, based on the formulation of questions addressed to groups of learners, in the quest for one of them to be the first to give the correct answer. Some riddles are based on playing with similar words, meanings and sounds. In general, riddles promote the development of grammar and vocabulary in foreign language learners. “The Genially platform can be used for the implementation of a riddle activity” (Martínez-López, 2021).

Another activity commonly used to develop linguistic intelligence is alphabet soup, which involves arranging a series of letters in columns and rows to form a square or rectangle. “The aim of the activity is to find and mark certain words, which can be arranged diagonally, vertically or horizontally, from right to left or vice versa, from bottom to top or vice versa” (Martínez-López, 2021). The aim of alphabet soup is for the learner to find all existing words and its function is to promote vocabulary learning in second language learners. This activity can be developed through the use of mobile apps or on the internet, such as on the Genially platform.

2.3.3.3. Gamification for Visual-spatial intelligence

Gamification activities based on visual-spatial intelligence, generally constructed with a question, “include concepts contained in circles or boxes and the relationships between concepts called propositions, which are indicated by linking lines between these two concepts” (Busso et al., 2019). Among its benefits we can highlight that it makes prior knowledge visible and promotes critical thinking that allows the individual to develop the skills of understanding, interpreting and extracting specialized scientific-technical information. It is possible to achieve a hierarchical and contextualized organization of the contents and generate independent and meaningful study habits. Main concepts can be made using the Miro and Canva platforms. Among the games that can be used to work on visual-spatial intelligence is Origami, which is the art or process, originally from Japan, of folding paper into shapes that represent objects, such as flowers and birds (Mitra, 2019).

2.3.3.4. Gamification for Logical-mathematical intelligence

To encourage the use of mathematical intelligence for the benefit of English language learning, students can use number-based games. For example, through the Kahoot! application, which has games in which simple arithmetic operations are carried out and which helps to learn the vocabulary of numbers commonly used in everyday life. Kahoot! is a free platform that allows the creation of evaluation quizzes (Erlina et al., 2019).

2.3.3.5. Gamification for Bodily-kinaesthetic intelligence

One of the gamification activities that can be used to work on students' bodily-kinaesthetic intelligence is the verb knowledge game. Two groups should be established for the development of the activity, one group is in charge of miming the action of a specific verb and one of the members of the other group must recognise the verb and say it. If the answer is correct in up to three attempts, the group gets one point, otherwise they get 0 points. Then the mime is performed on another verb and the same procedure is followed, in total as many mimes are performed as there are students in the group. After the roles of the groups are exchanged, the group that did the mime becomes the group that recognises the verbs. “The group of students with the highest number of correct answers wins the game and the aim is to help students memorise and master commonly used verbs in the English language” (Martínez-Buffa, 2013). Only one student per group can intervene in turn, but all students must intervene. This activity can be carried out in the classroom, with the participation of the teacher as the one who assigns the verbs to be represented.

2.3.3.6. Gamification for Intrapersonal intelligence

The use of diaries as a tool for working on intrapersonal intelligence and for the improvement of foreign language learners' writing skills has been the subject of several studies. A considerable number of studies suggest that diaries motivate and encourage learners to improve and learn to write in English. “The application of this activity is based on constructivist theory which focused on reflective writing, based on the conception that journal writing can be a motivating challenge for learners” (Malo-

Toledo, 2020). Precisely, journaling applied to improve writing has positive effects by increasing self-confidence, motivation, creativity, critical thinking and thus the art of writing. This activity should be done by students in class, with the teacher directly guiding the students.

2.3.3.7. Gamification for Interpersonal intelligence

Among the activities that can be developed to work on interpersonal intelligence are discussion activities with questions and answers between groups of students. For this, the teacher can set a topic of interest on which a group of students can ask questions to the students of the other groups. In this way, points can be awarded to the groups that get the correct answer. The groups should be rotated so that everyone has the opportunity to participate. “In the end the winning group will be the one with the most correct answers” (García, 2016). This activity should be carried out in class, but it is possible for the teacher to ask the students to prepare the discussion at home beforehand by using a platform such as Genially.

CHAPTER III

METHODOLOGICAL FRAMEWORK

3.1 Location

The research is performed at Tecnológico Universitario Vida Nueva (TUVN), located at Pedro Vicente Maldonado Avenue S58-34, in the city of Quito. The institute is a legally constituted higher education center, created on April 14th, 1998, with ministerial agreement No. 1273 granted by the Ministerio de Educación y Cultura, the same state agency, with agreement No. 1968, authorized on September 8th, 1999, the transformation to Tecnológico. Currently, TUVN trains professional Technologists, both in the technical and service areas, as detailed below: Superior technology in Automotive Mechanics, Software Development, Industrial Mechanics, Electromechanics, Tourism, Teaching, Accounting, and Administration.

3.2 Equipment and materials

The materials used for the development of the proposal are among others, the next: Genially, Kahoot!, CANVA, and Miro platforms, Lyricstraining website, internet, computer, pencils, and sheets of papers.

3.3 Type of research

The research has a quantitative approach because the information collected can be measurable and processable through statistical analysis. The modality of research is bibliographic and field, given that a review of the research background on the multiple intelligences and intrinsic motivation is executed, and information is also collected directly from the institute.

The study is longitudinal and prospective, information is obtained on two occasions on the intrinsic motivation to learn English shown by the students, the first before the application of the strategies based on multiple intelligences and the other at the end of the intervention. The research has a descriptive scope, didactic activities directed to

each of the multiple intelligences are developed as well as the aspects inherent to the students' intrinsic motivation for learning the English language are described. An analysis of the intervention effect is performed through Student t-test statistical hypothesis tests application to assess the effect of the application of activities based on multiple intelligences.

The research design is quasi-experimental, the researcher establishes two groups of students at the A2 level, one called experimental, in which the teacher uses the strategies based on multiple intelligences; and the other called control, in which the teacher uses a traditional methodology. Finally, the results of the students' intrinsic motivation of both groups are compared.

3.4 Hypothesis testing

The use of strategies based on multiple intelligences improves students' intrinsic motivation to learn English.

3.5 Population or sample

The population is conformed by the A2 level (according Common European Framework of Reference) students of the regular modality at TUVN. In this case, two parallels are selected as a sample, one of which is called experimental, in which strategies based on multiple intelligences are applied; and the other group is called control, in which regular didactic strategies are used. The two groups are formed according to the following information:

Table 1. Sample of students.

Level	Parallel	Group	Sample size
A2	E1	Control	30
A2	E2	Experimental	30
Total	-	-	60

Source: Aguagüiña, P. (2022).

3.6 Data collection

Firstly, the survey questionnaire of intrinsic motivation (Annex A) is applied as pre-test to evaluate the students' intrinsic motivation to learn English. In this sense, the level of the students' motivation is obtained by adding the individual scores of each of the 20 items in section A of the questionnaire, with a maximum score of 100. Each item belongs to a specific potential source of intrinsic motivation, including competence, enjoyment, self-confidence, challenge, curiosity, competitiveness, and cooperativeness. After, the strategies based on multiple intelligences are applied in the experimental group, while the control group receives the traditional teaching methodology. Then, the survey is applied again, with the aim of finding out the improvement of the students' intrinsic motivation. In this sense, it is expected that the students in the experimental group show development in their intrinsic motivation.

A validation by experts of the questionnaire designed to measure the level of intrinsic motivation that students have for learning the English language is performed to ensure that it is suitable for its purpose. In that sense, a validation format is used (Annex B). The validation criteria are the following: sufficiency, relevance, clarity, timeliness, objectivity, strategy, consistency, and structure. Each criterion is evaluated with the scores: 1 deficient, 2 acceptable, and 3 satisfactory.

3.7 Data processing and statistical analysis

Once the information from the survey questionnaire on intrinsic motivation is compiled, a table of descriptive statistics of the students' intrinsic motivation level is presented, which has the information about the mean, median, standard deviation, minimum and maximum values. At the same time, vertical bar charts are also used to represent these results classified by group. On the other hand, with regard to inferential statistics, the Student's t-test for related samples is applied to identify if there are significant differences (p-value less than 0.05) between the grades obtained by the students before and after the application of the teaching strategies based on multiple intelligences. This fact means that the alternative hypothesis of the research is accepted.

3.8 Response variables or results achieved

The response variable is the intrinsic motivation to learn English.

CHAPTER IV

ANALYSIS AND INTERPRETATION

4.1 Analysis of the results and data interpretation.

4.1.1 Survey results before the proposal

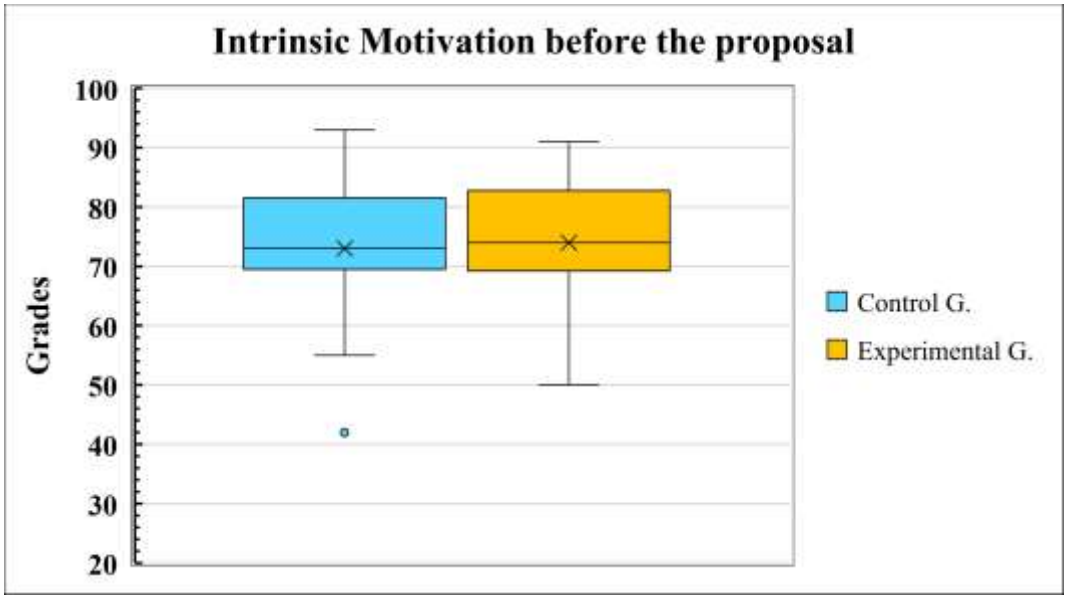
From the initial application of the survey in Annex A before the proposal implementation, which measures students' intrinsic motivation, the obtained results are summarized in Table 2 as follows:

Table 2. Summary of intrinsic motivation averages classified by each dimension in the pre-test.

Dimension	Grade / out of	Control group		Experimental group	
		Mean	Standard deviation	Mean	Standard deviation
Intrinsic motivation	100	73.03	11.12	73.97	11.39
Competence	30	20.73	3.72	21.40	3.46
Enjoyment	25	19.27	3.39	19.17	2.83
Self-confidence	10	7.37	1.43	7.20	1.30
Challenge	20	14.80	1.92	15.23	2.45
Curiosity	5	3.60	0.62	3.53	0.78
Cooperativeness	10	7.27	1.26	7.43	1.48

Source: Aguagüiña, P. (2022).

According to the results in Table 2, it can be observed that at the beginning of the course the level of intrinsic motivation for learning English of the TUVN students was more or less even between the control and the experimental group, since for each of the dimensions that compose motivation, the averages were similar. In both cases, the level of motivation was relatively low, approximately around 70% of the maximum score. Graph 1 shows that general intrinsic motivation, evaluated out of 100 points, is similar between both groups (control and experimental) and the average is 73 with a standard deviation of 11.



Graph 1. Intrinsic Motivation before the proposal.

Source: Aguagüiña, P. (2022).

4.1.2 Survey results after the proposal

In the same way, from the application of the survey in Annex A after the proposal implementation, which measures students' intrinsic motivation, the obtained results are summarized in Table 3 as follows:

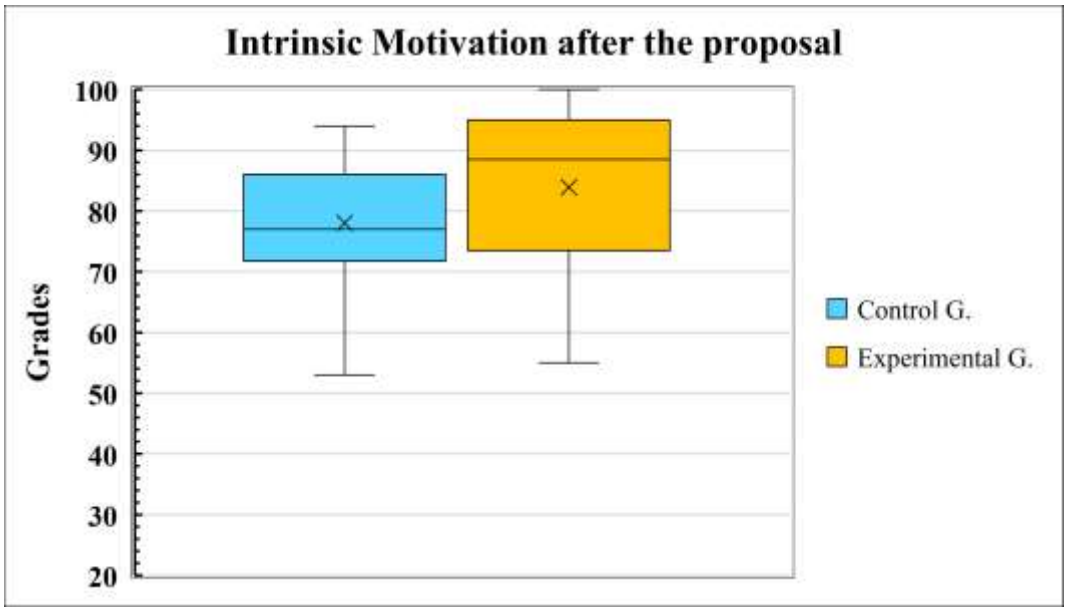
Table 3. Summary of intrinsic motivation averages classified by each dimension in the post-test.

Dimension	Grade / out of	Control group		Experimental group	
		Mean	Standard deviation	Mean	Standard deviation
Intrinsic motivation	100	78.07	10.50	83.90	14.21
Competence	30	22.50	3.79	24.53	4.44
Enjoyment	25	20.60	3.17	21.57	3.53
Self-confidence	10	8.03	1.25	8.20	1.54
Challenge	20	15.73	1.87	17.20	2.85
Curiosity	5	3.80	0.71	4.00	0.95
Cooperativeness	10	7.40	1.19	8.40	1.57

Source: Aguagüiña, P. (2022).

According to the results in Table 3, it can be observed that after the proposal implementation the level of intrinsic motivation for learning English of the TUVN

students was better in the experimental group compared to control group. In both cases, the level of intrinsic motivation increased with respect to the results of the initial survey, approximately around 80% of the maximum score. Graph 2 shows that general intrinsic motivation, evaluated out of 100 points, is higher in the experimental group with an average of 83.9 with a standard deviation of 14.21.



Graph 2. Intrinsic Motivation after the proposal.
Source: Aguagüiña, P. (2022).

In general terms, it is evident that the intrinsic motivation of the students after the application of the proposal was better in those who were part of the experimental group because they worked on multiple intelligences. The most relevant dimensions of improvement in the experimental group were competence, enjoyment, challenge, and cooperativeness.

4.2 Hypothesis verification

4.2.1 Variables

Independent variable: Strategies based on multiple intelligences.

Dependent variable: Intrinsic motivation.

4.2.2 Hypothesis formulation

Null hypothesis H_0

The use of strategies based on multiple intelligences through gamification activities does not enhance students' intrinsic motivation to learn English in the regular modality at TUVN.

Alternative hypothesis H_1

The use of strategies based on multiple intelligences through gamification activities enhances students' intrinsic motivation to learn English in the regular modality at TUVN.

4.2.3 Description of the population

An experimental group of thirty students and a control group of also thirty students were selected as a part of the sample in the quasi-experimental research of the regular modality at TUVN.

4.2.4 Mathematical model

Single tailed Student's t-test for paired samples was applied using the following mathematical model:

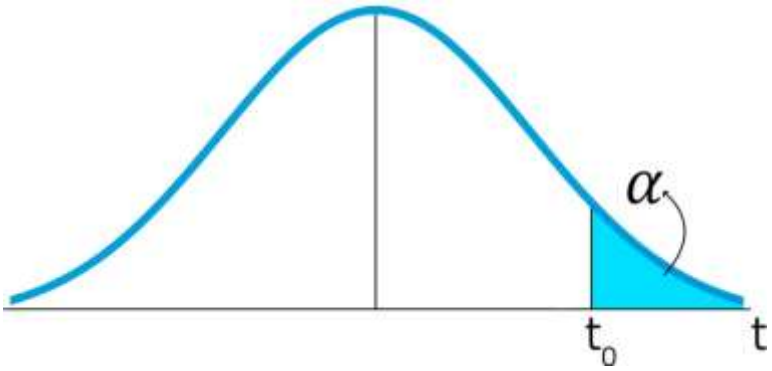
$$H_0: \mu_2 \leq \mu_1$$
$$H_1: \mu_2 > \mu_1$$

Where:

μ_1 = population mean in the initial survey.
μ_2 = population mean in the final survey.

4.2.5 Specification of the regions of acceptance and rejection

Taking into account the Student's t-test distribution, the rejection region of the null hypothesis is located to the right of the t-value of the tables with the respective degrees of freedom and the accepted region is located to the left of the same tabulated t-value.



Graph 3. Student t-distribution curve.
Source: https://matemovil.com/tabla-t-de-student/

4.2.6 Decision making

If the calculated Student's t-value is higher than the tabulated Student's t-value, it is located in the rejection region so the null hypothesis is rejected and the alternative hypothesis is accepted.

4.2.7 Selection of the level of significance

The value of the significance level was equal to 0.05 which means 5%.

4.2.8 Degrees of freedom

The degrees of freedom were calculated by using the following formula:

$$df = n - 1$$

Where:
df = degrees of freedom.
n = number of students.

$$df = 30 - 1 = 29$$

4.2.9 Data collection and calculation of statistics

The tabulated Student t-value is 1.6991 in both groups, according to the significance level of 0.05 and 29 degrees of freedom. The purpose of calculating the Student t is to determine if there are significant differences between the scores given by the students in the surveys measuring intrinsic motivation after the implementation of the proposal with respect to the initial surveys (before the proposal).

The calculated t-values are calculated using the following formula:

$$t = \frac{\bar{x}_d}{\frac{S_d}{\sqrt{n}}}$$

Where:

t = Student's t-test from the data.
$\bar{x}_d$ = differences mean in the sample.
n = pre-test and post-test data (30).
S_d = standard deviation of the differences.

4.2.10 Student T-test results

The calculated t-values are summarized in Table 4, at the same time the tabulated t-values, the degrees of freedom and the significance values are located in columns:

Table 4. Student's t-test of the survey application data.

Group	Section	Tabulated t-value	Calculated t-value	df	Significance (unilateral)
Control	Intrinsic motivation	1.6991	7.2707	29	0.0000***
	Competence	1.6991	5.0492	29	0.0000***
	Enjoyment	1.6991	4.3255	29	0.0001***
	Self-confidence	1.6991	5.2150	29	0.0000***

Group	Section	Tabulated t-value	Calculated t-value	df	Significance (unilateral)
	Challenge	1.6991	2.6926	29	0.0058**
	Curiosity	1.6991	0.7504	29	0.2295
	Cooperativeness	1.6991	7.4892	29	0.0000***
Experimental	Intrinsic motivation	1.6991	6.3256	29	0.0000***
	Competence	1.6991	5.5756	29	0.0000***
	Enjoyment	1.6991	6.0208	29	0.0000***
	Self-confidence	1.6991	6.15	29	0.0000***
	Challenge	1.6991	5.0374	29	0.0000***
	Curiosity	1.6991	5.9496	29	0.0000***
	Cooperativeness	1.6991	6.1633	29	0.0000***

Source: Aguagüiña, P. (2022).

According the information in Table 4, the unilateral significance level for the experimental group p-value = 0.0000 was lower than $\alpha = 0.05$ with 29 degrees of freedom. Then the calculated t-value of 6.3256 was located in the null rejection region. Therefore, the null hypothesis was rejected and the alternative one was accepted: "The use of strategies based on multiple intelligences through gamification activities enhances students' intrinsic motivation to learn English in the regular modality at TUVN".

Additionally, as can be seen in the data in Table 4, in the control group the students did not improve in the curiosity criterion, while in the experimental group the students improved in all the intrinsic motivation criteria. Consequently, the results were better in the experimental group, who worked with strategies based on multiple intelligences with gamification activities.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.3 Conclusions

- Teaching strategies based on multiple intelligences are intended to work on each of the students' specific skills. In the case of English language teaching and learning, the use of strategies is perfectly applicable because the mastery of the language involves the development of the four skills such as speaking, reading, writing, and listening. In addition, according to several authors, working on multiple intelligences contributes to improving students' intrinsic motivation.
- Intrinsic motivation expressed through the dimensions of competence, enjoyment, self-confidence, challenge, curiosity, and cooperativeness constitutes the action that encourages and promotes in learners the desire to learn the English language in its different skills: speaking, reading, writing, and listening. The initial evaluation of the intrinsic motivation of TUVN students through the survey reflected that some of them had a lack of desire to improve their English language proficiency, which is why they required stimuli that promote the desire for self-improvement.
- The need to adopt methodological strategies that promote the desire for self-improvement in terms of learning English was identified based on the results of intrinsic motivation that were evidenced in TUVN students. For this purpose, didactic strategies through gamification activities were applied based on multiple intelligences, particularly: musical, linguistic, visual-spatial, logical-mathematical, bodily-kinesthetic, intrapersonal, and interpersonal; which contributed favorably to the strengthening of the intrinsic motivation of the students, which had an impact on the improvement of their English language proficiency skills.

5.4 Recommendations

- To apply the manual designed as part of this research project in the English language teaching-learning process of basic level students and to adapt it to the teaching process at the intermediate and advanced levels.
- To use new technological tools for the diversification of gamification activities aimed at working on the multiple intelligences that students have, in order to strengthen the stimuli in their various forms to grow the desire for self-improvement in learning the English language.
- To evaluate the impact of the application of didactic strategies based on multiple intelligences and the consequent strengthening of intrinsic motivation in the mastery of English language skills: reading, writing, speaking, and listening.

CHAPTER VI

THE PROPOSAL

6.1 Informative Data

Theme: Handbook of Gamification based on multiple intelligences to improve intrinsic motivation.

Name of institution: Tecnológico Universitario Vida Nueva.

Beneficiaries: Students at the A2 level of English of the regular modality of the TUVN.

Beginning: June 6th, 2022

End: August 19th, 2022

Person in charge: Paulina Aguagüiña

Cost: 100$ (Kahoot! License and didactic materials)

6.2 Background of the Proposal

Authors such as Asmali (2016), Díaz-Posada et al., (2017), and Derakhshan & Faribi (2015) assert that teaching through multiple intelligences contributes to the achievement of better results, motivates students, and is conducive to autonomous learning by allowing students to construct their own knowledge.

A teaching English methodology based on multiple intelligences is a way to attend to the diversity of students since different activities and techniques that favor access to the contents from all the dominant bits of intelligence (Derakhshan & Faribi, 2015).

This attention to diversity is related to personalized education and higher quality education, and it is also fundamental for the achievement of linguistic competence in English. This competence required a teaching-learning process, in which each student

has different motivations, interests, abilities, learning rhythms, and styles that have a direct and unique influence on the learning process (Díaz-Posada et al., 2017).

6.3 Justification

Since unmotivated students lack intentionality, some triggers for this situation: are thoughts about lack of ability to perform a task, belief that the task is difficult and that they are not competent, and feelings of helplessness and lack of control. Learning styles have contributed significantly to language teaching by making teachers aware of the need to take into account the heterogeneity of learners and to diversify classroom activities to satisfy the particular needs of all students.

Both teachers and learners need to be aware of the differences that learners present when dealing with learning experiences. They must learn to identify the traits that determine their tendencies and preferences, to know the advantages and disadvantages of their ways of learning (Ramajo-Cuesta, 2008). Therefore, teachers should offer students a variety of tasks that can be adapted to different types of learning.

6.4 Theoretical Framework

6.4.1 Objectives

6.4.2 General Objectives

To design a Handbook of Gamification bases on multiple intelligences to improve intrinsic motivation.

6.4.3 Specific Objectives

- To select technological resources such as websites, platforms and mobile apps to use gamification activities.
- To elaborate gamification lessons with the use of technological resources.
- To apply gamification activities based on multiple intelligences.

- To evaluate the intrinsic motivation of the students after the implementation of the proposal.

6.5 Feasibility Analysis

The present proposal is feasible since the application has references in the academic field, which allow better interaction between teachers and students since through the strategies based on multiple intelligences students are encouraged to develop all the skills required for effective communication in a foreign language. The proposal can also help students to take part in different areas within society, which will promote new fields of action in the educational, social, cultural and economic, technological, organizational, environmental, economic, and financial fields.

6.6 Theoretical-schietifica foundations

The use in the classroom of a methodology that involves multiple intelligences favor the multiple dimensions of the person. Thus, even this type of methodology allows to improve students' knowledge who are in a low mastery of learning English as a foreign language. The development of language teaching through the application of the theory of Multiple Intelligences offers students the possibility of using their own ways of being "intelligent" in favor of a better performance in the foreign language (Velásquez de Romero, 2016).

The lesson plan consists of seven multiple intelligences presented in Table 5. Each multiple intelligence has a specific gamification activity, website/apps, some activities, resources and materials, and the responsible. The multiple intelligences worked on are musical intelligence, linguistic intelligence, visual-spatial intelligence, logical-mathematical intelligence, bodily-kinesthetic intelligence, intrapersonal intelligence, and interpersonal intelligence.

Table 5. Lessons plan based on multiple intelligences

N°	MULTIPLE INTELLIGENCE	GAMIFICATION	WEBSITE/APP	ACTIVITIES	RESOURCES AND MATERIALS	RESPONSIBLE
1	Musical intelligence	Gamification with song's lyrics	○LyricsTraining (website)	○Game 1: Listening ○Game 2: Listening and writing ○Game 3: Speaking	Student's Book: Touchstone 2nd edition. Cambridge Unit 4. Internet, LyricsTraining website.	Teacher
2	Linguistic intelligence	Through a riddle	○Genially (website)	○Game 1: Reading	Genially website. Student's Book: Touchstone 2nd edition. Cambridge Unit 3. Internet.	Teacher
3	Visual-spatial intelligence	Training the brain	○Train your brain (App)	○Game 1 to 6: Reading	Internet, cellphone, Train your brain App.	Teacher
4	Logical-mathematical intelligence	Mathematical operations	○Genially (website) ○Train your brain (App)	○Game 1: Reading ○Game 2: Reading	Internet, cellphone, genially website, train your brain App.	Teacher
5	Bodily-kinaesthetic intelligence	Acting and searching for treasure	None	○Game 1: Listening ○Game 2: Reading	Student's Book: Touchstone 2nd edition. Cambridge Unit 7. Marker, sheet of paper, multicolor chalks, dice, six game pieces.	Teacher
6	Intrapersonal intelligence	Description	None	○Game 1: Writing	Student's Book: Touchstone 2nd edition. Cambridge Unit 5. Internet.	Teacher
7	Interpersonal intelligence	Trivia Games	○Kahoot!	○Game 1: Writing ○Game 2: Reading ○Game 2: Reading	Student's Book: Touchstone 2nd edition. Cambridge Unit 2. Internet, Kahoot! Website, Projecto.	Teacher

HANDBOOK

GAMIFICATION

STRATEGIES BASED ON
MULTIPLE INTELLIGENCES
TO LEARN ENGLISH

PAULINA AGUAGUIÑA

INTRODUCTION

The teaching-learning process must take into account the learning styles of each student, to allow them to assimilate the contents. Therefore, activities applied to the different intelligence should be created. To increase the intrinsic motivation of the students, promoting autonomous learning with the initial support of the teacher.

The activities presented in this handbook allow students according to the dominant multiple intelligences to have motivated and autonomous learning with greater results in terms of intrinsic motivation. This handbook is a guide for teachers to apply gamification activities in English language teaching at the A2 level to reinforce the intrinsic motivation of English learners. In that sense, each of the seven multiple intelligences includes the following components:

- The application required for the gamification activity.
- The learning objective.
- The resources (cell phone, internet, apps, didactic materials).
- The instruction of each gamification.
- Rating scale for assesment
- Expected outcomes.

The author suggests that English teachers apply gamification of activities by using this manual and evaluate the activities according to the rating scale.

Table of Contents

LYRICSTRAINING

Multiple intelligence: Musical intelligence

Objective: To develop musical intelligence through making gamification activities based on lyrics of songs.

Resources:

LyricsTraining website. It allows to do gamification activities based on lyrics songs to develop musical intelligence.

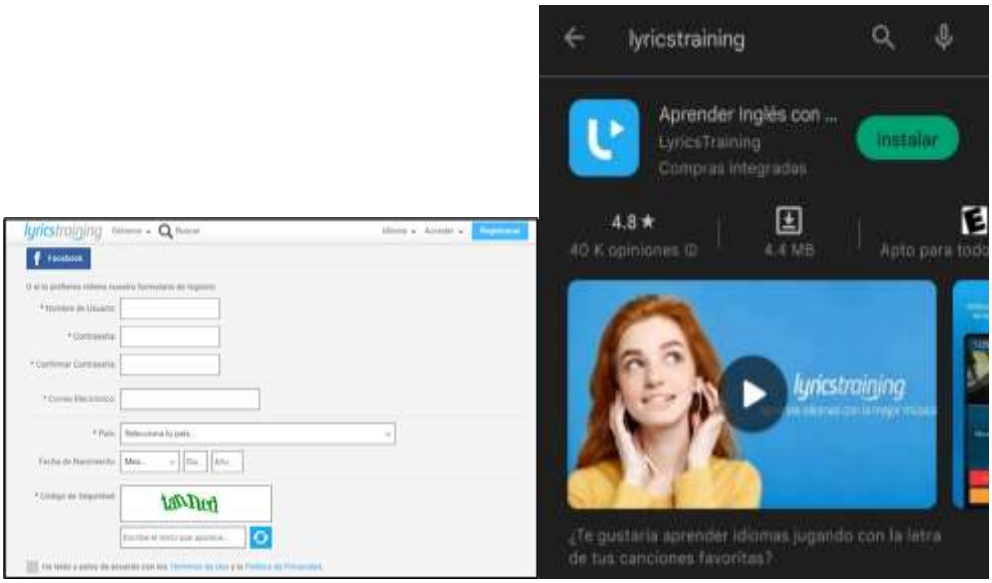
Student's Book: Touchstone 2nd edition. Cambridge Unit 4.

Internet.

LyricsTraining

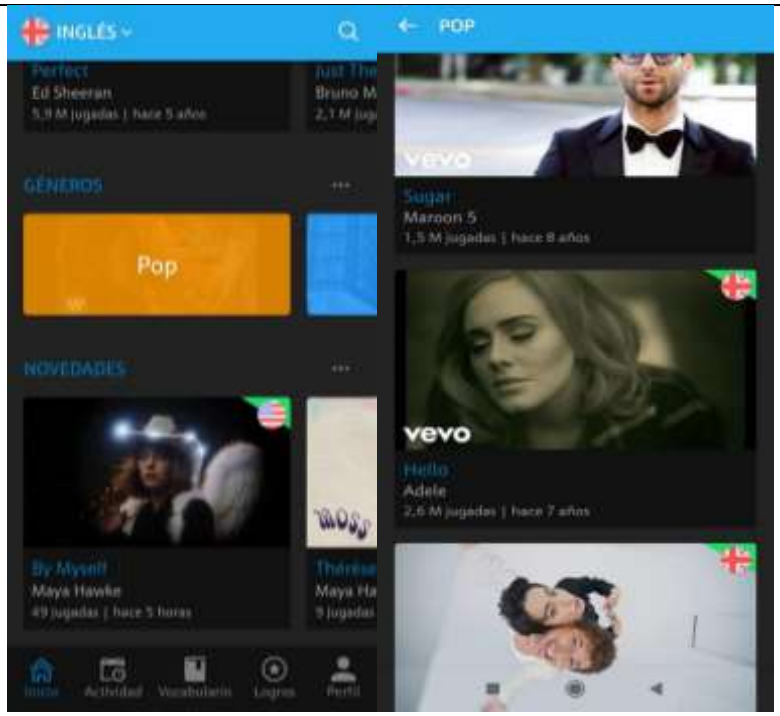
Steps for LyricsTraining

1. Create an account on LyricsTraining/ or download the App on your cell phone.



2. Choose the level of difficulty (Recommended level 1).

3. Choose a genre and a song



GAME 1: MULTIPLE CHOICE GAME MODE

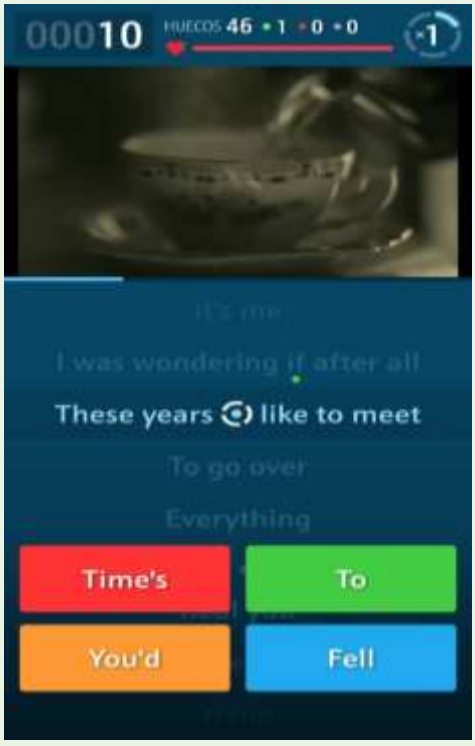
Instructions:

Students must select **multioption** so that they can listen to the lyrics of the song and choose the correct word. The levels of difficulty are beginner, intermediate, advanced, and expert. The number of words you have to complete is according to the level of difficulty.

1. Select the game mode, in this case choose Multioption.

2. Choose the level of difficulty (Recommended beginner).

3. Start playing for qualification. Listen to the music and click on the correct word that should go in the blank.



Continue to choose the missing words of the song. The application counts the successes, mistakes, and words not completed in the course of playing the song.

Rating scale				
Grade	**Beginner**	**Intermediate**	**Advanced**	**Expert**
10	≥ 90%	≥ 80%	≥ 70%	≥60%
9	≥ 80%	≥ 70%	≥ 60%	≥55%
8	≥ 70%	≥ 60%	≥ 50%	≥50%
7	≥ 60%	≥ 50%	≥ 40%	≥45%
6	≥ 50%	≥ 40%	≥ 30%	≥40%
5	≥ 40%	≥ 30%	≥ 25%	≥35%
4	≥ 30%	≥ 20%	≥ 20%	≥30%
3	≥ 20%	≥ 15%	≥ 15%	≥20%
2	≥ 10%	≥ 10%	≥ 10%	≥10%
1	≥ 2%	≥ 2%	≥ 2%	≥ 2%
0	0	0	0	0

GAME 2: GAME MODE WRITING

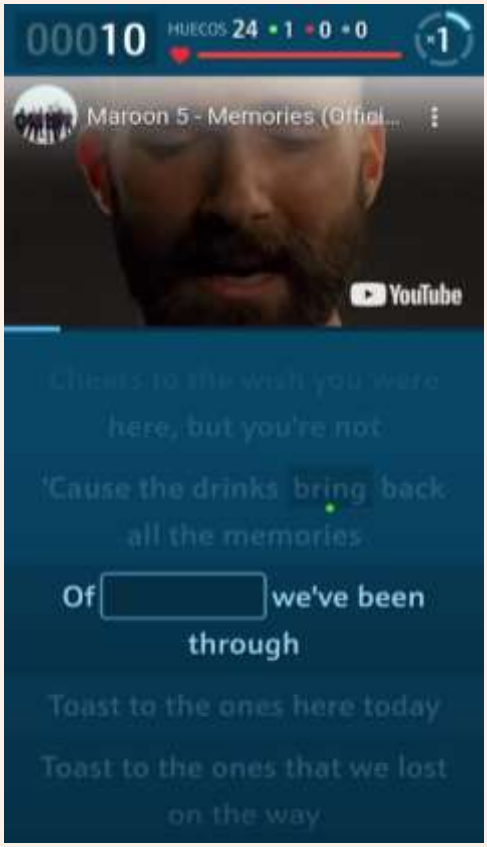
Instructions:

Students must choose a song, a game mode, and a difficulty level. In this case, the game is about **writing**. The activity consists in writing down the missing words. The number of words by each one is according to the level of difficulty. The beginner level has 25 words to be completed.

1. Select the game mode, in this case choose writing.

1. Choose the level of difficulty (Recommended beginner).

2. Start playing for qualification. Listen to the music and write the word that should go in the blank.



Continue writing the missing words of the song. The application counts the successes, mistakes, and words not completed in the course of playing the song.

Rating scale

Grade	Beginner	Intermediate	Advanced	Expert
10	≥ 80%	≥ 70%	≥60%	≥ 50%
9	≥ 70%	≥ 60%	≥55%	≥45%
8	≥ 60%	≥ 50%	≥40%	≥40%
7	≥ 50%	≥ 40%	≥35%	≥35%
6	≥ 40%	≥ 30%	≥30%	≥30%
5	≥ 30%	≥ 25%	≥25%	≥25
4	≥ 20%	≥ 20%	≥20%	≥20%
3	≥ 15%	≥ 15%	≥15%	≥15%
2	≥10%	≥ 10%	≥10%	≥10%
1	≥4%	≥ 4%	≥4%	≥4%
0	0	0	0	0

GAME 3: KARAOKE GAME MODE

Instructions:

Students must select the game mode. In this case, it will be karaoke. Students must choose the song and sing it.

1. Select the game mode, in this case choose Karaoke.

2. Start playing for qualification

EXPECTED RESULTS:

Comprehend information presented at an A2 level of English.

Ability to listen to grammatical sentences in the different tenses.

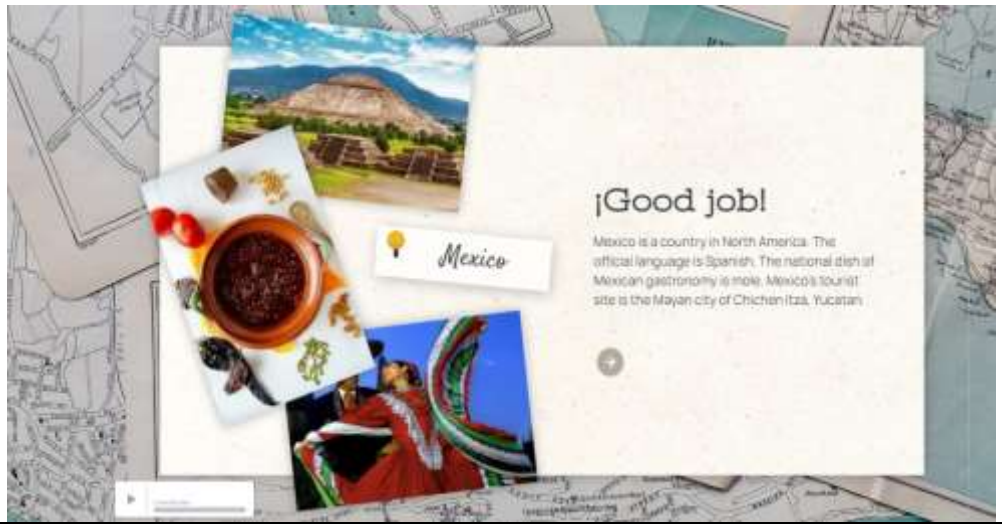
Improving students' intrinsic motivation to learn English.

GENIALLY
Multiple intelligence: Linguistic intelligence 
Objective: To develop linguistic intelligence through making gamification activities based on a riddle game.
Resources: Genially website. It allows to do gamification activities based on riddle game and others. Student's Book: Touchstone 2nd edition. Cambridge Unit 3. Internet.
Riddle game 
Instructions: The teacher will send a link (https://view.genial.ly/62d6d62a843f180011d60545/interactive-content-descubre-

el-pais) to the students so that they can access the game. Once they enter the game, they will have to click on the Start option. Look at the four clues given on the left side near the map. Taking into account the information, choose the country that is associated with all the clues. If the chosen answer is correct, the game interface will display the legend good job and present additional information of the country the clues are about. Students must continue with the next riddle and choose the next country according to the new clues as they progress. After that the number of clues decreases progressively until there is only one clue. In the end, the number of correct answers will be counted, which can be a maximum of five correct answers.


Brazil
¡Good job!
Brazil is a country in South America. The official and most spoken language is Portuguese. The national dish of Brazilian gastronomy is feijoada. Christ the Redeemer is the monument of Jesus of Nazareth with open arms. The statue is located in Rio de Janeiro, is 30 meters high, and is the most representative figure of Brazil.


Discover the country
Clues
Spanish
Mole
Toluca
Chichén Itzá (Yucatán)
Mexico
Argentina
Russia
Australia


Mexico
¡Good job!
Mexico is a country in North America. The official language is Spanish. The national dish of Mexican gastronomy is mole. Mexico's tourist site is the Mayan city of Chichen Itza, Yucatan.


Discover the country
Canada
Russia
Spain
India
Brazil
Clues
1 Valencian paella
2 Vigo
3 The Basilica of the Sagrada Familia

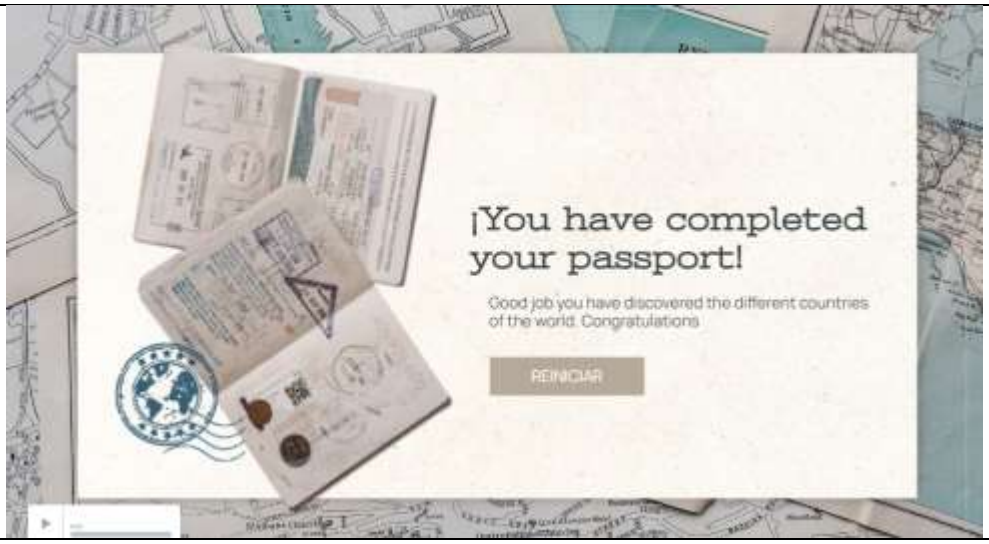

Spain
¡Good job!
Spain is a country in Europe. The official and most spoken language is Spanish. The national dish of Spanish gastronomy is paella. The most touristic place in Spain is the basilica of the Sagrada Familia.


Discover the country
Canada
Russia
Spain
China
Australia
Chile
Clues
1 Canton (Guangzhou)
2 Chop suey


China
¡Good job!
China is a country in East Asia. The official and most spoken language is Mandarin Chinese. The national dish of Chinese gastronomy is the spicy, wan tan, and tofu soup noodles. The most popular tourist site is the Chinese wall.


Discover the country
France
Japan
Mexico
India
Clues
Argentina
South Africa
Australia
Osaka


Japan
¡Good job!
Japan is an island nation in the Pacific Ocean. The most widely spoken language in Japan is Japanese. The national dish of Japanese cuisine is sushi. The most popular tourist site is the blue lagoon of Biei and Mount Fuji.



Rating scale	
Grade	**Hits**
10	5
8	4
6	3
4	2
2	1
0	0

EXPECTED RESULTS:

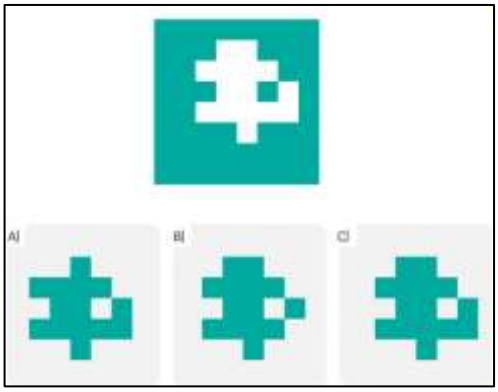
Comprehend information presented at an A2 level of English.

Develop the ability to infer the riddle from different clues.

Improving students' intrinsic motivation to learn English.

TRAIN YOUR BRAIN

Multiple intelligence: Visual-spatial intelligence



Objective: To develop Visual-spatial intelligence through making gamification activities based on abstract reasoning games.

Resources:

Train your brain App. It allows stimulate your cognitive abilities while having fun.
Internet.
Cellphone.

Train your brain

Instructions

Students should play some gamification activities using the "train your brain" App to develop the visual-spatial intelligence. The games are 3D figures, symmetry, numerical scale, moving pictures, block puzzles, and perimeter lines. Each game consists of 30 levels.

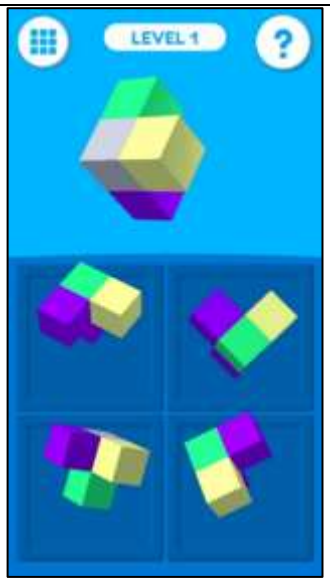
https://play.google.com/store/apps/details?id=com.tellmewow.senior.brain.training&hl=en_US&gl=US

Steps for using train your brain App.

Download the Train your brain App in the cellphone.
Open the App and select the visuospatial option.

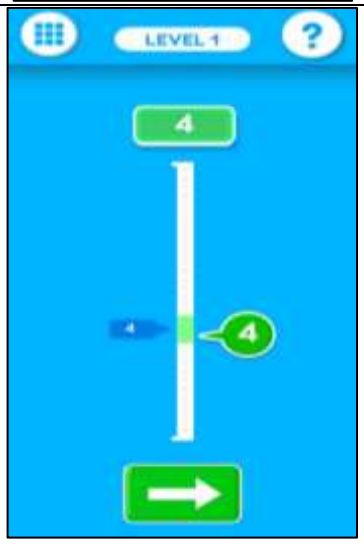
GAME 1: 3D FIGURES

Choose a game and follow its intructions. To observe the game instructions, click on the question mark key (?). Students must reach untill level 30 and only then can they switch to another game. By the end of the class, students should have completed all six games.

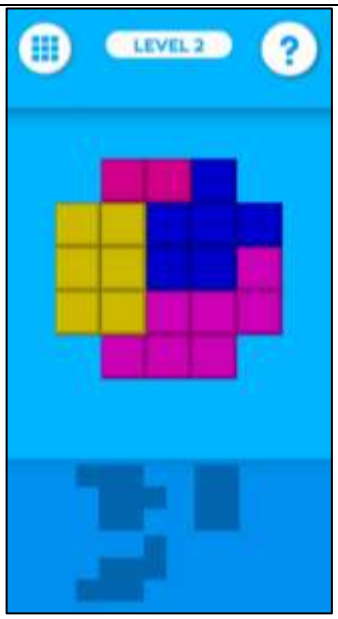


GAME 2: SYMMETRY

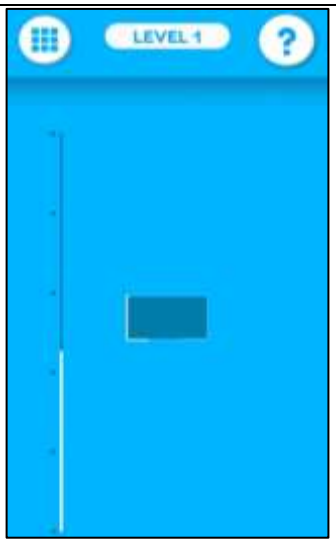
GAME 3: NUMBER SCALE


GAME 4: SHOT IN MOTION


GAME 5: BLOCK PUZZLE



GAME 6: PERIMETER LINE


Ruting scale: Levels with 100/100 in green squares will be counted as valid. 

Rating scale	
Grade	**Complete levels**
10	29 – 30
9	26 – 28
8	23 – 25
7	20 – 22
6	17 – 19
5	14 – 16
4	10 – 13
3	6 – 9
2	3 – 5
0	1 – 2

EXPECTED RESULTS:

Comprehend the instructions presented in the gamification activity.

To develop the ability to identify the visual relationships of objects.

Improving students' intrinsic motivation to learn English.

MATHEMATICAL OPERATIONS

Multiple intelligence: Logical-mathematical intelligence

Objective: To develop Logical-mathematical intelligence through making gamification activities based on mathematical operations.

Resources:

Genially website. It allows to do gamification activities based on riddle game and others.

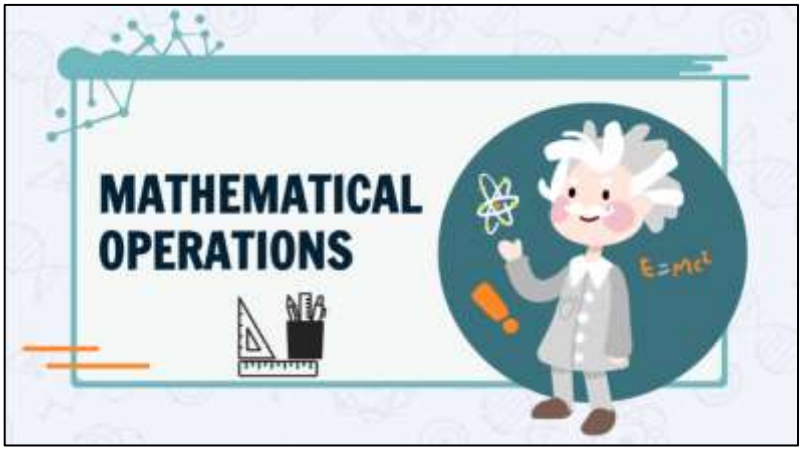
Train your brain App. It allows stimulate your cognitive abilities while having fun.

Student's Book: Touchstone 2nd edition. Cambridge Unit 7-12.

Internet

Cellphone.

Mathematical operations

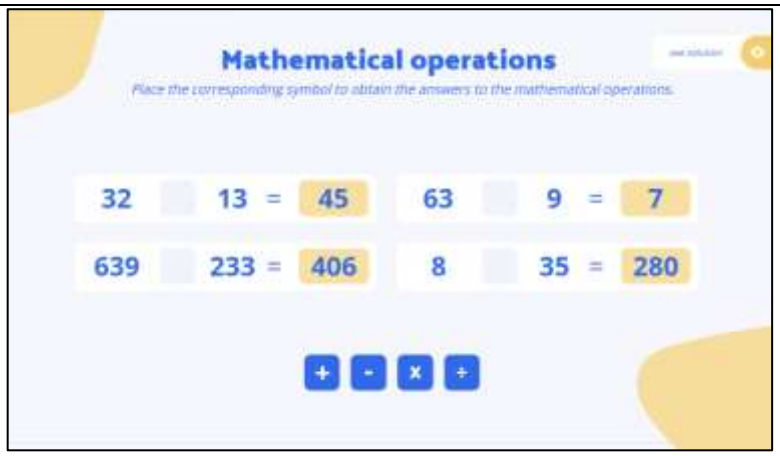


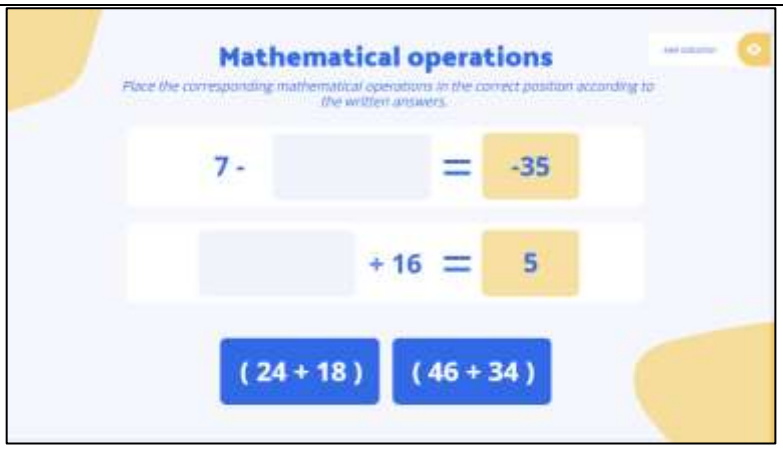
GAME 1: MATHEMATICAL OPERATIONS

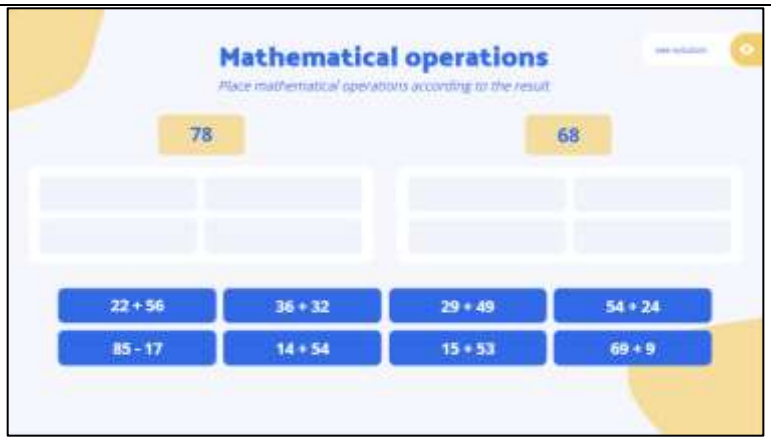
Instructions:

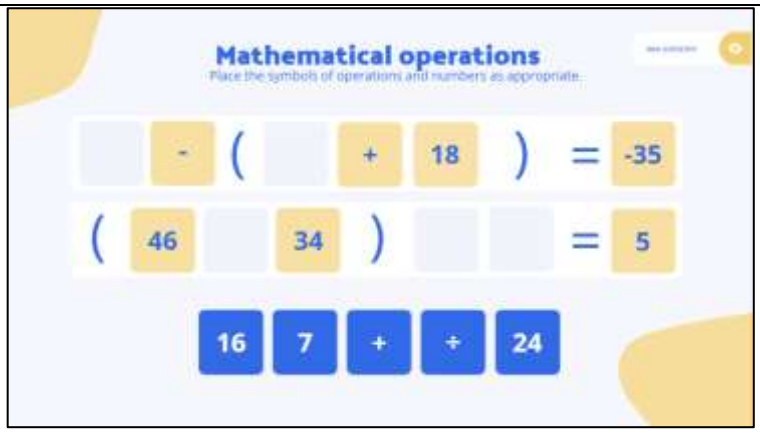
The teacher has to send the next link to the students (https://view.genial.ly/62e7f585edeec800181a7eea/interactive-content-operaciones-matematicas) so that they can access the game. Once they enter the

game, they have to click on the Start option. Students must place the numbers, symbols and operations in the appropriate position to get the indicated result.









The grade will be assigned according to the scoring scale, each successful mathematical operation will be counted as a success

Rating scale	
Grade	**Hits**
10	10
9	9
8	8
7	7
6	6
5	5
4	4
3	3
2	2
1	1
0	0

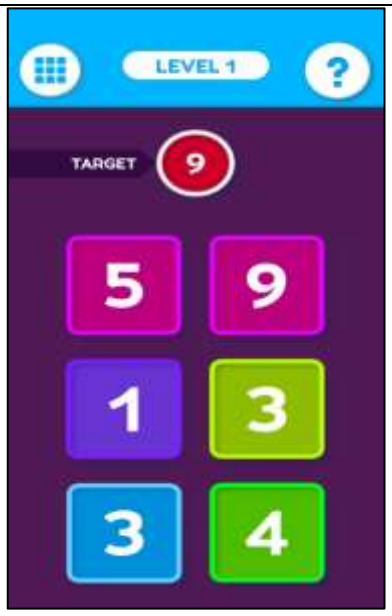
GAME 2: MATHEMATICAL OPERATIONS

Instructions:

Students must play a gamification activity using the "train your brain" application to develop logical-mathematical intelligence. The game is called sum the numbers. Students must complete the 30 levels. Each level belongs to three specific sum.


Train your brain
Reasoning
Beginner


SUM OF NUMBERS
HOW TO PLAY
TARGET
5
6
3
2
1
3
4
Sum numbers until reaching the target number


LEVEL 1
TARGET
9
5
9
1
3
3
4

Students will have 60 minutes to complete the 30 levels. Levels that are 100% complete, i.e. green squares, will be counted.

Grade	Complete levels
10	29 – 30
9	26 – 28
8	23 – 25
7	20 – 22
6	17 – 19
5	14 – 16
4	10 – 13
3	6 – 9
2	3 – 5
0	1 – 2

EXPECTED RESULTS:

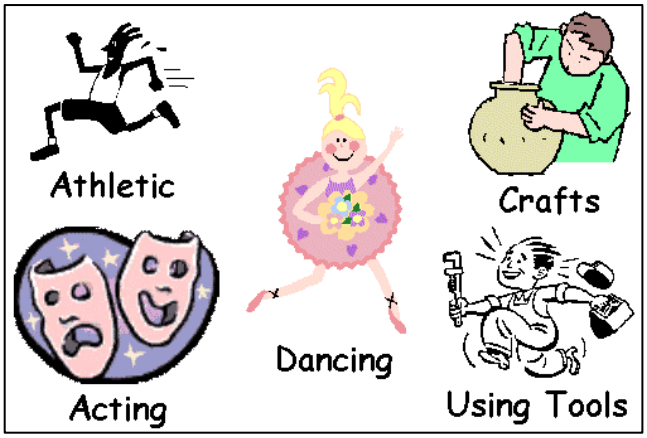
Comprehend information presented at an A2 level of English.

Develop logical-mathematical intelligence by performing mathematical operations.

Improving students' intrinsic motivation to learn English.

ACTING AND SEARCHING FOR TREASURE

Multiple intelligence: Bodily-kinaesthetic intelligence



Objective: To develop Bodily-kinaesthetic intelligence through making gamification activities.

Resources:

Student's Book: Touchstone 2nd edition. Cambridge Unit 7.
Marker
Sheet of paper
Multicolor chalks
Dice
Six game pieces.

Acting

GAME 1: ACTING

Instructions:

The teacher will establish two groups (group 1 and 2). The teacher will show the students the verb they have to represent by miming. Group 1 will mime and group

2 will try to guess the verb. Group 1 members will act out a total of 15 verbs according to the list below. Once group 1 has finished representing all the verbs, the roles will be reversed. The winning group will be the one with the highest number of correct guesses.

Verbs (Group 1)	**Verbs (Group 2)**
Drink	Cook
Sleep	Build
Sing	Speak
Break	Run
Hear	Swim
Cut	Drive
Eat	Cry
Brush	Open
Dance	Walk
Fly	Wash
Draw	Look
Pay	Sit
Teach	Think
Win	Write
Jump	Clean

The evaluation scale will be based on the number of correct answers.

Rating scale	
Grade	**Hits**
10	15 - 14
9	13 – 12
8	11 – 10
7	9 – 8
6	7 – 6
5	5
4	4
3	3
2	2
1	1
0	0

GAME 2: SEARCHING FOR TREASURE

SEARCHING FOR TREASURE

Instructions:

The teacher will draw on the playground floor the labyrinth shown in the figure above. The teacher will assign five groups of six students. The activity will take place in the schoolyard. All students will participate in the game, one of each group will participate in the labyrinth and throw the dice, the members then will perform the activities if that is the case. Alternate one-to-one launches among all the groups.

Rules of the game:

From to 5 players (groups) can play.

Each player must choose a piece and roll the die.

The player who gets the highest number will be the one who starts the game.

To play each participant must roll the die and move their piece to the corresponding square.

Some of the squares on the board mean that each student must perform activities.

If the game piece lands on an "X2" or "X3" square, it must multiply the number on the die by the corresponding number and advance that number of squares.

If the player falls in the DANGER box, they lose three turns.

The group winner is the one who reaches the finish line first and so on for the other positions.

The rating scale will be for the three games because the groups will get a place (first, second, third, fourth, and fifth).

Rating scale	
Grade	**Place**
10	First place
9	Second place
8	Third place
7	Fourth place
6	Fifth place

EXPECTED RESULTS:

Comprehend information presented at an A2 level of English.

Develop Bodily-kinaesthetic intelligence by gamification activities.

Improving students' intrinsic motivation to learn English.

DESCRIPTION

Multiple intelligence: Intrapersonal intelligence

Objective: To develop intrapersonal intelligence through making gamification activities based on description vacation.

Resources:

Student's Book: Touchstone 2nd edition. Cambridge Unit 5.
Internet.

Describe your ideal vacation

Instructions:

Describe your ideal vacation, activities you would do, activities you would not be willing to do, favorite places you would visit, number of days you would like to go, transportation you would like to take, who would you like to travel with?, food you would like to eat, sports activities you would like to do, among others. Students will discuss in classroom work. The estimated time for each student will be between 2 and 3 minutes.

Rubrics				
Grade	**Vocabulary**	**Grammar**	**Pronunciation**	**Interaction**
2.5	Students use the vocabulary required to express clearly their ideas.	Students use simple grammatical structures correctly but make some mistakes, although the meaning is clear. Students are able to join ideas with some simple linkers (but, and, when, however, then, among others).	The individual sounds of the students are mostly intelligible during the discussion. Students have an acceptable control of word stress and intonation.	Students respond appropriately to instructions, questions and visual prompts, and only need a little support. Students can ask for support if they need it. Students almost always responds promptly, although there may be hesitation and some pausing mid-utterance.
2.0	Some features of 1.5 and some features of 2.5 in similar measure.			
1.5	Students use the vocabulary required to express clearly their ideas in regular measure.	Students use simple grammatical structures correctly but make some basic mistakes which may obscure meaning. Students are able to join ideas with a few simple linkers (e. g. and).	The individual sounds of the students are intelligible during the discussion, although some sounds may be unclear. Students have limited control of word stress and intonation.	Students respond well to instructions, questions and visual prompts, although some support is required. Students can ask for support if they need it, although they have difficulties to do it. Students often responds promptly, although there may be hesitation and some pausing mid-utterance.
1.0	Some features of 0.5 and some features of 1.5 in similar measure.			
0.5	Students have difficulties to use the vocabulary required to express their ideas.	Students attempt to use simple grammatical structures but make some basic mistakes which obscure meaning. Students are able to join ideas with a few simple linkers (e. g. and).	The individual sounds of the students are intelligible during the discussion, although some sounds are unclear. It is difficult to understand the discourse.	Students respond to some instructions, questions and visual prompts, although frequent support may be required. Students try to ask for support if they need it but show difficulties in doing so. Students show hesitation and pausing mid-utterance; responses are delayed or halting.
0	Performance does not satisfy at least the Band 0.5 descriptor.			

EXPECTED RESULTS:

Comprehend information presented at an A2 level of English.

Develop intrapersonal intelligence through gamification activities.

Improving students' intrinsic motivation to learn English.

KAHOOT!

Multiple intelligence: Interpersonal intelligence

Objective: To develop interpersonal intelligence through making gamification activities based on trivia games in Kahoot!

Resources:

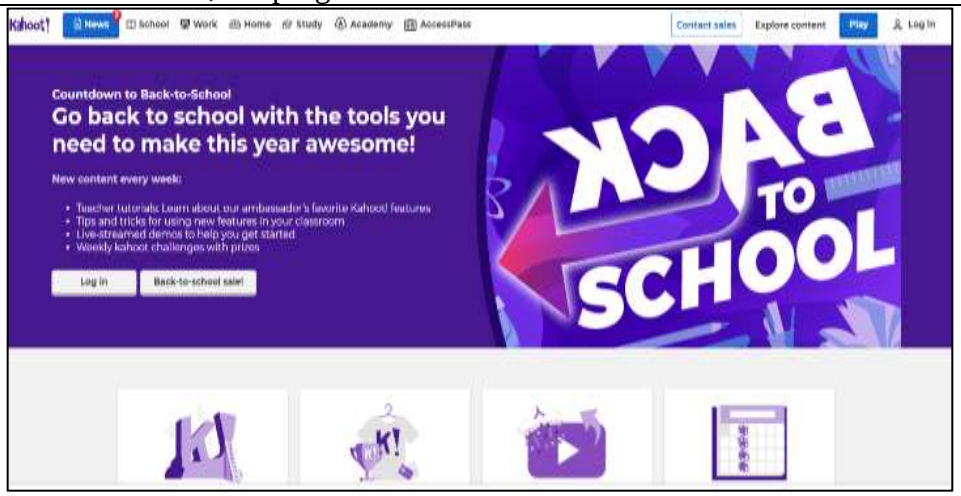
Kahoot! Website. It is a very useful tool for teachers and students to learn and review concepts entertainingly as if it were a contest.
Student's Book: Touchstone 2nd edition. Cambridge Unit 2.
Projector
Internet.

Trivia Game

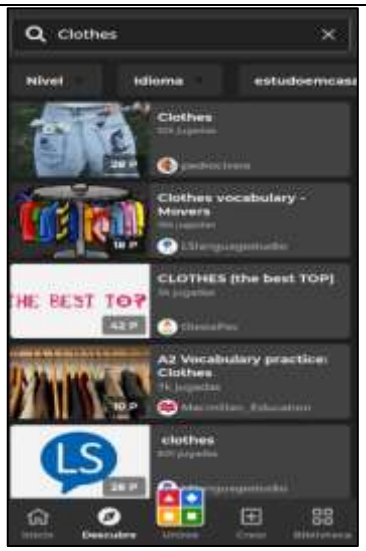
GAME 1

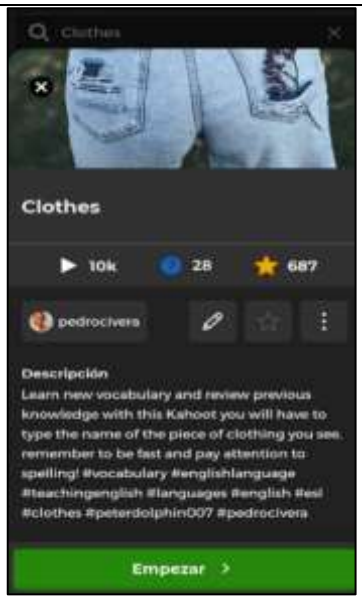
Intruccions:

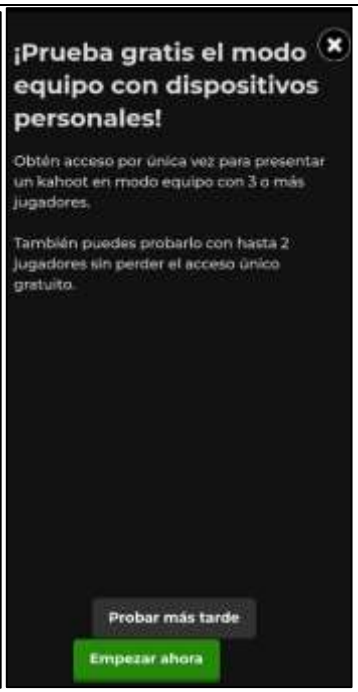
The teacher will form five groups of six students, and should assign a name to the group. The groups will be distributed in the classroom.
The teacher must create an account on Kahoot and accesses the discover option. The teacher must type the word **"clothes"** and choose the first option and click on **"start"**. Then, the teacher must choose the game mode, in this case, **"live game"**, and also choose whether to work in a team or individually, in this case, it has to be selected **"team mode".** The teacher will click "**start now"** and wait to receive the game PIN. Upon getting the game PIN, the teacher will write on the board the game PIN. Each group will have a computer to answer the questions. The groups must write the PIN of the game, put the name of the team and click on **"ready, go".** Then, students will see a legend that says **"you are already in the game"**. When all the groups are in the game, the teacher will click on **"start"**. The teacher will project the question on the blackboard with the use of a projector. The students will have 6 to 10 seconds to watch and discuss it as an image will appear. Then groups have 30 seconds to write the answer. In the end, the program counts the number of hits.




Kahoot!
Aprovecha al máximo Kahoot! y enseña
Inicia sesión o regístrate para crear kahoots con diapositivas, GIF y más.
Registrarse
Iniciar sesión
Mis kahoots
¡Que empiecen los juegos!
Crear kahoot


Clothes
Nivel
Idioma
Clothes
Clothes vocabulary - Movers
CLOTHES [the best TOP]
A2 Vocabulary practice: Clothes
clothes


Clothes
10k
28
687
pedrocivera
Descripción
Learn new vocabulary and review previous knowledge with this Kahoot you will have to type the name of the piece of clothing you see. remember to be fast and pay attention to spelling! #vocabulary #englishlanguage #teachingenglish #languages #english #esl #clothes #peterdolphin007 #pedrocivera
Empezar



Teacher: The image displayed on the teacher's device

Student: The image displayed on the student's device

Teacher: The image displayed on the teacher's device

Student: The image displayed on the student's device

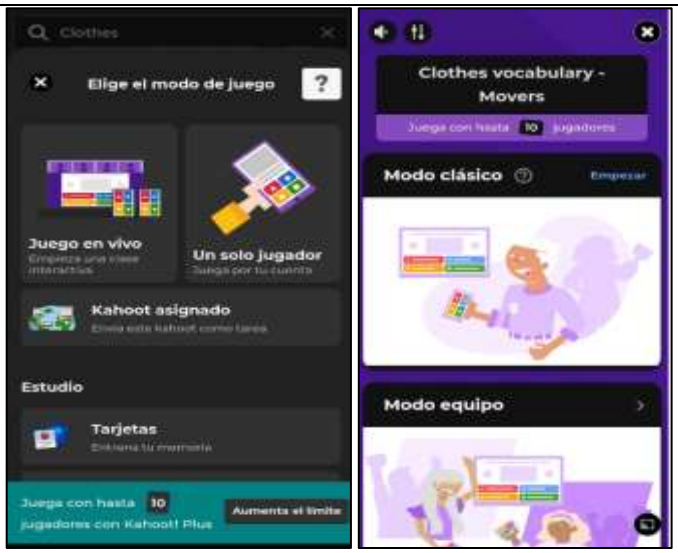
GAME 2

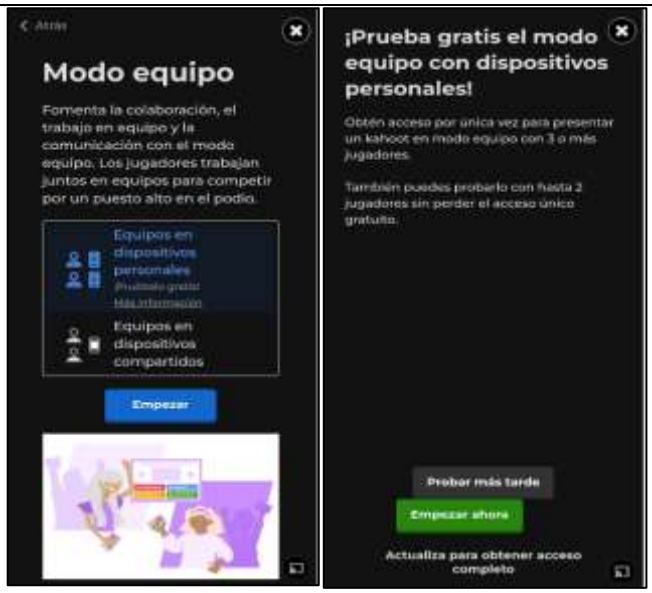
Instructions:

The teacher must accesses the discover option. The teacher must type the word **"clothes"** and choose the first option and click on **"start"**. Then, the teacher must choose the game mode, in this case, **"live game"**, and also choose whether to work in a team or individually, in this case, it has to be selected **"team mode".** The teacher will click "**start now"** and wait to receive the game PIN. Upon getting the game PIN, the teacher will write on the board the game PIN. Each group will have a computer to answer the questions. The groups must write the PIN of the game, put the name of the team and click on **"ready, go".** Then, students will see a legend that says **"you are already in the game"**. When all the groups are in the game, the teacher will click on **"start"**. The teacher will project the question on the blackboard with the use of a projector.

The groups have 30 seconds to click on the correct answer according to the colours and figures of the options (four options).

Clothes Vocabulary





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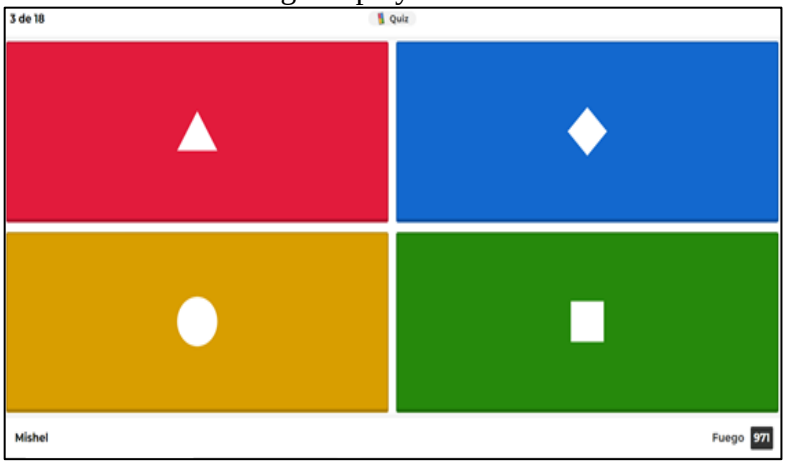
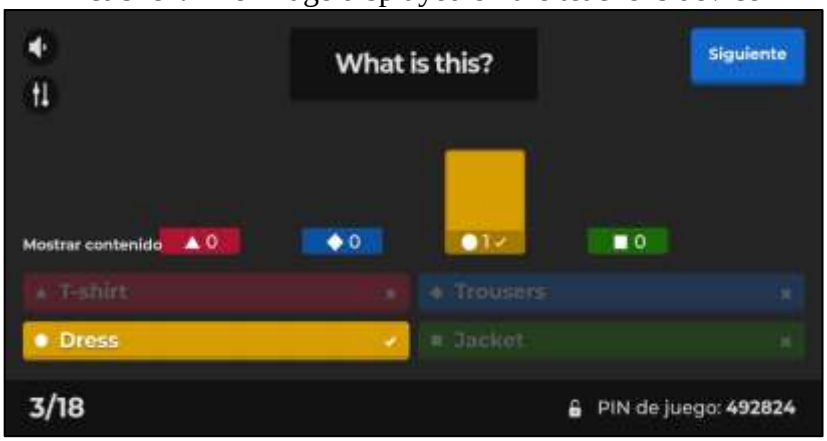
Student: The image displayed on the student's device

Teacher: The image displayed on the teacher's device

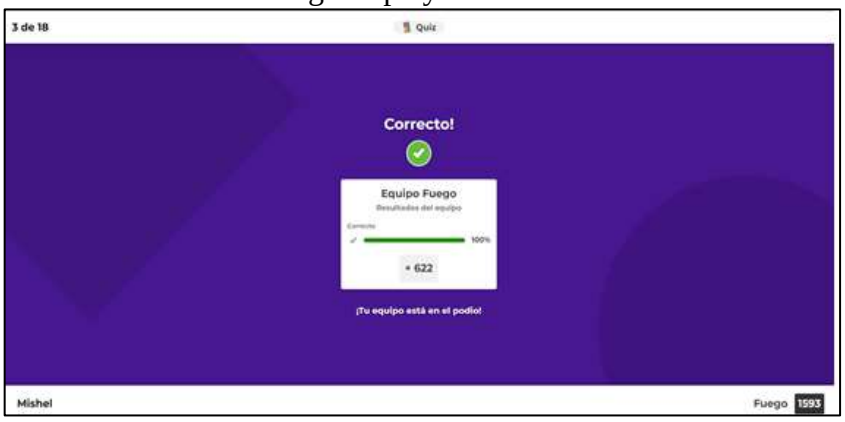
Student: The image displayed on the student's device



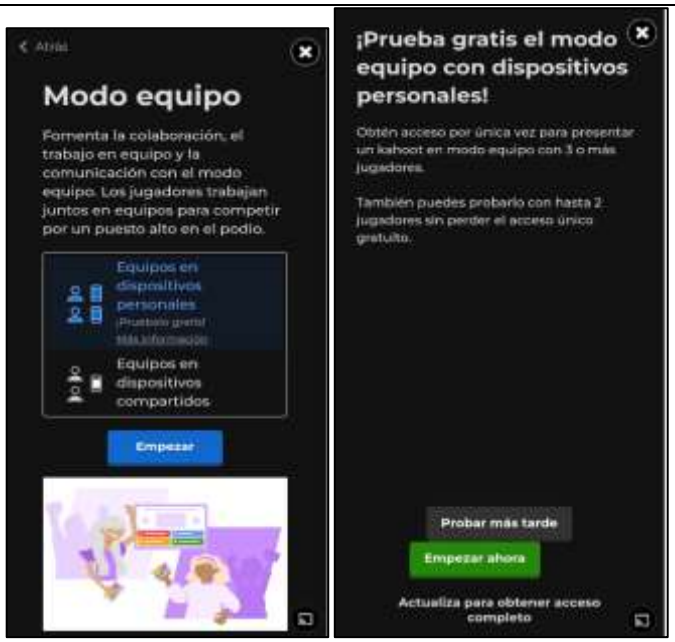
Teacher: The image displayed on the teacher's device



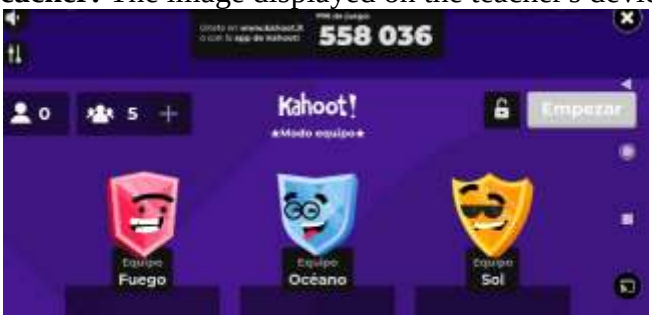
Student: The image displayed on the student's device



GAME 3
Instructions: The teacher must accesses the discover option. The teacher must type the word **"clothes"** and choose the first option and click on **"start"**. Then, the teacher must choose the game mode, in this case, **"live game"**, and also choose whether to work in a team or individually, in this case, it has to be selected **"team mode".** The teacher will click "**start now"** and wait to receive the game PIN. Upon getting the game PIN, the teacher will write on the board the game PIN. Each group will have a computer to answer the questions. The groups must write the PIN of the game, put the name of the team and click on **"ready, go".** Then, students will see a legend that says **"you are already in the game"**. When all the groups are in the game, the teacher will click on **"start"**. The teacher will project the question on the blackboard with the use of a projector. The groups have 30 seconds to click on the correct answer according to the colours and figures of the options (four options).



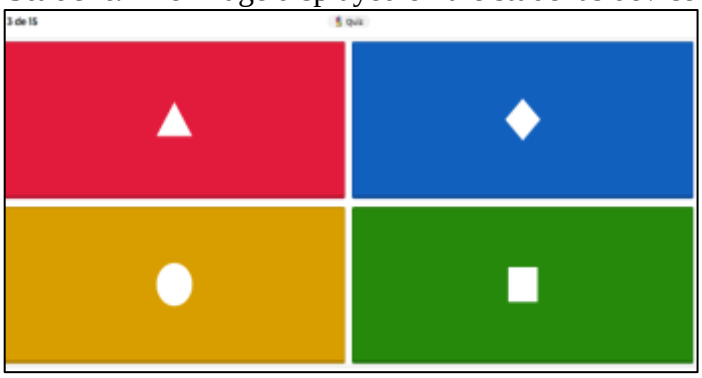
Teacher: The image displayed on the teacher's device



Student: The image displayed on the student's device

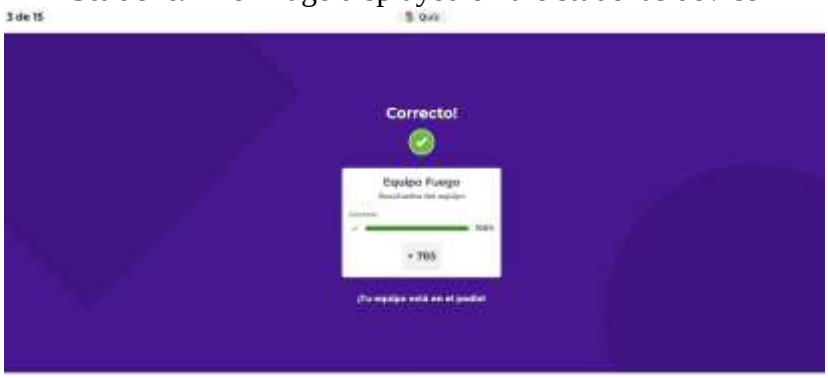
Teacher: The image displayed on the teacher's device

Student: The image displayed on the student's device

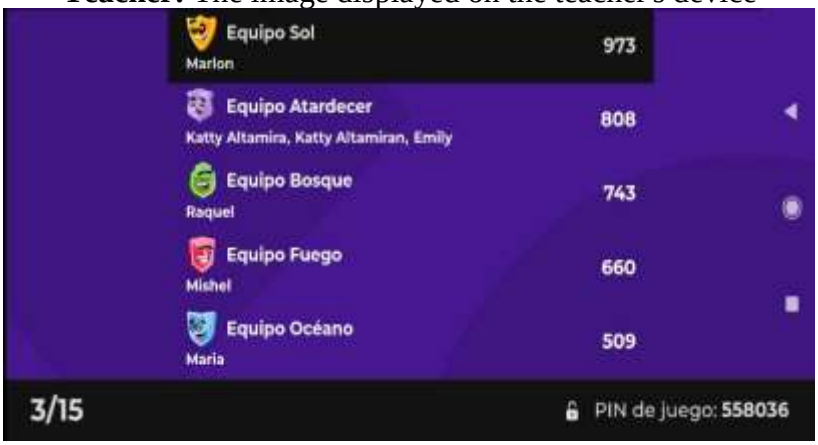


Teacher: The image displayed on the teacher's device

Student: The image displayed on the student's device



Teacher: The image displayed on the teacher's device



Teacher: The image displayed on the teacher's device

Student: The image displayed on the student's device

The rating scale will be for the three games because the groups will get a place (first, second, third, fourth, and fifth).

Rating scale	
Grade	**Place**
10	First place
8	Second place
7	Third place
6	Fourth place
5	Fifth place

EXPECTED RESULTS:

Comprehend information presented at an A2 level of English.

Develop interpersonal intelligence by gamification activities.

Improving students' intrinsic motivation to learn English.

6.7 Methodology

The lesson plan based on multiple intelligences consists of the gamification activities, the multiple intelligence, the App/website, the activities, the resources and materials, and the person in charge.

Gamification activities were developed through different Apps and websites. Each lesson consists of the introduction, the name of the application, the multiple intelligence, the objective, the resources, instructions, images representing the game, rating scale, and expected results.

6.8 Administration of the proposal

Table 6. Administration of the proposal

Administration of the proposal	**Activity**	**Resources**	**Person in charge**	**Time**
Identify	Recognition of the lack of intrinsic motivation in A2 level students.	Student's Book: Touchstone 2nd edition. Survey Questionnaire of Intrinsic Motivation initial application	Paulina Aguagüiña	1 week
Compile seven multiple intelligence	Establish gamification activities for each multiple intelligence.	Student's Book: Touchstone 2nd edition.	Paulina Aguagüiña	1 week
Organize and design the Handbook.	Elaboration of lessons based on gamification activities according to the themes of the Student's Book: Touchstone	Student's Book: Touchstone 2nd edition App Kahoot! Website Genially App Lyricstraining	Paulina Aguagüiña	3 week

Administration of the proposal	**Activity**	**Resources**	**Person in charge**	**Time**
	2nd edition and multiple intelligences.	App Train your brain.		
Plan	Establish the gamification schedule according to the class schedule and book units.	Student's Book: Touchstone 2nd edition	Paulina Aguagüiña	2 week
Implementation	Implement the seven gamification activities of the handbook.	Proposal Handbook	Paulina Aguagüiña	3 weeks
Evaluation	Rating scale of gamification Survey Questionnaire of Intrinsic Motivation final application	Survey Questionnaire of Intrinsic Motivation	Paulina Aguagüiña	1 week

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Annexes

Annex A. Survey Questionnaire of Intrinsic Motivation

Battery of questions for the survey

The questionnaire you will read below belongs to a study carried out for educational purposes.

SECTION A:

Questions must be answered using one of the following answers, equivalent to a number. The Likert scale used in the questions is the next:

1 = Strongly Disagree or Nothing.
2 = Disagree or Almost nothing.
3 = Moderately Agree or Little.
4 = Agree or Quite.
5 = Strongly Agree or A lot.

Each item will have a single answer. Mark with an x or a tick on the answer that you think most closely matches your perception of the questioned issue.

No.	Potential sources for intrinsic motivation	Item	1	2	3	4	5
1	Competence	I feel English is an important language in the world.	☐	☐	☐	☐	☐
2	Competence	English will be helpful for my future career.	☐	☐	☐	☐	☐
3	Competence	Learning and mastering the English language is very fulfilling.	☐	☐	☐	☐	☐
4	Competence	English helps me to understand native people and their way of life.	☐	☐	☐	☐	☐

No.	Potential sources for intrinsic motivation	Item	1	2	3	4	5
5	Competence	I am interested in increasing my English vocabulary.	☐	☐	☐	☐	☐
6	Competence	I feel pretty competent during the classes/lectures of English.	☐	☐	☐	☐	☐
7	Enjoyment	I can get pleasure from learning English.	☐	☐	☐	☐	☐
8	Enjoyment	I really enjoy learning English Language.	☐	☐	☐	☐	☐
9	Enjoyment	When English class ends, I often wish that we could continue.	☐	☐	☐	☐	☐
10	Enjoyment	I enjoy using English outside of class whenever I have a chance.	☐	☐	☐	☐	☐
11	Enjoyment	I would study English even if it were not required by my technical institute.	☐	☐	☐	☐	☐
12	Self-confidence	Knowledge of English helps me to become a better person.	☐	☐	☐	☐	☐
13	Self-confidence	I gain self-confidence when I know I use the English language well.	☐	☐	☐	☐	☐
14	Challenge	I feel English is mentally challenging.	☐	☐	☐	☐	☐
15	Challenge	I know that studying English is not an easy task, but I am certain that if I worked hard, I would learn better.	☐	☐	☐	☐	☐
16	Challenge	In English classes, I prefer activities and exercises that challenge me to learn better.	☐	☐	☐	☐	☐
17	Challenge	I prefer English classes in which there are lots of activities that allow me to participate actively.	☐	☐	☐	☐	☐

No.	Potential sources for intrinsic motivation	Item	1	2	3	4	5
18	Curiosity	I greatly desire to learn the English language to fulfill my curiosity.	☐	☐	☐	☐	☐
19	Competitiveness	I learn English best when I am competing with other students.	☐	☐	☐	☐	☐
20	Cooperativeness	I like English learning activities in which students work together in pairs or small groups.	☐	☐	☐	☐	☒

Source: Aguagüiña, P. (2022) adapted from (J. Torres & Alieto, 2019, p. 6; Moskovsky & Alrabai, 2009, pp. 7-8)**.**

SECTION B:

The following questions are open-ended. Please answer it as you think best and honestly:

21. Is English one of your favorite subjects and why?

_____

_____

_____.

22. How much time do you spend studying English a day and why?

_____

_____

_____.

23. What are your future goals related to learning English?

_____

_____

_____.

Thank you!

Annex B. Intrinsic motivation survey applied prior to the proposal.

			Competence						Enjoyment					Self-confidence		Challenge				Curiosity	Cooperativeness			
No.	**PARALLEL**	**GROUP**	**I1**	**I2**	**I3**	**I4**	**I5**	**I6**	**I7**	**I8**	**I9**	**I10**	**I11**	**I12**	**I13**	**I14**	**I15**	**I16**	**I17**	**I18**	**I19**	**I20**	**Grade /100**	**Percentage**
1	E1	Control	4	3	4	4	5	3	4	5	5	4	4	4	4	4	5	5	4	4	5	4	84	84%
2	E1	Control	4	3	3	4	4	3	4	4	4	4	3	4	4	3	4	4	3	3	4	3	72	72%
3	E1	Control	3	2	3	3	3	2	3	4	4	4	3	3	4	4	4	4	3	4	2	3	65	65%
4	E1	Control	5	3	4	4	3	3	4	4	3	4	4	4	4	4	3	4	4	3	3	4	74	74%
5	E1	Control	3	4	3	4	5	4	4	5	4	5	5	4	5	4	4	5	4	4	3	4	83	83%
6	E1	Control	4	4	4	4	4	3	4	4	4	4	3	4	4	4	3	4	3	4	4	4	76	76%
7	E1	Control	4	3	3	4	4	3	4	4	4	4	4	3	4	3	4	4	4	3	4	4	74	74%
8	E1	Control	2	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	2	3	57	57%
9	E1	Control	3	3	3	3	4	3	4	4	3	4	4	4	4	4	3	4	3	3	4	4	71	71%
10	E1	Control	4	2	3	3	3	2	3	3	3	3	2	2	3	3	2	4	3	3	4	4	59	59%
11	E1	Control	5	4	4	5	4	4	4	5	4	5	5	4	5	4	4	5	4	4	4	4	87	87%
12	E1	Control	4	2	3	4	4	3	4	5	4	4	5	4	4	4	5	4	4	5	4	4	80	80%
13	E1	Control	4	3	4	3	3	3	4	4	4	4	4	3	4	4	3	4	3	4	3	3	71	71%
14	E1	Control	4	3	3	4	3	3	3	3	3	4	4	3	4	3	4	4	3	4	4	4	70	70%
15	E1	Control	3	3	3	2	3	2	3	3	3	3	3	2	3	3	3	3	4	3	4	4	60	60%
16	E1	Control	4	3	3	4	3	3	4	4	4	4	4	3	4	4	4	4	4	3	4	4	74	74%
17	E1	Control	4	4	4	5	4	4	5	5	4	5	4	4	5	4	5	5	4	4	5	4	88	88%
18	E1	Control	4	3	4	4	4	3	4	4	4	3	4	4	4	4	3	4	3	4	4	3	74	74%
19	E1	Control	5	5	5	5	5	4	5	5	5	5	5	4	5	4	4	5	4	4	5	4	93	93%
20	E1	Control	3	3	3	4	4	3	4	4	4	3	4	3	4	3	4	4	3	4	4	3	71	71%
21	E1	Control	4	3	3	4	4	3	4	4	3	4	4	3	4	4	4	4	3	4	3	3	72	72%
22	E1	Control	4	3	4	3	4	4	4	4	4	4	4	3	4	3	4	4	4	4	3	3	74	74%
23	E1	Control	3	3	3	3	3	2	3	3	3	3	3	2	3	2	3	3	3	2	3	2	55	55%
24	E1	Control	5	4	4	4	5	4	4	5	4	5	5	4	5	4	4	4	4	4	4	5	87	87%
25	E1	Control	2	1	1	2	2	2	2	2	1	2	2	1	2	2	3	3	3	3	3	3	42	42%

			Competence						Enjoyment					Self-confidence		Challenge				Curiosity	Cooperativeness			
No.	**PARALLEL**	**GROUP**	**I1**	**I2**	**I3**	**I4**	**I5**	**I6**	**I7**	**I8**	**I9**	**I10**	**I11**	**I12**	**I13**	**I14**	**I15**	**I16**	**I17**	**I18**	**I19**	**I20**	**Grade /100**	**Percentage**
26	E1	Control	4	3	3	3	3	3	3	4	4	4	4	3	5	4	4	3	3	4	3	3	70	70%
27	E1	Control	4	3	4	3	4	3	4	5	5	4	4	3	5	4	4	5	4	4	5	4	81	81%
28	E1	Control	4	3	4	3	3	3	3	4	4	4	3	3	4	3	3	4	4	3	3	3	68	68%
29	E1	Control	3	3	3	4	4	3	4	4	4	4	4	4	4	4	3	4	3	3	4	3	72	72%
30	E1	Control	5	4	4	4	5	4	5	5	4	5	4	4	5	4	4	5	4	4	4	4	87	87%
1	E2	Experimental	4	4	4	5	5	4	5	5	4	5	5	4	5	5	4	5	4	4	5	4	90	90%
2	E2	Experimental	4	3	3	4	4	4	4	4	4	4	4	3	4	4	4	4	3	4	4	4	76	76%
3	E2	Experimental	4	3	4	4	4	3	4	4	4	4	3	3	4	4	4	4	4	3	4	3	74	74%
4	E2	Experimental	2	2	2	3	3	3	3	3	3	3	3	2	3	3	3	3	3	2	2	3	54	54%
5	E2	Experimental	4	3	4	3	4	3	4	4	4	4	4	3	4	4	4	4	3	3	4	3	73	73%
6	E2	Experimental	3	3	3	3	3	2	3	3	3	3	3	2	3	3	3	3	3	3	3	3	58	58%
7	E2	Experimental	4	3	4	4	4	3	4	4	4	4	4	3	4	4	4	4	3	4	4	3	75	75%
8	E2	Experimental	3	2	2	3	3	3	3	3	3	3	3	2	3	3	2	3	3	3	2	3	55	55%
9	E2	Experimental	4	3	3	4	4	4	4	4	3	4	4	3	4	4	4	4	3	4	4	4	75	75%
10	E2	Experimental	3	3	3	3	3	3	3	3	2	3	3	2	3	2	2	2	2	2	1	2	50	50%
11	E2	Experimental	5	4	4	4	5	4	5	5	4	4	5	4	4	4	4	5	5	5	4	4	88	88%
12	E2	Experimental	2	2	2	3	3	3	4	4	3	4	3	4	4	3	4	4	3	4	3	4	66	66%
13	E2	Experimental	4	3	3	4	4	3	3	4	4	4	4	3	4	4	4	4	3	3	4	3	72	72%
14	E2	Experimental	4	4	4	4	4	4	4	4	4	5	4	4	5	5	5	4	4	4	4	5	85	85%
15	E2	Experimental	4	4	4	5	5	4	5	5	4	5	5	4	5	5	4	5	4	5	5	4	91	91%
16	E2	Experimental	3	3	3	4	3	3	3	4	4	4	4	3	4	3	4	4	4	4	3	4	71	71%
17	E2	Experimental	5	4	4	3	4	3	3	4	4	4	4	3	4	4	4	5	4	4	5	4	79	79%
18	E2	Experimental	3	3	3	3	3	3	3	3	3	3	2	2	3	3	2	3	3	2	3	2	55	55%
19	E2	Experimental	4	4	4	4	5	4	5	5	4	4	5	4	5	4	4	5	4	4	4	5	87	87%
20	E2	Experimental	4	4	4	3	4	3	4	4	4	4	3	3	4	4	4	4	4	3	3	4	74	74%
21	E2	Experimental	3	3	3	3	4	3	4	4	4	4	3	3	3	4	4	4	3	4	4	3	70	70%
22	E2	Experimental	5	4	4	4	4	4	5	5	4	4	4	4	5	5	4	5	4	4	5	4	87	87%

			Competence						Enjoyment					Self-confidence		Challenge				Curiosity	Cooperativeness			
No.	**PARALLEL**	**GROUP**	**I1**	**I2**	**I3**	**I4**	**I5**	**I6**	**I7**	**I8**	**I9**	**I10**	**I11**	**I12**	**I13**	**I14**	**I15**	**I16**	**I17**	**I18**	**I19**	**I20**	**Grade /100**	**Percentage**
23	E2	Experimental	4	4	4	4	4	4	4	4	4	4	4	3	5	4	4	5	4	4	4	5	82	82%
24	E2	Experimental	4	4	4	4	3	3	3	4	4	4	3	3	4	4	3	4	3	3	4	4	72	72%
25	E2	Experimental	4	4	3	4	4	3	4	4	4	4	3	3	4	4	4	4	4	3	4	3	74	74%
26	E2	Experimental	3	2	3	3	4	3	4	4	4	4	3	3	4	4	4	4	3	3	4	4	70	70%
27	E2	Experimental	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	4	4	81	81%
28	E2	Experimental	4	3	2	3	3	3	3	3	3	3	3	3	4	4	4	3	4	4	4	4	67	67%
29	E2	Experimental	5	5	4	5	5	4	5	5	4	4	5	4	5	5	4	5	4	4	5	4	91	91%
30	E2	Experimental	4	4	3	4	4	3	4	4	4	4	4	4	4	4	4	4	4	3	4	4	77	77%

Annex C. Intrinsic motivation survey applied after to the proposal.

			Competence						Enjoyment					Self-confidence		Challenge				Curiosity	Cooperativeness			
No.	**PARALLEL**	**GROUP**	**I1**	**I2**	**I3**	**I4**	**I5**	**I6**	**I7**	**I8**	**I9**	**I10**	**I11**	**I12**	**I13**	**I14**	**I15**	**I16**	**I17**	**I18**	**I19**	**I20**	**Grade /100**	**Percentage**
1	E1	Control	5	4	5	5	5	4	5	5	5	5	4	5	5	5	5	5	4	5	4	4	94	94%
2	E1	Control	4	3	3	4	4	3	4	4	4	4	4	4	4	3	4	4	3	3	4	3	73	73%
3	E1	Control	3	2	3	3	3	2	3	4	4	4	3	3	4	4	4	4	3	4	3	3	66	66%
4	E1	Control	5	4	4	5	4	3	5	4	4	5	5	5	5	4	4	5	4	4	3	4	86	86%
5	E1	Control	4	4	4	4	5	4	4	5	4	5	5	4	5	5	4	4	4	4	3	4	85	85%
6	E1	Control	4	4	4	4	5	4	4	5	4	4	3	4	4	4	4	5	4	4	5	4	83	83%
7	E1	Control	4	4	3	4	4	3	4	4	4	4	4	4	5	4	4	4	4	3	4	4	78	78%
8	E1	Control	3	3	3	4	4	3	4	4	4	4	3	3	3	4	4	4	3	4	3	4	71	71%
9	E1	Control	3	3	4	3	4	4	4	4	3	4	4	4	4	4	3	4	4	3	3	3	72	72%
10	E1	Control	4	3	3	3	3	2	3	3	4	3	3	3	4	3	2	4	3	3	3	4	63	63%
11	E1	Control	5	4	5	5	4	4	5	5	4	5	5	4	5	5	5	5	4	4	4	4	91	91%
12	E1	Control	5	3	3	5	4	4	4	5	4	5	5	4	4	4	5	4	4	5	4	4	85	85%
13	E1	Control	4	3	4	4	3	3	4	4	4	4	4	4	4	4	3	5	4	5	4	4	78	78%
14	E1	Control	4	3	4	4	3	3	4	4	3	4	4	3	4	4	4	4	3	4	4	4	74	74%
15	E1	Control	3	4	3	2	3	3	3	3	4	3	3	2	4	3	4	4	5	4	5	5	70	70%
16	E1	Control	4	3	3	4	3	3	4	4	4	4	4	4	4	4	4	4	4	3	4	4	75	75%
17	E1	Control	5	4	5	5	5	4	5	5	5	5	5	4	5	5	5	5	4	4	4	4	93	93%
18	E1	Control	4	3	4	4	4	4	4	5	5	4	5	4	5	4	3	5	4	5	5	4	85	85%
19	E1	Control	5	5	5	5	5	4	5	5	5	5	5	4	5	4	5	5	4	4	4	4	93	93%
20	E1	Control	4	3	3	4	4	4	4	4	4	3	4	3	4	4	4	4	3	4	4	3	74	74%
21	E1	Control	4	3	4	4	4	3	4	4	4	4	4	4	4	4	4	4	3	4	3	3	75	75%
22	E1	Control	4	3	4	4	4	4	4	5	4	5	5	3	4	3	5	4	4	4	3	3	79	79%

			Competence						Enjoyment					Self-confidence		Challenge				Curiosity	Cooperativeness			
No.	**PARALLEL**	**GROUP**	**I1**	**I2**	**I3**	**I4**	**I5**	**I6**	**I7**	**I8**	**I9**	**I10**	**I11**	**I12**	**I13**	**I14**	**I15**	**I16**	**I17**	**I18**	**I19**	**I20**	**Grade /100**	**Percentage**
23	E1	Control	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	3	2	3	2	59	59%
24	E1	Control	5	5	4	5	5	4	5	5	4	5	5	4	5	4	4	4	4	4	4	5	90	90%
25	E1	Control	2	2	2	3	2	3	3	3	2	3	2	2	3	3	3	3	3	3	3	3	53	53%
26	E1	Control	4	3	3	4	4	3	4	4	4	4	4	4	5	4	4	3	3	4	3	3	74	74%
27	E1	Control	5	4	5	3	4	4	4	5	5	5	5	3	5	5	4	4	4	4	4	4	86	86%
28	E1	Control	4	3	4	3	3	3	3	4	4	4	3	3	4	3	4	4	4	3	3	3	69	69%
29	E1	Control	4	3	3	4	4	4	4	4	4	4	4	5	5	4	3	4	3	3	4	3	76	76%
30	E1	Control	5	5	4	5	5	4	5	5	5	5	5	4	5	4	5	4	4	4	5	4	92	92%
1	E2	Experimental	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100	100%
2	E2	Experimental	4	3	3	4	4	4	4	4	4	4	4	3	4	4	4	4	3	4	4	4	76	76%
3	E2	Experimental	5	4	5	5	5	4	5	5	5	5	4	4	5	5	5	5	5	4	5	4	94	94%
4	E2	Experimental	3	3	3	4	4	4	4	4	4	4	4	3	4	4	4	4	4	3	3	4	74	74%
5	E2	Experimental	5	4	5	4	5	4	5	5	5	5	5	4	5	5	5	5	4	4	5	4	93	93%
6	E2	Experimental	4	4	4	4	4	3	4	4	4	4	4	3	4	4	4	4	4	3	4	4	77	77%
7	E2	Experimental	5	4	5	5	5	4	5	5	5	5	5	4	5	5	5	5	4	5	5	4	95	95%
8	E2	Experimental	3	2	2	3	3	3	3	3	3	3	3	2	3	3	2	3	3	3	2	3	55	55%
9	E2	Experimental	5	4	4	5	5	4	5	5	4	5	5	4	5	5	5	5	4	5	5	5	94	94%
10	E2	Experimental	3	4	3	3	3	3	4	3	2	3	3	2	3	3	3	2	3	2	2	2	56	56%
11	E2	Experimental	5	4	5	5	5	5	4	5	5	5	5	5	4	5	4	5	4	5	4	5	94	94%
12	E2	Experimental	3	3	3	4	4	4	5	5	4	5	4	5	5	4	5	4	4	5	4	5	85	85%
13	E2	Experimental	5	4	4	5	5	4	4	5	5	5	5	4	5	5	5	5	4	4	5	4	92	92%
14	E2	Experimental	4	4	4	4	4	4	4	4	4	5	4	4	5	5	5	4	4	4	4	5	85	85%
15	E2	Experimental	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100	100%
16	E2	Experimental	3	3	3	4	3	3	3	4	4	4	4	3	4	3	4	4	4	4	3	4	71	71%
17	E2	Experimental	5	5	5	4	5	4	4	5	5	5	5	4	5	5	5	5	5	5	5	5	96	96%

			Competence						Enjoyment					Self-confidence		Challenge				Curiosity	Cooperativeness			
No.	**PARALLEL**	**GROUP**	**I1**	**I2**	**I3**	**I4**	**I5**	**I6**	**I7**	**I8**	**I9**	**I10**	**I11**	**I12**	**I13**	**I14**	**I15**	**I16**	**I17**	**I18**	**I19**	**I20**	**Grade /100**	**Percentage**
18	E2	Experimental	3	3	3	3	3	3	3	3	3	3	2	2	3	3	2	3	3	2	3	2	55	55%
19	E2	Experimental	5	4	5	5	5	5	4	5	5	5	5	5	5	5	4	5	5	4	4	5	95	95%
20	E2	Experimental	4	4	4	3	4	3	4	4	4	4	3	3	4	4	4	4	4	3	3	4	74	74%
21	E2	Experimental	4	4	4	4	5	4	5	5	5	5	4	4	4	5	5	5	4	5	5	4	90	90%
22	E2	Experimental	5	4	4	4	4	4	5	5	4	4	4	4	5	5	4	5	4	4	5	4	87	87%
23	E2	Experimental	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	99	99%
24	E2	Experimental	4	4	4	4	3	3	3	4	4	4	3	3	4	4	3	4	3	3	4	4	72	72%
25	E2	Experimental	5	5	4	5	5	4	5	5	5	5	4	4	5	5	5	5	5	4	5	4	94	94%
26	E2	Experimental	3	2	3	3	4	3	4	4	4	4	3	3	4	4	4	4	3	3	4	4	70	70%
27	E2	Experimental	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100	100%
28	E2	Experimental	4	3	2	3	3	3	3	3	3	3	3	3	4	4	4	3	4	4	4	4	67	67%
29	E2	Experimental	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100	100%
30	E2	Experimental	4	4	3	4	4	3	4	4	4	4	4	4	4	4	4	4	4	3	4	4	77	77%

Annex D. Application of the intrinsic motivation survey to TUVN students.