



**UNIVERSIDAD NACIONAL DE LOJA**

**ÁREA DE LA EDUCACIÓN, EL ARTE Y LA  
COMUNICACIÓN**

**ENGLISH LANGUAGE CAREER**

**TITLE**

**“THE MULTIPLE INTELLIGENCES AND THEIR  
EFFECT IN THE TEACHING LEARNING PROCESS OF  
THE ENGLISH LANGUAGE WITH THE STUDENTS OF  
1<sup>ST</sup>, 2<sup>ND</sup> AND 3<sup>RD</sup> YEARS OF HIGH SCHOOL  
CURRICULUM AT “VICENTE ANDA AGUIRRE” HIGH  
SCHOOL, ACADEMIC YEAR 2012 – 2013”**

*Thesis as a previous requirement  
to obtain the bachelor's degree in  
Sciences of Education English  
language specialization.*

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**1859**

**LOJA – ECUADOR**

**2015**

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### CERTIFIES:

That this thesis entitled "THE MULTIPLE INTELLIGENCES AND THEIR EFFECT IN THE TEACHING LEARNING PROCESS OF THE ENGLISH LANGUAGE WITH THE STUDENTS OF 1ST, 2ND AND 3RD YEARS OF HIGH SCHOOL CURRICULUM AT "VICENTE ANDA AGUIRRE" HIGH SCHOOL, ACADEMIC YEAR 2012 – 2013", under the responsibility of the undergraduate Cristyan Paul Bravo Ludeña. Therefore, has been directed and corrected with relevance and scientific rigor in all its parts.

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Loja, July 2015



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## **ACKNOWLEDGEMENTS**

It is essential to leave all my sincere thanks to the National University of Loja, specifically to the Education, art and communication Area; and particularly to the English Language Career, for giving me the opportunity to study and to major in as an English language teacher.

My special appreciation to all authorities and teachers, who have contributed to my professional training. Besides, my sincere gratitude to Dr. Silvana Trujillo, who has given all his support as my thesis advisor.

The Author

## **DEDICATION**

I dedicate this thesis to God and my grandparents who helped, supported and encouraged me during my training process to achieve my goals.

**CRISTYAN PAUL**

## MATRIZ DE ÁMBITO GEOGRÁFICO

ÁREA GEOGRÁFICA DE LA INVESTIGACIÓN											
Biblioteca: Área de la Educación, el Arte y la Comunicaci											
TIPO DE DOCUMENTO	AUTOR/NOMBRE DEL DOCUMENTO	LUGAR	AÑO	GEOGRAPHICAL FIELD OF THE RESEARCH							NOTAS OBSERVACIONES
				NACIONAL	REGIONAL	PROVINCIA	CANTON	PARROQUIA	BARRIO/COMUNIDAD	OTRAS DESAGREGACIONES	
<b>TESIS</b>	Cristyan Paul Bravo Ludeña "THE MULTIPLE INTELLIGENCES AND THEIR EFFECT IN THE TEACHING LEARNING PROCESS OF THE ENGLISH LANGUAGE WITH THE STUDENTS OF 1ST, 2ND AND 3RD YEARS OF HIGH SCHOOL CURRICULUM AT "VICENTE ANDA AGUIRRE" HIGH SCHOOL, ACADEMIC YEAR 2012 – 2013"	UNL	2015	ECUADOR	ZONE 7	LOJA	LOJA	EL SAGRARIO	CENTRAL	CD	TÍTULO EN CIENCIAS DE LA EDUCACIÓN, ESPECIALIDAD INGLÉS







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**a. TITLE**

**“THE MULTIPLE INTELLIGENCES AND THEIR EFFECT IN THE TEACHING LEARNING PROCESS OF THE ENGLISH LANGUAGE WITH THE STUDENTS OF 1ST, 2ND AND 3RD YEARS OF HIGH SCHOOL CURRICULUM AT “VICENTE ANDA AGUIRRE” HIGH SCHOOL, ACADEMIC YEAR 2012 – 2013”**

## **b. RESÚMEN**

El objetivo de la presente investigación es detectar la influencia de las inteligencias múltiples en el proceso de enseñanza aprendizaje del idioma Inglés de los estudiantes de 1ro, 2ndo, y 3er año de Bachillerato del colegio Vicente Anda Aguirre. Año académico 2012 – 2013

Los métodos científico, descriptivo y explicativo fueron utilizados en la presente investigación.

La encuesta fue aplicada tanto a docentes como a estudiantes y tuvo relación con las hipótesis planteadas. Los datos obtenidos fueron procesados y representados en los correspondientes cuadros y gráficos.

Existen inteligencias múltiples que facilitan el aprendizaje del idioma Inglés de los estudiantes; sin embargo se detecta la poca aplicación de estrategias y técnicas de las inteligencias múltiples para estimular el aprendizaje del idioma Inglés en los estudiantes.

## **ABSTRACT**

The present research entitle has as its main objective to find out the influence of the Multiple Intelligences in the Teaching Learning Process of the English Language Learning in students of the 1st, 2nd and 3rd years of Bachillerato at " Vicente Anda Aguirre" High School, Academic year 2012 – 2013.

The scientific, descriptive, and explicative methods were used to carry out the research.

The survey applied to both teachers and students of the institution was related to the stated hypotheses and the information gotten was processed and represented on the corresponding tables and graphs.

There are certain multiple intelligences that facilitate the students' English language learning. However there is a little application of strategies and techniques of the multiple intelligences that stimulate the English language learning.

### **c. INTRODUCTION**

***“If we had only one intelligence- it would either mean that if we were smart, we are smart in everything, and if we are not smart, we’d be poor in everything.”*** (GARDNER, HOWARD. The multiple intelligences theory. 1983)

English is one of the most popular language spoken around the world.

People need to know English to communicate effectively.

Educational leaders need to be conscious about the society changes of the English teaching learning process where people’s intelligence, plays a notable role. It is also important to consider that capacity to do something useful in the society in which we live.

Teachers who perform their teaching based on multiple-intelligence theories make that their students understand and learn in different ways, emphasizing in language, pictures, sounds, physical movements among others.

The main reason to carry out this research was to wake up the teachers’ and students’ interest about the multiple intelligences and to be aware about their importance in the teaching learning process of the English language in High Schools.

During the development of the research, different methods were used. The scientific method helped the researcher to do a systematic and ordered process of the research work and it permitted to do a logical explanation of the relations that are established in the researched object and derivate conclusions and recommendations about the detected problem. The

descriptive method oriented to describe the influence of multiple intelligences in the teaching learning process. The analytic-synthetic method was used to analyze the results gotten in the research by means of the application of instruments to make the interpretation about the variables and the hypotheses which were set up at the beginning of the work.

The thesis includes: a summary that illustrates the general objective, methods, techniques and instruments, the main results and the most important conclusions. The Introduction, which describes the contextualization of the research problem; the specific objectives, hypothesis and methods. The Revision of the literature, which was elaborated taking into account the theoretical reference that served as support to analyze and interpret the results obtained during the research. Next, the methodology used to carry out the research, the methods, techniques, procedures and instruments, which facilitated to get information about the multiple intelligences and the Teaching learning process. It also contains the principal results gotten from the instruments applied to teachers and students which permitted the analysis and interpretation of each question in order to contrast the information found in the empirical field with the respective theoretical frame. Furthermore, it has a discussion, where the most important results were analyzed in order to verify if the stated hypotheses were accepted or denied. The conclusions were presented based on the analysis of the most relevant questions and

percentages of the gathered information, establishing a logical relation with the variables of the research work.

As a final point, the researcher set up the recommendations about the problematic related to the multiple intelligences and their effects in the teaching learning process of the English language.



## **d. REVIEW OF THE LITERATURE**

### **THE INTELLIGENCE**

“Intelligence is the capacity to do something useful in the society in which we live. Intelligence is the ability to respond successfully to new situations and the capacity to learn from one’s past experiences, it is a capacity for original and productive thought.”

Intelligence comes from the Latin verb *‘intellegere’*, which means *‘to understand’*. The Oxford Dictionary defines the term *‘intelligence’* as *‘understanding, quickness of understanding, sagacity.’* Intelligence is a very vast term and encompasses multiple capacities – reasoning, planning, and solving problems.

Intelligence is most widely studied in humans, but has also been observed in animals and plants. Artificial intelligence is the intelligence of machines or the simulation of intelligence in machines.

Numerous definitions of and hypotheses about intelligence have been proposed since before the twentieth century, with no consensus reached by scholars. Within the discipline of psychology, various approaches to human intelligence have been adopted. The psychometric approach is especially familiar to the general public, as well as being the most researched and by far the most widely used in practical settings”

## **THE MULTIPLE INTELLIGENCES**

The Multiple intelligences are different intelligences that people have and develop according to their affinity.

Some of the benefits of understanding a student's intelligence type are:

- To facilitate better and effective learning;
- To help determine students' personality, hobbies, interests, and skills.
- To help students to determine the most suitable educational opportunities.

## **TYPES OF INTELLIGENCE**

Howard Gardner's theory claims that humans have multiple intelligences.

He believes that each individual has eight intelligences:

- ❖ Bodily Kinesthetic Intelligence
- ❖ Interpersonal Intelligence
- ❖ Verbal Linguistic Intelligence
- ❖ Logical Mathematical Intelligence
- ❖ Naturalist Intelligence
- ❖ Intrapersonal Intelligence
- ❖ Musical Intelligence
- ❖ Visual Spatial Intelligence

### **Bodily-Kinesthetic Intelligence.**

This area has to do with movement and doing. People are generally good at physical activities such as sports or dance. People who have this intelligence usually learn better by getting up and moving around. They may enjoy acting or performing, and in general they are good at building and making things. They often learn best by physically doing something, rather than reading or hearing about it. Those with strong bodily-kinesthetic intelligence seem to use what might be termed muscle memory. They remember things through their body such as verbal memory or images. They require fine motor skills that require dancing, athletics, surgery, craft and other movements.

### **Interpersonal Intelligence.**

This area has to do with interaction with others. People in this category are usually extroverts and are characterized by their sensitivity to others' moods, feelings, temperaments and motivations, and their ability to cooperate in order to work as part of a group. They communicate effectively and empathize easily with others, and may be either leaders or followers. They typically learn best by working with others and often enjoy discussion and debate.

### **Verbal-linguistic Intelligence**

This area has to do with words, spoken or written. People with verbal-linguistic intelligence display a facility with words and languages. They are

typically good at reading, writing, telling stories and memorizing words along with dates. They tend to learn best by reading, taking notes, listening to lectures via discussion and debate. They are also frequently skilled at explaining, teaching and oration or persuasive speaking. Those with verbal-linguistic intelligence learn foreign languages very easily as they have high verbal memory and recall, and an ability to understand and manipulate syntax and structure.

### **Logical-Mathematical Intelligence**

This area has to do with logic, abstractions, reasoning, and numbers. While it is often assumed that those with this intelligence naturally excel in mathematics, chess, computer programming and other logical or numerical activities, a more accurate definition places emphasis on traditional mathematical ability and more reasoning capabilities, abstract patterns of recognition, scientific thinking and investigation, and the ability to perform complex calculations. Many scientists, mathematicians, engineers, doctors and economists function in this level of intelligence.

### **Naturalistic intelligence**

This area has to do with nature, nurturing and relating information to one's natural surroundings. This is the eighth and newest of the intelligences, added to the theory in 1997. This type of intelligence was not part of Gardner's original theory of Multiple Intelligences. Those with it are said to have greater sensitivity to nature and their place within it, the ability to

nurture and grow things, and greater ease in caring for, taming and interacting with animals. They may also be able to discern changes in weather or similar fluctuations in their natural surroundings.

### **Intrapersonal Intelligence**

This area has to do with introspective and self-reflective capacities. Those who are strongest in this intelligence are typically introverts and prefer to work alone. They are usually highly self-aware and capable of understanding their own emotions, goals and motivations. They often have an affinity for thought-based pursuits such as philosophy. They learn best when allowed to concentrate on the subject by themselves. There is often a high level of perfectionism associated with this intelligence.

Careers which suit those with this intelligence include philosophers, psychologists, theologians, writers and scientists.

### **Visual-Spatial Intelligence**

This area has to do with vision and spatial judgment. People with strong visual-spatial intelligence are typically very good at visualizing and mentally manipulating objects. Those with strong spatial intelligence are often proficient at solving puzzles. They have a strong visual memory and are often artistically inclined. Those with visual-spatial intelligence are also generally have a very good sense of direction and may also have very

good hand-eye coordination, although this is normally seen as a characteristic of the bodily-kinesthetic intelligence.

Some critics point out the high correlation between the spatial and mathematical abilities, which seems to disprove the clear separation of the intelligences as Gardner theorized.

### **Musical Intelligence**

This area has to do with rhythm, music, and hearing. Those who have a high level of musical-rhythmic intelligence display greater sensitivity to sounds, rhythms, tones, and music. They normally have good pitch and may even have absolute pitch, and are able to sing, play musical instruments, and compose music. Since there is a strong auditory component to this intelligence, those who are strongest in it may learn best via lecture.

The musical learning style is one of eight types of intelligence defined in Howard Gardner's theory of Multiple Intelligences. "Musical learning style refers to a person's ability to understand and process sound, rhythm, patterns in sound, relationships between sounds, and ability to process rhymes and other auditory information"(Howard Gardner, 1983)

### **THE TEACHING LEARNING PROCESS**

Planning refers to all of those activities a teacher might do to get ready to interact with students in the classroom. Management refers to controlling

student behavior, while instruction refers to actually guiding student learning.

### Classroom planning

- Who are my students?
- How will I accomplish my goal and objectives?
- How will I know if my goals and objectives have been accomplished?

### **Steps in Planning Process**

Frudden and Stow (1986) identified 8 steps in the planning process:

- Establish goals and objectives
- Establish allocated time
- Identify strategies and models of teaching
- Determine methods of evaluating of student outcomes
- Select instructional methods and techniques
- Design student activities
- Provide for variety and individual differences

### **Classroom management**

Another important author states “there are 3 general principles for good classroom management:

- Willingness of the teacher to accept responsibility for classroom control



- Long-term, solution-oriented approaches to problems (rather than short-term, desist/control responses)
- Check to see if symptomatic behavior is caused by underlying personal problems (impulsivity, lack of awareness, home problems, etc.)” (Brophy, The teaching 1985)

Brophy also cites 3 orientations to classroom management:

- The teacher encourages discouraged students, builds self-esteem by arranging for and calling attention to success, improving peer relationships, etc.
- Insight (cognitive)--spend time with problem students individually, attempting to instruct and inform them, getting to know them personally
- Behavioristic--offer incentives, negotiate contracts, call attention to and reinforce desirable behavior

### **Classroom instruction**

Instruction was defined previously as "the purposeful direction of the learning process" and is one of the major teacher class activities (along with planning and management). Professional educators have developed a variety of models of instruction, each designed to produce classroom learning. Joyce, Weil, and Calhoun (2003) describe four categories of models of teaching/instruction (behavioral systems, information

processing, personal development, and social interaction) that summarize the vast majority of instructional methods.

## **STRATEGIES TO DEVELOP THE MULTIPLE INTELLIGENCES**

There are many ways to improve our own intelligences and students' intelligences using tools and techniques called in better way strategies for each intelligence. (Gardner, Howard. Frames of mind. 1983)

### **BODILY – KINAESTHETIC INTELLIGENCE**

Activities that involve touching and moving will help develop this intelligence.

- Use posts it notes to generate ideas. Then put them on a wall and sort them into categories.
- Use post it notes to create flowcharts and Gantt charts that can be physically built up and manipulated.
- Something physically real by providing a model people can touch, walk around and interact with.
- Make a problem a physical reality by acting out a role-play.
- If drawing pictures or diagrams make them big so that they maximize the amount of movement required.
- Place whiteboards in different locations so that you can catch ideas as you move around.
- Provide stress balls and other tactile toys that people can squeeze and touch whilst they are thinking.

- Rehearse and memorize physical actions such as dance movements to build up your muscle memory.
- Go for a walk or do some other type of physical activity whilst thinking.
- Build models of your ideas with play – dough and other tactile materials.

### **INTERPERSONAL INTELLIGENCE**

Any strategies that involve group interaction and communication will help develop this type of intelligence.

- Use role-plays involving interaction between two or more people.
- Use any group brainstorming approaches.
- Try to put self in the shoes of other. Imagine How they think and feel about any problem
- Create new opportunities for face to face contact.
- Personalize the problem. How does it affect a day in the life of an individual?
- Build relationships with people who are different, do different things, or do things differently.

### **LINGUISTIC INTELLIGENCE**

Any strategies that engage a significant amount of writing and speaking will help develop this type of intelligence.

- Describe a topic using different words and phrases.
- Write down others' ideas using your own words.
- Clarify your thinking by speaking your thoughts out loud.

- Script out a problem or issue in the form of a play.
- Create acronyms and key phrases to develop your verbal memory.
- Write out your experiences in a personal journal.
- Tell the story of a problem, how it began, how it developed and how it was brought to an end.
- Write down your ideas as they occur to you without self – censorship.
- Read what you have written out loud.

### **LOGICAL – MATHEMATICAL INTELLIGENCE**

Any strategies that involve an analytical approach that breaks things down, build things up or looks for patterns can be used to develop this intelligence.

- Ask How? To cut up a problem down and get into details.
- Ask why? To cut up a problem up and obtain its overall context.
- Create process maps of problem areas.
- Identify the positive, effectiveness increasing and negative, effectiveness decreasing attributes of specific products or activities and identify how they can be maximized and minimized respectively.

### **NATURALISTIC INTELLIGENCE**

Any strategies that involve producing and developing your own and others' ideas will help develop this intelligence.

- Create mind maps to explore, categorize and develop students' thinking about what they like.

- Look for ways to create new, improved ideas from separate, initially unrelated ideas.
- Produce new ideas by using random objects and words and their various characteristics and associations to stimulate your thinking.

### **INTRAPERSONAL INTELLIGENCE**

Any strategies that encourage self – awareness and reflection will help develop this intelligence.

- Keep a journal of your ongoing experiences. Think specially about what you thought, felt and did in specific situations. What insights does this give you?
- Write a script of a situation you want to deal with well. Take note of what you think and feel as you read through it. What insights does this give you?
- Explicitly notice what you are thinking, feeling and doing at the same time as others are speaking. Also, mentally note what you find positive, negative and interesting about what they are saying. Ask yourself why this is.

### **SPATIAL INTELLIGENCE**

Any strategies that encourage the visual expression and manipulation of thoughts, ideas and concepts will help the development of this intelligence.

- Draw a picture of a problem or issue.
- Create a mind map of a problem or issue
- Use diagrams and flowcharts instead of words.

- Make visual notes of what someone is saying rather than using words.
- Use pictures and symbols to represent important concepts, or definitions that would take a lot of words to describe.
- Use the cartoon strip approach to draw out the story of a problem or process.

### **MUSICAL INTELLIGENCE**

Any strategies that encourage the development of musical awareness, sense of rhythm and hearing in general will help enhance this intelligence.

(Gardner, Howard, Frames of mind.1983)

- Use rhythmic and memorable melodies to remember information.
- Experiment with adding music to your environment. What types of music help you to relax or concentrate? What types of music stimulate and energize you?
- Immerse yourself in the sounds associated with the situation or subject you are addressing.
- Listen to audio recordings of lectures and books.
- Record your own thoughts and ideas and play them back to yourself.
- Listen and sing the music with a lyric more complicated each time.

## **e. MATERIALS AND METHODS**

### **MATERIALS**

- Office material: books, paper, folders
- Technological resources: computer, scanner, printer, internet, flash memory.

### **METHODS**

The Descriptive method was used to describe the influence of the multiple intelligences in the students of the mentioned high school in the English teaching learning process.

The analytical-synthetic method was used to analyze the obtained results through the research instruments and to make the interpretation of data, including a critical analysis considering the variables of the hypotheses. It also was used to establish the conclusions based on the results of major tendency.

The explicative method was also used to explain the implications of the variables of every hypothesis and in that way the researcher was able to prove the same ones, through a descriptive deduction according to the obtained results contrasted with the theoretical references.

### **TECHNIQUES AND INSTRUMENTS**

To carry out the present research and to get the bibliographic information some resources like: books, magazines and internet were consulted.



The survey was the technique that was applied. It contained a multiple choice questionnaire with close and mixed questions about the theme researched in order to find out the influence of the Multiple Intelligences in the teaching learning process.

## **PROCEDURES**

To carry out the present research the following steps were considered:

Once applied the surveys, the tabulating of the obtained information was done in the field researched; this means adding all the answers of the indicators for each question until the percentages were obtained from all the instruments applied.

Then data was organized in general charts tab to get a panoramic view of the problem, and later it was broken down into statistical tables for each question on all instruments.

After the representation of the data on the corresponding tables and graphs the logical analysis of the results was done. It was necessary to check the theoretical reference in order to do the contrasting with the empiric information, which allow the researcher to verify the stated hypotheses

Finally, the conclusions were drawn according to the situation of the problems found; it permitted the researcher give the corresponding recommendations.

## POPULATION AND SAMPLE

The total population is formed by 4 teachers and 328 students from 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years of Bachillerato at “Vicente Anda Aguirre” High School. In order to handle the results appropriately, a meaningful sample from students’ population was taken out.

The sample is detailed in the next chart.

COURSES	STUDENTS’ POPULATION			SAMPLE TOTAL
	A	B	C	
Years				
1 <sup>st</sup> year	17	17	16	50
2 <sup>nd</sup> year	17	17	15	49
3 <sup>rd</sup> year	17	17	11	45
<b>TOTAL</b>				<b>144</b>
<b>Teachers total</b>				<b>4</b>

## f. RESULTS

### HYPOTHESIS 1:

There are certain multiple intelligences that support the English learning on students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of Bachillerato at “Vicente Anda Aguirre” high school.

### TEACHERS AND STUDENTS’ SURVEY

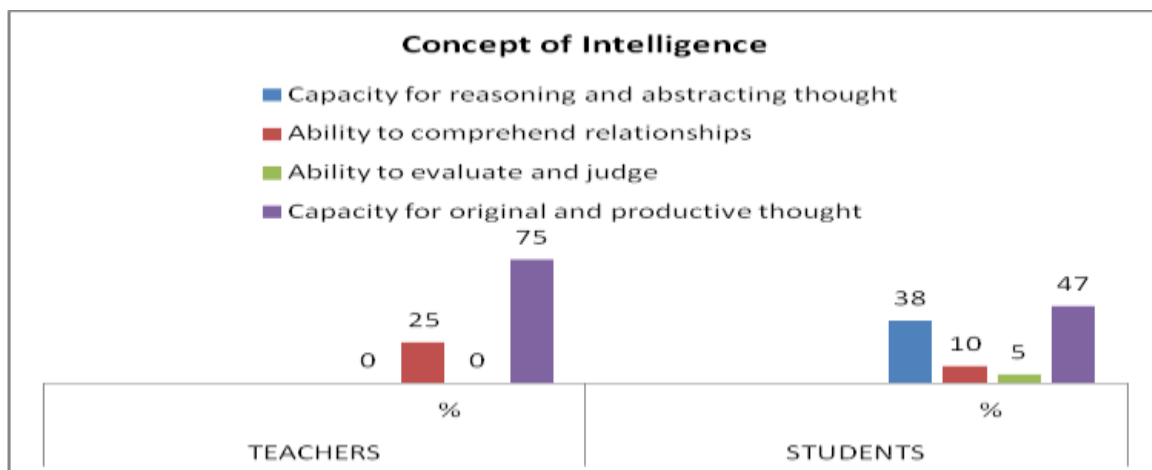
#### 1. How can you define the intelligence?

##### a. Table 1

CONCEPT OF INTELLIGENCE	Teachers		Students	
	f	%	f	%
Capacity for reasoning and abstracting thought	0	0	55	38
Ability to comprehend relationships	1	25	15	10
Ability to evaluate and judge	0	0	6	5
Capacity for original and productive thought	3	75	68	47
<b>TOTAL</b>	<b>4</b>	<b>100</b>	<b>144</b>	<b>100</b>

**Source:** Teachers and students’ survey  
**Researcher:** Cristyan Paul Bravo Ludeña

##### b. Graph 1



### c. Logical analysis

Most of the teachers and an important number of students chose the definition of intelligence as a capacity for original and productive thought. Nevertheless, another important group of students selected its definition as the capacity for reasoning and abstracting thought.

Howard Gardner (1983) said that intelligence is the ability to respond successfully to new situations and the capacity to learn. This criteria in relation to others, give us the idea that the human's intelligence is defined as the capacity for reasoning and abstracting thought. This means that teachers know what intelligence is but they are not completely informed about these concepts.

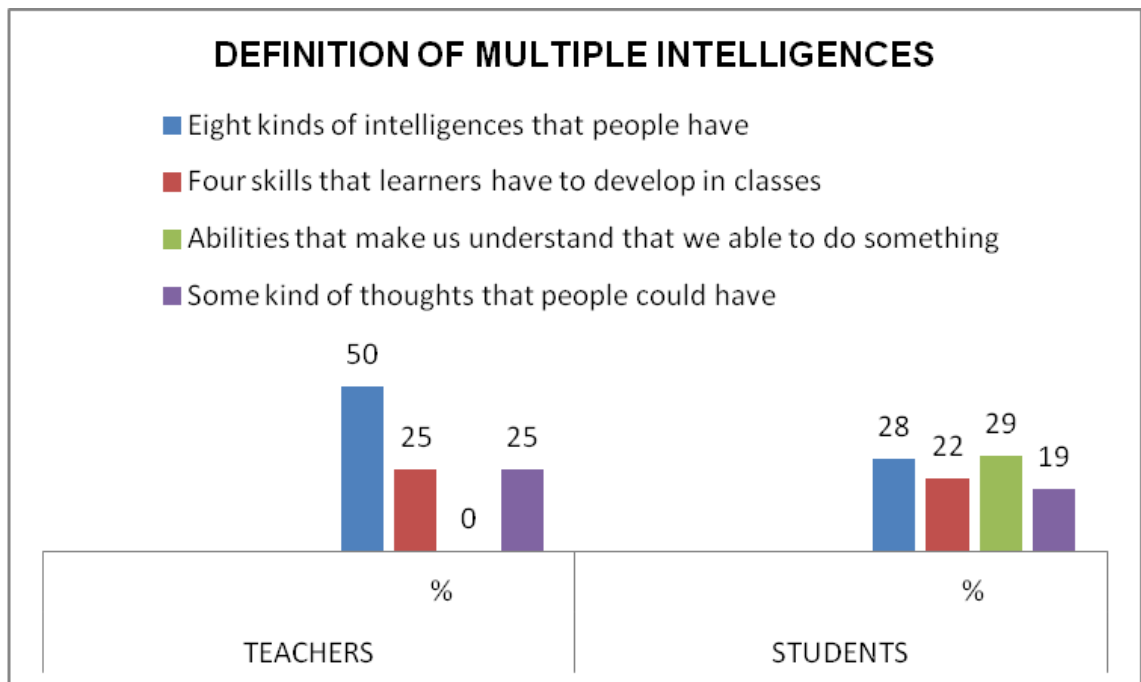
## 2. The multiple intelligences describe to: (tick)

### a. Table 2

DESCRIPTION OF MULTIPLE INTELLIGENCES	Teachers		Students	
	f	%	f	%
Eight kinds of intelligences that people have	2	50	41	28
Four skills that learners have to develop in classes	1	25	32	22
Abilities that make us understand that we are able to do something	0	0	43	29
Some kind of thoughts that people could have	1	25	28	19
<b>TOTAL</b>	<b>4</b>	<b>100</b>	<b>144</b>	<b>100</b>

**Source:** Teachers and students' survey  
**Researcher:** Cristyan Paul Bravo Ludeña

## b. Graph 2



## c. Logical analysis

Half percent of the teachers might misunderstood the question or they might not be clear about the concept of multiple intelligences. Likewise, students in relation to this question have different criteria about its definition. This indicates that teachers are not clear about this important matter. While considering the students` answers it can be justified since they are in learning process.

According to Dr. Howard Gardner in his book “Frames **of Mind**” multiple intelligences are defined as the eight kinds of intelligences that people have, thus half of teachers are right, they know the concept, because they are responsible of the development of the English teaching learning

process. It is important that students guided by their teachers discover by themselves their own intelligences, which will facilitate a better and effective learning.

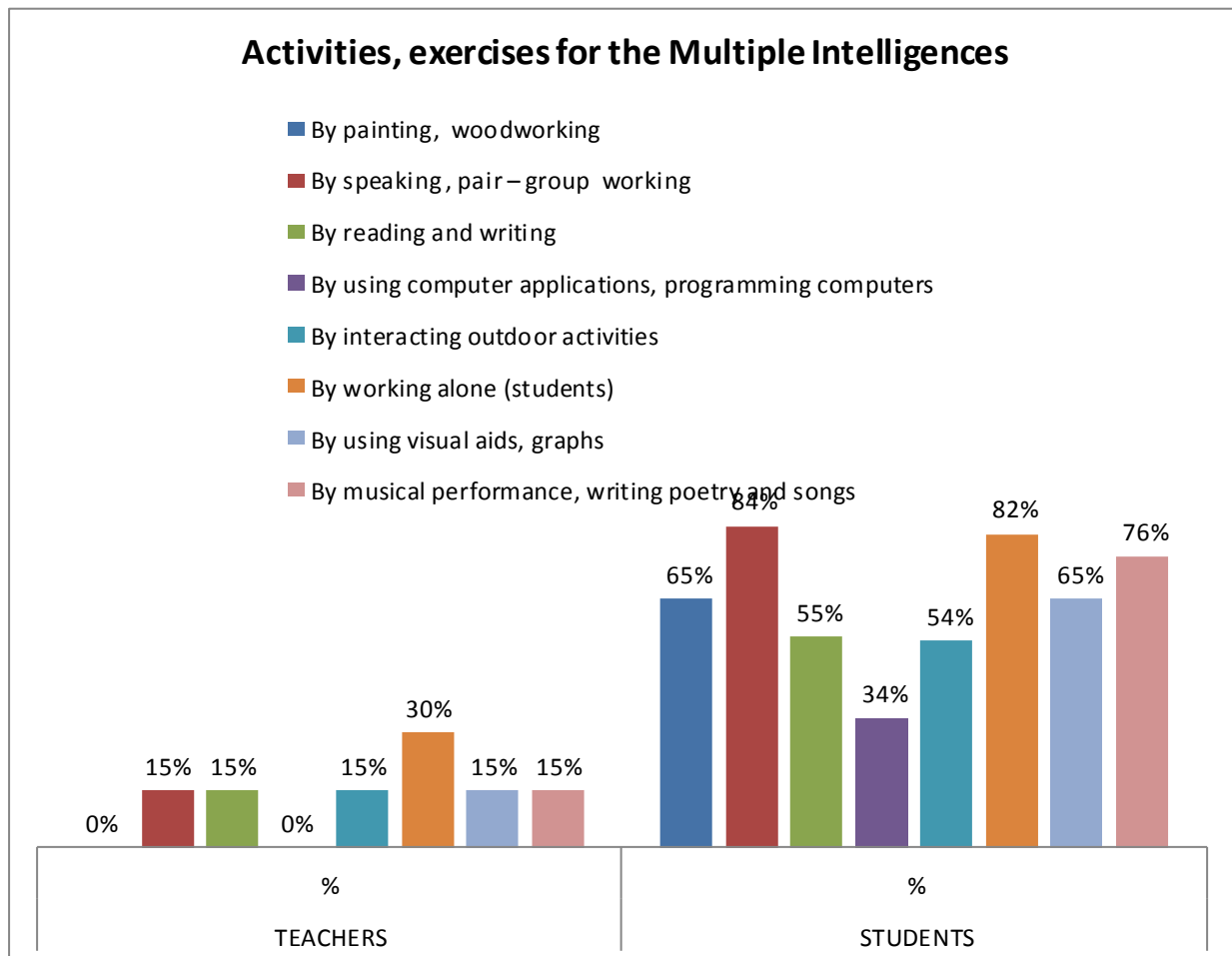
### 3. How do you stimulate the development of the multiple intelligences in students?

a. Table 3

ACTIVITIES, EXERCISES FOR THE MULTIPLE INTELLIGENCES	TEACHERS		STUDENTS	
	F	%	F	%
By painting, woodworking	0	0	94	65
By speaking, pair – group working	1	15	122	84
By reading and writing	1	15	80	55
By using computer applications, programming computers	0	0	50	34
By interacting outdoor activities	1	15	79	54
By working alone (students)	2	30	119	82
By using visual aids, graphs	1	15	95	65
By musical performance, writing poetry and songs	1	15	110	76

**Source:** Teachers and students' survey  
**Researcher:** Cristyan Paul Bravo Ludeña

### b. Graph 3



### c. Logical analysis

As it can be observed in the chart according to teachers' answers, it is clearly noticed that intrapersonal intelligence is the most stimulated intelligence because they prefer to make students work alone, while most of the students' answers contrast with it since most of them like to work in groups. However an important number of students establish they like to work alone. Likewise, reading and writing, pair and group work, using

visual aids and graphs, music performance, poetry and songs and outdoor activities receive a little acceptance by teachers.

Teachers should work on all multiple intelligences students have; and pay specific attention on students' abilities to support the English learning by planning appropriate activities to help students to identify their own intelligences in order to facilitate their learning.

Regarding the teachers' answers it is clear that interpersonal intelligence is the most stimulated on the students, it is because they prefer working in pairs or group helping and exchanging ideas among each other.

Gardner (2011) emphasizes on students' capacities and skills to learn or to do something, especially in learning a foreign language.

#### 4. What Multiple Intelligences have you noticed in your students?

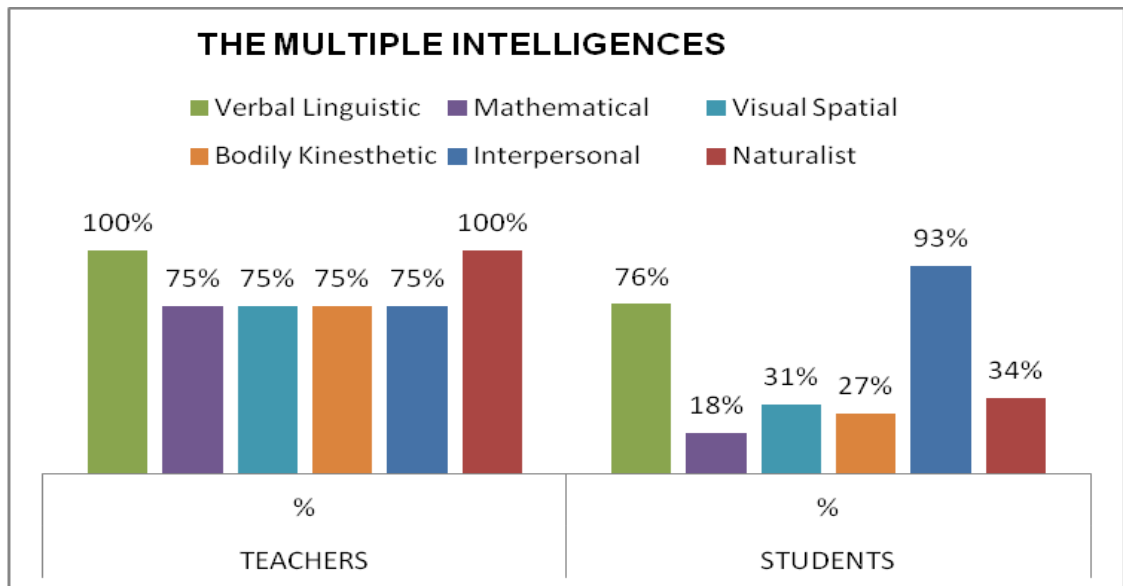
##### a. Table 4

THE MULTIPLE INTELLIGENCES	Teachers		Students	
	f	%	f	%
Musical	4	100	39	27
Intrapersonal	3	75	101	70
Verbal Linguistic	4	100	110	76
Mathematical	3	75	26	18
Visual Spatial	3	75	45	31
Bodily Kinesthetic	3	75	39	27
Interpersonal	3	75	134	93
Naturalist	4	100	50	34

**Source:** Teachers and students' survey  
**Researcher:** Cristyan Paul Bravo Ludeña



**b. Graph 4**



**c. Logical analysis**

The results from the teachers' surveys demonstrated that the musical, verbal linguistic and naturalist intelligences are the more common intelligences that students have during the English classes. In relation to the results gotten from students, the highest percentages about multiple intelligences they have are the interpersonal, verbal linguistic and intrapersonal. In relation to teachers' answers the musical, visual spatial and kinesthetic intelligences there is a inconsistency with students' answers since they think they don't have those types of intelligences. This disagreement is given because of the limited knowledge of the student's individuality on part of teachers.

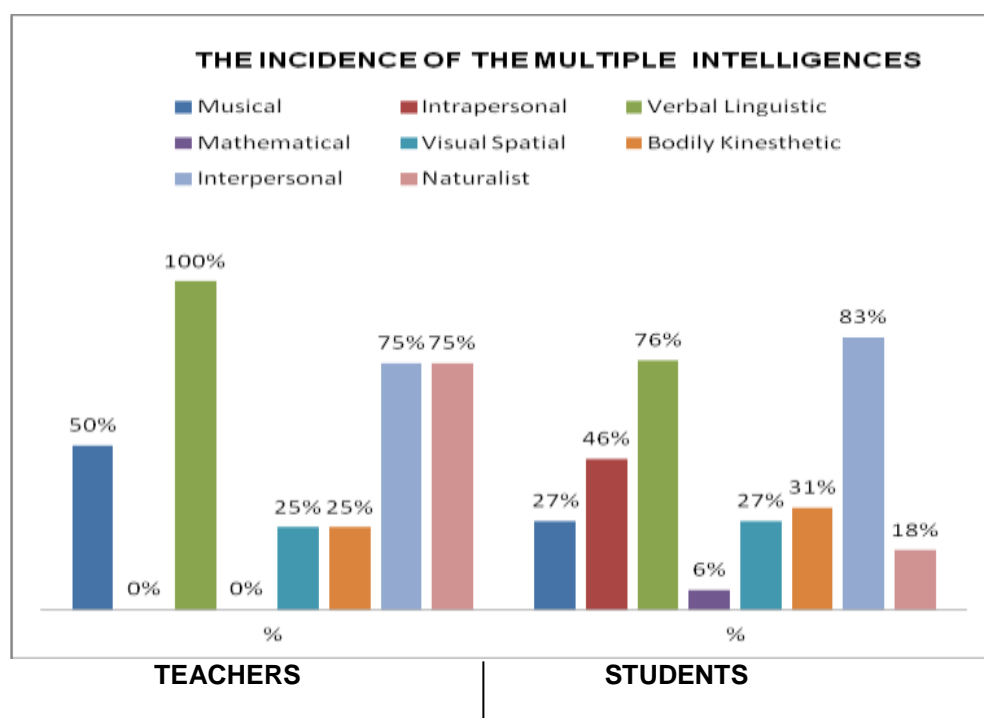
5. As an English teacher what intelligence do you think helps students to learn English language more easily? Select maximum three

a. Table 5

THE INCIDENCE OF MULTIPLE INTELLIGENCES	Teachers		Students	
	f	%	f	%
Musical	2	50	39	27
Intrapersonal	0	0	67	46
Verbal Linguistic	4	100	110	76
Mathematical	0	0	10	6
Visual Spatial	1	25	39	27
Bodily Kinesthetic	1	25	45	31
Interpersonal	3	75	120	83
Naturalist	3	75	26	18

Source: Teachers and students' survey  
 Researcher: Cristyan Paul Bravo Ludeña

b. Graph No.5



### **c. Logical analysis**

Most of the teachers indicate that, verbal linguistic, interpersonal and naturalistic intelligences are the more important skills to help students learn more easily; which is corroborated by students except with the naturalist one. However an important group of students, think that the intrapersonal and bodily kinesthetic are the more important intelligences for learning English.

The theoretical reference estimates that students learn a language in class through working by groups and interacting with others (interpersonal intelligence), by permitting them to communicate effectively and empathize easily. These results demonstrate that there are certain multiple intelligences that support English language learning.

Verbal – linguistic intelligence relates with words, spoken or written ideas, through it students are able to learn languages, they are typically good at reading, writing, telling stories and memorizing words along with dates. In this case, while teachers are aware of the role of multiple intelligences in language learning, students emphasized the importance of interpersonal intelligence. The theoretical reference estimates that students learn a language in class through working by groups and interacting with others, which permit them to communicate effectively by means of interaction.

## HYPOTHESIS 2:

There is a little application of strategies and techniques of multiple intelligences that stimulate the English language learning in students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of Bachillerato at “Vicente Anda Aguirre” High School.

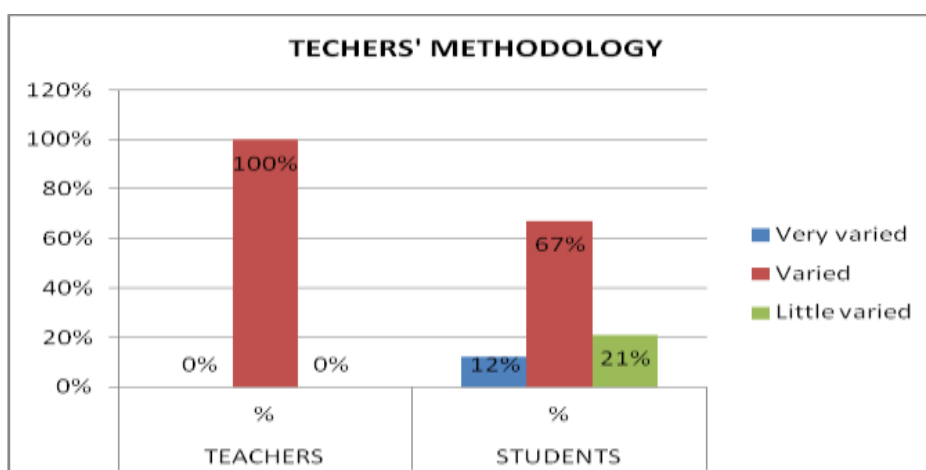
**6. Do you think, your methodology is varied enough according to your students’ multiple intelligences?.**

### a. Table 6

THE TEACHERS’ METHODOLOGY	Teachers		Students	
	f	%	f	%
Very varied	0	0	17	12
Varied	4	100	97	67
Little varied	0	0	30	21
<b>TOTAL</b>	<b>4</b>	<b>100</b>	<b>144</b>	<b>100</b>

**Source:** Teachers and students’ survey  
**Researcher:** Cristyan Paul Bravo Ludeña

### b. Graph 6



### c. Logical analysis

To research the types of methodologies employed by teachers, in relation to the question six, the following criteria were established: “very varied”, “varied”, “little varied”. In this context the total of surveyed teachers expressed that the methodology used to teach is varied. This criterion is corroborated by most of the students who pointed out the same idea. Likewise a minor group of learners indicated that the methodology is little varied”.

In relation to this issue Gardner (1983) establishes that in teaching and learning languages through multiple intelligences the teachers’ methodology plays a vital role because they have to consider all of them in their practice in order to find the most varied methodology.

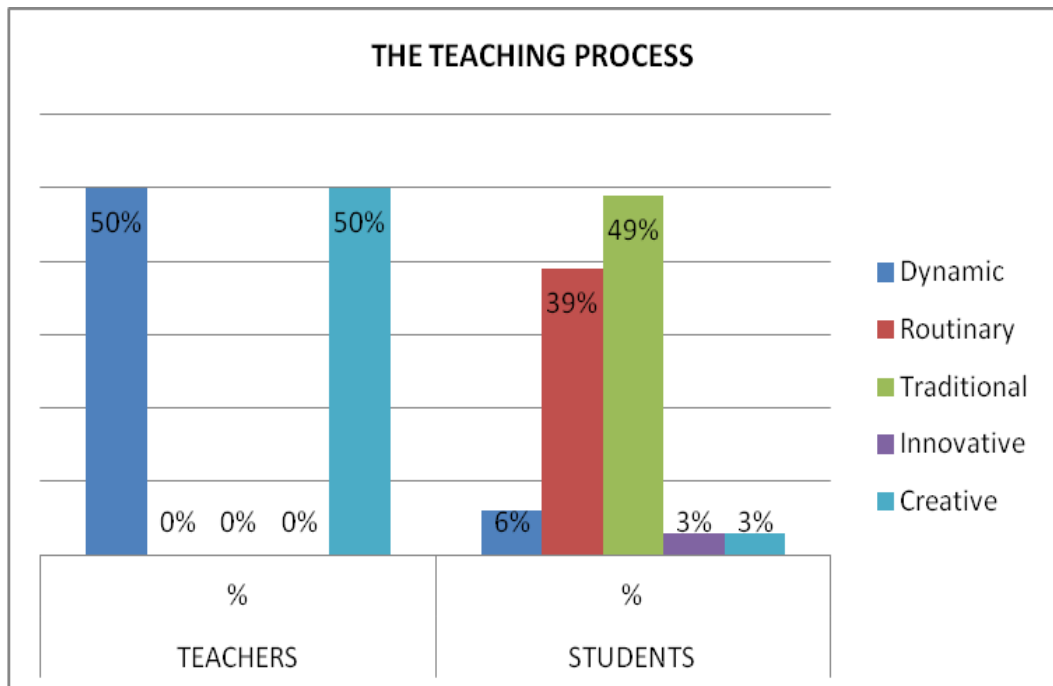
## 7. How do you consider your teaching?

### a. Table 7

THE TEACHING PROCESS	TEACHERS		STUDENTS	
	F	%	f	%
Dynamic	2	50	9	6
Routinary	0	0	54	39
Traditional	0	0	71	49
Innovative	0	0	5	3
Creative	2	50	5	3
<b>TOTAL</b>	<b>4</b>	<b>100</b>	<b>144</b>	<b>100</b>

Source: Teachers and students’ survey  
Researcher: Cristyan Paul Bravo Ludeña

**b. Graph 7**



**d. Logical analysis**

In relation to this question, teachers and students have different criteria. Some teachers informed that their teaching is dynamic and creative; while an important number of students indicated that their teacher's methodology is traditional and repetitive. That is to say they refuse the idea that their methodology is "dynamic and creative".

According to these criteria, students think their teachers still are using traditional methodologies like Grammar Translation. It seems that they do not promote learning. It can be noted because teachers talk a lot in class, students only listen to them and they almost never practice their speech.

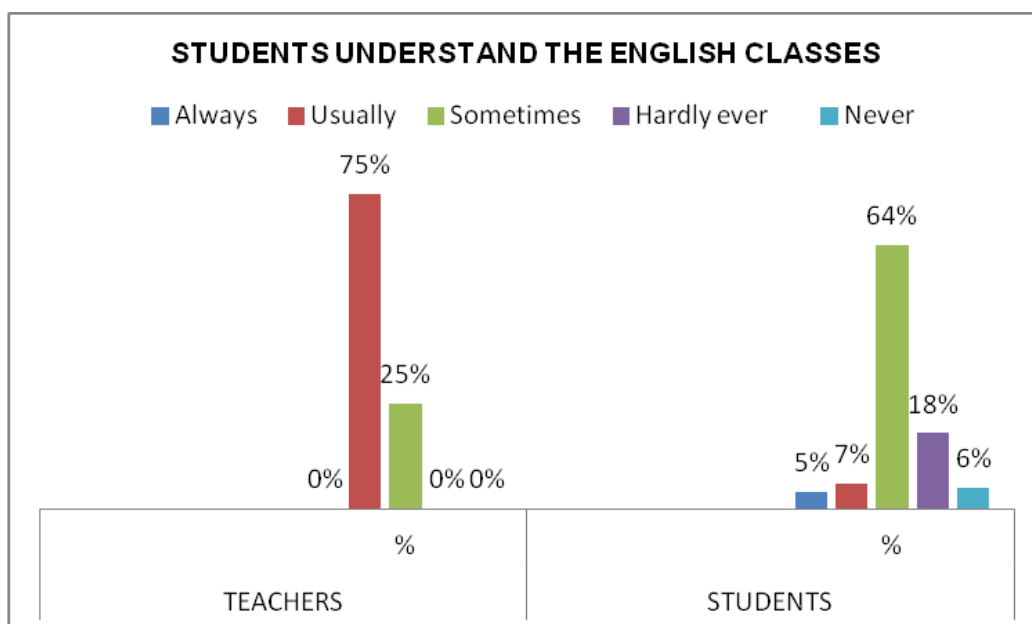
**8. Do you apply strategies and techniques considering your students' multiple intelligences to stimulate the English learning?**

**a. Table 8**

APPLICATION OF STRATEGIES AND TECHNIQUES IN RELATION TO THE STUDENTS' MULTIPLE INTELLIGENCES	Teachers		Students	
	f	%	f	%
Always	0	0	7	5
Usually	3	75	10	7
Sometimes	1	25	92	64
Hardly ever	0	0	27	18
Never	0	0	8	6
<b>TOTAL</b>	<b>4</b>	<b>100</b>	<b>144</b>	<b>100</b>

Source: Teachers and students' survey  
 Researcher: Cristyan Paul Bravo Ludeña

**b. Graph 8**



**c. Logical analysis**

To analyze this question in relation to the strategies and techniques that teachers apply considering students multiple intelligences to promote

English learning in class, the following criteria were established: “usually”, “sometimes”, “always”, “hardly ever” and “never”. In this context, according to the teachers’ opinion, most of them “usually” apply strategies and techniques to stimulate learning. Few of them express that “sometimes” apply them. This position is not corroborated by students since most of them affirm that “sometimes” the teacher apply the strategies and techniques to stimulate their English learning. Few learners think that teachers “usually” apply them in class. Likewise, few students think that their teachers “always” apply them. Rather, an important number of students support the idea that teachers “hardly ever” or “never” use these strategies and techniques according to their multiple intelligences to stimulate their learning.

Dr. Howard Gardener (2011) pointed out that teachers have to consider the students’ multiple intelligences with the purpose of using and applying the appropriate strategies and techniques to get students’ understanding due to the fact that there are many students that learn differently because of their multiple intelligences.

English classes focused on strategies and techniques of verbal linguistic intelligence display a good environment to use language in teaching. Moreover it is notable that teachers are not much interested to use active techniques to impulse an effective learning.



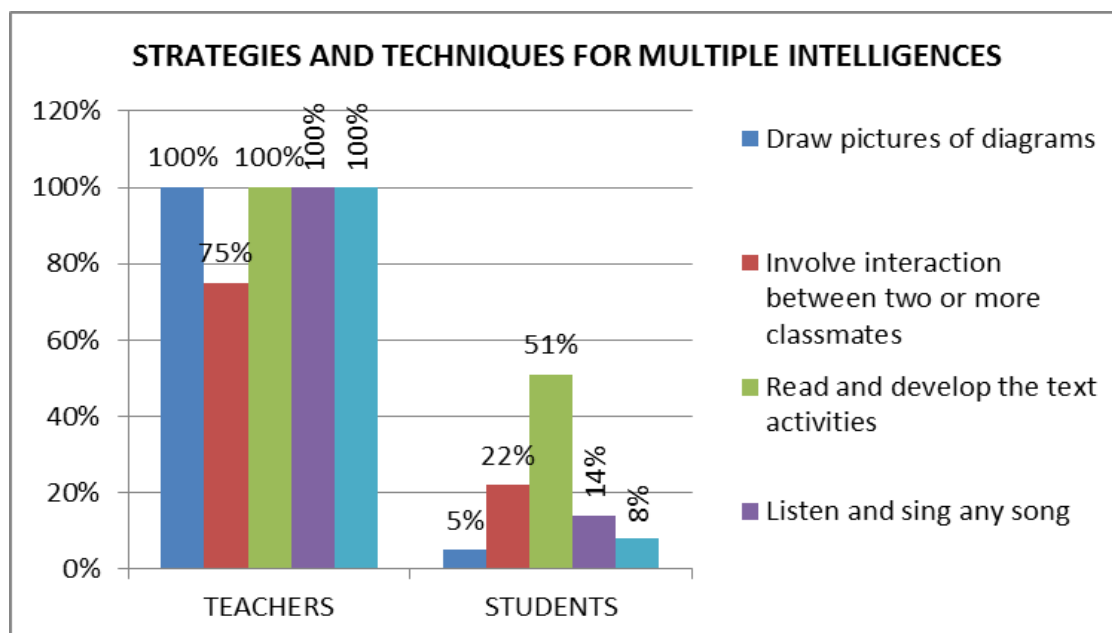
## 9. Do you encourage your students to?

### a. Table 9

STRATEGIES AND TECHNIQUES FOR MULTIPLE INTELLIGENCES	Teachers		Students	
	f	%	f	%
Draw pictures of diagrams	4	100	7	5
Involve interaction between two or more classmates	3	75	32	22
Read and develop the text activities	4	100	73	51
Listen and sing any song	4	100	21	14
Play games using vocabulary	4	100	11	8

**Source:** Teachers and students' survey  
**Researcher:** Cristyan Paul Bravo Ludeña

### b. Graph 9



### c. Logical analysis

In relation to this question about how to motivate students to do activities according to their multiple intelligences. Teachers establish that the more

important strategies and techniques to encourage students' multiple intelligences are drawing pictures of diagrams, reading and developing text activities, listening to songs and playing games. Even, they indicate that, the interaction between two or more classmates are also used in their classrooms.

However, most of the students' answers reject the teachers' criteria, basically in relation to drawing pictures or diagrams, listening to songs, and playing games. Only, around half of students confirmed that some text activities are developed in class; which is the unique criteria that has a little relationship with teachers' opinion. Therefore, the students' replies don't confirm teachers' position. It means that they don't encourage students by means of drawing pictures, listening to English songs and playing games. Only few students confirm that teachers try to involve them in some activities to promote the interaction among them

The theoretical reference points out that each multiple intelligence has specific strategies and techniques which can be presented with different activities like drawing pictures or diagrams, involving interaction between two or more classmates. Likewise reading and developing text activities, listening and singing songs and playing games are meaningful techniques to encourage students to learn.

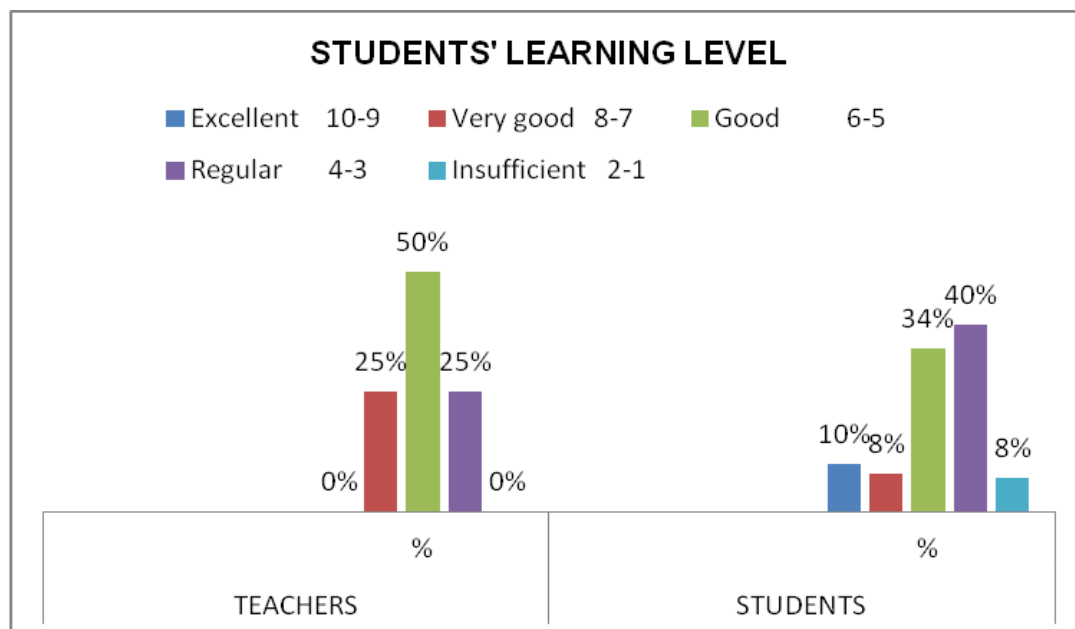
## 10. What is the students' real learning level of the English language?

a. Table 10

STUDENTS' LEARNING LEVEL		Teachers		Students	
		f	%	f	%
Excellent	10-9	0	0	15	10
Very good	8-7	1	25	12	8
Good	6-5	2	50	49	34
Regular	4-3	1	25	57	40
Insufficient	2-1	0	0	11	8
<b>TOTAL</b>		<b>4</b>	<b>100</b>	<b>144</b>	<b>100</b>

Source: Teachers and students' survey  
 Researcher: Cristyan Paul Bravo Ludeña

b. Graph 10



### c. Logical analysis

Analyzing the teachers' and students' answers to know about the English learning level, they have established different viewpoints. Few teachers

and almost half of students think they are regular and bad. Likewise, half of teachers and a smaller percentage of students think they are good. So, this tendency is different between teachers and students. Besides, there are different criteria related to the category “regular”, because few teachers think they are in this level, but almost half of students realize that they belong to its. A small percentage of students believe they are insufficient. Summarizing these opinions, it is established that the tendency of students’ real learning level is regular and good, which demonstrates that the students’ English knowledge is not good.

## **g. DISCUSSION**

### **HYPOTHESIS ONE**

There are certain Multiple Intelligences that support the English Learning on students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of Bachillerato at “Vicente Anda Aguirre” High School.

#### **Demonstration:**

To demonstrate the hypotheses one, it was based on questions one, two, three, four and five of this survey. Question number one tried to know if teachers are aware about the intelligence definition. 75% and 47% respectively chose the definition of intelligence as a capacity for original and productive thought. Likewise 38% of students pointed out this concept as a capacity for reasoning and abstracting thought.

In question number two related to the description of Multiple Intelligences 50% of teachers pointed out the correct description that is established as people own the eight kinds of intelligences. 25% of them indicated four skills that learners have; while the remaining 25% of teachers answered about it as thoughts that people could have.

Referring to students' replies, it was found that 29% chose the option that the multiple intelligences are abilities that make us understand that we are able to do something. 28% of them pointed out that the Multiple Intelligences are eight kinds of intelligences that people have; while 22% said that those are four skills that learners have to develop in class. Finally

19% of students answered that they are some kind of thoughts that people could have.

The hypothesis one which establishes “There are certain Multiple Intelligences that support the English Learning on students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of Bachillerato at “Vicente Anda Aguirre” High School” is demonstrated by means of the questions three, four and five

In question No. 3, concerning to learning by encouraging student’s multiple intelligences. 30% of teachers said that they stimulate students to work alone, belonging to the intrapersonal intelligence. 15% stated that they stimulate the development of activities and exercises related to speaking skill, which is done in pair and group work; they are related to the interpersonal intelligence. Within the same percentage are: reading and writing, interacting outdoors activities, visual aids, graphs and musical performance, poetry writing and songs ( verbal linguistic, visual – spatial and the musical intelligence). In relation to students’ results: 84% pointed that they are stimulated by their teachers by means of speaking and pair and group work . 82% expressed that teachers stimulate them by working alone. Finally, the remaining 76% pointed out they are stimulated by writing poetry and songs.

In question 4, the surveyed teachers about the multiple intelligences that they noticed in their students, all of them confirmed that they have the musical, verbal linguistic and naturalistic intelligences. It is also important

to note that 75% of them pointed out that students have the intrapersonal, mathematical, visual spatial, bodily kinesthetic and interpersonal intelligence. Referring to students' answers, they indicated that their multiple intelligences are divided in: 93% interpersonal, 76% verbal linguistic, while 70% answered to have intrapersonal intelligence. It corroborates the criteria of the hypothesis that there are certain Multiple Intelligences that support the English Learning on students

Regarding to question 5, 100% of teachers responded that the verbal linguistic is the intelligence that helps students learn English more easily. 75% of them manifested in favor of the interpersonal and naturalistic intelligences, and 50% pointed out the musical intelligence. Regarding the students' answers 83% established their support to the interpersonal intelligence. Likewise 76% mentioned the verbal linguistic one; while, 46% of students believed that Intrapersonal intelligence helped them learn English. These facts demonstrate what the hypothesis establishes

It is clear noticed that interpersonal intelligence is the most stimulated on students since they prefer working in couples, trios or in groups which help to exchange their ideas. The majority of teachers indicate that, the verbal linguistic and interpersonal and naturalistic intelligences are the more important skills that help students learn more easily; which is corroborated by students, except with the naturalist one. An important group of

students, think that the intrapersonal and bodily kinesthetic are the more important intelligences for learning English.

Certain inconsistencies in teachers and students' answers can be understood as a lacking of knowledge of students' individuality by their teachers.

### **DECISION:**

In base of the obtained results corresponding to teachers' and students' surveys, the first hypothesis that states: There are certain multiple intelligences that support the English language learning on students of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years of Bachillerato at "Vicente Anda Aguirre" High School is accepted by means of the questions number three, four and five in the sense that teachers and students confirm that truly exists certain multiple intelligences that support the English language learning on students.

### **HYPOTHESIS TWO:**

There is a little application of strategies and techniques of multiple intelligences that stimulate the English language learning on the students of 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of Bachillerato at "Vicente Anda Aguirre" High School.

**Demonstration:**Through the analysis of question No. 6 related to get information about the methodology employed by teachers according



**to the students' multiple intelligences. All surveyed teachers manifested that the methodology used to teach their students is *varied*. Likewise, 67% of students pointed out the same criteria. 21% of them established that it is *little varied*, and only 12% of students indicated that teacher's methodology is *very varied*.**

In question No 7, requested to find out the effectiveness of the teaching process, half of the teachers answered that their teaching is creative and the other 50% expressed that it is dynamic. Nevertheless, when students were consulted, 49% of them expressed that the teaching is traditional, and the other 39% indicated that it is routinary.

If we contrast the answers established by teachers and students in question number 7, it is possible to corroborate the second hypothesis that establishes "there is a little application of strategies and techniques of multiple intelligences that stimulate the English learning on the students of 1st, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of Bachillerato at "Vicente Anda Aguirre" High School", since almost fifty percent of students think their teachers' methodology is traditional. And thirty-nine percent indicate it is routinary. It can be understood that the teaching learning process is emphasized in teaching rather than learning.

By means of the analysis of question number 8 related to the strategies and techniques that teachers apply considering students multiple intelligences to promote English learning in class. According to the

teachers' answers 75% of them usually apply strategies and techniques to stimulate learning. 25% expressed that they sometimes apply them. It contrasts with students' criteria, since 64% of them affirm that sometimes the teacher apply the strategies and techniques to stimulate their English learning. Only 7% of learners think that teachers usually apply them in class. 18% of them support the idea that teachers hardly ever or never use these strategies and techniques according to their multiple intelligences to stimulate their learning.

If we take into account we can say that the hypothesis two is corroborated

According to the question No. 9 about encouraging students to do exercises in relation to the multiple intelligences, 100% of teachers chose the following activities: drawing pictures of diagrams, reading and developing the text activities, listening and singing songs and playing games using vocabulary. 75% involve an interaction between two or more classmates. Likewise, 51% of students indicated to read and develop the text activities, 22% to involve interaction between two or more classmates and 14% to listen and sing any song. This question helps to confirm the hypothesis, since students criteria refuse the teachers' one, which is that the teachers don't promote students' learning through the strategies and techniques applied in class.

In question 10, 50% of teachers answered that their students have a *good* english level; 25% indicated they are *very good* and the other 25% *regular*.

It contrasts with students' answers, because 40% of them said that their English level is *regular*, 34% *good* and 10% of them expressed that it is *excellent*. On the basis of these results, the second hypothesis is corroborated one more time with the students' criteria that their English level is not very good, but they have only a *regular* knowledge.

#### **DECISION:**

Based on the analyzed results from the collected data and supported to the theoretical reference, the hypothesis two is accepted : There is a little application of strategies and techniques of multiple intelligences that stimulate the English language learning in the students of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years of Bachillerato at "Vicente Anda Aguirre" High School; because the teaching learning process is developed by teachers considering the development of some the multiple intelligences that students have in order to apply the most suitable strategies and techniques to stimulate the learning of the English language.

## **h. CONCLUSIONS**

- This research has proved that teachers somehow stimulate certain students' multiple intelligences through activities and exercises related to: speaking, pair – group working, reading and writing , interacting outdoor activities, by working alone, using visual aids, graphs and by musical performance, writing poetry and songs. Nevertheless, not all students have a good level of English language.
- Teachers are aware about their learners' multiple intelligences; so that they could identify on their students the musical, verbal linguistic and naturalistic intelligences. This knowledge permit them to take a good advantage to develop meaningful learning on their students, since they are clear that theses intelligences help students learn English easily .
- Teachers and students establish that the methodology applied to develop the teaching learning process in English class, is varied. It means that teachers are employing several methods, strategies and techniques of teaching in the classroom. However, some students are not much incorporated to work harmoniously in this way. So, an important number of students are not enjoying to work by means of the teachers' methodology.
- Although teachers stimulate and encourage certain students' multiple intelligences through strategies and techniques, the students' learning level of the English language is not ideal but good.

## **i. RECOMMENDATIONS**

- Through seminars and workshops about this topic will benefit students to encourage them to identify their own multiple intelligences; as well as to have more practice to develop a variety of activities which encourage the learning process in their students.
- Teachers should emphasize their teaching planning based on the most appropriate strategies and techniques according to their learners' multiple intelligences that students have. This will help to improve the English teaching learning process.
- It is important that teachers plan their lessons considering the whole students' characteristics that is to say, procuring to expand their methodology according to all students' multiple intelligences for a total improvement into the teaching learning process.
- It is essential the improvement of strategies and techniques for the application of activities and classroom and try this way to adjust the development of the classes with more stimulation for students and teachers.

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k. ANNEXES

# **UNIVERSIDAD NACIONAL DE LOJA**

**ÁREA DE LA EDUCACIÓN, EL ARTE Y LA COMUNICACIÓN**

**ENGLISH LANGUAGE CAREER**

**PROJECT**

**THEME**

**“THE MULTIPLE INTELLIGENCES AND THEIR EFFECT IN THE TEACHING – LEARNING PROCESS OF THE ENGLISH LANGUAGE WITH THE STUDENTS OF 1ST, 2ND AND 3RD YEARS OF HIGH SCHOOL CURRICULUM AT “VICENTE ANDA AGUIRRE” HIGH SCHOOL, ACADEMIC YEAR 2012 – 2013”**

This project previous to obtain the Bachelor's degree in Sciences of Education, English Language Specialization

**AUTHOR:**

**CRISTYAN PAUL BRAVO LUDEÑA**

**1859**

**LOJA – ECUADOR**

2012



**a. THEME**

“THE MULTIPLE INTELLIGENCES AND THEIR EFFECT IN THE TEACHING LEARNING PROCESS OF THE ENGLISH LANGUAGE WITH THE STUDENTS OF 1ST, 2ND AND 3RD YEARS OF HIGH SCHOOL CURRICULUM AT “VICENTE ANDA AGUIRRE” HIGH SCHOOL, ACADEMIC YEAR 2012 – 2013”

## **b. PROBLEM**

### ➤ BACKGROUND

“Vicente Anda Aguirre” High School is annexed to “La Dolorosa “High School. Both academic centers in cooperation have been in the educational ground for more than sixty years.

On October 11<sup>th</sup>, 1962 teachers of the then called “Loja” High School organized a meeting with the Father Angel Rogelio Loaiza as principal, this institution started with just ten teachers and eighty students who were men and it was created to give an opportunity to people that worked during the day.

From June of 1973 this educational center has the name of “Vicente Anda Aguirre” because the Ministry of Education wanted to honor this lojano person who was a recognized General and Educator from Loja.

And according the history of the institution it is necessary to present the next data:

- The Institutions has had 44 promotions of bachilleres.
- Its first promotion was in 1962 without any specialty.
- In 1966 the institution establishes the first specialties: Exact Sciences, Chemical-Biology and Socials.

- In 1968 Physical-Mathematics is considered a new specialty.
- In 1973 when the Institution gets the name of Vicente Anda Aguirre according the agreement of the authorization 3576 of the institution the specialties approved are Physical-Mathematics, Chemical-Biology and Socials.
- In 2002 according the agreement of the authorization 006 of the institution Electricity is the new specialty in the High School.
- In 2003 according the agreement of the authorization 010 of the institution Informatics is the new specialty implemented.
- Nowadays and according the agreement of the authorization 077 the institution has the specialties of: Physical-Mathematics, Chemical-Biology, Socials, Electric installations, Equipment - electrical machines and the specialty of Informatics Applications.

### **Vision**

The educational unit “Vicente Anda Aguirre” based on the humanistic and Christian dimension that identify, it seeks to be constituted in the academic-formative space that facilitates the student a practical knowledge of the values, a positive and progressive attitude toward the knowledge, an attachment to the communication, growing capacity of human-civic relationship, and a permanent preparation to respond to the working and social demands of the life. It aspires to the attainment of an

axis of human-Christian maturity that serves as a referent with respect that make present and future of their students.

### **Mission**

The educational unit "Vicente Anda Aguirre", is explained by its formative commitment - integral, guided toward the respectful, solidary, sociable youth, occupational and vital wealth. It through studies at basic level and of high school in different specialties according to the humanistic-scientist demands and working of the environment, and the academic foundation for the university projection and of the life in general.

And nowadays, this institution works with 49 teachers and four of them are of the English subject and there are 550 students between men and women in the High School.

### **➤ CURRENT SITUATION OF THE RESEARCH OBJECT**

In recent years, the idea that the theory of Multiple Intelligences (MI) might contribute something valuable to English Language Teaching in general and in particular by providing a more learner-centered approach to materials design and methodology has become fashionable among teachers and course directors.

Firstly, Multiple Intelligences is not a theory of first or second language acquisition although it is "innatist" (i.e. nativist) in the sense that it attempts

to explain how learning in different areas is facilitated or hindered by (supposedly) innate individual differences in brain physiology.

The preferred learning styles of different learners has, of course, been around for a long time. Learning style is a broad concept that attempts to encompass the totality of psychological functioning as this affects learning and can be seen as the interaction of personality - i.e. a person's motivations and habitual cognitive, emotional and behavioral Multiple Intelligences could be considered as a learning style. It does not state that different learners acquire the same skills in different ways simply that different people learn the same things at different rates.

Secondly, not all componential theories of intelligence are nativist. For example the ability of someone in one thing could be better or worse than other.

Thirdly, the emphasis on adapting teaching materials and methods to responses to the environment - with cognitive style, which refers typically to a person's preferred modality of information processing (kinesthetic, visual or auditory).

In Latin America the theory of Howard Gardner is analysed as an option to try to understand the performance to do things for students and learners of

any age and in any period of time, within such a theory there is no way in which different activities can directly influence language acquisition.

There are a lot of activities that each person could do and inside each activity there is an ability that is developed by the same person.

In a local point of view (institution) every day there are more students that show them their own abilities that are immersed inside the MI together the Teaching Learning process, for example, the ability to learn, to perform each class or what the teacher says and including the way to talk inside the classroom with their classmates and for answer a test.

However these abilities are not developed by students because some of them do not have any idea about multiple intelligences and the strategies and techniques that these include inside their study.

When the teaching programs in the institution are limited in this kind of intelligences, the importance of the knowledge in student is minimized and for that reason a lot of students don't demonstrate the application of any strategy to study.

In consequence the students receive a little congratulation in their achievements and their contribution and role in the academic and social ambit vanishes.

The students in the institution learn, represent, and use the knowledge in different way. These differences represent a challenge in the educative system of the institution that believes that everybody can learn the same subjects in the same mode, all students have several grades of the nine intelligences and it is important that they combine and use the in a profoundly personal way.

“Schools have often sought to help students develop a sense of accomplishment and self-confidence. Gardner's Theory of Multiple Intelligences provides a theoretical foundation for recognizing the different abilities and talents of students. This theory acknowledges that while all students may not be verbally or mathematically gifted, children may have an expertise in other areas, such as music, spatial relations, or interpersonal knowledge. Approaching and assessing learning in this manner allows a wider range of students to successfully participation in classroom learning.” ( Brualdi, A, C. )<sup>1</sup>

According to this theory there are many areas that students could improve their knowledge with the adequate styles that permit to students of this institution to get a satisfactory result, but these styles inside the institution need to be improved applying the reasonable methods that can be used to suit the diverse intelligences.

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<sup>1</sup> **Brualdi, A, C. (1996) 'Multiple Intelligences: Gardner's Theory. ERIC Digest', *Eric Digests*,**

➤ **RESEARCH PROBLEM**

“WHAT IS THE INFLUENCE OF THE MULTIPLE INTELLIGENCES IN THE TEACHING LEARNING PROCESS OF THE ENGLISH LANGUAGE IN STUDENTS OF VICENTE ANDA AGUIRRE HIGH SCHOOL, ACADEMIC YEAR 2012-2013?”

➤ **DELIMITATION OF THE RESEARCH**

- a) **TEMPORAL:** This research work is going to be worked during the school year 2012 until 2013.
- b) **SPATIAL:** This research work is going to be done at “Vicente Anda Aguirre” Night session High School; it’s located in Loja City on the corner of Olmedo and José Antonio Eguiguren Streets.
- c) **OBSERVATION UNITS:** In this research are immersed 4 English teachers, and 328 students.
- d) **SUBPROBLEMS:** It is necessary to consider the consequences with the next subproblems:
  - What type of Multiple intelligences support the English Learning Process in students of 1<sup>St</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> years of Vicente Anda Aguirre High School?



- What kind of strategies and techniques of Multiple Intelligences stimulate the English Language Learning in students of 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> years of Vicente Anda Aguirre High School?

### **c. JUSTIFICATION**

This investigation has the objective to get information to know about the Multiple intelligences, that are considered as a set of abilities that students can discover and improve during their studies in classes and outside a class for example attitudes and aptitudes to do something, to speak, to write, to sing, to study, and all these aspects are immersed inside the teaching learning process that is considered as a tool to teach and learn.

And according the different points for establishing this justification it is important to explain:

The present project has the purpose to give to the institution the improvement of the knowledge about methods, process and techniques about the intelligences in relationship to the English language learning , because this topic presents interesting parts that make reference to the origin of all the activities that we do and this project present us different ways to improve the teaching learning process of the English language in the institution making a relationship with all kinds of intelligences that this project explain us.

In another spot this project will contribute to a knowledge that will be helping to the society taking into account that this research will give to people an important interest about this topic, because this research work

have not been done before so it will wake up the curiosity about the Multiple Intelligences.

In the academic aspect the present project represents the opportunity of improve the understanding about the Multiple Intelligences and get the enough information about skills that going to help teachers and students inside the teaching learning process of the English language and put in practice the knowledge and the experience obtained during the personal formation in this learning.

This project is considered in the scientific point of view because it will be demonstrated using instruments and systematic methods that help us to prove results about their relationship with the knowledge of this topic. And through all this results people will take out their own conclusions and opinions that are going to help for this research work.

And finally, it is a requirement to get the degree in Science of Education English Language Specialization.

#### **d. OBJECTIVES**

##### **GENERAL:**

To find out the influence of the Multiple Intelligences in the Teaching Learning Process of the English Language Learning in students of the 1st, 2nd and 3rd years of high school curriculum at "Vicente Anda Aguirre" high school.

##### **ESPECIFICS:**

- To identify the Multiple Intelligences that support the English Language Learning in students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> years of high school curriculum at "Vicente Anda Aguirre" high school.
- To classify and catalog the strategies and techniques of Multiple intelligences that stimulate the Learning of the English Language in students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> years of high school curriculum at "Vicente Anda Aguirre" high school.

## **e. THEORETICAL FRAME**

### **CHAPTER ONE**

#### **THE INTELLIGENCE**

Intelligence comes from the Latin verb *'intellegere'*, which means *'to understand'*. The Oxford Dictionary defines the term *'intelligence'* as *'understanding, quickness of understanding, sagacity.'* Intelligence is a very vast term and encompasses multiple capacities – reasoning, planning, and solving problems.

“Intelligence has been defined in many different ways, including the abilities, but not limited to, abstract, understanding, awareness, communication, reasoning, learning, having emotional knowledge, retaining, planning, and problem solving.

Intelligence is most widely studied in humans, but has also been observed in animals and plants. Artificial intelligence is the intelligence of machines or the simulation of intelligence in machines.

Numerous definitions of and hypotheses about intelligence have been proposed since before the twentieth century, with no consensus reached by scholars. Within the discipline of psychology, various approaches to human intelligence have been adopted. The psychometric approach is

especially familiar to the general public, as well as being the most researched and by far the most widely used in practical settings”

("Intelligence: Knowns and Unknowns")<sup>2</sup>

Intelligence derives from the Latin verb *intelligere* which derives from *inter-legere* meaning to "pick out" or discern. A form of this verb, *intellectus*, became the medieval technical term for understanding, and a translation for the Greek philosophical term *nous*. This term was however strongly linked to the metaphysical and cosmological theories of teleological scholasticism, including theories of the immortality of the soul, and the concept of the Active Intellect (also known as the Active Intelligence). This entire approach to the study of nature was strongly rejected by the early modern philosophers such as Francis Bacon, Thomas Hobbes, John Locke, and David Hume, all of whom preferred the word "understanding" in their English philosophical works. Hobbes for example, in his Latin *De Corpore*, used "*intellectus intelligit*" (translated in the English version as "the understanding understandeth") as a typical example of a logical absurdity.<sup>[4]</sup> The term "intelligence" has therefore become less common in English language philosophy, but it has later been taken up (with the scholastic theories which it now implies) in more contemporary psychology.

“The definition of intelligence is controversial. Groups of scientists have stated the following:

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<sup>2</sup> Article in Wikipedia: Intelligence: Knowns and Unknowns 01-10/2012

From "Mainstream Science on Intelligence" (1994), an editorial statement by fifty-two researchers:

A very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings—"catching on," "making sense" of things, or "figuring out" what to do.

From "Intelligence: Knowns and Unknowns" (1995), a report published by the Board of Scientific Affairs of the American Psychological Association:

Individuals differ from one another in their ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought. Although these individual differences can be substantial, they are never entirely consistent: a given person's intellectual performance will vary on different occasions, in different domains, as judged by different criteria.

Concepts of "intelligence" are attempts to clarify and organize this complex set of phenomena."( Gottfredson, L.S. (1997))<sup>3</sup>

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<sup>3</sup> Gottfredson, L.S. (1997). "Foreword to "intelligence and social policy" 01-10/2012

Although considerable clarity has been achieved in some areas, no such conceptualization has yet answered all the important questions, and none commands universal assent. Indeed, when two dozen prominent theorists were recently asked to define intelligence, they gave two dozen, somewhat different, definitions.

Besides the foregoing definitions, these psychology and learning researchers also have defined intelligence as:

<b>Researcher</b>	<b>Quotation</b>
<b>Alfred Binet</b>	Judgment, otherwise called "good sense," "practical sense," "initiative," the faculty of adapting one's self to circumstances ... auto-critique.
<b>David Wechsler</b>	The aggregate or global capacity of the individual to act purposefully, to think rationally, and to deal effectively with his environment.
<b>Lloyd Humphreys</b>	"...the resultant of the process of acquiring, storing in memory, retrieving, combining, comparing, and using in new contexts information and conceptual skills."
<b>Howard Gardner</b>	To my mind, a human intellectual competence must entail a set of skills of problem solving — enabling the individual to resolve genuine problems or difficulties that he or she encounters and, when appropriate, to create an effective product — and must also entail the potential for finding or creating problems — and thereby laying the groundwork for the acquisition of new knowledge.
<b>Linda Gottfredson</b>	The ability to deal with cognitive complexity.
<b>Sternberg &amp; Salter</b>	Goal-directed adaptive behavior.
<b>Reuven Feuerstein</b>	The theory of Structural Cognitive Modifiability describes intelligence as "the unique propensity of human beings to change or modify the structure of their cognitive functioning to adapt to the changing demands of a life situation."



What is considered intelligent varies with culture. For example, when asked to sort, the Kpelle people take a functional approach. A Kpelle participant stated "the knife goes with the orange because it cuts it." When asked how a fool would sort, they sorted linguistically putting the knife with other implements and the orange with other foods, which is the style considered intelligent in other cultures.

## THEORIES OF THE INTELLIGENCE

### **Triarchic theory of intelligence**

*Main article: [Triarchic theory of intelligence](#)*

Robert Sternberg proposed the triarchic theory of intelligence to provide a more comprehensive description of intellectual competence than traditional differential or cognitive theories of human ability.<sup>[31]</sup> The triarchic theory describes three fundamental aspects of intelligence. Analytic intelligence comprises the mental processes through which intelligence is expressed. Creative intelligence is necessary when an individual is confronted with a challenge that is nearly, but not entirely, novel or when an individual is engaged in automatizing the performance of a task. Practical intelligence is bound in a sociocultural milieu and involves adaptation to, selection of, and shaping of the environment to maximize fit in the context. The triarchic theory does not argue against the validity of a

general intelligence factor; instead, the theory posits that general intelligence is part of analytic intelligence, and only by considering all three aspects of intelligence can the full range of intellectual functioning be fully understood.

More recently, the triarchic theory has been updated and renamed the Theory of Successful Intelligence by Sternberg.<sup>[32][33]</sup> Intelligence is defined as an individual's assessment of success in life by the individual's own (idiographic) standards and within the individual's sociocultural context. Success is achieved by using combinations of analytical, creative, and practical intelligence. The three aspects of intelligence are referred to as processing skills. The processing skills are applied to the pursuit of success through what were the three elements of practical intelligence: adapting to, shaping of, and selecting of one's environments. The mechanisms that employ the processing skills to achieve success include utilizing one's strengths and compensating or correcting for one's weaknesses.

Sternberg's theories and research on intelligence remain contentious within the scientific community.

### **Theory of Intelligence**

Based on A. R. Luria's (1966) "Theory of Intelligence" proposes that cognition is organized in three systems and four processes. The first is the Planning, which involves executive functions responsible for controlling

and organizing behavior, selecting and constructing strategies, and monitoring performance. The second is the Attention process, which is responsible for maintaining arousal levels and alertness, and ensuring focus on relevant stimuli. The next comprise two processes, Simultaneous and Successive processing to encode, transform, and retain information. Simultaneous processing is engaged when the relationship between items and their integration into whole units of information is required". (Luria, A. R).<sup>4</sup>

Examples of this include recognizing figures, such as a triangle within a circle vs. a circle within a triangle, or the difference between 'he had a shower before breakfast' and he had breakfast before a shower. Successive processing is required for organizing separate items in a sequence such as remembering a sequence of words or actions exactly in the order in which they had just been presented. These four processes are functions of four areas of the brain. Planning is broadly located in the front part of our brains, the frontal lobe. Attention and arousal are combined functions of the frontal lobe and the lower parts of the cortex, although the parietal lobes are also involved in attention as well. Simultaneous processing and Successive processing occur in the posterior region or the back of the brain. Simultaneous processing is broadly associated with the occipital and the parietal lobes while Successive processing is broadly associated with the frontal-temporal lobes. The PASS (Planning/Attention/Simultaneous/Successive) theory is heavily indebted

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<sup>4</sup> Luria, A. R. (1966). Higher cortical functions in man.

to both Luria and studies in cognitive psychology involved in promoting a better look at intelligence.

### **Piaget's theory and Neo-Piagetian theories**

In Piaget's theory of cognitive development the focus is not on mental abilities but rather on a child's mental models of the world. As a child develops, increasingly more accurate models of the world are developed which enable the child to interact with the world better. One example being object permanence where the child develops a model where objects continue to exist even when they cannot be seen, heard, or touched.

“Piaget's theory described four main stages and many sub-stages in the development. Degree of progress through these is correlated with but is not identical with psychometric IQ.

Neo-Piagetian theories of cognitive development expand Piaget's theory in various ways such as also considering psychometric-like factors such as processing speed and working memory, "hypercognitive" factors like self-monitoring, more stages, and more consideration on how progress may vary in different domains such as spatial or social”.( Kitchener, Richard F.)<sup>5</sup>

Piaget's theory has been criticized for the age of appearance of a new model of the world, such as object permanence, being dependent on how the testing is done (see the article on object permanence). More generally, the theory may be very difficult to test empirically due to the difficulty of

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<sup>5</sup> Kitchener, Richard F. (1993). "Piaget's epistemic subject and science education

proving or not proving that a mental model is the explanation for the results of the testing.

## **CHAPTER TWO**

### **THE MULTIPLE INTELLIGENCES**

As a teacher we need to remember that abilities of understanding ideas, adapting to the environment, reacting to situations, learning from experience, reasoning of no two individuals is the same. Our understanding of the world is complex. Some students will be better at understanding one aspect than the others. For some it is easy to visualize a distance of two feet, but for others it is a tough job. For some to understand music is easy but to play football is tough.

There are three broad types of learners: Visual, Auditory and Kinesthetic. Howard Gardner's theory claims that humans have multiple intelligences. He believes that each individual has nine intelligences:

1. Verbal Linguistic Intelligence
2. Mathematical Intelligence
3. Musical Intelligence
4. Visual Spatial Intelligence
5. Bodily Kinesthetic Intelligence
6. Interpersonal Intelligence
7. Intrapersonal Intelligence

## 8. Naturalist Intelligence

As a trainer, parent understanding these intelligences can help us to strengthen, nurture, promote the inherent talent of the student, child. Psychometric tests used by counselors and employers are used to understand the different multiple intelligences present in a person.

Some of the benefits of understanding a student's intelligence type are:

1. Facilitates better and effective learning;
2. Helps determine personality, hobbies, interests, and skills of students;
3. Helps students to determine the most suitable educational opportunities;
4. Better Career Planning for a student.

All these in turn decide the satisfaction and pleasure that a student enjoys from his chosen course of studies and further in his career. Psychometric tests help students, teachers and parents to avail the best of these intelligences. Use of the same is being encouraged in educational institutes at various levels.

In recent years, the idea that Gardner's (1983,1993) theory of Multiple Intelligences (MI) might contribute something valuable to English Language Teaching in general and ESP in particular by providing a more learner-centered approach to materials design and methodology has

become fashionable among teachers and course directors, who are nevertheless at a loss as to how to implement it.

This enquiry is perhaps typical of those from teachers who succumb to "psychobabble" and fashion, of which MI is one of the most recent, without understanding the implications of what is being put forward.

Firstly, MI is not a theory of first or second language acquisition although it is "innatist" (i.e. nativist) in the sense that it attempts to explain how learning in different areas is facilitated or hindered by (supposedly) innate individual differences (ID's) in brain physiology. Nor is MI a theory of learning style. It does not state that different learners acquire the same skills in different ways simply that different people learn the same things at different rates.

Secondly, not all componential theories of intelligence are nativist. For example, model of analogical reasoning, which explains ID's in IQ scores in terms of the different amounts of time that individuals spent on encoding analogies, makes no such claim. On the contrary, Sternberg and his associates have shown that people's scores on IQ tests improve with training.

Thirdly, this teacher, who claims to be "*doing research on the application of MI and CBI, together (...) in an experimental setting*", obviously does not understand even the basic principles of experimentation and evidence, which would require a researcher to test for the influence of MI and CBI

separately in order to establish a baseline before testing them in combination (otherwise, how could he or she know whether learning is enhanced by a combination of the two?).

As I shall show, the whole idea of applying MI theory to ELT is misguided and is based on a misunderstanding of Gardner's theory. Moreover, Gardner's theory is, itself, contentious in the claims it makes about giftedness. But before considering Gardner's theory in more detail, it is worth clarifying the notion of "learning style".

The emphasis on adapting teaching materials and methods to the preferred learning styles of different learners has, of course, been around for a long time. Learning style is a broad concept that attempts to encompass the totality of psychological functioning as this affects learning and can be seen as the interaction of personality - i.e. a person's motivations and habitual cognitive, emotional and behavioural responses to the environment - with cognitive style, which refers typically to a person's preferred modality of information processing (kinaesthetic, visual or auditory).

However, problems arise when we attempt to define personality or cognitive style in terms of fixed, inherited traits or characteristics, or to classify people into types. There is a large body of research that shows that at, any given time in their lives, people sometimes react quite differently in different situations (the Person-Situation Debate) while the whole question of personality continuity and change over time is fraught



with difficulties. Similarly, concepts of cognitive style based on perception take no account of the role of social and metacognitive strategies, which can be learnt.

What, then, does Gardner's theory actually say?

Theory of MI suggests quite clearly that there are discrete information processing operations within the cognitive/neurobiological system that deal with specific kinds of information. Thus, there are separate intelligences or "modules" that deal with musical, mathematical, kinesthetic or interpersonal information independently of one another.

Among these different "modules" Gardner includes verbal / linguistic intelligence, which does not, by definition, interact with other modules, although it passes on the products of linguistic processing to a central processor.

Within such a theory there is no way in which different activities can directly influence language acquisition.

Now, the irony is that those who defend the idea of a separate linguistic intelligence and hence – by default - the notion that language acquisition is radically different from other types of skill acquisition, forget that this theory originated with Chomsky, who also claimed that the brain is "hard-wired" for learning language (remember Chomsky's LAD – Language Acquisition Device?). However, Chomsky (1965) also claimed that, as a result, the type of input a learner received was almost irrelevant.

Consequently, if we accept any "strong" form of Gardner's theory, then MI approaches to language learning are nonsense. We might just as well claim that ballet enthusiasts will solve algebra equations more efficiently if they are encouraged to dance around the blackboard or that keen linguists will develop a better sense of pitch if given songs to sing in their favorite foreign language. Indeed, proponents of task-based approaches to language learning point out that while easier tasks tend to lead to more fluent speech, more complex tasks result in less fluent but more complex and accurate production, which would seem to imply that students do not have to be good at a particular activity to benefit from it linguistically.

Of course, most ESP teachers already know this from personal experience.

How many times does a teacher find that CFO's, who deal with figures in English on a daily basis and who obviously have a high degree of mathematical intelligence in Gardner's sense of the term, continue to come out with mistakes such as \* "fifteen millions of pesos / dollars" even at intermediate level, while Human Resources Managers, accustomed to dealing with people in their own language, find it more difficult to make small talk than to discuss more technical matters such as downsizing, outsourcing and other aspects of company policy.

On the other hand, if we merely wish to say that people develop - or fail to develop - different talents for reasons that may or may not have anything to do with the distinctiveness of their genetic make-up (and the whole

issue of inherited talent is an extremely contentious one) and that most people enjoy doing what they are good at, then it seems fairly obvious that by encouraging students to do in the foreign language what they enjoy and are good at (singing, solving logic problems or whatever) teachers will motivate students more and get more mileage out of language learning activities.

In the case of ESP students, many activities may not be appropriate – for example, it is unlikely that many corporate managers would feel comfortable singing "Money makes the world go round" in their offices within earshot of their subordinates. However, many ESP learners *are* motivated by materials that offer intellectual stimulation and the possibility of professional advancement even though the latter is unlikely to materialize in the near future. Teachers would do better to concentrate on getting to know their students as individuals with subjective as well as objective needs instead of trying to fit students into "types"

Here is the crux of the matter: the problem with nativist theories of intelligence is that they lead to stereotyping and self-fulfilling prophecies— weaker students are expected to learn less than stronger students because of their "genetic make-up" rather than **because they simply lack** the prior knowledge and range of strategies that stronger students have, and so, of course, they learn less.

A further danger is that such theories may serve as a justification for an unbalanced approach to teaching and learning, encouraging fossilization

in so-called "social" or "communicative" learners, while so-called "analytical" learners are not challenged enough to get involved in social situations, to take risks, etc.

As mentioned earlier, even Gardner's claim that the rate of learning is mainly determined by genetic factors is contentious. As evidence for his theory, Gardner leans heavily on the selective achievements shown by child prodigies and "idiots savants" (mentally handicapped people with remarkable musical, artistic or mathematical gifts). However, Gardner's theory remains underspecified and "there is equally good evidence for the role of environmental factors – and in particular quality instruction - in the development of giftedness, with the current consensus among psychologists being that giftedness is more about nurture than about nature" (Gardner<sup>6</sup>)

In conclusion, the main attraction of MI is that it seems to offer teachers a simple framework for understanding differences in language ability and learning style, and a commercial catchphrase or gimmick that can be readily understood (or rather misunderstood) by large sections of the general public. However, the mistake is to assume that simple, ready made recipes can be "lifted" from psychology and applied in the classroom.

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• <sup>6</sup> GARDNER, Howard, The multiple Intelligences and the different Types o learners, Paidós Editorial

### **Bodily-Kinesthetic Intelligence.**

This area has to do with movement and doing. People are generally good at physical activities such as sports or dance. People who have this intelligence usually learn better by getting up and moving around. They may enjoy acting or performing, and in general they are good at building and making things. They often learn best by physically doing something, rather than reading or hearing about it. Those with strong bodily-kinesthetic intelligence seem to use what might be termed muscle memory. They remember things through their body such as verbal memory or images. They require fine motor skills that require dancing, athletics, surgery, craft and other movement functions. In artificial Intelligences programs are being developed to mimic the movement of athletics through games and other computer related items but they will not take the place of the actual movement of this intelligence physically.

Careers which suit those with this intelligence include athletes, dancers, actors, surgeons, builders, and soldiers. Although these careers can be duplicated through virtual simulation they will not produce the actual physical learning that is needed in this intelligence.

## Bodily Kinesthetic Learning Style - Characteristics of the Bodily Kinesthetic Learning Style?

Bodily kinesthetic learning style is one of eight types of learning styles defined in Howard Gardner's theory of Multiple Intelligences. Bodily kinesthetic learning styles, or intelligence, refer to a person's ability to process information through the hand and body movement, control, and expression.

### **Bodily Kinesthetic Learning Style - Characteristics of Bodily Kinesthetic Learning Style**

Bodily kinesthetic learning styled people enjoy school activities such as drawing, modeling, sculpting, drafting, shop, athletics, dance, and hands-on sciences. Bodily kinesthetic learners enjoy creating work with their hands, may have a lot of energy and need to move, and may be talented athletes.

### **Bodily Kinesthetic Learning Style - How Bodily Kinesthetic Learning Styled People Learn Best**

People with bodily kinesthetic learning styles learn best when they are permitted to use their tactile senses and fine and gross motor movement as part of the learning process. They often prefer direct involvement with material they are learning than worksheets or reading from a book. Bodily

kinesthetic learning style students understand and remember material longer when they use it in an active way.

### **Bodily Kinesthetic Learning Style - Bodily Kinesthetic Learning Style Career Choices**

The bodily kinesthetic learning styled student may be drawn to careers such as professional dancer, athletic coach or trainer, aerobics instructor, artist in painting, sculpture, or woodworking, factory work with moving systems, postal carrier, emergency rescue worker, fire fighter or police officers, or military.

### **Interpersonal Intelligence.**

This area has to do with interaction with others. People in this category are usually extroverts and are characterized by their sensitivity to others' moods, feelings, temperaments and motivations, and their ability to cooperate in order to work as part of a group. They communicate effectively and empathize easily with others, and may be either leaders or followers. They typically learn best by working with others and often enjoy discussion and debate. The artificial intelligences for this intelligence can be excellent. Although this is a feeling and emotional intelligences, with today's computer and online material people can learn, relate, with each other. Web cam and other technical material has allowed people to function in this intelligence. The personal touch has to still be there to

implement these functions. Careers which suit those with this intelligence include politicians, managers, teachers, and social workers.

### **Interpersonal Learning Style - Characteristics of the Interpersonal Learning Style**

Interpersonal learning style is one of eight types of learning styles defined in Howard Gardner's theory of Multiple Intelligences. Interpersonal learning styles, or intelligence, refer to a person's ability to interact with and understand other people and social situations.

### **Interpersonal Learning Style - Characteristics of Interpersonal Learning Style**

Interpersonal learning styled people enjoy school activities such as speech, drama, and debate teams. Interpersonal learners are true people persons. They enjoy heading up committees, group learning projects, and communicating with other students and adults. Interpersonal learners love to interact and prefer learning through interpersonal communication and interaction.

### **Interpersonal Learning Style - How Interpersonal Learning Styled People Learn Best**

People with interpersonal learning styles learn best when they are permitted to use their people senses as part of the learning process. They



often prefer direct involvement with others in group projects in school or within the larger community. They are stimulated by dialog with students and adults and seem to have a strong sense of intuition regarding others' opinions and preferences. Interpersonal learners are good at reading people and are good at getting to the root cause of communication problems.

### **Interpersonal Learning Style - Interpersonal Learning Style Career Choices**

The interpersonal learning styled student may be drawn to careers such as politician, attorney, teacher, minister, travel and tourism, psychologist, television or radio, social worker, or corporate officer.

### **Verbal-linguistic Intelligence**

This area has to do with words, spoken or written. People with verbal-linguistic intelligence display a facility with words and languages. They are typically good at reading, writing, telling stories and memorizing words along with dates. They tend to learn best by reading, taking notes, listening to lectures, and via discussion and debate. They are also frequently skilled at explaining, teaching and oration or persuasive speaking. Those with verbal-linguistic intelligence learn foreign languages very easily as they have high verbal memory and recall, and an ability to understand and manipulate syntax and structure. This intelligence is high

in writers, lawyers, philosophers, journalists, politicians and teachers. Artificial Intelligences can be used in this function with written literature from the intelligences, also through computers and other audio media to enhance the intelligence.

### **What is the Verbal Linguistic Learning Style**

Verbal linguistic learning style, or intelligence, is one of eight types of learning styles defined in Howard Gardner's theory of Multiple Intelligences. Verbal linguistic learning style refers to a person's ability to reason, solve problems, and learn using language.

### **Verbal Linguistic Learning Styles - Characteristics of Verbal Linguistic Learning Styles**

Verbal Linguistically talented people flourish in school activities such as reading and writing. They express themselves well and are usually good listeners with a well-developed memory for material they've read and recall of spoken information. Language fascinates people with verbal linguistic learning styles, and they enjoy learning new words and exploring ways to creatively use language, as in poetry. They may enjoy learning new languages, memorizing tongue twisters, playing word games, and reading reference materials for fun.

## **Verbal Linguistic Learning Styles - How do Verbally Linguistic Learning Styled People Learn Best?**

People with verbal linguistic learning styles learn best when taught using spoken or written materials. They prefer activities that are based on language reasoning rather than abstract visual information. Math word problems are more appealing to verbal linguistic learners than solving equations. They usually enjoy written projects, speech and drama classes, debate, language classes, and journalism.

## **Verbal Linguistic Learning Styles - Verbal Linguistic Learning Style Career Choices**

Verbal linguistic learning style students with high levels of verbal intelligence often seek careers such as teaching English, language arts, drama, and debate at k-12 or postsecondary institutions. They frequently choose careers such as professional writer, news correspondent, poet, creative writer, attorney, publicist, advertising agent, psychologist, speech pathologist, and editorial positions.

## **Logical-Mathematical Intelligence**

This area has to do with logic, abstractions, reasoning, and numbers. While it is often assumed that those with this intelligence naturally excel in mathematics, chess, computer programming and other logical or numerical activities, a more accurate definition places emphasis on

traditional mathematical ability and more reasoning capabilities, abstract patterns of recognition, scientific thinking and investigation, and the ability to perform complex calculations. Many scientists, mathematicians, engineers, doctors and economists function in this level of intelligences. This probably is the most useable intelligence that can compare with the artificial intelligences. The military has used this intelligence in war, with the aim of finding enemy targets with mathematical calculations. Engineers have used computer programs and robots to build and construct projects. Doctors have used robots to operate on patients. Economists have used computers to forecast the economy in the future.

### **Mathematical Logical Learning Styles - What is a Mathematical Logical Learning Style?**

Mathematical logical learning style is one of eight types of learning styles, or intelligences, defined in Howard Gardner's theory of Multiple Intelligences. Mathematical Logical learning style refers to a person's ability to reason, solve problems, and learn using numbers, abstract visual information, and analysis of cause and effect relationships. Mathematical logical learners are typically methodical and think in logical or linear order. They may be adept at solving math problems in their heads and are drawn to logic puzzles and games.

## **Mathematical Logical Learning Styles - Characteristics of Mathematical Learning Styles**

People with mathematical logical learning styles enjoy school activities such as math, computer science, technology, drafting, chemistry and other "hard sciences," and design. Mathematical linguistic learners prefer logical order in instruction and often work best in structured, organized environments. They have strong visual analysis and memory and problem solving skills. Natural tinkerers and builders, they enjoy bringing mathematic and conceptual ideas into reality via hands-on projects such as computer assisted design, creating electronic devices, using computer applications, or programming computers.

## **Mathematical Logical Learning Styles - Ways Mathematical Logical Learning Styled People Learn Best**

People with mathematical logical learning styles learn best when taught using visual materials, computers, statistical and analytical programs, and hands on projects. They prefer structured, goal-oriented activities that are based on math reasoning rather than less structured, creative activities with inexact learning goals. Mathematical logical learners would find a statistical study more appealing than analyzing literature or keeping a journal.

## **Mathematical Logical Learning Styles - Mathematical Logical Learning Styles Career Choices**

The mathematically and logically talented student may be drawn to careers such as computer programming and design or electronic, mechanical, or chemical engineering. Drafting, accounting, finance and investment, architecture, and the sciences may also be appealing to people with mathematical logical learning styles.

### **Naturalistic intelligence**

This area has to do with nature, nurturing and relating information to one's natural surroundings. This is the eighth and newest of the intelligences, added to the theory in 1997. This type of intelligence was not part of Gardner's original theory of Multiple Intelligences. Those with it are said to have greater sensitivity to nature and their place within it, the ability to nurture and grow things, and greater ease in caring for, taming and interacting with animals. They may also be able to discern changes in weather or similar fluctuations in their natural surroundings. They are also good at recognizing and classifying different species. "Naturalists" learn best when the subject involves collecting and analyzing, or is closely related to something prominent in nature; they also don't enjoy learning unfamiliar or seemingly useless subjects with little or no connections to nature. It is advised that naturalistic learners would learn more through being outside or in a kinesthetic way.

The theory behind this intelligence is often criticized, much like the spiritual or existential intelligence (see below), as it is seen by many as not indicative of an intelligence but rather an interest. However it might have been a more valuable and useful intelligence in prehistoric times when humans lived closer to nature.

Careers which suit those with this intelligence include scientists, naturalists, conservationists, gardeners and farmers.

### **Naturistic Learning Style - Characteristics of the Naturistic Learning Style**

Naturistic learning style is one of eight types of learning styles defined in Howard Gardner's theory of Multiple Intelligences. Naturistic learning styles, or intelligence, refer to a person's ability to perceive, understand, and work with elements of the natural world.

### **Naturistic Learning Style - Characteristics of Naturistic Learning Style**

Naturistic learning styled people enjoy school activities such as botanical and life sciences and vocational studies in forestry and agriculture. Naturistic learners thrive in outdoor classrooms and may enjoy taking care of classroom pets. They are often adept at interacting with animals and are skilled with maintaining plants.

## **Naturistic Learning Style - How Naturistic Learning Styled People Learn Best**

People with naturistic learning styles learn best when they are directly and actively involved with hands-on tasks with plants and animals. They may be interested in etymology and leaf collecting projects, assisting with school landscaping, or maintaining a school greenhouse or bird sanctuary. They prefer reading materials such as outdoor living books and magazines. They may enjoy fiction and non-fiction books with nature and survival themes.

## **Naturistic Learning Style - Naturistic Learning Style Career Choices**

The naturistic learning styled student may be drawn to careers such as forest ranger, fish and wildlife biologist, nature writer, veterinarian, conservation officer, herbalist, agriculture scientist, extension agent, florist, greenhouse and nursery operator, and landscape architect.

## **Intrapersonal Intelligence**

This area has to do with introspective and self-reflective capacities. Those who are strongest in this intelligence are typically introverts and prefer to work alone. They are usually highly self-aware and capable of understanding their own emotions, goals and motivations. They often have an affinity for thought-based pursuits such as philosophy. They learn best



when allowed to concentrate on the subject by themselves. There is often a high level of perfectionism associated with this intelligence.

Careers which suit those with this intelligence include philosophers, psychologists, theologians, writers and scientists.

### **Visual-Spatial Intelligence**

This area has to do with vision and spatial judgment. People with strong visual-spatial intelligence are typically very good at visualizing and mentally manipulating objects. Those with strong spatial intelligence are often proficient at solving puzzles. They have a strong visual memory and are often artistically inclined. Those with visual-spatial intelligence are also generally have a very good sense of direction and may also have very good hand-eye coordination, although this is normally seen as a characteristic of the bodily-kinesthetic intelligence.

Some critics point out the high correlation between the spatial and mathematical abilities, which seems to disprove the clear separation of the intelligences as Gardner theorized. Since solving a mathematical problem involves reassuringly manipulating symbols and numbers, spatial intelligence is involved in visually changing the reality. A thorough understanding of the two intelligences precludes this criticism, however, as the two intelligences do not precisely conform to the definitions of visual and mathematical abilities. Although they may share certain

characteristics, they are easily distinguished by several factors, and there are many with strong logical-mathematical intelligence and weak visual-spatial, and vice versa.<sup>[citation needed]</sup>

## **Visual Spatial Learning Styles - What is Visual Spatial Learning Styles?**

Visual Spatial Learning Styles is one of eight types of learning styles defined in Howard Gardner's theory of Multiple Intelligences. Visual Spatial learning styles, or intelligence, refer to a person's ability to perceive, analyze, and understand visual information in the world around them.

## **Visual Spatial Learning Styles - Characteristics of Strong Visual Spatial Learning Styles**

Visual spatially learning styled people enjoy school activities such as art, drafting, shop, geometry, computer graphics, and computer assisted design. They often have excellent visual memory for details in print and in the environment. People with visual spatial learning styles are good at visual problem solving and visual estimation.

## **Visual Spatial Learning Styles - How Visual Spatial Learning Styled People Learn Best**

People with visual spatial intelligence learn best when taught using written, modeled, or diagrammed instruction and visual media. Visually and spatially talented students have good visual memory for details

## **Visual Spatial Learning Styles - What are Popular Career Choices for People with High Visual Spatial Learning Styles?**

The visually spatially learning styled student may be drawn to careers such as working in television, drafting, architecture, photography, artistry, engineering, airline piloting or air traffic control, construction, fashion design or merchandising, visual advertising, and interior design.

### **Musical Intelligence**

This area has to do with rhythm, music, and hearing. Those who have a high level of musical-rhythmic intelligence display greater sensitivity to sounds, rhythms, tones, and music. They normally have good pitch and may even have absolute pitch, and are able to sing, play musical instruments, and compose music. Since there is a strong auditory component to this intelligence, those who are strongest in it may learn best via lecture. In addition, they will often use songs or rhythms to learn and memorize information, and may work best with music playing in the background.

Careers which suit those with this intelligence include instrumentalists, singers, conductors, disc-jockeys, and composers.

## **Musical Learning Styles - What is a Musical Learning Style?**

The musical learning style is one of eight types of intelligence defined in Howard Gardner's theory of Multiple Intelligences. "Musical learning style refers to a person's ability to understand and process sound, rhythm, patterns in sound, relationships between sounds, and ability to process rhymes and other auditory information" (Gardner)<sup>7</sup>.

## **Musical Learning Styles - Characteristics of Musical Learning Styles**

Musically learning styled people enjoy school activities such as music performance and appreciation, band, choir, orchestra, and writing poetry or songs. The musically talented person enjoys being surrounded by music and can appreciate many different types of music and sounds. They may be avid collectors of music, may join a band or choir, or may enjoy playing one or more instruments. They may often be found humming or drumming out beats with their hands. Many are also creative in other areas as well.

## **Musical Learning Styles - How do Musical Learning Styled People Learn Best?**

People with musical learning styles learn best when taught using spoken instruction and auditory media. Musically learning styled students have

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• <sup>7</sup> GARDNER, Howard, The multiple Intelligences and the different

Types o learners. Paidós Editorial

good auditory memory and may respond well to jingles and rhymes to help memorize information they may otherwise struggle with.

### **Musical Learning Styles - Musical Learning Style Career Choices**

Musically talented students may be interested in careers such as working in radio or television, playing music professionally in a group or orchestra, teaching music, band, choir or orchestra at k-12 or postsecondary levels. Musical learning styled people may also prefer working in music retail stores, composing music, private tutoring in music and instruments, music ministry in churches or community choirs, music journalism reviewer, and work as a recording engineer.

### **How to Teach or Learn Anything in Different Ways**

According to Dr. Thomas Armstrong, “one of the most remarkable features of the theory of multiple intelligences is how it provides eight different potential pathways to learning. If a teacher is having difficulty reaching a student in the more traditional linguistic or logical ways of instruction, the theory of multiple intelligences suggests several other ways in which the material might be presented to facilitate effective learning. Whether you are a kindergarten teacher, a graduate school instructor, or an adult

learner seeking better ways of pursuing self-study on any subject of interest, the same basic guidelines apply”(Armstrong)<sup>8</sup>.

Whatever you are teaching or learning, see how you might connect it with:

- words (linguistic intelligence)
- numbers or logic (logical-mathematical intelligence)
- pictures (spatial intelligence)
- music (musical intelligence)
- self-reflection (intrapersonal intelligence)
- a physical experience (bodily-kinesthetic intelligence)
- a social experience (interpersonal intelligence), and/or
- An experience in the natural world. (naturalist intelligence)

For example, if you’re teaching or learning about the law of supply and demand in economics, you might read about it (linguistic), study mathematical formulas that express it (logical-mathematical), examine a graphic chart that illustrates the principle (spatial), observe the law in the natural world (naturalist) or in the human world of commerce (interpersonal); examine the law in terms of your own body [e.g. when you supply your body with lots of food, the hunger demand goes down; when there's very little supply, your stomach's demand for food goes way up and

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• <sup>8</sup> ARMSTRONG, Thomas. The multiple Intelligences inside the classroom . Manantial Editorial.1999

you get hungry] (bodily-kinesthetic and intrapersonal); and/or write a song (or find an existing song) that demonstrates the law (perhaps Dylan's "Too Much of Nothing?").

You don't have to teach or learn something in all eight ways, just see what the possibilities are, and then decide which particular pathways interest you the most, or seem to be the most effective teaching or learning tools. The theory of multiple intelligences is so intriguing because it expands our horizon of available teaching/learning tools beyond the conventional linguistic and logical methods used in most schools (e.g. lecture, textbooks, writing assignments, formulas, etc.). To get started, put the topic of whatever you're interested in teaching or learning about in the center of a blank sheet of paper, and draw eight straight lines or "spokes" radiating out from this topic. Label each line with a different intelligence. Then start brainstorming ideas for teaching or learning that topic and write down ideas next to each intelligence (this is a spatial-linguistic approach of brainstorming; you might want to do this in other ways as well, using a tape-recorder, having a group brainstorming session, etc.).

## CHAPTER THREE

### STRATEGIES TO DEVELOP THE MULTIPLE INTELLIGENCES

There are many ways to improve our own intelligences and students' intelligences using tools and techniques called in better way strategies for each intelligence.

#### **BODILY – KINAESTHETIC INTELLIGENCE**

“Activities that involve touching and moving will help develop this intelligence.

- Use post it notes to generate ideas. Then put them on a wall and sort them into categories.
- Use notes to create flowcharts and Gantt charts that can be physically built up and manipulated.
- Make something physically real by providing a model people can touch, walk around and interact with.
- Make a problem a physical reality by acting out a role-play.
- If drawing pictures of diagrams make them big so that they maximize the amount of movement required.
- Place whiteboards in different locations so that you can catch ideas as you move around.



- Shuffle, play with a select cards from a “Whack Pack” to stimulate your thinking.
- Provide stress balls and other tactile toys that people can squeeze and touch whilst they are thinking.
- Rehearse and memorize physical actions such as dance movements to build up your muscle memory.
- Go for a walk or do some other type of physical activity whilst thinking.
- Build models of your ideas with play – dough and other tactile materials.

## **INTERPERSONAL INTELLIGENCE**

Any strategies that involve group interaction and communication will help develop this type of intelligence.

- Use role-plays involving interaction between two or more people.
- Use any group brainstorming approaches.
- Try to put self in the shoes of other. Imagine How they think and feel about any problem
- Create new opportunities for face to face contact.
- Personalize the problem. How does it affect a day in the life of an individual?
- Build relationships with people who are different, do different thing, or do thing differently.

## **LINGUISTIC INTELLIGENCE**

Any strategies that engage a significant amount of writing and speaking will help develop this type of intelligence.

- Describe a topic using different words and phrases.
- Write down others' ideas using your own words.
- Clarify your thinking by speaking your thoughts out loud.
- Find someone that you can speak at rather than do
- Scribble out a problem or issue in the form of a play.
- Create acronyms and key phrases to develop your verbal memory.
- Write out your experiences in a personal journal.
- Tell the story of a problem, how it began, how it developed and how it was brought to an end.
- Write down your ideas as they occur to you without self – censorship.
- Read what you have written out loud.

## **LOGICAL – MATHEMATICAL INTELLIGENCE**

Any strategies that involve an analytical approach that breaks things down, build things up or looks for patterns can be used to develop this intelligence.

- Ask How? To cut up a problem down and get into details.
- Ask why? To cut up a problem up and obtain its overall context.
- Create process maps of problem areas.

- Identify the positive, effectiveness increasing and negative, effectiveness decreasing attributes of specific products or activities and identify how they can be maximized and minimized respectively.

## **NATURALISTIC INTELLIGENCE**

Any strategies that involve producing and development your own and others' ideas will help develop this intelligence.

- Create mind maps to explore, categorise and develop students' thinking about what they like.
- Look for ways to create new, improved ideas from separate, initially unrelated ideas.
- Produce new ideas by using random objects and words and their various characteristics and associations to stimulate your thinking.

## **INTRAPERSONAL INTELLIGENCE**

Any strategies that encourage self – awareness and reflection will help develop this intelligence.

- Keep a journal of your ongoing experiences. Think specially about what you thought, felt and did in specific situations. What insights does this give you?
- Write a script of a situation you want to deal with well. Take note of what you think and feel as you read through it. What insights does this give you?

- Explicitly notice what you are thinking, feeling and doing at the same time as others are speaking. Also, mentally note what you find positive, negative and interesting about what they are saying. Ask yourself why this is.

## **SPATIAL INTELLIGENCE**

Any strategies that encourage the visual expression and manipulation of thoughts, ideas and concepts will help the development of this intelligence.

- Draw a picture of a problem or issue.
- Create a mind map of a problem or issue
- Use diagrams and flowcharts instead of words.
- Make visual notes of what someone is saying rather than using words.
- Use pictures and symbols to represent important concepts, or definitions that would take a lot of words to describe.
- Use the cartoon strip approach to draw out the story of a problem or process.

## **MUSICAL INTELLIGENCE**

Any strategies that encourage the development of musical awareness, sense of rhythm and hearing in general will help enhance this intelligence.

- Use rhythmic and memorable melodies to remember information.

- Experiment with adding music to your environment. What types of music help you to relax or concentrate? What types of music stimulate and energize you?
- Immerse yourself in the sounds associated with the situation or subject you are addressing.
- Listen to audio recordings of lectures and books.
- Record your own thoughts and ideas and play them back to yourself.
- Listen and sing the music with a lyric more complicated each time.”<sup>9</sup>

## **CHAPTER FOUR**

### **TYPES OF LEARNERS**

Whenever you are going to present to a group, you must consider who makes up the group and how best you can reach them. Sometimes you will present to a diverse group with different backgrounds and learning styles. When you present to a diverse group you must try to consider all learning styles. However, if you are presenting to a more homogeneous group of learners you may choose to present emphasizing one strategy over the others. The topic of your presentation may also lend itself to one style over others. Your main objective is to involve the audience and to teach them about your subject.

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<sup>9</sup>[http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?\\_nfpb=true&\\_&ERICExtSearch\\_SearchValue\\_0=EJ534215&ERICExtSearch\\_SearchType\\_0=no&accno=EJ534215](http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=EJ534215&ERICExtSearch_SearchType_0=no&accno=EJ534215) 06 – 21 /2012

### **Visual learners**

- Visual learners learn primarily through the written word.
- They tend to be readers who diligently take down every word.

### **Auditory learners**

Auditory learners learn primarily through listening.

- They focus their ears and attention on your words, listening carefully to everything you say.
- They like to talk rather than write and relish the opportunity to discuss what they've heard.

### **Kinesthetic learners**

- Kinesthetic learners learn better by doing.
- This group learns best when they can practice what they're learning.
- They want to have their hands on the keyboard, the hammer, or the test tube because they think in terms of physical action

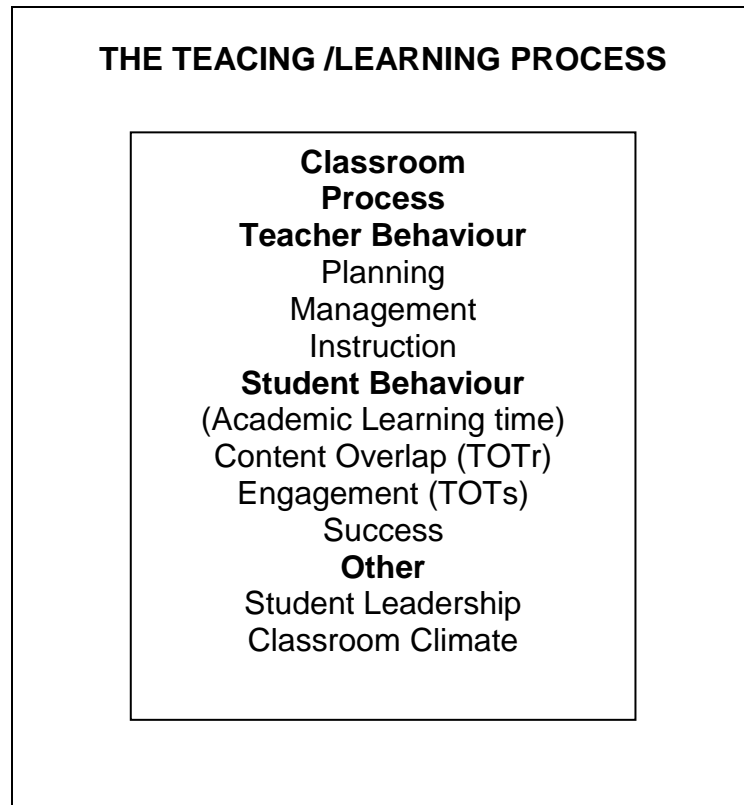
### **How to Present to Different Types:**

VISUAL LEARNERS	AUDITORY LEARNERS	KINESTHETIC LEARNERS
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WRITE IT	SAY IT	DEMONSTRATE IT
<ul style="list-style-type: none"> <li>• provide written materials and exercises</li> </ul>	<ul style="list-style-type: none"> <li>• State the information</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how a principle works</li> </ul>
<ul style="list-style-type: none"> <li>• Write key words on board or flip chart</li> </ul>	<ul style="list-style-type: none"> <li>• Ask audience to describe specific info</li> </ul>	<ul style="list-style-type: none"> <li>• Ask them to practice the technique</li> </ul>
<ul style="list-style-type: none"> <li>• Ask them to write a response</li> </ul>	<ul style="list-style-type: none"> <li>• Provide discussion periods</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage underlining and highlighting key words</li> </ul>
<ul style="list-style-type: none"> <li>• Use visuals or graphics</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage questions</li> </ul>	<ul style="list-style-type: none"> <li>• Provide real-life simulations</li> </ul>
<ul style="list-style-type: none"> <li>• Ask them to be recorder in a group</li> </ul>	<ul style="list-style-type: none"> <li>• Foster small group participation</li> </ul>	<ul style="list-style-type: none"> <li>• Offer hands-on activities</li> </ul>
<ul style="list-style-type: none"> <li>• Involve them through visual/spatial sense</li> </ul>	<ul style="list-style-type: none"> <li>• Utilize audiovisuals and audio cassettes</li> </ul>	<ul style="list-style-type: none"> <li>• Involve them physically</li> </ul>

## CHAPTER FIVE

### THE TEACHING LEARNING PROCESS AND THE MULTIPLE INTELLIGENCES



Planning refers to all of those activities a teacher might do to get ready to interact with students in the classroom. Management refers to controlling student behavior, while instruction refers to actually guiding student learning.

➤ **Classroom planning**



Goals--Long-term outcomes generally presented in broad, general terms (e.g., become a responsible citizen; become a professional educator)

Objectives--Specific, short- and medium-term statements related to tasks that students should master after instruction; a clear, unambiguous description of educational intentions for students (e.g., state the advantages of a democratic system of government; compare and contrast goals and objectives)

Who are my students?

How will I accomplish my goal and objectives?

How will I know if my goals and objectives have been accomplished?

➤ **Timing of the Planning Process**

**Long-term (School Year)**

Content overlap--do the objectives I intend to cover with students overlap with the prerequisite skills needed for the curriculum taught in the next grade? Expectations of important stakeholders in the educational process?

Task analysis

Models of instruction

Instructional methods and techniques

### **Medium-term (Quarter, Semester)**

Themes

Units

### **Short-term (Lesson)**

Lesson objectives

Activities

Materials

### **Steps in Planning Process**

Frudden and Stow (1986) identified 8 steps in the planning process:

Establish goals and objectives

Establish allocated time

Identify strategies and models of teaching

Determine methods of evaluating of student outcomes

Select instructional methods and techniques

Design student activities

Provide for variety and individual differences

Of course, it is necessary to properly implement the plan and to properly evaluate results in order to determine if the plan was a success.

### **Instructional objectives**

Instructional objectives are statements of educational expectations for students. Although research has not demonstrated a strong link between writing objectives and student achievement (perhaps because well-written objectives are not always properly implemented or taught), it is still considered good educational practice to have written objectives in order to facilitate communication to students about expected outcomes.

There are a number of approaches to writing instructional objectives. Mager (1997) proposes writing very specific statements about observable outcomes (called behavioral objectives) that can be built up to become a curriculum (an inductive approach). An example of a Mager objective is: Given 3 minutes of classtime, the student will solve 9 out of 10 multiplication problems of the type:  $5 \times 4 = \underline{\quad}$ .

Gronlund (1999) proposes starting with a general statement and then providing specific examples of topics to be covered or behaviors to be observed (a deductive approach). An example of a Gronlund objective is:

The student can perform simple multiplication.

- a. can define what multiplication means, in his or her own words
- b. can define relevant terms such as "multiplier" and "product"
- c. can solve problems of the type  $5 \times 4 = \underline{\hspace{2cm}}$ .

Eisner (1997) proposes that not all instructional objectives should focus on outcome; some should focus on the learning process itself (expressive objectives). Two examples are:

- a. Students will attend a live symphony performance.
- b. Students will use multiplication in everyday activities.

While there are advantages and disadvantages to each approach, we will focus on Mager's approach, since it is the most widely used and perhaps the most inclusive.

### **Orientation to Classroom management**

According to another important author states "there are 3 general principles for good classroom management:

- ♣ Willingness of the teacher to accept responsibility for classroom control
- ♣ Long-term, solution-oriented approaches to problems (rather than short-term, desist/control responses

- ♣ Check to see if symptomatic behavior is caused by underlying personal problems (impulsivity, lack of awareness, home problems, etc.)”<sup>10</sup>(Brophy)

Brophy also cites 3 orientations to classroom management:

**Self-concept/personal adjustment**--the teacher encourages discouraged students, builds self-esteem by arranging for and calling attention to success, improving peer relationships, etc.

**Insight (cognitive)**--spend time with problem students individually, attempting to instruct and inform them, getting to know them personally

**Behavioristic**--offer incentives, negotiate contracts, call attention to and reinforce desirable behavior

### **Classroom instruction**

Instruction was defined previously as "the purposeful direction of the learning process" and is one of the major teacher class activities (along with planning and management). Professional educators have developed a variety of models of instruction, each designed to produce classroom learning. Joyce, Weil, and Calhoun (2003) describe four categories of models of teaching/instruction (behavioral systems, information processing, personal development, and social interaction) that summarize

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• <sup>10</sup> Brophy, Jere, The Teaching (La enseñanza),1983

the vast majority of instructional methods. Each model differs in the specific type or measure of learning that is targeted. Therefore, as we make **decisions about "best educational practices" we must be** certain that we connect recommended practices with specific desired outcomes. This point is often omitted; discussion of best practices then becomes a debate about desired outcomes rather than a discussion of how to achieve them.

### **Models of instruction**

Another important point is that the different models and methods of instruction have been developed based on specific interpretations of concepts and principles of teaching and learning. While it is important to learn and practice the approaches developed by others, it is even more important to understand the concepts and principles upon which they are based.

*If you learn only methods, you'll be tied to your methods, but if you learn principles you can devise your own methods. -- Ralph Waldo Emerson (1803 – 1882)*

As you review each of the models or methods of instruction, ask yourself "Why is this being done?" and "Why is this being done now?" See if you can determine the underlying principles that are being advocated. You will

then be in a better position to make modifications as your competency as a teacher grows.

### **Direct instruction**

As stated in other sections of these materials, the most often used measures of student achievement in the U.S. are scores on standardized tests of basic skills. Using this criteria as the desired student outcome, one set of models, labeled direct or explicit instruction has developed overwhelming research support in the past 25 years. Several principles of direct instruction, such as more teacher direction and student-teacher interaction, provide the foundation for this approach.

Although the research shows that, in general, direct instruction is the preferred model of instruction when the measure of learning is scores on a standardized test of basic skills, teachers must also decide how to deal with individual differences. In general there are three different approaches. The first is to develop a set of instructional events that directly address different student learning styles. This is the approach adopted by Bernice McCarthy in her 4MAT System. A second approach is to use a method of grouping. Research has shown that cooperative learning, an in-class, heterogenous grouping alternative, is an effective alternative that both impacts student achievement as well as social skills. A third approach is to alter the schooling system within which instruction is provided. This is the

approach used by Bloom (1976; see Davis & Sorrell, 1995) in his mastery learning strategy. Although many teachers have attempted to implement a mastery learning strategy in their individual classrooms, the approach seems to work best when implemented on a school- or district-wide basis.

In summary, instruction (the purposeful guidance of the learning process) is complex and can take many forms. It is a vitally important classroom activity, but must be considered in the context of such factors as measures of desired student learning (including overlapping objectives taught to objectives tested), controlling student behavior (classroom management activities), individual differences among students, and school processes and characteristics. Under the best conditions it takes many years of experience for most teachers to meet the ideals of instructional practice that they set for themselves as preservice undergraduate students.

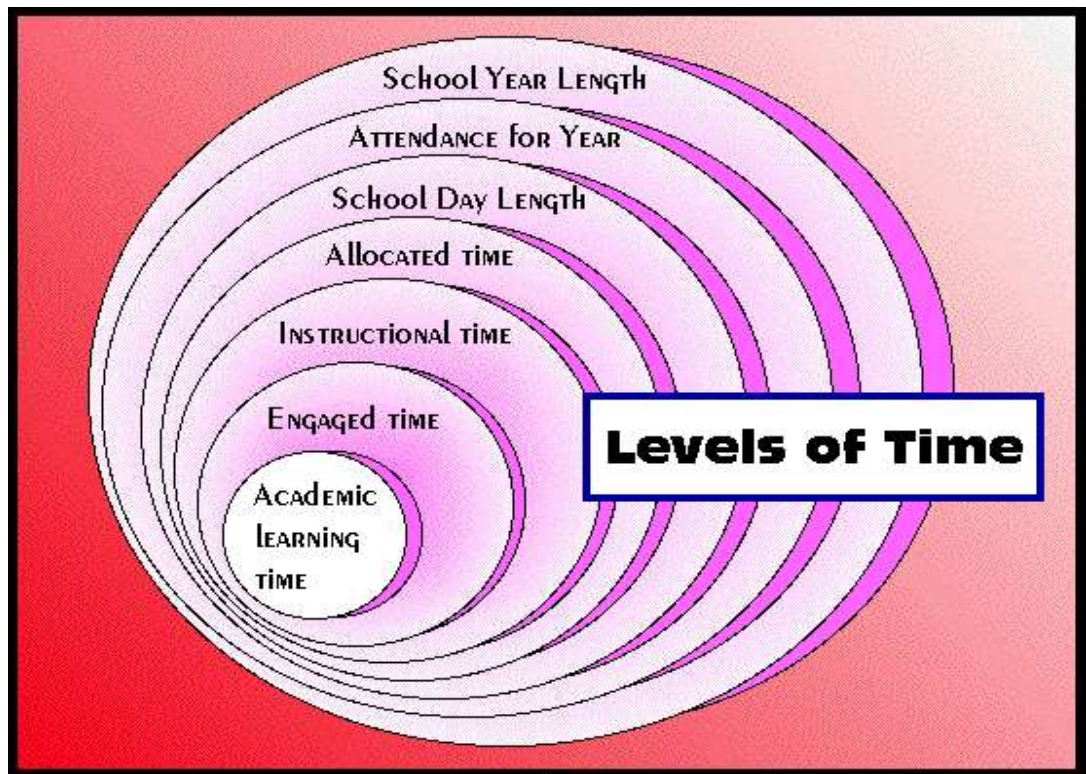
### **Academic Learning time**

Academic Learning Time (ALT) is defined as "**the amount of time students are successfully covering content that will be tested**" (Squires, Huitt & Segars, 1983). It is a revision of the time-on-task or engaged time variable first highlighted by John Carroll (1963) in his formula for school learning (Berliner, 1990). ALT is a combination of three separate variables: Content Overlap, Involvement, and Success. Content Overlap is defined as "the percentage of the content covered on the test actually covered by students in the classroom" (Brady, et al., 1977) and is



sometimes referred to as "Time on Target." Involvement is the "amount of time students are actively involved in the learning process" and is often referred to as "Time on Task." (Stallings & Kaskowitz, 1974). Success is defined as the "extent to which students accurately complete the assignments they have been given" (Fisher, et al., 1978). A high level of Academic Learning Time means that 1) students are covering important (tested/evaluated) content; 2) students are "on-task" most of the class period; and 3) students are successful on most the assignments they complete.

Because ALT is really the result of many decisions about how time is spent in schools and classroom, as is depicted in the graph below, small increases in a number of these factors can lead to large increases in ALT.



## Evaluation

The evaluation of the teaching-learning process is a conduct that poses great challenges from a modeling perspective. Tutor modules form part of intelligent systems that are applied to education, and should assess: when to interrupt, how to teach a given topic, and what to teach in a given moment. By considering the different types of errors, a good evaluation of the teaching-learning process allows the systems to adapt in an optimum form to different users. This paper proposes a design technique to model the conduct of an expert that evaluates the results of the teaching-learning process within a reactive learning environment. To achieve this, a fuzzy cognitive map, which is a representation recently proposed to model the conduct and operation of complex systems, is

used. Bart Kosko introduced this type of maps in 1986 with the aim of describing the behavior of a system in terms of concepts and causal relations between concepts. Since then, their use has been extended to diverse real-world situations that span from the analysis of investment in stock to supervisory system control. Missing conceptions, which provide a basis to assemble the didactic tactics, are imputed to this representation. Starting from the mental model of the expert in the learning domain, a conceptual genetic graph is established to orientate the fuzzy cognitive map.

Evaluation in higher education entails gathering evidence about the impact of teaching, topic and course design on students' participation and achievement and the appropriateness of content and processes for intended purposes.

Effective evaluation of teaching and topics is the basis of good educational practice. Evaluation of teaching and topics must be done with a purpose. For evaluations to be effective and useful you need to clarify what is it that you want to know or to demonstrate about your teaching.

There are many possible purposes for assessing, sources of information and uses for which the evidence might be used.

Evaluation needs to be deliberate. In particular, it needs to be a continuous process.

## **Why Evaluate?**

To judge the efficacy of specific teaching strategies, approaches and innovations so that:

- There can be some critical debate as to the worth and value of the strategies used
- Others can appraise a teachers' effectiveness in the light of a performance appraisal for promotion purposes.

There are many possible purposes for assessing, sources of information and uses for which the evidence might be used.

## **What Decisions can be Based on the Data?**

Changes to course structure

Changes to teaching processes

Changes to teaching content

Changes to assessment tasks

Changes to student work load

Changes to student staff interactions

Promotion and tenure

Professional development

## **Types of Evaluation**

## **Formative**

This is feedback for teacher development, and usually occurs early in the teaching process. Formative evaluation needs to be:

- ♣ specific
- ♣ relevant
- ♣ contextual
- ♣ diagnostic

## **Summative**

This is judgment of effectiveness, and usually occurs at the end of the teaching process. Summative evaluation needs to be:

- ♣ valid,
- ♣ reliable
- ♣ based on data that measures quality

“Teaching without learning is just talking” (Angelo and Cross, 1993)

## **Assessment**

Before considering what to assess, you might wish to consider what's worth learning.

Most academics would argue that the ideal purpose of their teaching is to foster a critical appreciation of ideas, creativity and independence of

thought. It is not the lecture that will encourage such higher learning dispositions; rather it is the design and conduct of assessment.

### **Planning assessments**

Planning assessment is planning for student learning. Assessment tasks and processes establish the learning culture of a department or Faculty.

The design of assessment tasks, the ways in which the tasks are assessed and the ways in which the assessors give feedback to students all determine the ways in which students will approach their learning at university.

The objective for assessment should be to ensure that assessment processes have educational integrity without increasing the workload for staff and students.

Educational integrity is created when the tasks or learning activities are focused on the expressed educational intentions and are capable of producing the desired learning outcomes.

The processes should provide both the teacher and the student with a clear understanding, through feedback, of how their performances compare with an orderly development in capability. This achievement ought to be accurately reflected in a grade.

## **HYPOTHESES**

### **GENERAL**

The Multiple Intelligences influence on the Teaching Learning Process of the English Learning Language in students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> years of high school curriculum at “Vicente Anda Aguirre” high school.

### **SPECIFIC**

- There are certain Multiple Intelligences that support the English Learning in students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of high school curriculum at “Vicente Anda Aguirre” high school.
- There is a little application of strategies and techniques of Multiple intelligences that stimulate the English Language Learning on students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of high school curriculum at “Vicente Anda Aguirre” high school.

## **f. METHODOLOGY**

### **Design of the research.**

The present is a non-experimental research because, the researcher will need to test the results from the same place where the researcher is going to work using different methods and techniques to get success at final results.

### **Methods.**

To develop this research work will be necessary to use and apply the following methods explaining the reasons.

#### **The Analytic- synthetic method**

Because it will help to note and mention all the results of the applied surveys into the institution for teachers and authorities and after that all the answers will be performed by a strict criteria.

#### **The Scientific method**

This method is very important and useful because with the scientific investigation of the topic that will be researched we can make a contrast with the true information of the institution and take out important definitions and conclusions for the present reach work.



### **Explicative method**

This method will permit us to explain all the collected data and information about this research using our words and techniques to give an excellent explanation of the present research.

### **Techniques and instruments**

#### **The surveys**

The surveys are important and necessary in all type of investigations and in this case it will help to get results with the own answers of teachers and students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> years of Vicente Anda Aguirre High School.

#### **Population and sample.**

The Vicente Anda Aguirre high school night section has a population of 328 students in 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> years. and 4 English teachers.

This research work will be developed with a small population explained in the next formula:

<b>VARIABLES</b>	<b>POPULATION</b>	<b>SAMPLE</b>
<b>Teachers</b>	<b>4</b>	
<b>Students</b>	<b>328</b>	144

$$n = \frac{PQ \times N}{(N-1) \frac{E^2}{K^2} - PQ}$$

-----

n= ?

PQ= 0.25  
 E2= 0.1  
 K2= 2  
 N= 328

$$n = \frac{0.25 \times 328}{(328 - 1) \frac{(0.1)^2}{(2)^2} - 0.25}$$

$$n = \frac{82}{(327) \frac{(0.01)}{4} - 0.25}$$

$$n = \frac{82}{(327) (0.0025) - 0.25}$$

$$n = \frac{82}{0.57}$$

n= 144 //

Due to these results it will be necessary to work with 144 students.

Students	Students			Total
	A	B	C	
1 <sup>st</sup> year	17	17	16	50
2 <sup>nd</sup> year	17	17	15	49
3 <sup>rd</sup> year	17	17	11	45
<b>TOTAL</b>				<b>144</b>

Regard to the teachers, it has been considered the whole population of them since there are only 4.

**g. TIME TABLE**

DESCRIPTION	DECEMB 2011				JAN 2012				FEB 2012				MARCH 2012				MAY 2012				JUNE 2012				OCT. 2012				NOV. 2012			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Election of the Thesis Theme	X																															
First visit to the institution	X																															
Aprobation of the thesis theme			X																													
Aprobation of the Principal of the institution						X																										
Presentation of the Thesis Project						X																										
Correction and explanation of the thesis Project by the Doctor							X																									
Analysis and improvement of the Project by the researcher										X																						
Second presentation of part of the Project														X	X	X																
Presentation of all the thesis project																				X												
Aprobation of the thesis project																						X										
Aplication of the surveys to teachers and students																							X									
Presentation of the thesis with tabs and analysis of the results of the surveys																															X	

## **h. BUDGET AND FINANCING**

### **ORGANIZATION AND MANAGEMENT OF THE RESEARCH**

#### **RESOURCES**

##### **HUMAN**

- ❖ Students and teachers at “Vicente Anda Aguirre” Night Section High School.
- ❖ Students and teachers at “Vicente Anda Aguirre” Night Section High School.
- ❖ Doctor Marcia Criollo.
- ❖ The researcher: Cristyan Bravo

##### **MATERIAL**

Surveys, copies, internet, typing, books, magazines.

Technological resources:

Computers, photocopier, printer, -laptop

## **BUDGET**

Office material .....	\$90.00
Internet.....	\$50.00
Copies.....	\$29. 00
Impressions an corrections.....	\$50.00
Transport.....	\$30.00
Bibliographic material .....	\$40.00

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<b>Total</b>	<b>\$289.00</b>
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## **FINANCING**

The present research work will be financed by the researcher.

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## ANNEXES



### UNIVERSIDAD NACIONAL DE LOJA ÁREA DE LA EDUCACIÓN, EL ARTE Y LA COMUNICACIÓN ENGLISH LANGUAGE DEPARTMENT

#### TEACHERS' SURVEY

Dear teacher:

The present survey is an instrument to gather information for a research work. Your answers and opinions will be very important to find out the influence of the Multiple Intelligences in the Teaching Learning Process of the English Learning language in students of the 1st, 2nd and 3rd years of high school curriculum at "Vicente Anda Aguirre" high school. Therefore, I request your honest answer to the questions asked.

#### HYPOTHESIS 1

**There are certain Multiple Intelligences that support the English Learning in students of "Vicente Anda Aguirre" high school.**

**1. How can you define the intelligence?**

- Capacity for reasoning and abstracting thought ( )
- Ability to comprehend relationships ( )
- Ability to evaluate and judge ( )
- Capacity for original and productive thought ( )

**2. The multiple intelligences describe to: (tick)**

- a. Eight kinds of intelligences that people have ( )
- b. Four skills that learners have to develop in classes ( )
- c. Abilities that make us understand that we able to do something ( )
- d. Some kind of thoughts that people could have ( )



**3. How do you stimulate the development of the multiple intelligences in students?**

- a. By painting, woodworking ( )
- b. By speaking , pair – group working ( )
- c. By reading and writing ( )
- d. By using computer applications, programming computers ( )
- e. By interacting outdoor activities ( )
- f. By working alone (students) ( )
- g. By using visual aids, graphs ( )
- h. By musical performance, writing poetry and songs ( )

**4. What Multiple Intelligences have you noticed in your students?**

	80%	60%	40%	20%
a. Musical	( )	( )	( )	( )
b. Intrapersonal	( )	( )	( )	( )
c. Verbal Linguistic	( )	( )	( )	( )
d. Mathematical	( )	( )	( )	( )
e. Visual Spatial	( )	( )	( )	( )
f. Bodily Kinesthetic	( )	( )	( )	( )
g. Interpersonal	( )	( )	( )	( )
h. Naturalist	( )	( )	( )	( )

**5. As an English teacher what intelligence do you think helps students to learn more English language easily? Select maximum three**

- a. Musical ( )
- b. Intrapersonal ( )
- c. Verbal Linguistic ( )
- d. Mathematical ( )
- e. Visual Spatial ( )
- f. Bodily Kinesthetic ( )
- g. Interpersonal ( )
- h. Naturalist ( )

## HYPOTHESIS 2

**There is a little application of strategies and techniques to develop multiple intelligences that stimulate the English Language Learning in students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of high school curriculum at “Vicente Anda Aguirre” high school.**

**6. Do you think, your methodology is varied enough according to your students’ multiple intelligences?**

Very varied ( )      Varied ( )      Little varied ( )

**7. How would you consider your teaching?**

- Dynamic ( )
- Routinary ( )
- Traditional ( )
  
- Innovative ( )
- Creative ( )

**8. Do you apply strategies and techniques considering your students’ multiple intelligences to stimulate the English learning?**

- a. Always ( )
- b. Usually ( )
- c. Sometimes ( )
- d. Hardly ever ( )
- e. Never ( )

**9. Do you encourage your students to:**

- Draw pictures of diagrams ( ) ( ) ( )
- Involve interaction between two or more classmates ( ) ( ) ( )
- Read and develop the text activities ( ) ( ) ( )
- Listen and sing any song ( ) ( ) ( )

- Play games using vocabulary ( ) ( ) ( )

**10. What is the students' real learning level of the English language?**

- Excellent ( )
- Very good ( )
- Good ( )
- Regular ( )
- Insufficient ( )

**THANK YOU FOR YOUR COLLABORATION.**

## STUDENTS' SURVEY

### Hypotheses 1

There are certain Multiple Intelligences that support the English Learning in students of "Vicente Anda Aguirre" high school.

**1. As a student, how could you define the Intelligence?**

- a. Capacity for reasoning and abstracting thought ( )
- b. Ability to comprehend relationships ( )
- c. Ability to evaluate and judge ( )
- d. Capacity for original and productive thought ( )

**2. The multiple intelligences describe to:**

- a. Eight kinds of intelligences that someone has (.....)
- b. Four skills that learners have to develop in classes (.....)
- c. Abilities that make us understand that we able to do something (.....)
- d. Some kind of thoughts that people could have (.....)

**3. How does your teacher stimulate the learning of the multiple intelligences?**

- a. By painting, woodworking ( )
- b. By speaking , pair – group working ( )
- c. By reading and writing ( )
- d. By using computer applications, programming computers ( )
- e. By interacting outdoor activities ( )
- f. By working alone (students) ( )
- g. By using visual aids, graphs ( )
- h. By musical performance, writing poetry and songs ( )

**4. What Multiple Intelligences have you develop in class?**

	<b>80%</b>	<b>60%</b>	<b>40%</b>	<b>20%</b>
a. Musical	( )	( )	( )	( )
b. Intrapersonal	( )	( )	( )	( )
c. Verbal Linguistic	( )	( )	( )	( )
d. Mathematical	( )	( )	( )	( )
e. Visual Spatial	( )	( )	( )	( )
f. Bodily Kinesthetic	( )	( )	( )	( )
g. Interpersonal	( )	( )	( )	( )
h. Naturalist	( )	( )	( )	( )

**5. As a student what intelligence do you think helps to learn more English language easily? Select maximum three**

- c. Musical ( )
- d. Intrapersonal ( )
- e. Verbal Linguistic ( )
- f. Mathematical ( )
- g. Visual Spatial ( )
- h. Bodily Kinesthetic ( )
- i. Interpersonal ( )
- j. Naturalist ( )

**Hypotheses 2**

**There is a little application of strategies and techniques to develop multiple intelligences that stimulate the English Language Learning in students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of high school curriculum at “Vicente Anda Aguirre” high school.**

**7. Do you think, the English teacher’s methodology to develop different multiple intelligences is varied enough?**

Very varied ( )      Varied ( )      little varied ( )

**8. How would you consider the English teaching in class?**

- Dynamic ( )

- Routinary ( )
- Traditional ( )
- Innovative ( )
- Creative ( )

**9. Does your teacher apply strategies and techniques to stimulate the English classes?**

- a. Always ( )
- b. Usually ( )
- c. Sometimes ( )
- d. Hardly ever ( )
- e. Never ( )

**10. How often does your English teacher encourages students to:**

- Draw pictures of diagrams ( ) ( ) ( )
- Involve interaction between two or more classmates ( ) ( ) ( )
- Read and develop the text activities ( ) ( ) ( )
- Listen and sing any song ( ) ( ) ( )
- Play games using vocabulary ( ) ( ) ( )

**11. How do you consider your learning level of the English language?**

- Excellent ( )
- Very good ( )
- Good ( )
- Regular ( )
- Insufficient ( )

**THANK YOU FOR YOUR COLLABORATION.**

**THEME: THE MULTIPLE INTELLIGENCES AND THEIR EFFECT IN THE TEACHING LEARNING PROCESS OF THE ENGLISH LANGUAGE WITH THE STUDENTS OF 1<sup>ST</sup>, 2<sup>ND</sup> AND 3<sup>RD</sup> YEARS OF BACHILLERATO AT "VICENTE ANDA AGUIRRE" HIGH SCHOOL, ACADEMIC YEAR 2012 - 2013**

PROBLEM	OBJECTIVES	HYPOTHESES	VARIABLES	INDICATORS	
<p>¿WHAT IS THE INFLUENCE OF THE MULTIPLE INTELLIGENCES IN THE TEACHING LEARNING PROCESS OF THE ENGLISH LANGUAGE IN STUDENTS OF VICENTE ANDA AGUIRRE HIGH SCHOOL, PERIOD 2012-2013?</p> <p><b>SUBPROBLEMS</b></p> <ul style="list-style-type: none"> <li>■ What types of Multiple Intelligences support the English Learning Teaching process in students of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years of Vicente Anda Aguirre High School?</li> <li>■ What kind of strategies and techniques of Multiple Intelligences stimulate the English Language Learning in students of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years of Vicente Anda Aguirre High School?</li> </ul>	<p><b>GENERAL</b> To find out the influence of the Multiple Intelligences in the Teaching Learning Process of the English Learning language in students of the 1st, 2nd and 3rd years of high school curriculum at " Vicente Anda Aguirre" high school .</p> <p><b>SPECIFICS:</b></p> <ul style="list-style-type: none"> <li>• To identify the Multiple Intelligences that facilitate the English Language Learning in students of "Vicente Anda Aguirre" high school.</li> <li>• To classify and catalog the strategies and techniques of Multiple Intelligences that stimulate the Learning of English Language in students of the 1st, 2nd and 3rd years of high school curriculum at " Vicente Anda Aguirre" high school.</li> </ul>	<p><b>GENERAL</b> The Multiple Intelligences influence on the Teaching Learning Process of the English Learning Language in students of the 1st, 2nd and 3rd years of high school curriculum at " Vicente Anda Aguirre" high school .</p> <p><b>SPECIFICS</b></p> <ul style="list-style-type: none"> <li>• There are certain Multiple Intelligences that support the English Learning in students of "Vicente Anda Aguirre" high school.</li> <li>• There is a little application of strategies and techniques to develop Multiple intelligences that stimulate the English Language Learning on students of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup>, years of high school curriculum at "Vicente Anda Aguirre" high school.</li> </ul>	<p><b>INDEPENDENT</b> The Multiple Intelligences</p> <p><b>DEPENDENT</b> The teaching Learning Process</p>	<p>• The Intelligence</p> <p>• The Multiple Intelligences</p> <p>• Activities, Tests, exercises</p> <p><b>SUBINDICATORS</b></p> <p>• Types of Learners</p> <p>• Steps and Models of the English Process</p>	<p><b>THE MULTIPLE INTELLIGENCES:</b></p> <p>The intelligence Definitions</p> <p>The kinds of Multiple Intelligences Musical - Intrapersonal - Verbal Linguistic - Mathematical - Visual Spatial - Bodily Kinesthetic - Interpersonal - Naturalist</p> <p>Theories of The intelligence</p> <p>Styles according to the intelligences</p> <p>Visual Learners Auditory Learners Kinesthetic Learners</p>

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