Universidad Latina de Costa Rica

# Learning Styles and their Effect on Student's Learning 

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## Declaración Jurada

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## DECLARACIÓN JURADA

Yo, Keylor Andres Aguilar Solis estudiante de la Universidad Latina de Costa Rica, declaro bajo la fe de juramento y consclente de las responsabilidades penales de este acto, que soy Autor Intelectual de la Tesis / Proyecto de Grado titulada (o):

Learning Styles and Their Effect on Student's Learning

Por lo que libero a la Universidad de cualquier responsabilidad en caso de que mi declaración sea falsa.

Es todo, firmo en Grecia, Alajuela a los 5 dias del mes de mayo del aగ̂o 2018.


## Tribunal Examinador

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Esto tesis fue aprobsda por el Trbunal Examinador de la carrera de ENSENANEA DEL ingles, requisito para eptar por el erado LICENCIATURA


## TABLE OF CONTENTS

Declaración Jurada ..... i
Tribunal Examinador ..... ii
CHAPTER I ..... 1
INTRODUCTION ..... 1
1.1 Purpose of the Study ..... 2
1.2 Objectives ..... 3
1.2.1 General Objective ..... 3
1.2.2 Specific Objectives ..... 3
1.3 Research Question ..... 3
1.4 Definition of Terms ..... 3
1.5 Significance of the Study ..... 5
CHAPTER II ..... 6
REVIEW OF LITERATURE ..... 6
2.1 References ..... 7
2.1.1 Vark, a guide to learning styles ..... 7
2.1.2 The Relationship Between The Learning Styles Of Middle School Students And The Teaching And Learning Styles Of Middle School Teachers And The Effects On Student Achievement Of Students’ Learning Styles And Teachers' Learning And Teaching Styles ..... 8
2.1.3 Different Perspectives of Learning Styles from VARK Model ..... 9
2.1.4 Language Learning Strategies in a Nutshell: Update and ESL Suggestions ..... 10
2.1.5 The Relationship among Learning Styles, Language Learning Strategies, and the Academic Achievement among the English Majors at Al-Aqsa University ..... 11
2.2 Summary of Chapter II ..... 13
CHAPTER III ..... 14
PROCEDURES ..... 14
3.1 Rationalization for Quantitative Research ..... 15
3.2 Data collection tools ..... 15
3.3 Site and Participants ..... 16
3.4 The Plan of the Study Data Analysis Procedures ..... 16
3.5 Summary of chapter III ..... 17
CHAPTER IV ..... 18
FINDINGS ..... 18
4.1 Data ..... 19
4.2 Restatement of questions and discussion of the results ..... 25
4.3 Summary of chapter IV ..... 27
CHAPTER V ..... 28
DISCUSSION ..... 28
5.1 Conclusion ..... 29
5.2 Implications ..... 29
5.3 Concluding statement ..... 31
REFERENCES ..... 33
ANNEXES ..... 36

## CHAPTER I

## INTRODUCTION

### 1.1 Purpose of the Study

The term 'learning style' refers to the fact that when the students want to learn something they will use their own method or set of strategies. Although the concrete strategies the population can use vary on what students want to learn, each student tend to develop global preferences and applied what is given in class. These preferences, tendencies and ways of learning constitute their style of learning. The fact that students do not learn in the same way, nor at the same speed is not new. In any group where more than two people are studying a subject all together and starting from the same level it is possible to find after a very short time with great differences in the knowledge of each member of the group and that despite the fact that apparently, everyone has received the same explanations and done the same activities and exercises. Each member of the group will learn differently, will have different doubts and will advance more in some areas than in others. Materials should take into account that learners differ in learning styles. A learner's preference for a particular learning styles is variable and depends on what is being learned, where it is being learned, who it is being learned with and what it is being learned for.

The concept of learning styles is directly related to the conception of learning as an active process. If teachers consider that learning is the equivalent of receiving information in a passive way what the student does or thinks is not very important. However, if they understand learning as the elaboration by the recipient of the information obtained it seems quite obvious that each of them will elaborate and will relate the received data according to its own characteristics. The importance of this project lies on that not many students know what is the best way for them to learn the language; therefore, they begin to have fear of the language. The idea that this project has is to apply it in the ninth year classroom, where students are in a transition process, so it is
important for them to identify their learning style so to complement their knowledge in English in the years to come, and also during their learning process.

### 1.2 Objectives

### 1.2.1 General Objective

To recognize Neil Fleming learning styles in the English learning process.

### 1.2.2 Specific Objectives

a) To analyze the effectiveness of the application of learning styles in an English class.
b) To demonstrate how the use of learning styles improve the learning of English as a foreign language.

### 1.3 Research Question

How the application of different learning styles can improve the learning of English as a foreign language?

### 1.4 Definition of Terms

- Learning Style: According to Dr Rita Dunn (International learning styles, 2010)
'Learning style is the way in which each individual learner begins to concentrate on, process, absorb and retain new and difficult material. Also, as Keefe (1982, p. 44), mentioned, "learning styles are cognitive, affective, and physiological traits that serve as relatively stable indicators of how learners perceive, interact with, and respond to learning environment."

Also, Dunn and Dunn (1979 as cited in Reid 1987) define it as "a term that describes the variations among learners in using one or more senses to understand, organize, and retain experience" (p. 89).

- VARK Method: According to his creator, Neil D Fleming (VARK a guide to learning style, 2017):
it is a piece of paper on 2 sides whether a 16 questions for people to trying find out how they learn based on particular preferences modes, and the VARK stand for visual, auditory, Read/write and Kinesthetic, so it gives people some idea of the preferences ....it was first on paper and then with technology we moved on to a web site.
- Kinesthetic: This term according to Kinsella (1995, p.172) "implies total physical involvement with a learning environment such as taking a field trip, dramatizing, pantomiming, or interviewing"
- Auditory: "Are students who enjoy the oral-aural learning channel. Thus they want to engage in discussions, conversations, and group work. These students typically require only oral directions" (Oxford, 1995, p. 36)
- Visual: Are learners who "prefer to learn via the visual channel. Therefore they like to read a lot, which requires concentration and time spent alone. Visual students need the visual stimulation of bulletin boards, videos and movies. They must have written directions if they are to function well in the classroom (Oxford, 1995, p. 35).
- Reading: As it is mentioned by Rebecca L. Oxford in the book Methodology in Language Teaching "students with global style use strategies that help them find the big picture (i.e., guessing, scanning, predicting) and assist them in conversing without knowing all the words (i.e., paraphrasing, gesturing)." (Rebecca, 121).


### 1.5 Significance of the Study

This action research project is based on how students can improve the second language learning using different learning styles. The project is carried out with a ninth grade students of the Santa Gertrudis High School, in order to improve their academic performance in the English class.

As it is known, kids, teenagers and students in general, all of them have different ways to learn and acquire knowledge. Some are visual, which learn by watching images, maps or graphics. Others may learn in the kinesthetic way, by doing things. Some other can better learn auditory, which means listening to discussions or situations, or by reading and writing.

With this knowledge, the idea of the project is to apply and develop some tasks, with different activities, in all the different learning styles in the class. This can help students to find out what is the best way for them to learn English in an efficient way, by giving them different and attractive options to learn the language in order to make them succeed in the educational process.

For no one is a secret that public institutions devote many of their lessons to basic subjects such as Spanish, Mathematics or Social Studies. In this process, languages, especially English, which is a basic tool for anyone who wants to incorporate to the workforce is left behind.

Dealing with a second language is difficult. Students at Santa Gertrudis High School produce good results in the English classes, but with a better understanding of the learning style. These teenager can improve the way in which the language is learnt and it will increase the chances of these learners to get better opportunities in the labor life. In addition, the initiative of this project is to help students that are performing poorly in English lessons, using and applying different strategies, and learning styles that increase and improve the way students learn.

## CHAPTER II

## REVIEW OF LITERATURE

### 2.1 References

### 2.1.1 Vark, a guide to learning styles

According to VARK, a guide to learning styles (2017), VARK tells something about what people may or may not know. It is a short, simple inventory that has been well-received because its dimensions are intuitively understood and its applications are practical. It has helped people understand each other and assists to learn more effectively in many situations.

Neil Fleming is a teacher from New Zealand, who was born in 1939. As part of his bibliography, he has a PhD by the Queen's University of Belfast (2002). He has been a learner and a teacher in different high schools and educational centers like Lincoln University in New Zealand, and was much known for his research about how people learn and communicate. In 2003, he had his first teaching appointment at the Ulster University.

For many years, the application and implementation of different workshops used in America, Europe and Asia is what permitted him being much known in the educational field. He is the creator of the VARK, which is an acronym of the different types of learning which are: Visual, Auditory, Reading/Writing and Kinesthetic.

Another important aspect provided by Fleming in his structure of learning styles VARK, is that it gives tools for the teacher to improve the way in how the lessons are developed because the teacher can apply different strategies to make the learning of a second language easier. Also, it opens the field for the students because with these activities the learners can find a good way to learn a language, but also, it provides strategies that can be applied in different fields.

### 2.1.2 The Relationship Between The Learning Styles Of Middle School Students And The Teaching And Learning Styles Of Middle School Teachers And The Effects On Student Achievement Of Students' Learning Styles And Teachers' Learning And Teaching Styles

According to Merrigan and White (2010), mentioned by Vanessa M. Morrow, all people have a favorite style of learning. Also, Merrigan and White (2010), mentioned by Vanessa M. Morrow said that "unconscious bias exhibited by teachers has a lasting effect on student achievement" (p. 24). If teachers do not care about students, if he/she does not really care about the process, it is going to be really difficult to make students feel engaged in classes with the topics and activities, but if teachers identify or determine the best way his or her students learn, it could be easy to know their strengths, so the application of different activities address to them and their learning style could improve the way they learn and their performance in class. As said, everybody learns in a different way, and even though these researches said that it is difficult for a student to feel identified for one learning style. However, it can be a combination of two learning style, as some activities that teachers do in class are.

The learning styles include four different ones:
a) Visual: it refers to the use of images, patterns, shapes, diagrams, maps or graphics where information can be organized in a different way. It is important to mention that visual does not include PowerPoint presentations, movies or videos. Some visual strategies that can be applied in the class are: drawing things using diagrams, lectures that use gestures and pictures or the use of highlighters.
b) Auditory: it is about learning new things of the language by listening and speaking, by lectures, stories or group discussions. Some aural study strategies that can be applied in the class are: discuss topics with your teachers, explain new ideas to other people or use a tape recorder. This learners prefer to hear information rather than reading some text or
write something. This term is also used to identify a learning preference of an individual who can learn best when initially listening to verbal instructions.
c) Reading/Writing: the use of words in this type of learning is crucial. Take notes, translation, understanding concepts and doing essays can help. In this type the use of dictionaries, definitions, summaries, paragraphs, glossaries, or manuals are very useful. The interaction with texts is what this type of learners like, rather than the use of images or videos.
d) Kinesthetic: "either through concrete personal experiences, examples, practice or simulation" (Fleming \& Mills, 1992, pp. 140-141). As Fleming said, students with this type, receive and understand information by doing things, by practice with solid things, figures or objects with their hands. Field tours, laboratory practice or trial and error can develop in a very good way this type of learning. The students with this type of learning are very experimental, so body movement with real life experiences is the way they absorb and retain information, to move and make things.

### 2.1.3 Different Perspectives of Learning Styles from VARK Model

The main idea of the VARK is to help students; by having different approaches they can use to improve the learning process and know under which situations is easier to apply. Learning a language is not an easy task, most of the time the students do not understand the way in which the language is taught, that is because they do not know how to learn; that is why the VARK is so important and revolutionary in this field.

Talking about all the relationship between the fourth learning styles, according to Wintegest in Yusoff (2007) mentioned by Norasmah Othmana and Mohd Hasril Amiruddinb in the document Different Perspectives of Learning Styles from VARK Model, some students can have more than
one strength style, which is called bimodal. And of course, this is an advantage, because that means that this student, for example in addition to learn visually, can learn also in a better way by listening(auditory), so is more flexible to receive and process information.

According to Yahaya (2007), mentioned by Norasmah Othmana and Mohd Hasril Amiruddinb in the document Different Perspectives of Learning Styles from VARK Model, teachers are the ones that have to start create, apply and innovate different activities that activate the feeling of learning in students, with the purpose of accomplish the objectives and give students new ways of learning, giving students new experiences of learning, for example, by integrating technology, and pull out the traditional way.

### 2.1.4 Language Learning Strategies in a Nutshell: Update and ESL Suggestions

Processing a second language requires a lot of time and effort, many students find very difficult to lead with a second language. Sometimes the students get frustrated because they are not able to find an efficient way to acquire a second language in some cases the student is not even aware of what is their learning style or do not have an idea of what is the best way to learn for him or her, in this case English. This is where the role of the teacher gets very important; the teacher is the one in charge of finding activities and procedures that include all the student's necessities. As is stated by Rebecca L. Oxford in her article, sometimes the teachers generalized the activities applied in classes. In these scenarios not all the students would be fitted by the activities and it will be unfair.

According to Rebecca L. Oxford (2002) mentioned in the book Methodology in language teaching, an anthology of current practice of Jack C. Richards and Willy A. Renandya (p. 124), learners have a better response when the material is adapted to their cognitive and affective capacities. The teacher has to take this role and find activities that best describes the group he is
teaching. That is why Oxford mentions that a teacher has to know his students as the back of the hand because in this way it would be easier to the teacher to tailor the activities according the necessities of the group. For the students this will create a nice environment to learn a second language.

According to Rebecca L. Oxford (2002) mentioned in the book Methodology in language teaching, an anthology of current practice of Jack C. Richards and Willy A. Renandya (pag. 125), a good strategy that can be used for the teacher to be aware of the students learning styles and capacities is to apply surveys to check what activities show a better response for the students to keep implementing and improving the learning process.

### 2.1.5 The Relationship among Learning Styles, Language Learning Strategies, and the Academic Achievement among the English Majors at Al-Aqsa University

Generally, students tend to favor one learning style more than another, but most people are a mix of two or maybe even three different styles. So, teachers make sure you are creating a classroom that can engage any type of learner and students, use your strengths so you can be the most successful student you can be.

According to Griggs and Dunn (1996) mentioned by Mohammed Ashour Jhaish in his thesis The Relationship among Learning Styles, Language Learning Strategies, and the Academic Achievement among the English Majors at Al-Aqsa University, students who learn with a method that has strong correlation with a learning style it will create a better experience learning process and the achievement of the academic objectives can be better, and this is a very good example of what teachers should do. If the class is about means of transportation, and the teacher knows that most of the students learn in a kinesthetic way, why not make some activities like role plays where students can create, can move their bodies and also use grammatical structures
and vocabulary related to the topic, it would be easier for them, when the exam comes, to remember this topic and the specific details from what they performed that just copy things from the board.

Moreover, according to Kroonenberg (1995), mentioned by Mohammed Ashour Jhaish in his thesis The Relationship among Learning Styles, Language Learning Strategies, and the Academic Achievement among the English Majors at Al-Aqsa University, adds that even though a student can have a favorite or strong learning style "they also need to open the idea of 'style flex' - that is students should be encouraged to diversify their style preferences" (p. 80). This is important to take into account, because students cannot close their mind to just learn with a specific style or their strongest style, it is important that teachers encourage students to practice with activities that are not just related to their specific learning style, maybe by exploring other styles, can improve even more their acquisition of language.

### 2.2 Summary of Chapter II

In this chapter, it is going to be found part of the theoretical framework and the different references that are going to be used in order to obtain the information and the bases of this project. As can be observed, VARK model or VARK questionnaire is the one that help the project to be developed. This important tool created many years ago by Neil Fleming, a teacher from New Zealand, had and has as a purpose to help students to know what is the best way for them to learn a second language. VARK means the fourth ways people have to learn: V for Visual, A for Auditory, R for Read/Write and K for Kinesthetic. For each one of them there are many activities, many interesting facts that can guide people to know what the strongest learning style to learn is.

The learning styles that would be applied in the project will be: Visual people that usually learn by watching graphics or tables. Auditory people, by listening videos or conferences for example. Read/Write students who prefer to write or read information in order to learn better. The kinesthetic ones, by doing things, they learn moving and making things with their hands. The VARK structure also is very helpful for the teacher because it allowed to create and prepare lessons based in the student's needs. In this way the teacher gives a good environment for the students to acquire a second language. It is important to mention that all teachers have to be able to adapt the lesson to all different learning styles and to apply it in an efficient way in classroom, as we know all students learn in a different way.

## CHAPTER III

## PROCEDURES

### 3.1 Rationalization for Quantitative Research

For this project, due to the different application of data collection and the information that is going to be collected, this type of research is a quantitative research.

For Glesne \& Peshkin (1992, p.6):
"Quantitative researchers seek explanations and predictions that will generalize to other persons and places. Careful sampling strategies and experimental designs are aspects of quantitative methods aimed at produce generalizable results. In quantitative research, the researcher's role is to observe and measure, and care is taken to keep the researchers from "contaminating" the data through personal involvement with the research subjects..."

### 3.2 Data collection tools

An important technique or tool used for data collection or gathering information are surveys and questionnaires. The ones made for the students are questionnaires with four different options already given in the first one and then in the second questionnaire. This technique is apply in order to obtain the most appropriate and clear information needed to accomplish the previously stated objectives.

After students have answered all the questions the data is selected and studied to get the information that allows us to know how the different learning styles are distribute in the class.

According to Collins Dictionary, a questionnaire is "a written list of questions which are answered by a lot of people in order to provide information for a report or a survey." Also, it can be said that a questionnaire can be also a printed structured form, to collect information about a specific subject. this instrument with questions are usually intended to
understand and get statistical results, that is what this project is going to reach, all the data and information that can be recollected for the answers of the students.

The close survey is the one that we are applying, because a close questionnaire is the one when people need to choose between options presented in the form. For this reason, the final results are going to be easier to quantify. With this, the idea is to determine which of the four different learning styles each student had, so they can identify it to learn better. In the second questionnaire applied, the idea is to see the response of them in order to the different activities that were applied and how they felt. Below, there are different graphics with the answers of the students regarding to their strongest and developed learning style.

### 3.3 Site and Participants

For this phase, the two questionnaires were applied to the students of one group of ninth grade in Santa Gertrudis High School in Grecia, Alajuela.

### 3.4 The Plan of the Study Data Analysis Procedures

In this case of the project, two questionnaires are applied to the students, then, analyze the data of how many students have in a strongest way a learning style developed. Also to know how many of them have problems with learning a second language and really do not know how to learn. Knowing that, comparing and analyzing all the information, graphics is the way this results are going to be analyze, with the answers and information given by the students regarding to their strongest and developed learning style and finally and knowing their strongest learning style, how they felt with the application of different activities linked with their style.

### 3.5 Summary of chapter III

This action research is going to be a quantitative research, because the analysis is going to be made by numbers. In this case, we are giving to the students two different surveys or questionnaires. The idea is to apply the VARK Questionnaire before the observation class, with the intention to identify what is the strongest learning style of each student, which is what the VARK Questionnaire gives us.

Knowing that, the application of different activities in order to strengthen their learning style is what we are going to do, combining different styles in the activities, to make them attractive not just for a percentage of the group, but to all of them because the idea is not to lose some of them in the middle of the activities if they feel that they do not understand because maybe is not his or her learning style.

This questionnaires are going to be applied in Santa Gertrudis High School in Grecia, Alajuela, to a group of ninth graders.

Once this is already done, it is time to collect all the information and wrap it in the different graphics, were the analysis of the questionnaires is presented. The graphics allow us to determine if the objectives previously raised were accomplished.

## CHAPTER IV

## FINDINGS

### 4.1 Data

For question number one, asking students about an hypothetical situation about a person that wants to go from the airport to the city, $71 \%$ of the students answered the option B, that stated "I would tell her how to get there", that shows specially in this question, students tend to be more Auditory, $17 \%$ said that they will go with the person to the place, made them Kinesthetic, $8 \%$ said that they will give written instructions and just $4 \%$ said that they will give a map to the person, so this percentage show that less of the students in this question are visual. In question number two, $29 \%$ of the students said that they will look for a dictionary to know the correct way to write a word, making them (the majority) with a Reading/Writing style of learning. Visual has $25 \%$ of the answers, which in this case is that they will see the words in their mind and guess the best way of write it, the other $25 \%$ said that they will think in how each word sound, they are more auditory. Finally the $21 \%$ represents just five students that said that they will write both words and chose one. In the case for question number three, $46 \%$ of the students answer option C, which is that they will give a copy of the itinerary that means that almost half of the group in this question tend to have the learning style of Read/Write stronger. $33 \%$ of students said that they will use a map to show to the group the relevant places to visit, showing also a strength in the visual area. The third percentage is $17 \%$ that represent four students that answered that they will call them or write them an e-mail, representing the auditory style. Finally just one person said that the description of the most attractive places in the trip will be the best way to help that is the kinesthetic style turning in $4 \%$ of the total.

Then, in question number four, fifteen people that represents $63 \%$ of the group answered with option D that is that they will look for a cooking book and find a good recipe to cook, showing a very strong percentage for Read/Write learning style. $25 \%$ of the students are in this question
kinesthetic, because they will cook something they know without a recipe. In third place is the visual style, three people represents $13 \%$ of the group that said that they will look a cooking book and take some ideas of the photos. Nobody answer in an auditory way in this question. In addition, in question number five, $71 \%$ of the students have a kinesthetic trend, which means that seventeen students answer option C that was to take to the group of tourists to a park and walk with them, very related to kinesthetic learning style about doing things. Three students said that they will give a talk about wild life or parks, representing the Auditory learning style with a $13 \%$. The other $12 \%$ belongs to the students that answered that they will show pictures in internet or books. The last $4 \%$ is for Read/Write and just one student answer option D that was to give books or brochures about parks or wild life.

Furthermore, in question number six of the VARK questionnaire, $54 \%$ of the students answered it with option B, which was to read details about the digital object, which indicates that in this question more than a half has strength the Read/Write learning style when making a decision. On the other hand, $25 \%$ of the group said that they will try and use it, which shows they have also a spark of kinesthetic style. $21 \%$ answered option C, which referred to the appearance and if it is modern. No one felt identified with the auditory option that was to listen the seller opinion. In this case, referring to question seven, $58 \%$ of the group felt linked with option B, that was listen someone's explanation and making questions about learn to do something, with show very strongly the Auditory learning style. Six people, that is $25 \%$ answered in relation to kinesthetic style that is watching a demonstration, $17 \%$ of the group feel empathy with option C, that was see graphics or diagrams, very related to Visual learning style. Finally, cero students chose the option that refers to Read/Write learning style that was follow written instructions on a manual. Additionally, for the eight question made, $42 \%$ of the students, represented by ten
people, said that they will use a plastic model to show what is wrong, and denoting the kinesthetic style. $33 \%$ of them said that they will show the problem in a diagram. $25 \%$ of them, which represent 6 students, answer option C , which is to describe what is wrong, denoting clearly the auditory style. Nobody answer the option related to Read/Write that was to read an article related to. Correspondingly for the nine question, the results were very equitable. $33 \%$ of the students answer with the option that denotes auditory style, this one was to talk with people that know the program, fourteen students answer Read/Write and kinesthetic in equal percentages, $29 \%$ each one. Just $9 \%$ of them that is two people tend to be identify with option D, which was to follow the book diagrams that come with the program.

Moreover, in question number ten, $42 \%$ of the total, represented by ten students answered option C with the one the felt most identified, which is Read/Write style. The option was that they like websites with explanations, characteristics and interesting descriptions. Eight people, which is $33 \%$ of the total students were more identified with option B, related to an interesting design and visual characteristics. $21 \%$ of them felt linked with the auditory learning style and just $4 \%$ with the kinesthetic, making relation this last one with things to move or try in the website, that was option A. Likewise, in question number eleven, $33 \%$ of the students denote a Read/Write learning style in this question, answering option B, which was to read quickly some parts of the book. $29 \%$ answered the kinesthetic option, which was if the book has histories, experiences or real life examples. $25 \%$ of them said that it would influence their decision if a friend talk about it and recommend it, denoting the auditory learning style. Finally, just three student, that is the $13 \%$ of the total, felt empathy with option A, that is the visual option and said that the experience result attractive. Talking about question twelve, the results were very equal. $33 \%$ of the students answer the option C, related to the visual learning style, referring to have
diagrams that show the use of the device. $29 \%$ of them were inclined by option B, related to Read/Write style, that was to have written instructions with characteristics and with what to do. $25 \%$ felt identify with the Auditory option that was to have the opportunity to make questions about the device and its characteristics. Finally, just three students felt related to the kinesthetic option, represented by $13 \%$ of the total. For question number thirteen, $46 \%$, almost have of students answered the option related with kinesthetic style, they agreed that they prefer demonstrations and practical sessions to be used by teachers. $29 \%$ prefer that the teacher use questions or group discussions, denoting the auditory style. $17 \%$ prefer books and brochures, which means that four of them prefer to read information. Just $8 \%$ of the group in this questions prefer the use of diagrams or graphics, which is pretty visual. Also, in question fourteen, $46 \%$ of the student said that they prefer to receive feedback listening clearly with a detailed revision of his or her performance. $29 \%$, represented by seven students choose option A, which was to use examples of what he or she has done. $13 \%$ of them prefer to receive the result in a written way, denoting their Read/write style and just $12 \%$ of the students in this question like the use of graphics showing the results, so the minority in this question are with the visual learning style. In addition, for question fifteen, $42 \%$ of the students, which is represented by eleven of them, said that they will listen to the waiter or recommendations of friends, obviously denoting an auditory identification. $37 \%$ of the students preferred option C that was to choose in relation to the description of the menu. $17 \%$ choose option A , which is to make a decision according to what they have already tried before. Finally, just one person, which is the $4 \%$ of the results of this questions, chose the option $D$, which was to see other people food or take pictures of them. Finally, in the last question of the VARK questionnaire, number sixteen, $46 \%$ of the students answer option D, related to the kinesthetic style, making emphasis in look for a lot of examples
or stories to make the conference more real and practical. $21 \%$ of them, which is represented by five students, said that they will chose graphics or diagrams that can help to explain better the topic. $17 \%$ said that they will write the ideas and try to learn them by reading many times. The $16 \%$ of the students said that they will practice by writing some key words and immediately practicing the discourse.

All these analysis is for the first survey applied, that was the VARK questionnaire, with the idea to identify what is the strongest learning style of each student. As a final analysis for this first questionnaire, in a general way and summing up all the information, it can be said that Kinesthetic, Read/write and a combination between Auditory and Read/Write learning styles, each one with a $21 \%$, are the strongest learning styles in the group that has been evaluated, this is represented by five people per learning style. The second group is composed by the Auditory learning style, with the $17 \%$ of the group and it is represented by four students. $8 \%$ of the total is represented by the Visual learning style, which was represented by two students that have this style as the strongest one. Just $4 \%$ of the students have a combination between Read/Write and Kinesthetic, and it was one person.

Also just one student has a combination between three learning styles, visual, auditory and kinesthetic at the same level, represented by another $4 \%$ what tell us that this students has a great ability to learn by different ways, and we could check this, because the teacher told us that this student is one of the best students and has the best scores, showing that it is easy for him in this case, to receive and learn information from different ways. The last $4 \%$ of them, represented by one student has Visual and Read/write learning styles as a better way to learn.

Furthermore, talking about the analysis of the second questionnaire, for the first question raised to $100 \%$, represented by the twenty four students of the class, all of them answered that they
could identify their learning style in the activities developed in class. After the second question, when they had to select what was their learning style, we got the same results and the last analysis of the first questionnaire, which prove that the first results are correct and that they truly understand and get what is their strongest way to learn, showing the effectiveness of the application of the activities; the same $21 \%$ represent by Auditory and Read/Write, Kinesthetic and Read/Write, $17 \%$ represented by Auditory, $8 \%$ for Visual, $4 \%$ for Read/Write and Kinesthetic, another 4\% for Visual and Read/Write and the last 4\% a combination between Kinesthetic, Auditory and Visual.

Furthermore, in the third question of the final questionnaire, $38 \%$ of the students, represented by nine of them, considered that their performance in the activities that were related to their strongest learning style was very good, so they understood all the topics presented and studied in class which is a very interesting result. $29 \%$ of them, which was seven students said that it was easy to understand most of all the class and the topics studied, which is also a good result. Six students, which is the $25 \%$ of the total, said that the understood a little bit better the information given by the teacher. Finally, just two students, represented by $8 \%$ of the total did not feel any changes knowing their learning style and developed activities related to them. Correspondingly for the fourth question, when students were asked about what do they think it would be the result if they apply this method of learning in other subject, $63 \%$ of the students, that was fifteen of them, said that it would be easier to understand the subject, $21 \%$ of them, that was five students, said that if they apply this in other subjects, they will understand everything. Three of them, represented by three of them, said that it would improve a little bit, and finally just one person, represented by $4 \%$ said that it would represent no changes in their academic results.

Moreover, for question five, when they were asked about what other learning style do they think could help them to learn better. Ten students, that is the $42 \%$ of the class said that Visual is another style they will like or feel that could help us to learn better, this is very linked to the analysis we got in the VARK questionnaire, where just $8 \%$ got Visual as their strongest learning style, so they feel that activities related to Visual, could improve their performance. Kinesthetic was the second option selected by just six students that is a $25 \%$ of the total. $21 \%$ of the students, that are five people, said that Auditory is the second learning style they could maybe learn better and finally just three, that is just the $12 \%$ of people said that Read/Write is other learning style they think can help them to learn better, which is equitable to the first results we got, when the majority of them had a strength in the Read/Write learning style.

And finally, for the last question, $100 \%$, the twenty four students answered that they feel a better interaction, understanding and better way to receive information when an activity related to their learning style was developed, which is a great result because it shows that they, knowing now their learning style, feel to understand better the information given.

### 4.2 Restatement of questions and discussion of the results

How the application of different learning styles can improve the learning of English as a foreign language? That was the research question cited for the very beginning. In this case it is considered that it is not necessary to restate the raised question. The final results gave a very interesting points for analysis according to the objectives of the project. The application of different learning styles truly can improve the English learning, and with the obtained results in the graphics by the applications of the final questionnaire, students responded in a very positive way, because at the end, with the results, it can be seen that they felt better, they felt that they understand more of the topics studied in class, when they knew their learning style and activities
related to their style were applied. So to answer this question, how? Well, indeed with the application of different interactive activities that involved all the different learning styles, it can be improved. When the activities were developed, it was found a very good response on the students, because they were not used to learn by new and different activities, just the traditional and monotony way. With the combination of two learning styles in the same activity, like auditory and writing, we are enhancing their learning methods, opening their minds to new ways of learning.

### 4.3 Summary of chapter IV

In this chapter, a deep analysis is made for the obtained results before the application of the questionnaires, to see what was the learning style and student's response once they knew their learning style, how they felt, when different activities were applied according to the topics they were studying, and their response. With the results obtained, $21 \%$ of the students have a strength in the Kinesthetic learning style. Another $21 \%$ (five students) of them, have more developed the Read/Write learning style and there is a last $21 \%$ of the students that have a combination between Read/Write and Auditory, which means that besides learn with stories in a written way, they also learn listening, could be by a dictation. Four people that represent $17 \%$ of the class learn just by Auditory, $8 \%$ (two students) learn in a Visual style, watching images for example. Read/Write and Kinesthetic, Read/Write and Visual and finally Visual, Auditory and Kinesthetic, these three combinations of learning styles correspond to $4 \%$ (one student) each one per combination of style (bimodal).

For the final questionnaire it is important to sum up that $100 \%$ of the students learn and know now their learning style, $38 \%$ (nine students) of the class said that they feel that they understood all the class. Fifteen students (63\%) said that it would be easier to understand not just English, but other subject. Finally, $100 \%$ (twenty four students) of the class agreed that when an activity related to their strongest learning style was applied, they feel a better connection between the topic, the understanding and interaction with the studied subject.

At the end the question raised from the first beginning was full filled by the applications of the activities and the results obtained when students said that they could recognize their learning style and felt better with the developed activities related to their style.

## CHAPTER V

## DISCUSSION

### 5.1 Conclusion

Based on the results taken from the activities applied in the class we can conclude that the students presented a good response to the activities that represented their learning style. Most of them were able to accomplish the activities and reach the target language that was planned.

They were positive with the idea of the application of different activities in class instead of having a static class were the teacher is the one that control and guide every step. In these activities they were able to apply and explore different methods that they can use to improve the acquisition of a second language, mostly because they are not used to make some different activities as the ones that were applied, so the response of them in class were very positive and the reaction of them were very reciprocal and they wanted more activities

Furthermore, it is important to mention that the activities applied were planned to reach all the learning styles found in the group and these activities have the main objective to be understood for all the students, no matter their learning style but to give them a better understanding of their personal capacity.

Another main point is that the student were aware of the learning styles in which they get information in an efficient way due to the survey applied in the English class. Then, they were able to apply some of the techniques in order to make easier their learning process not only in English but in the other subjects.

### 5.2 Implications

The results provided by the project show that the students really improved their performance when they apply their learning style in a class environment where the activities based in these styles are used in a wide way. It is important to take into consideration the fact that all the
students who applied the survey were able to identify and recognize their learning style and some strategies they can use to improve their learning process, using different tools that will make the process of acquisition of a second language easier.

Another aspect that the project demonstrated was that many of the students are not happy with the approach used in class. They are not happy with a static class where they are not able to use their knowledge in a different way, a structure where they are almost forced to work with a book that they do not find useful or meaningful. It would be better a class environment where they are able to explore different ways of learning making them improve in a daily basis.

It is important to mention that the project had a collateral effect as the students were capable to recognize what type of learning style they had; they are now able to used it and put it into practice in other subjects, this will not only improve their academic performance but also will expand their ability of knowledge retention in other subject. This would give a significant meaning to the topics they are receiving in class.

A very significant fact to take into account as a teacher is that it is important to see the students as individuals, most of the time the teachers forget that they are working with a group of people and no all of the learn or acquire information in the same way. That is why teachers should apply and create a wider type of activities to evaluate and teach their students. It is better when the teacher creates a didactic and comfortable environment for the students and not a static class ruled class.

Everything during this process happened under the expected, from the beginning, no problems were presented with the institution, teacher and students and the project developed in a successfully way. It could be very useful for the future that teachers involve more technological
devices to promote a new methodology of learning. It is better for both students and teachers to adapt new system to help students to improve their own way of learn with different and attractive activities and approaches.

### 5.3 Concluding statement

The project was a success; the students were able to explore new ways to make easier their learning process. They got different tools that they can use to improve the acquisition of the language. This project was not only helping the students but also the teacher, sometimes teachers do not have enough time to check these specific details in their classes but they have to find the way to look for the best for the students.

It is important to mention that the application of VARK survey turned out to be a success. The students were more than happy with the opportunity that was given, because thanks to this study they were capable to recognize and identify better methods that they can apply in their daily basis. Thanks to these questionnaires the teacher has a better idea of how to check the process of their students in their learning process.

Something that has to be improved are the approaches used in class. Most of the time teacher are attached to the old scheme, were everything has to be lead by the book. Teacher are not creating material they are just using what is given without taking into consideration that not all the students learn in the same way. Teachers are not using authentic material and this is affecting the students.

Now, knowing this information, teachers can change, can develop better techniques, activities, with the use also of technological devices as they have in Santa Gertrudis High School to take advantage of that knowledge and develop it more and more and in a better way, to create
successful students that understand topics or subjects not just for the exam, but now, they know how to learn, how to apply this style of learning in all their duties, projects, exams, etc. improving in general the educational system and their way of learning.

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## ANNEXES

## VARK Questionnaire (Annex 1)

1. You are helping a person who wants to go from the airport, to the city center or to the station railway. You:
a. I would go with her.
b. I would tell her how to get there.
c. I would give the directions in writing (without a map).
d. I would give her a map.
2. You are not sure if a word is written as "transcendent" or "transendent", you:
a. You would see the words in your mind and choose the one that looks better.
b. You would think about how each word sounds and I would choose one.
c. You would look for them in a dictionary.
d. You would write both words and choose one.
3. You are planning a vacation for a group of people and would like feedback from them about the plan. You:
a. I would describe some of the attractions of the trip
b. I would use a map or a website to show the places.
c. I would give them a copy of the printed itinerary.
d. I would call them, write to them or send an e-mail.
4. You will cook a special dish for your family. You:
a. You would cook something you know without the need for instructions.
b. You would ask your friends for suggestions.
c. You would leaf through a cookbook to take ideas from the photographs.
d. You would use a cookbook where you know there is a good recipe.
5. A group of tourists want to learn about parks or wildlife reserves in their area. You:
a. You would give them a talk about parks or wildlife reserves.
b. You would show them Internet figures, photographs or books with images.
c. You would take them to a park or reserve and take a walk with them.
d. You would give them books or brochures about parks or wildlife reserves.
6. You are about to buy a digital camera or a mobile phone. In addition to the price, what else does influence in your decision?
a. Use it or test it.
b. Reading the details about the characteristics of the device.
c. The design of the device is modern and looks good.
d. The seller's comments about the characteristics of the device.
7. Remember the time when you learned how to do something new. Avoid choosing a physical skill, such as ride the bicycle. How did you learn better?
a. Watching a demonstration.
b. Listening to someone's explanation and asking questions.
c. Following visual clues in diagrams and graphs.
d. Following instructions written in a manual or textbook.
8. You have a problem with you knee, you would prefer that the doctor:
a. Gave you a web address or something to read about the subject.
b. Use the plastic model of a knee to show you what is wrong.
c. He would describe what is wrong.
d. He will show you with a diagram what is wrong.
9. You want to learn a new program, skill or computer game. You must:
a. Read the written instructions that come with the program.
b. Talk with people who know the program.
c. Use the controls or the keyboard.
d. Follow the diagrams in the book that come with the program.
10. You like websites that have:
a. Things that can be chopped, moved or tasted.
b. An interesting design and visual characteristics.
c. Interesting written descriptions, characteristics and explanations.
d. Audio channels to listen to music, programs or interviews.
11. Besides the price, what would influence more in your decision to buy a new non-fiction book?
a. The appearance is attractive.
b. A quick reading of some parts of the book.
c. A friend talks about the book and recommends it.
d. It has stories, experiences and examples from real life.
12. You are using a book, CD or website to learn how to take pictures with your new digital camera. Would you like to have:
a. The opportunity to ask questions and talk about the camera and its characteristics.
b. Clearly written instructions, with characteristics and points on what to do.
c. Diagrams that show the camera and what each of its parts does.
d. Many examples of good and bad photographs and how to improve these.
13. You prefer a teacher or an exhibitor who uses:
a. Demonstrations, models or practical sessions.
b. Questions and answers, talks, discussion groups or guest speakers.
c. Brochures, books or readings.
d. Diagrams, diagrams or graphs.
14. You have finished a competition or a test and would like a feedback. You would like to have the feedback:
a. Using examples of what you have done.
b. Using a written description of your results.
c. Listening to someone doing a detailed review of your performance.
d. Using graphs that show what you have achieved.

15 You will choose your food in a restaurant or cafe. You:
a. Would choose something that has already been tried in that place.
b. Would listen to the waiter or ask your friends for recommendations.
c. Would choose from the menu descriptions.
d. Would observe what others are eating or the photographs of each dish.
16. You have to make an important speech for a conference or a special occasion. You:
a. Would make diagrams or get graphics that help explain ideas.
b. Would write some key words and practice your speech repeatedly.
c. Would write your speech and learn it by reading it several times.
d. Would get many examples and stories to make the talk real and practical

## Final Questionnaire (Annex 2)

Answer the following questions by checking the option you consider most appropriate with X.

Name: $\qquad$

1. ¿Did you identify your learning style(s) with the activities applied in class?
A. Yes ( )
B. No ( )
2. ¿Which is your learning style? Select two option if it is necessary.
A. Auditory.
B. Visual.
C. Read/Write.
D. Kinesthetic.
3. How do you consider was your performance in the English class after you identified your learning style?
A. No changes.
B. I understood a little bit better.
C. It was easy to understand most of it.
D. I understood all the class.
4. Which do you think it would be the result if you apply this method in other subject?
A. No changes.
B. It would improve a little.
C. It would be easier to understand.
D. I would understand everything.
5. Which other learning style do you think can help you to learn in a better way?
A. Auditory.
B. Visual.
C. Read/Write.
D. Kinesthetic.
6. When in class an activity related to your learning style was developed, did you feel a better interaction between the subject and the way you received it and understood it?
A. Yes ( )
B. No ( )

## Graphics (Annex 3)

## VARK Questionnaire

## Question \#1



Note: own source (2018)
Question \#2


Note: own source (2018)

## Question \#3



Note: own source (2018)

Question \#4


Note: own source (2018)

## Question \#5



Note: own source (2018)

## Question \#6



Note: own source (2018)

## Question \#7



Note: own source (2018)

## Question \#8



Note: own source (2018)

## Question \#9



Note: own source (2018)

Question \#10


Note: own source (2018)

## Question \#11



Note: own source (2018)

## Question \#12



Note: own source (2018)

## Question \#13



Note: own source (2018)

## Question \#14

You have finished a competition or a test and would like a feedback. You would like to have the feedback:


Note: own source (2018)

## Question \#15



Note: own source (2018)

Question \#16


Note: own source (2018)

Final Questionnaire

Question \#1


Note: own source (2018)

Question \#2


Note: own source (2018)

## Question \#3

## How do you consider was your performance in the English class after you identified your learning style?



Note: own source (2018)

Question \#4


Note: own source (2018)

## Question \#5



Note: own source (2018)

Question \#6


Note: own source (2018)

Pictures (Annex 4)


## Lesson Plans (Annex 5)

Ministerio de Educación Pública
Departamento de Inglés
Liceo Santa Gertrudis
Teacher: Keylor Aguilar/Alexander Murillo

Time: 80 minutes
Date: March, $21^{\text {st }}$
Method: Eclectic
Year: $9^{\mathrm{TH}}$

Target Content: SPORTS AND LEISURE ACTIVITIES
General Objective: Identification of general vocabulary about sports

| Linguistics Objectives | Meditation Activities | Evaluation of Learning Outcomes | Time |
| :---: | :---: | :---: | :---: |
|  | ROUTINE <br> Greetings, call the role, explain the chronogram to the class and write the date. |  | 5 |
|  | WARM UP <br> The students talk about what is their favorite sport and what do they like to do in their free time (Soccer, Tennis, swimming, yoga) |  | 10 |
| LISTENING <br> Identifying different sports | PRESENTATION <br> The teacher gives vocabulary about sports and types (team sports and individual sports ) and explains how to use the verbs go, play, and do in context. ( I play soccer, I go swimming, I do yoga ) | Identification of key words about Sports | 20 |
| SPEAKING <br> Applying vocabulary related to Sports | PRACTICE <br> The students use the verbs already explained to create sentences using vocabulary of sports and leisure activities | Reproduction of vocabulary in an oral way | 30 |


| WRITING/SPEAKING <br> Composing short <br> sentences using <br> vocabulary already seen <br> in class | CONSOLIDATION <br> Students make a practice using <br> vocabulary about sports and <br> Leisure activities. | Construction of <br> ideas using <br> vocabulary related <br> to sports and <br> leisure activities | 10 |
| :---: | :---: | :---: | :---: |
|  | FAREWELL <br> The teacher thanks the students and <br> arranges the class | 5 |  |
| READING <br> Recognizing specific <br> vocabulary about sports | Students read a small text about <br> sports and extract vocabulary | Recognition of <br> vocabulary in <br> context | 10 |

Ministerio de Educación Pública
Departamento de Inglés
Liceo Santa Gertrudis
Teacher: Keylor Aguilar/Alexander Murillo

Time: 80 minutes
Date: April, $5^{\mathrm{TH}}$
Method: Eclectic
Year: $9^{\mathrm{TH}}$

Target Content: SPORTS AND LEISURE ACTIVITIES
General Objective: Identification of general vocabulary about leisure activities

| Linguistics Objectives | Meditation Activities | Evaluation of Learning Outcomes | Time |
| :---: | :---: | :---: | :---: |
|  | ROUTINE <br> Greetings, call the role, explain the chronogram to the class and write the date. |  | 5 |
|  | WARM UP <br> The students play a charade game where they have to mimic vocabulary of some leisure activities (dance, yoga, read ) |  | 10 |
| LISTENING <br> Identifying different leisure activities | PRESENTATION <br> The teacher gives vocabulary about leisure activities and explains which are indoor or outdoor activities. | Identification of key words about Leisure Activities | 20 |
| SPEAKING <br> Applying vocabulary related to Sports | PRACTICE <br> The students are selected randomly and they go to the front to the class, where they have to create a sentence and mimic their favorite hobby. | Reproduction of vocabulary in an oral way | 25 |


| READING/WRITING <br> Recognizing <br> vocabulary about <br> leisure activities | CONSOLIDATION <br> The students read a small text <br> where they have to identify the <br> leisure activities mentioned in <br> the text. Then the students <br> write down are some leisure <br> activities they do in their free <br> time. | Construction of <br> ideas using <br> vocabulary related <br> to leisure activities | 15 |
| :---: | :---: | :---: | :---: |
|  | FAREWELL | 5 |  |
| The teacher thanks the students <br> and arranges the class | LISTENING <br> Recognizing specific <br> vocabulary about | EXTRA ACTIVITY <br> dictation given by the teacher. <br> The students listen to a <br> Recognition of <br> vocabulary in <br> context | 10 |

