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Learning styles and language teaching

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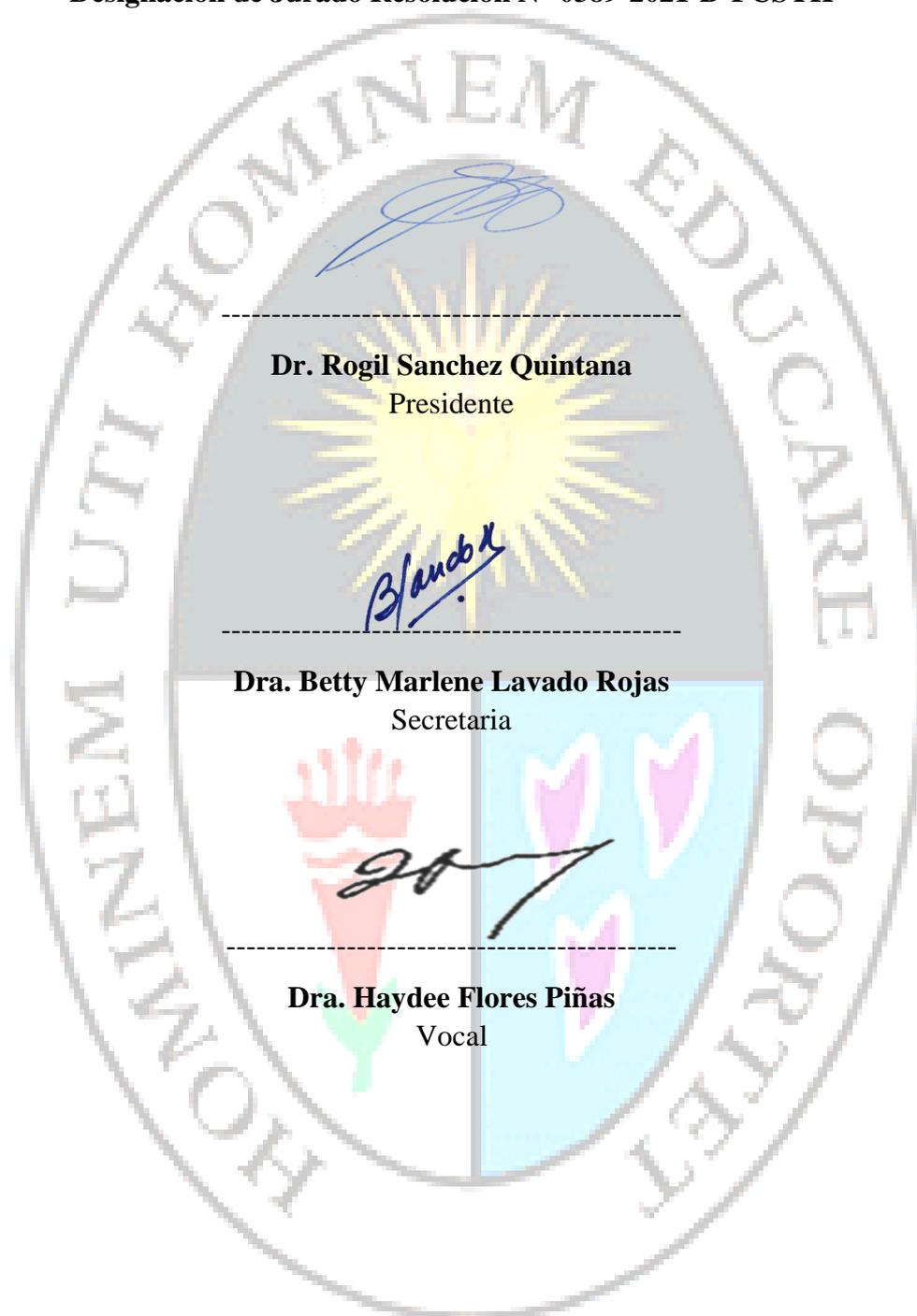
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To God, for his infinite love, the being who guides my path and who has given me the strength and wisdom necessary to complete this work.

To my parents, Maura and Daniel also my brothers Abad, Yanet, John and Hector by their unconditional support. Especially to Ireneo who has been my guide, motivation and my strength throughout this time. I dedicate this work to you with all my love.

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Introduction

Inquiring about learning styles is a necessity because each student is different and they have their own way of learning during their school life. Many authors propose different styles of learning and learning models that teachers have to take into account to develop better in the students their skills and integrate the information, that is why it is important to know what they are.

Language learning, especially English today, is essential for professional development, knowledge of different cultures which we will be exposed at any moment in our lives, whether to continue a study abroad, for work or travel reasons. Therefore, it is important to use the appropriate methods for teaching any language in schools, high schools, institutes and universities when teaching any foreign language, so that in this way the teachers may use the tools, strategies, resources and activities to achieve the expected goals.

In the teaching of different languages such as English, French, Portuguese, Italian, among others, technology played a very important role in the expansion of languages through virtual channels such as apps and podcasts, which are now more widely used due to the current situation in which we are living by the pandemic - SARS-COV2 affecting education around the world.

The objective of this work is to make known the different learning styles that exist. This monograph has been divided into three parts. In the first chapter, it talks about the concepts of learning styles according to some authors as well as psychology classifies the learning styles of each person or student. The second chapter deals with the different models of learning styles that exist. Finally, the third chapter shows the

methodology about language teaching, how important the use of technology is in teaching language and how neuroeducation influences learning people or students at different levels

Chapter I

Learning styles

1.1 Concepts of learning styles

They are the traits that indicate how a student learns, each of the students' learning styles in the classroom must be identified in order to help them to understand and receive the information that the teacher wants to transmit so help them to overcome the difficulties that students face every moment. Different learning styles are observed in a classroom.

“The learning styles are cognitive, affective and physiological traits that serve as indicators relatively stable as students perceive, interact and respond to their learning environments” (Keefe, 1988, p.55).

What help us to understand the different learning styles seen in the classroom. The learning style is simply the cognitive style that each individual show when faced with a learning task, and reflects the preferred, habitual and natural strategies of the student to learn, hence it can be placed between the personality and the strategies of learning. Learning of each student, as it is not as specific as the latter, nor as general as the former (Schmeck, 1998, p.87).

Each individual has his way, way and rhythm of learning that indicate that it is necessary to know more about learning styles and which of these defines our preferred way of learning (Alonso, Gallego & Honey 1995).

They conclude that students learn more effectively when taught based on their predominant learning styles. They point out that it is not only necessary to take into account the style of the students, and also of the teachers (Alonso, Gallego & Honey, 1999).

In recent years, many investigations have advanced about learning styles and working in this way is a motivation for students as it improves their academic performance.

Learning styles condition the choice of studies and promote a way of learning, teachers will have to take into account the different styles of our students not only depending on the degree they are studying, but also depending on the evolution that these styles present over time and in relation to gender (López – Aguado, 2011).

Classroom teachers must consider different learning styles to optimize learning for all students. There is a great concern in the educational environment, it is necessary to improve the quality of our teaching-learning, for this, we must analyze the way how students learn better, always having as a goal for our students the best achievement towards learning through an excellent learning process.

1.2 Learning styles according to psychology

Psychologists Alonso, Gallego & Honey (1994) were pioneers classifying the existing learning styles into four types, attending to a series of personality traits which we have already mentioned previously.

When it comes to learning, one should not limit oneself because all of us without exception will spend our lives learning consciously or unconsciously. In addition to the aforementioned learning styles, psychology also defines 12 other learning styles.

1.2.1 Visual learning.

It is up to the students to incorporate their learning through sight with images, symbols, graphs, photographs, drawings, films, documentaries, videos and visual schemes with which the students will be able to assimilate the learning.

One of the resources used by teachers is computer infographic in the classroom, as it is more effective for students who prefer to learn with a visual learning style that will help them to capture attention faster.

1.2.2 Auditory or musical learning.

It refers to students who learn by listening to dialogues and music, they feel comfortable interacting in discussion groups since they easily remember what they hear.

1.2.3 Physical or kinesthetic learning.

Students with this type of learning style need to be in constant movement, they learn through games, staging plays, it is important that they become actively involved in their learning.

1.2.4 Mathematical logic learning.

The Logical Mathematical style refers to the process of children to recognize and manipulate some abstract objects and symbols. They need to use logic to understand what they are learning like math.

According to Gardner (1983) individuals who appeal to logical mathematical intelligence have ease with abstract and logical thoughts. They like to do puzzles or play chess. People who possess this type of dominant intelligence often have a fondness for computers.

1.2.5 Verbal or linguistic learning.

Verbal learning style is the process by which the student learns through verbal messages, ideas, concepts, the reading or writing. Cofer (1976) defines verbal learning as “the acquisition of verbal habits or associations” (p.65). However, some relatively recent developments in the theory of processing information, the work of Piagetians as Sinclair Inhelder, Stam back and others (Bronkard, 1980) and theories of Chomsky (Costley & Nelson,2013) have created a favorable intellectual climate for the development of cognitive theories of verbal learning.

They have reinterpreted a large number of traditional experimental results in verbal learning within a cognitive framework (Chaplin & Krawieck, 1974).

1.2.6 Social or interpersonal learning.

In this case, the students are favored by the information when it is presented to them in a context of interaction in a group because they have the capacity for verbal and non-verbal communication.

1.2.7 Solitary or intrapersonal learning style.

Students are introverted and independent by such prefer to face the problems posed by themselves.

Chapter II

Models of learning styles

Many models of learning styles have been developed to clarify the different ways a student has when learning, each of the models approaches learning from different perspectives. Teachers sometimes use one model of learning styles and sometimes another according to the needs of the students.

2.1 VAK Model by Richard Bandler and John Grinder.

According to this model, human beings have different ways of perceiving information, the VAK model will allow us to identify the three channels of perception.

- Visual, students prefer to receive information visually so they are easier to learn through images, figures, videos, documentaries and when they read, receive better the information what the teacher wants convey. Students should be encouraged in actions such as observing, reading, drawing, and comparing pictures.
- Auditory, in this learning style the student prefers that the information reaches him verbally, they learn much better by listening, music, audios, conversations and explanations about the subject that allow him to form his ideas and are skilled in learning languages.

- Kinesthetic, those who associate sensations or movements to learn with constant movement based on experimentation, which is why it is more difficult for them to forget what they have learned. Their learning can be stimulated through crafts, board games, crosswords, skits, dance, and sports (Bandler & Grinder, 1982).

Table 1
VAK teaching techniques.

Learning Preference	Associated Teaching Strategies
Visual	Overhead slides, PowerPoint presentations, handouts, games, diagrams, roleplaying.
Auditory	Recorded audio, lectures, discussions, music, roleplaying, games.
Kinesthetic	Active exploration, activities involving movement, games, roleplaying.

Note: These are some of the teaching techniques used by VAK. Source: Gerschler, 2018.

2.2 Model of Kolb

Learning styles are the way in which an individual faces learning tasks more or less consistently over time and in different educational contexts, resulting from a triple influence from the hereditary apparatus, from their own experiences and the demands of the learning context (Kolb, 1984).

To learn something, we must process or work the information, according to this model it consists of four stages: concrete experience, reflective observation, abstract conceptualization and active experimentation. Kolb's model highlights that excellent learning is the result of the four phases that it proposes to facilitate student learning regardless of their learning style.

- Divergent students, are creative, enthusiastic, committed to any type of activity, they learn better when they are presented with a challenge, and they find it difficult when the activity is extensive or they have a passive role in the activity.

- Assimilating students, are more cautious and learn better when they analyze information, they show interest in abstract ideas, and they find it difficult when they are forced to be the center of attention.
- Convergent students, these types of students consolidate the information into something more solid, they learn better when they are presented with objectives, theories and systems.
- Students who adapt, will feel more comfortable, adapt to new situations, they are imaginative, observers preferably groupware, like taking risks, are presented difficulties when we present abstract situations that he cannot relate to reality (Kolb, 1984).

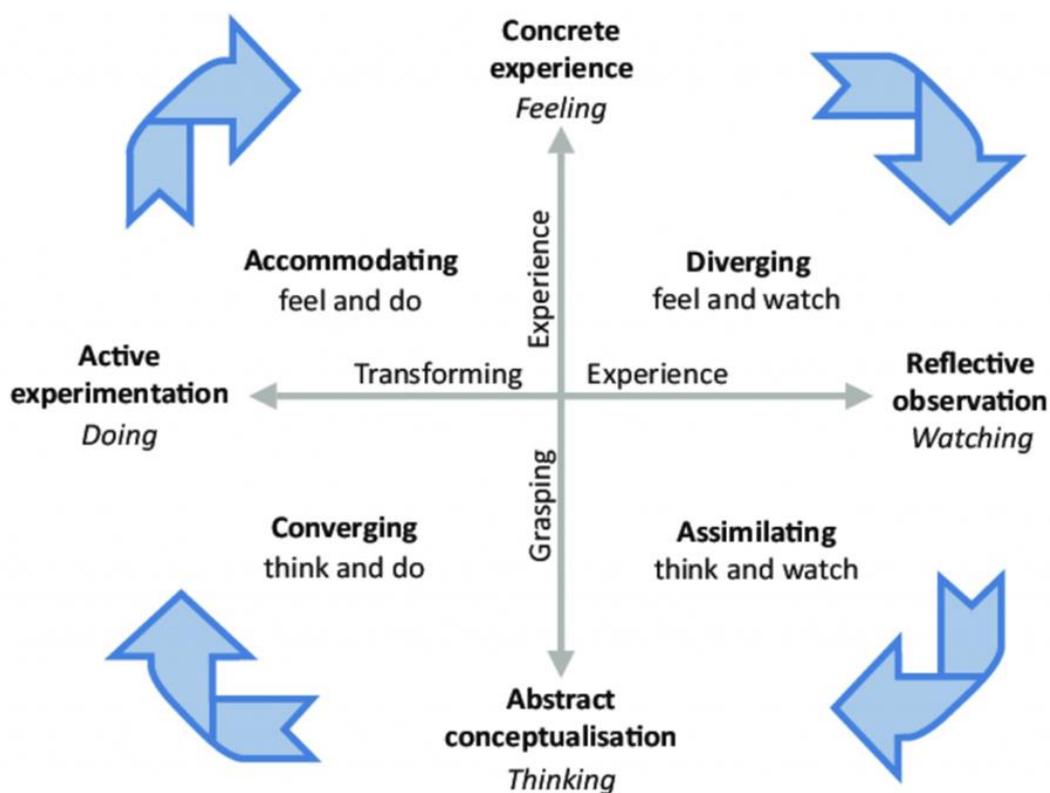


Figure 1. Kolb's experiential learning styles. Source: Kurt, 2020.

Kolb's experiential learning style theory is represented by a learning cycle consisting of four stages in which the student touches all the bases in their learning.

In 2013, Kolb developed the KLSI 4.0, which included the new typology of learning styles, where was added 9 new styles: initiate, experiment, imagine, reflect, analyze, think, decide, act and balance (Kolb, 2014).

2.3 Honey and Mumford Model

These authors give an attitudinal and variable character to learning styles since the characteristics and behavior of people can change while the activities are developed.

They started from Kolb's bases to create the Learning Styles Questionnaire (LSQ) focused on the business world, which contains 80 items corresponding to four Learning Styles. Each item is answered with a sign (+) if you agree and with a (-) if you disagree (Honey & Mumford, 1986).

It evaluates the four learning styles as active, reflective, theoretical, and pragmatic (Honey & Mumford, 1986).

- Active, they are more open-minded students who act in the moment, are risky in the face of any challenge, spontaneous, seek new experiences, like group work and learn better when they are in charge of a debate, meetings, carrying out different activities or presenting roles, trying something different in their learning generating ideas without limitations but it is difficult for them when they have to work alone or require many details, have a passive act, expose topics with a lot of theoretical load.
- Theorists, they are students who like to analyze the information for that, they need concepts and facts to participate in their own learning, coming to understand complicated situations, they learn by reading or listening to well-presented and enriching ideas, putting into practice the methods that are the basis of something, their learning is complicated when they participate in open problems or have to act without a basis of concepts or be forced to do something without a clear purpose.

- Reflexive, they are students who learn better by observing, analyzing what happens around them or some activity, they review what they have learned, see and listen to other points of view or some video, film, documentary before commenting on something, it is difficult for them when they have to lead a meeting or debate, acting in front of others, not having enough information to draw conclusions.
- Pragmatic, they are students who practice what they have learned trying new ideas or projects that attract them, watch movies or videos that tells them how to do things and be able to apply it to the moment, but have deficit when learning theories, working without instructions clear when carrying out any activity (Honey & Mumford, 1986).

2.4 Felder and Silverman Model

They defend that students learn in different ways such as by what they hear and see, by reflecting and acting, be it logic or intuitive reasoning, by memorizing and visualizing and establishing similarities either fixed or in small pieces and large pieces. Which classify in five dimensions (Felder & Silverman, 1988).

Felder & Silverman (1988) affirm that learning occurs in an educational environment structured in two stages of reception and processing of information.

According to the type of information.

Sensitive are the types of learners who are hands-on who like to solve problems by following established procedures. Intuitive are students who like to innovate, different, discover new possibilities that they do not like to memorize or routine things.

According to the sensory modality.

Visual this type of students prefers to learn through images, photographs, videos, it is easier for them to remember what they see. Verbal are the students who receive better the spoken information remember much better what they hear.

According to the way of processing information.

Active students learn best through activities, discussions group where they can promote their critical thinking. Reflective students are the types of students who prefer to learn by meditating, reflecting, analyzing about a topic.

According to the way of understanding the information.

Sequential students learn in an orderly manner following a line when they are presented with some kind of problem, they segment the topics by parts starting from the simplest to the most complex. Global learners are students who understand to grasp learning faster, however they have difficulties to explain how they did it.

According to the way of organizing the information.

Inductive students understand information better when presented with facts. Deductive students prefer to deduce for themselves that part of their understanding (Felder & Silverman, 1988).

2.5 Dunn and Dunn's Learning Styles Model

It is one of the most used models and has served to determine the didactic sequences that are adapted to the varieties of the students. Learning styles can be used to design individualized instructional strategies or to select the most effective teaching method (Dunn & Dunn, 1999).

Learning Styles are based on the premise that individuals have features development and biological, influencing the teaching-learning process. This model is made up of five categories (Dunn & Dunn, 1998).

- Environmental
- Emotional
- Sociological

- Physiological
- Psychological

Table 2
Dunn and Dunn's learning style dimensions.

Dimension	Elements	Key Questions
Environment	Sound	Do students prefer a noisy, busy, well lit, warm environment or a quiet, subdued, cooler environment? Should the learning environment be formal (e.g. desk and chairs) or informal (e.g. pillows)?
	Light	
	Temperature	
	Seating design	
Emotional	Motivational support	Do students need a lot of emotional support?
	Persistence	Will they persist on learning task?
	Individual responsibility	Can they assume individual responsibility?
Sociological	Structure	Do they need lots of structure?
	Individual	Do students learn best alone or working with someone?
Physiological	Pairs or team	How much guidance from adults do they want or need?
	Adult	Is the student an auditory, visual, tactual or kinesthetic learner? Does the student like to snack while learning? When is the optimal time for learning? Does the student require freedom to move during learning?
	Varied	
	Perceptual intake	
Time		
Physiological	Mobility	Does the student require freedom to move during learning?
	Global	How does the learner attack problem, globally or analytically?
	Analytical impulsive	Does the student jump into problems or pause to reflect before starting?
	Reflective	

Note: A comparative study of students' perceptual learning style preferences. Source: Dunn, 1986.

2.6 Brain Quadrant model

It proposes the theory of the whole brain, expressed in a model that integrates the neocortex (right and left hemispheres) with the limbic system. The whole brain model, made up of four quadrants, which determine different styles of information processing in individuals, even though it admits that the brain functions as an integrated whole (Herrmann, 1989).

It is based on the processing of information where cognitive development influences that teaches us that we must speak to several brains.

- Quadrant A is the upper left lobe, it is the student who has a critical thinking style, logical processes, organized and ordered.

- Quadrant B is the lower left lobe, it is characterized by being a style of thought sequential, organized, careful and detailed.
- Quadrant C is the lower right lobe characterized by an emotional, communicative, experimental, humanistic and intrapersonal thinking style.
- Quadrant D is the upper right lobe, it refers to the student with a creative style, artist, inventor, bohemian, capable of creating music, songs and paintings.

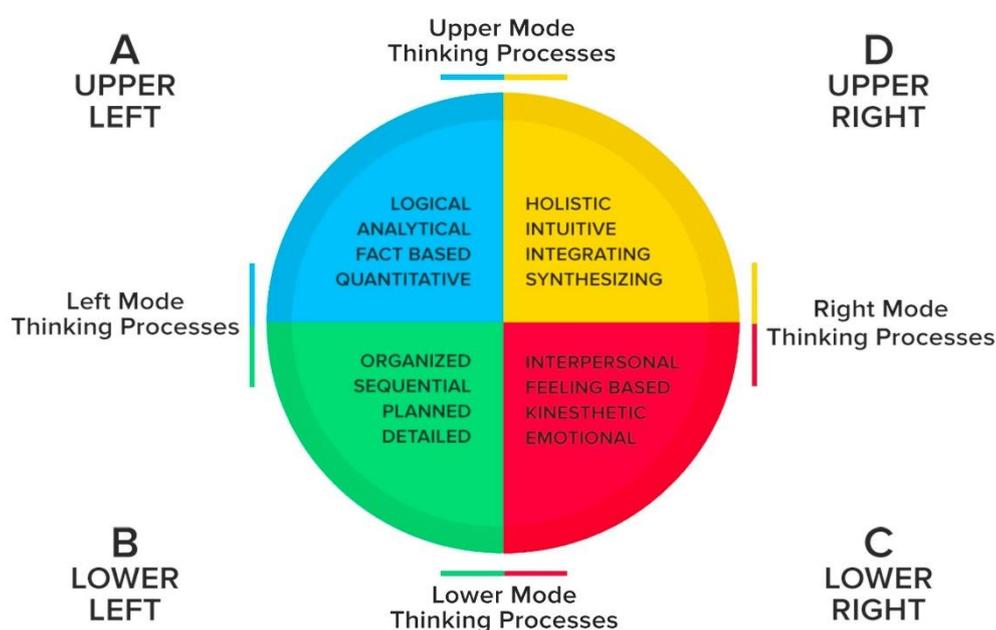


Figure 2. The four-quadrant graphic and whole brain. Source: Herrmann global LLC, 2016.

Studies indicate that there are differences in brain dominance in learning styles based on gender (Del Buey y Camarero, 2001; Gravini, 2006).

2.7 Multiple intelligences model

He suggested that all human beings are capable of knowing the world in seven different ways, indicating that all people have at least seven basic intelligences (Gardner, 1983).

In Gardner's own words:

The theory of IM represents an effort to support the broad form of the concept of intelligence in the most extensive current scientific knowledge, aims to provide a set of resources to educators, with which help in the development of individual potential, and I think it applied an adequate way can help all individuals reach their maximum potential development both in professional and private life (Gardner, 1998, p. 14).

According to Howard Gardner, intelligences are the ability to solve a problem for this reason that one makes use of more than one intelligence and each one of them is characterized by different abilities.

- Linguistic intelligence. It is the ability to use oral and written language so that they are capable to remember the facts, they understand the information they read in a book, newspaper and magazine.
- Musical intelligence. It is the ability to perceive and express themselves with musical forms, they can feel and create rhythms, sounds and melodies with ease.
- Logical-mathematical intelligence. It is one of the best - known intellects as they have the ability to solve problems logically, produce and read mathematical symbols.
- Kinesthetic bodily intelligence. It is the ability to express ideas and feelings through the body, as well as the ability to use objects, correspond to students or people who learn physical skills easily through movement which helps them learn better.
- Spatial intelligence. It encompasses the ability to perceive the environment visual using images to become transformed, improve and create entirely new ideas, present their ideas in the form of images or graphics so they find it easier to remember instead of words.

- Interpersonal intelligence. It is the ability to relate to others, they have the ability to empathize with others, they enjoy conversations, they like to learn in groups or carry out activities with other people.
- Intrapersonal intelligence. It is the ability to understand oneself, know oneself, their feelings and emotions, which will allow them to use them for themselves thus improving their life and self-development, they know their strengths and weaknesses (Gardner, 2000).

This kind of intelligence was later added to Gardner's original study on Multiple Intelligences, specifically in 1995. Gardner included naturalistic intelligence because it is important in the survival of the human being.

- Naturalistic intelligence. It is the ability to observe and study the elements that make up nature such as objects, animals, plants or phenomena related to nature. These people or students like camping, walking, caring for pets, animals, plants, and objects in their environment (Gardner, 2011).



Figure 3. Gardner's Multiple Intelligences. Source: Recovered from <https://thedailynewnation.com/news/141761/multiple-intelligences.html>.

Chapter III

Language teaching

The teaching of languages to students of different levels will help them acquire skills, help them in their self-esteem, intellectual development, which will allow them to have a broader vision, so teachers must be competent, talented and capable of applying various types of strategies, innovators and inventing their way of teaching languages. “All teachers are interested in deepening our understanding of the learning process, that is, in psycho- affective, social, educational, etc. factors that affect this process” (Santos Gargallo, 1999, p. 22).

3.1 Teaching the English language

English language learning is made up of three fields: English as a mother tongue, English as a second language and English as a foreign language.

The mother tongue is that what a child learns through his parents. It is a branch of the ELT, English as a mother tongue or Mother Tongue, it is taught in those countries where this language is the official language, used in everyday communication, and it is taught to all students who consider their mother tongue or in all in Anglo-Saxon countries like the United States, Great Britain, Ireland or Australia (González & Celaya, 1992).

When the teaching of English responds to an integrated motivation, it refers to a situation of English as a second language. This term is used to name the teaching-learning of the English language that fulfills the function of communicating in a country but that is not the mother tongue (Broughton, 1980).

English as a Foreign Language, refers to when a person or student learns at school as just another subject but is not used as a means of daily communication (Richards, 1992).

“Learning the English language has become a strategic issue in Latin America. Countries have developed their own strategies, creating programs and investing heavily to expand access to opportunities to learn English” (Cronquist & Fiszbein, 2017, p.2).

3.2.1 Learning English as a foreign language.

Much has been emphasized from different points of view the importance of learning other languages such as English, which favors the human being for their professional development since they will have better opportunities in the labor field, interaction with other cultures and it is suggested that learning to very early age favors faster assimilation.

The English language is one of the most important and widely used in the world. It suggests that globally could have more speakers of English as a foreign language than as a mother tongue or second language and it is anticipated that in the future, speakers of English as a foreign language will surpass the number of speakers of English as a mother tongue and second language (Graddol, 1997, p.134).

They define international language as “a language in widespread use as a Foreign Language or Second Language, as a language of international communication and exemplify the definition with English as the most widely used international language” (Fishman, 2002, p.187).

Today there are many reasons why the English language is the most widely expanded and technology played a very important role for its expansion, since today there are applications, magazines, movies, music and books through which a person can access the learning that language. “In most of the different specialties, the publications of magazines in English are the ones with the greatest prestige and international diffusion” (Alcaraz, 2000, p.15) but English is not only a foreign language but it is also a mother tongue for many countries such as England, USA, Canada, Australia, to name a few countries, there is no doubt that the learning of the English language will continue to expand either because of a need or because people like to learn this language.

“There is no doubt that English is the most widely taught, read and spoken language in the world right now” (Kachru & Nelson, 2001, p.96).

3.2 Teachers in language teaching

At present, many teachers work as teachers of different languages without having the required qualification, that is why there are shortages of language teachers who really master the language they teach, especially in Peru, unlike other countries, so teachers they must be constantly updated to incorporate new forms, while studying the linguistic, grammatical and phonetic aspects.

A competent language teacher must know how to articulate in a pertinent and creative way the different types of disciplinary and professional knowledge that they have when planning, promoting, conducting and evaluating learning processes. More than transmitting information, language teachers are expected to act as guides in the development of competencies that allow subjects to communicate in a timely manner in a changing and complex world. Within this context, assert that the language teacher must grow as a person with

autonomy, master the teaching practice through critical reflection, know the natural and social environment in its multiple interactions and generate attitudes that allow them to sustain opinions and commitments (Martínez, 2006, p.28).

3.3 The technology in language teaching

Technology in language teaching allows teachers access to materials such as films, videos, music, games in any language worldwide and thus improve their skills in languages and provide quality education to students especially in correct pronunciation, the use of technological means such as computers, cell phones, tablets and laptops.

For many years the teaching of English has used different means to optimize and facilitate learning. Technological advances have allowed foreign language learning to be more interactive and dynamic. These new teaching methods present however, a new type of challenge for both teachers and students, the latter being the ones who have needed to develop new learning strategies, conscious voluntary decisions that have a specific objective, in order to make use of it. Effective use of the new tools to which they have access and power to learn more effectively (Garcia, 2010, p.128).

“This use of technologies has not only been constituted as a pedagogical aid but as a leading element of any modern methodology”(Rivero, 2006, p. 27).

In the past, a computer was not part of the essential materials in a classroom, however today they are part of the key infrastructure. The content is made more enjoyable thanks to the animations and the contrast of colors that can be found in this virtual library (Selwyn, 2011).

They argue that the internet is not only a tool for sharing data and images but can also be used by teachers to develop and distribute educational materials. “Programs such as Jclie, Hot potatoes, Exe, Ardora among others, would facilitate reinforcement and learning within the classroom” (Sánchez & Ruiz, 2011, p.23).

One of the most important reasons for designing classes using technology is that students can learn and, at the same time, have an interesting experience with knowledge, in which they are sharing, generating and developing meaningful life skills (Castro 2019).

The use of technologies in student learning will reinforce their communication skills and abilities correctly because it allows them to access videos, series, films or documentaries in the original version of the language, which will be a great advantage in their learning. Social networking and podcasts also play an important role in teaching other languages (Castro, 2019).

3.4 Teaching languages in virtual environments

Today there are many educational platforms, applications, videos on YouTube or Facebook through which the student can access the learning of any language they prefer but at the same time the teacher assumes the role of guide.

- Duolingo
- Open English
- British Council

This modality of language teaching involves students to interact with different students from all over the world exposing themselves to the real language, having more opportunities to perfect their pronunciation which will allow them to communicate in any language.

The development of autonomy in students has been another of the advances in this process, allowing them to explore new ideas and educational experiences through active methodologies of visual thinking, flipped classrooms and gamification.

In this sense, it is important that the transformation and change of the hybrid teaching modality, from face to face to online, does not consist solely in digitizing the contents, as it implies a general, curricular reorganization and a methodological change of the curricular models that guarantee a significant impact on their learning through the acquisition of the competencies and skills they require for their personal and professional development (Grunhka-Cockayne, 2020, p.66).

3.5 Language Teaching Methodology

The methodology is like the form, manner, strategies, resources, methods that a teacher uses in the classroom to achieve meaningful learning in language teaching. It is difficult to create a single methodology that works for all countries since the reality of each country is different from that of others in the modality of language teaching, the resources used in each educational center, the level and accent of the language but what it can be done is to adapt teaching methodologies to the educational reality of each country.

3.5.1 Grammar - translation method.

Its purpose is to present the grammar rules so that the student can understand, form and join sentences correctly. The basis of this is the grammatical writing and its translation. In this case we refer to the verbal, reflective and theoretical learning styles that involve reading, writing and speaking. They learn best by reading, writing, observing, reflecting, analyzing and synthesizing the information or activities to be carried out using diagrams, schemes, brochures, books.

Over the years the needs of an individual have changed as well as the learning of foreign languages which becomes an objective of each educational institution. So the fact of “learning a second language does not lie only in being able to read and write, but in carrying out a more effective, more real communication” (Sánchez, 2009, p.7).

3.5.2 Direct or natural method.

Student learning occurs through direct oral communication developing their communication skills, images, objects, drawings, videos can be used to facilitate student learning. In this methodology, students learn different languages by associating the visual learning style, relating experience and expression, using visual tools, which will reinforce their oral comprehension and perfection of the pronunciation of the English language. Some way we can find the kinesthetic, active and mathematical logical learning style which offer a wide learning for young people and adults.

The fact that the student accumulates more vocabulary in their learning is usually more important, especially for their oral expression, but without neglecting the four skills that the language has as its objective in language teaching, which are; listen, speak, read and write. The culture, history, geography and day-to-day life of the countries of the language being learned are also studied (Sánchez, 2009).

3.5.3 Audio-lingual method.

It is based on the repetition of what the student hears such as audios, phrases, dialogues by which the student better develops their skills when expressing themselves and acquiring a pronunciation similar to native speakers. By using this method in learning the English language or another language creates a context of immersion to other cultures.

There is no single method to teach any subject in the classroom, for this the teacher must observe the student and choose the most assertive method for learning any language. That is why it could be said that this method is related to auditory, musical learning styles that allow students to develop their communication skills by capturing sounds and repeating them, listening to the correct pronunciation of words and understanding what is happening around them. For this we can use tools such as; videos, movies, recorded classes. The rules that each language has can be easier to learn a vocabulary combined with words in new expressions subject to the rules (Shaffer & Kipp, 2007).

3.5.4 CLIL method.

The Content and Language Integrated Learning (CLIL) is a methodology based on the learning of foreign languages by teaching other common courses using concepts of English or another language at different levels, but this method is more widely used in Europe.

An investigation carried out in Spain studied the implementation of the CLIL methodology through music and determined that bringing together these two elements, music and the teaching-learning of English, is a great resource for acquiring, deepening and reinforcing knowledge, since it improves the possibility to listen, invent, express and interpret; In short, it favors the motivation to find something fun and playful in English (Castro, 2014).

The CLIL method can not only learn the curriculum areas but also any language. This method arises with the purpose of reinventing the curriculum in Finland in the mid-90s, since its application spread throughout European countries, the greatest challenge to include this method in the curricula of each country is the teaching training in the different Languages such as English, French, German, Portuguese, Italian, Mandarin among others.

In Europe, the teaching and learning of foreign languages is experiencing a notorious growth for an educational pedagogical orientation that seeks to integrate languages with the contents in the classroom. Indeed, at the speed at which “CLIL has spread across Europe since 1994 which has surprised even its most ardent advocates” (Muñoz, 2007, p.23).

It concludes that CLIL is considered as a more effective approach as opposed to the traditional teaching of languages and which in turn brings many advantages in learning each person or student (Fernández, 2009).

The cognitive and educational psychology highlight some CLIL has advantages such as:

- Materials organized by topic are easier to remember and learn.
- Consistently and meaningfully presented information found in a CLIL curriculum can be processed more effectively.
- The motivation and interest of the student, frequent in CLIL, are associated to his ability to process complicated material, remember information and elaborate it.
- The management of a subject is achieved when the student reinvests his knowledge in progressively more complex tasks (Stoller, 2002, p. 108).

The advantage of the CLIL method cognitively is to promote language skills, stimulates the cognitive flexibility besides that students understand better the culture of each place. For CLIL to have a cultural impact, students must actively engage in learning through dialogues inside and outside the classroom (Coyle, 2010). In turn, it describes the principles of CILI as: content, cognition, communication and culture.

3.5.5 Teaching methodology during the pandemic.

The pandemic COVID-19 has generated changes in all aspects and one of them is the way in which education is now taught, many of the educational institutions as teachers had to go from teaching face-to-face to virtual, but the most affected in these changes were the students that today their homes became their classrooms.

In a matter of weeks, the way in which students learned has changed, this transformation served to reflect the inequality in rural areas of Peru where students cannot access virtual media and continue with their learning, added another disadvantage of teachers without experience in virtual teaching. But it should be noted that many teachers have reinvented their teaching methodologies in the face of these changes, especially in rural areas where students do not have technology, as opposed to urban areas where teachers can use digital tools, thus having better strategies for learning. Learning achievement of your students virtually. It is a great challenge that teachers face as students but at the same time it is an opportunity to be at the forefront of technology.

The flipped class is a strategy in which the student directs his learning, based on the concrete orientations of the purpose and contents proposed by the teacher for the construction of knowledge. The apprentice interacts in a didactic way and continues to develop meaningful learning, with the support of the family or close circle. From this, a curious learning environment is generated, favorable to the critical construction of knowledge. The organizations of the actions are distributed outside and inside the classroom, taking advantage of all kinds of resources, especially digital. The virtual platforms, television and a teaching radios turned and student learning at different levels (Zubiría, 2020).

3.5.6 Learning at home (Perú).

Learning at home is a learning proposal of the Ministry of Education through different media such as television, radio and internet in the face of the situation we are experiencing in the world, therefore the way of teaching languages changes from face-to-face to virtual in public institutions.

Private educational institutions chose to use their own educational platforms and digital tools to provide language teaching or other curricular areas.

Digital tools used for online teaching during the pandemic, are some tools that facilitate teachers to teach online during this pandemic - COVID 19 in different educational institutions.

- Google meet
- Zoom
- Classromm
- G-Suit and Office365
- Kahoot
- WebQuest
- Facebook live

Testimonial

Erika was a teacher in a rural area in the province of Caylloma and since everyone taught face-to-face classes before this crisis generated by covid 19, today she teaches virtual education and this is what she says, before it was different because we had a fixed schedule But now, sometimes due to the condition of our students in the area, we have to attend to them even at dawn, it is very complicated, it would be said for teachers also for students because we were not used to this rhythm of work, and we have to look for many strategies to reach them and it is more work it would be said because before in person it

was different for everyone the same , not now , we work with meet with some, some by WhatsApp with others by calls.



Figure 4. Social worker, Carmen Rosa Huallanca Conde. Source: Recovered from <https://andina.pe/agencia/noticia-aprendo-campo-conoce-a-trabajadora-social-educa-zona-rural-ayacucho-806178.aspx?fbclid>.

Not only in Peru education was affected, according to United Nations Educational, Scientific and Cultural Organization, more than 861.7 million students from different universities, schools, colleges in around 119 countries were also affected by this global pandemic. Especially in countries where low-income families live, where parents cannot offer their children the technology or adequate connectivity for online learning.

In the face of the pandemic, countries have combined high-tech and low-tech approaches to help teachers better support student learning. In Peru, for example, teachers have devised a strategy that combines text messages, printed materials and continuous feedback from teachers, taking advantage of the high penetration of mobile phones delivered by the government in the country. The approach goes beyond the provision of low-tech materials: it provides information on how to access learning programs, ensures students have access to hard-copy learning

materials, and provides home visits to monitor distance learning activities. Teachers are also expected to provide paper resources to students and meet with them weekly to hand out their corrected worksheets and distribute new ones for the coming week (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020, p.18).



Figure 5. Technological tools and resources for online teaching. Source: Recovered from <https://elperuano.pe/noticia/99188-inei-el-929-de-los-docentes-en-el-peru-hacen-uso-de-internet>.

In the context of confinement, the practice of teachers thus constituted the decreed adjustment variable for organizing “virtual classes”. In addition, emergency distance learning was not subject to a reading grid on which to rely, this period of confinement not having been anticipated (Bonnery & Douat, 2020).

3.6 Neuroeducation and Learning

It is based on the study of how our brain works, stimulates and assimilates information according to the environment that surrounds us, which then transforms it into knowledge. Learning styles are related to neo-education since they influence the different

emotions at the time of learning and that will allow them to expand their learning through reading, reflection, meditation, artistic training since it is understood that each student learns in a different way such as listening, deepening, doing more reading, through debates that help the teacher to identify and help shape the different learning styles of each student. It states that neuroscience is considered as a process of contribution to education, emphasizing that the brain is the key to learning, and it is precisely for the purpose of pursuing learning in the field of teaching (Yadira, 2017).

According to Doctor of Medicine and Neuroscience, Francisco Mora, one of the most important popularizers about the relationships established by the brain during learning. He maintains that one cannot learn if the subject to be discussed is not exciting, for that he affirms that a teacher must be able to transform any boring subject or concept into something attractive that motivates the student. It also emphasizes the need to know how a child learns even before entering school and during their years of study. Mora affirms that emotion is the fundamental ingredient to be able to teach and by which the child learns, what must be evoked is the curiosity in a child or anyone else that will arouse the emotion that makes the brain open the windows of attention, what is wanted with neuroeducation is that the teacher provokes the stimulation of the areas of our brain that encode curiosity.

Mora (2018) proposes some aspects for teaching and education based on the functioning of the brain:

Emotion. That arouses interest, curiosity to discover everything that is new in their learning.

Curiosity. It refers to the desire of the student to know new things that can vary depending on the age.

The attention. It is the brain mechanism that is required to be aware of something but there are different types of attention such as base, orientation, executive, unconscious attention, therefore the attention is not the same as that of a child and that of an adult.

The memory. It is the process by which we retain everything we have learned over time.

Mora (2018) also argues that a neuro-educator should be able to make bridges between the knowledge of the brain and its functioning to detect deficits in students that prevent them from learning correctly. The author reinforces the importance of repetition that without errors or constant rectifications of our knowledge there would be no real learning, the brain requires repeating everything we learn so that this learning will be available for the rest of our lives. He states that neurosciences, by examining the brain functions necessary to understand mental processes, such as intelligence, consciousness, personality or emotions, are essential to learn to improve the neurological methods and techniques used for this purpose.

Didactic application

Learning session

I.- Session title: What time is it, please?

II.- Informative data:

Grade : First

Level : Secondary

Area : English

Teacher : Cahuari Ponce, Amanda

Date : 24/05/2021

Duration : 45''

Unit : N° 1

III .- Purposes and learning evidences:

Competition	Capacity	Precise performance	What will give us evidence of learning?
1. Communicate orally in English as a foreign language	1.5 Interact strategically in English with different interlocutors	- Interacts in various oral situations with other people in English, asking and answering questions, making some comments, explaining and complementing ideas, adapting their answers to the interlocutor's points of view using everyday vocabulary and proper pronunciation and intonation.	- To learn and say the time. - To practice telling the time in English. - To use analog clocks. - To hear and say the correct stress pattern for time.
2. Read various types of texts in English as a foreign language.	2.3. Reflect and evaluate the form, content and text of the text written in English.	- Reflects on and evaluates the texts they read, giving their opinion on the content, textual organization and meaning of some textual resources based on their experience and context.	

3. Write various types of texts in English as a foreign language.	3.1. Adapt the English text to the communicative situation.	- Write texts of medium complexity in English with an extension of 90 to 100 words, adapting the text to the recipient, communicative purpose and type of text, distinguishing the formal and informal register using every day and relevant vocabulary.	
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IV.- Preparation of the session

What should be done prior to the session?	What resources or materials will be used in the session?	What evaluation tools will be used in the session?
The teacher introduces news Vocabularies	Session, Usb, videos, Loud speakers, flashcards pens, markers and wok sheets	Observation.

V.- Sequential sequence of the session:

Stages	Methodological strategies	
Opening 5´	<p>- The teacher enters the classroom and greets the students, good morning, how are you today?</p> <p>- The teacher will invite students to follow coexistence rules that follow English classes to flow in an atmosphere of harmony and respect.</p> <p>- Then the teacher asks, what time is it? And plays an audio of a conversation for students to identify what it is about.</p> <p>- The teacher writes on the board: the goals are to learn THE TIME.</p>	Motivation and permanent evaluation
Development 35´	<p>Exercise 1: the teacher explains about the use of the time. Then the students listen the dialogue again and identify the time.</p> <p>Exercise 2: the students read the first question and repeat after the teacher.</p> <p>Exercise 3: the teacher explains about the basic vocabulary related to hours:</p> <p>It's one – twenty</p> <p>O'clock – it's five o'clock</p> <p>Half past / after, it's half past nine</p> <p>Quarter past / after, it's quarter past five</p> <p>It's ten after two</p> <p>Quarter to, it's quarter to six</p> <p>It's twenty to four</p> <ul style="list-style-type: none"> • Noon • Midday • midnight <p>I get up at six o'clock</p>	

	I eat lunch at quarter to eight Exercise 4: the teacher shows a video to the students about the time and instructs them to work their worksheet.	
Closing 5'	- Metacognition What I learnt? What I want to learn? What I need to learn? - What difficulties were observed during learning and teaching?	

Observation sheet

Area

Grade and section

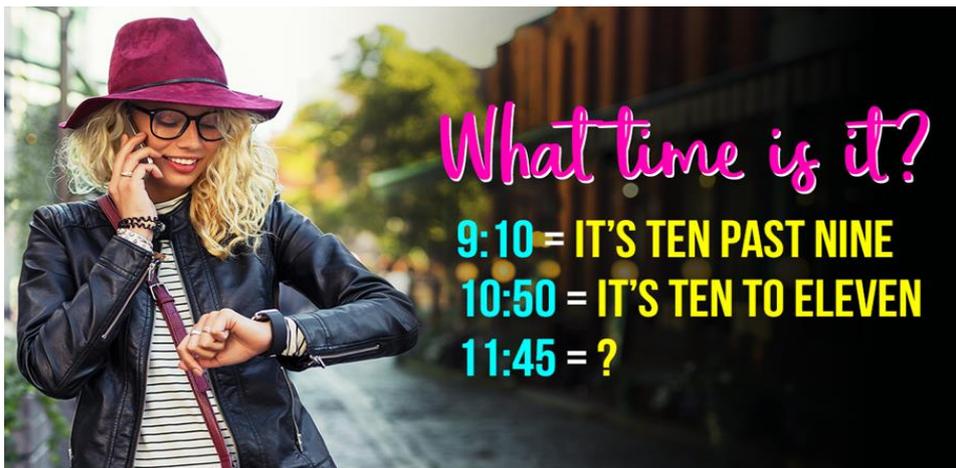
Teacher

Theme: What time is it?

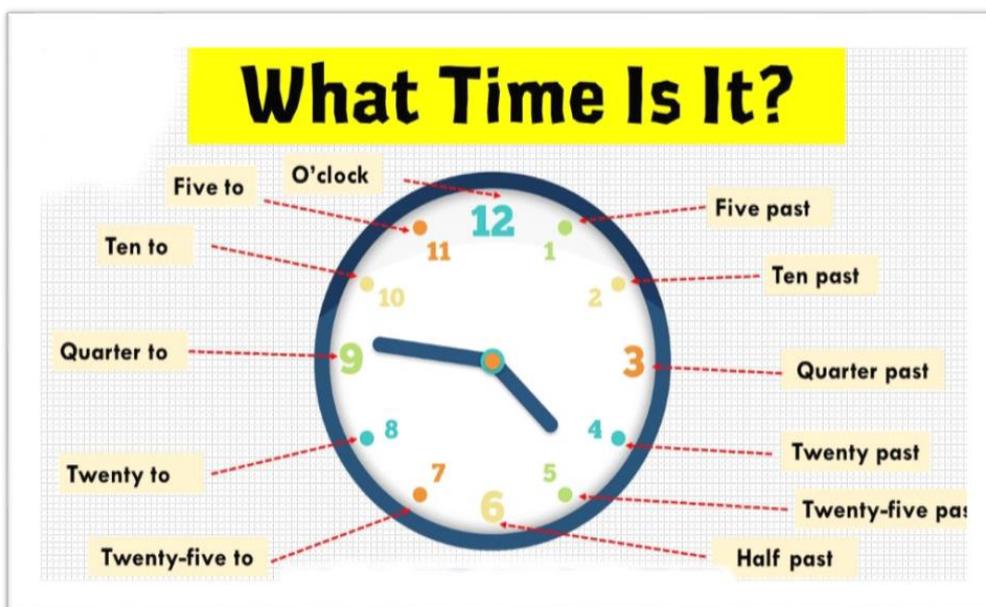
Names and Surnames		Participate actively.	Do activities related to the topic.	Expresses himself using appropriate vocabulary.	Identify vocabulary related to the topic.	Clarity in pronunciation.	TOTAL
		4	4	4	4	4	
1							
2							
3							
4							
5							

VI. Learning resources.

- Flashcards.



Flashcard, Writing and telling the time. Source: Retrieved from <https://images.app.goo.gl/h1ugRFWSmnSaTh3k9>.



Flashcard, Telling the time orally. Source: Retrieved from https://www.eslfast.com/kidsenglish/?token=TOKEN_KEY

- Video.



Video activity. Source: Retrieved from https://learnenglishkids.britishcouncil.org/how-videos/how-tell-the-time?_ga=2.172372515.1434820514.1619969482-321955025.1619625953 .

- worksheets.

e time:

What Time Is it?

























Worksheet, Time writing activity. Source: Retrieved from [https://es.liveworksheets.com/worksheets/en/English_as_a_Second_Language_\(ESL\)](https://es.liveworksheets.com/worksheets/en/English_as_a_Second_Language_(ESL)).

Match the times.

1		5:45	A quarter past two
2		18:00	Nine Fifty Five PM
3		11:20	Four Thirty AM
4		14:15	One PM
5		04:30	Six PM
6		21:55	Eleven Twenty AM
7		02:25	A quarter to six
8		19:05	Ten past Ten AM
9		13:00	Seven-o-Five PM
10		10:10	Two Twenty Five AM

Name: Class: Date:

Synthesis

- Throughout the content of this monograph, we have seen that there are various learning styles.
- Throughout the content of this monograph, we have seen that there are various learning styles.
- It is difficult to choose a single definition about learning styles due to the variety of definitions that exist.
- Knowing the different learning styles of students will allow us to use the correct strategies for good teaching.
- It could be said that learning styles are traits that indicate the way each student learns.
- In the same way, there are a large number of models of learning styles, in this work we have seen the most used.
- Also, it is advisable to publicize how neuroeducation influences language learning-teaching.
- In the same way as neuro-education and learning styles are related to the learning of each student.

Critical appraisal and suggestions

- It is important that each teacher knows the learning styles of the students, that way we will better understand the needs of each student and know how to guide them to overcome their deficits.
- None of the learning styles is better than the others, therefore each teacher must take into account each of them which will help students better assimilate their learning.
- Each person or student is different therefore their learning will be different from that of their classmates.
- Having knowledge and good understanding of the learning styles of the students allows the teacher of language teaching to develop his work in the best way.
- Teachers must find the best methodology for teaching different languages and adapt them to the needs of each student.
- Teachers must understand the individual needs of each student to understand how they learn and to be able to teach in a different way than the traditional one.
- The use of technology in language teaching takes great importance as the years go by, so it is essential that each teacher is updated in the use of technologies.

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Appendix

Appendix A: Test VAK school

Appendix A: Test VAK School

What is the predominant sensory channel in the student? This test, which can also be applied to student of school age, will help you to verify this. Rate each question with 0, 1, or 2 points, depending on how best reflects what is happening to your student:

N°	Learning styles	0	1	2
01	Only obey when say it several times with an authoritative tone.			
02	It is never still, it is always moving.			
03	To get it to obey, just look at it seriously.			
04	Likes to touch things, objects and people.			
05	Iis very fast counting things.			
06	Has very good ability to make abstractions.			
07	Gets excited very easily.			
08	Quickly move from one idea to another.			
09	Find the most exact word to express an idea.			
10	Touch others while speaking to them.			
11	have trouble understanding the schematics.			
12	Very quickly relate the concepts to each other.			
13	takes a long time to express a thought.			
14	Is able to remember in detail how a person was dressed.			
15	Has a special sensitivity to odors.			
16	Loves to be stroked.			
17	It is difficult for to change the topic of conversation.			
18	Has the facility to mentally "photograph" situations or people.			
19	When speaks, seems to be drawing objects in space.			
20	Schematics are easy for you.			
21	When he begins to speak, he does not stop, although it is difficult for him to express himself orally.			
22	Tell things in a thousand details.			
23	Gets a lot when talking.			
24	Speak with your eyes, with your gaze.			
25	It seems as if it had a broken record inside, repeat and repeat things.			
26	have a hard time making abstractions.			
27	Is extremely affectionate, affectionate.			
28	As he reads, trace pictures in the space with his finger.			
29	Is able to remember conversations verbatim.			
30	Has an extraordinary visual memory.			
31	When studying, he repeats the sentences several times and they easily stick to him.			
32	Obey when something reaches your heart.			
33	Has a lot of imagination (makes a lot of mental images).			
34	Loves to touch books, caress them, smell the.			
35	Does not memorize verbatim, but uses his own vocabulary.			
36	Know all the lyrics of the songs.			
37	Stays with the concepts, not with the textual phrases.			
38	Tend to have spelling mistakes.			
39	Study standing up, pacing the room.			
40	Has no difficulty learning poetry.			
41	Sometimes acts recklessly, without reflecting.			
42	Apparently, is always nervous, restless.			
43	Does not usually have spelling mistakes.			
44	loves manual activities.			
45	have a special interest in the facts, because of what has happened.			
46	Sometimes acts recklessly, without reflecting.			