

UNIVERSIDAD TÉCNICA DE AMBATO

FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN

CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES YEXTRANJEROS

Proyecto de Trabajo de Graduación o Titulación previo a la obtención del Título deLicenciado en Pedagogía de los Idiomas Nacionales y Extranjeros mención: Inglés

"BRAINSTORMING STRATEGIES AND WRITING SKILL"

Author: Aguirre Acosta Angie Liliana

Tutor: Dra. Mg. Elsa Mayorie Chimbo Cáceres

Ambato - Ecuador

2021

SUPERVISOR APPROVAL

I, Dra. Mg. Elsa Mayorie Chimbo Cáceres holder of the I.D No. 1802696458, in my capacity as supervisor of the Research dissertation on the topic: **"BRAINSTORMING STRATEGIES AND WRITING SKILL"** investigated by Angie Liliana Aguirre Acosta with I.D No. 1761071578, confirm that this research report meets the technical, scientific and regulatory requirements, so the presentation of it is authorized to the corresponding organism in order to be submitted for evaluation by the Qualifying Commission appointed by the Directors Board.

Dra. Mg. Elsa Mayorie Chimbo Cáceres SUPERVISOR

DECLARATION PAGE

I declare this undergraduate dissertation entitled **"BRAINSTORMING STRATEGIES AND WRITING SKILL"** is the result of the author's investigation and has reached the conclusions and recommendations described in the present study.

Comments expressed in this report are the author's responsibility.

Angie Liliana Aguirre Acosta I.D. 1761071578

AUTHOR

APPROVAL OF THE HIGH COURT OR DEGREE COURT TO THE DIRECTIVE COUNCIL OF THE FACULTY OF HUMAN SCIENCES AND EDUCATION

The Board of Directors who has received the defense of the research dissertation with the purpose of obtaining the academic degree with the topic "BRAINSTORMING STRATEGIES AND WRITING SKILL" which is help by Angie Liliana Aguirre Acosta, undergraduate student from Pedagogía de los Idiomas Nacionales y Extranjeros Major, academic period 2021 and once the research has been reviewed, it is approved because it complies with the basic, technical, scientific, and regulatory principles.

Therefore, the presentation before the pertinent organisms is authorized.

REVISION COMMISSION

Lic. Mg. Ximena Calero REVISER Lic. Mg. Wilma Suárez REVISER

COPYRIGHT REFUSE

I, Angie Liliana Aguirre Acosta with I.D. No. 1761071578, confer the rights of this undergraduate dissertation **"BRAINSTORMING STRATEGIES AND WRITING SKILL"**, and authorize its total reproduction or part of it, as long as it is in accordance with the regulations of the Universidad Técnica de Ambato, without any kind of profit from it.

Angie Liliana Aguirre Acosta I.D. 1761071578 **AUTHOR**

v

DEDICATION

I want to dedicate the effort of all these years and this work to my beloved grandmother, who was the reason to wake up every morning and do not give up. If there is a heaven, I know she belongs to it.

To my dear mother who raised me with love and for being always by my side, supporting me, even in the darkest days.

To my father, brothers and rest of my family for their patience, empathy and motivation.

To my unforgettable friends, who kept me alive for this moment. This is for every single person who made of Ecuador my home. For their kindness and for sharing with me a lot of experiences, adventures, laughs and tears, I am really thankful to you.

Last but not least, I want to thank Eigna, for believing in me and never let me quit. The climb could be hard to reach, but when there is a desire, there is going to be a flame which gives us faith to keep trying.

Sincerely...

Angie Liliana Aguirre

ACKNOWLEDGEMENTS

To God, for leading my feet on the right way, with the right people, even though I do not always understand His plans.

To my professors of the career, who taught me something more than theory and grammar. They gave me very important lessons of life that inspired me and make me a little bit stronger than I was. Especially, I want to thank to Mg. Mayorie Chimbo for guiding me during the development of this research work. For her effort, knowledge and gentle advices.

Finally, to Mg. Wilma Suárez, Mg. Ximena Calero, Mg. Edgar Encalada and Mg. Sarah Iza for their valuable cooperation in this investigative work.

Angie Liliana Aguirre

TABLE OF CONTENT

ABSTRACT	X
CHAPTER I	1
THEORETICAL FRAMEWORK	1
1.1 Investigative background	1
1.2 Independent variable theoretical support	5
1.3 Dependent variable theoretical support	11
1.4 Objectives	16
CHAPTER II	17
METHODOLOGY	17
2.1 Resources	17
2.2 Basic method of research	18
2.2.1 Approach	18
2.3 Research modality	18
2.3.1 Field research	18
2.3.2 Bibliographic research	19
2.3.3 Experimental research	19
2.4 Level or type of research	19
2.4.1 Exploratory	19
2.4.2 Descriptive research	20
2.4.3 Correlational	20
2.5 Population	20
2.6 Instruments	20
2.7 Intervention procedure	21
2.8 Hypothesis	23
CHAPTER III	24
ANALYSIS AND INTERPRETATION OF RESULTS	24
3.1 Analysis and interpretation of results	25
Results of the intervention	
General average of the pre and post-test	29
3.2 Survey analysis and interpretation	
3.3 Hypothesis verification	40
CHAPTER IV	42
CONCLUSIONS AND RECOMMENDATIONS	42

4.1 Conclusions	42
4.2 Recommendations	43
REFERENCES	45
ANNEXES	49
Urkund analysis	75

INDEX OF TABLES

Table 1. Content average scores over 5	25
Table 2. Organization average scores over 5	26
Table 3. Language average scores over 5	27
Table 4. Process results over 15	28
Table 5. General average scores over 15	29
Table 6. Brainstorming before a writing	30
Table 7. Teacher guidance for organizing thoughts	31
Table 8. Clear instructions	33
Table 9. Difficulty to organize sentences	34
Table 10. Interesting topics to develop writing skill	35
Table 11. Writing production	36
Table 12. Use of brainstorming strategies	38
Table 13. Feedback given by the teacher	39
Table 14. Mean T-Student	40
Table 15. T-Student test	41

INDEX OF GRAPHICS

Figure 1. Content average scores over 5	25
Figure 2. Organization average scores over 5	26
Figure 3. Language average scores over 5	27
Figure 4. Process results over 15	28
Figure 5. General average scores over 15	29
Figure 6. Brainstorming before a writing	30
Figure 7. Teacher guidance for organizing thoughts	32
Figure 8. Clear instructions	33
Figure 9. Difficulty to organize sentences	34
Figure 10. Interesting topics to develop writing skill	35
Figure 11. Writing production	37
Figure 12. Use of brainstorming strategies	38
Figure 13. Feedback given by the teacher	39

UNIVERSIDAD TÉCNICA DE AMBATO

FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN

CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

TOPIC: "BRAINSTORMING STRATEGIES AND WRITING SKILL"

AUTHOR: Angie Liliana Aguirre Acosta TUTOR: Dra. Mg. Mayorie Chimbo DATE: July 2021

ABSTRACT

Writing can be a challenge for EFL learners, especially when there is not a previous structure which can facilitate the writing process. On it, there are various stages, the ones that could be different depending on the author but all of them keep the same purpose that is producing the language in its written form. In the same way, it is required to organize and reflect on the content of the writing. For that reason, this investigative work aimed to determine the relationship in the use of brainstorming strategies and the development of writing skill in students of first semester at Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros at Universidad Técnica de Ambato. This study had a qualitative and quantitative approach and a quasi-experimental modality with the participation of two groups of 17 students. Moreover, both groups of participants took a pre-test from Cambridge (KET), but just the experimental one took a treatment based on four sessions in which brainstorming strategies were applied. At the end, a post-test was taken to compare the results between the experimental and control group. Those were analyzed by using the statistical software T-Student and it showed that there was a significance difference in the performance of the students who were part of the treatment. At last, a survey was applied to students to known their perspective about writing in daily English classes and it helped to raise the conclusions. Finally, it was determined the effectiveness of brainstorming strategies to improve the quality of writing skill.

Key words: Brainstorming strategies, writing skill, writing process, English language.

UNIVERSIDAD TÉCNICA DE AMBATO

FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

TEMA: "BRAINSTORMING STRATEGIES AND WRITING SKILL"

AUTOR: Angie Liliana Aguirre Acosta TUTOR: Dra. Mg. Mayorie Chimbo FECHA: Julio 2021

RESUMEN

La escritura puede ser un desafío para los estudiantes que toman el inglés como lengua extranjera, especialmente cuando no existe una estructura previa que pueda facilitar el proceso de escritura. En él se encuentran varias etapas, las que pueden ser distintas según el autor, pero todas guardan el mismo propósito que es producir el lenguaje en su forma escrita. De la misma forma, se requiere organizar y reflexionar sobre el contenido del escrito. Por ello, este trabajo de investigación tuvo como objetivo determinar la relación en el uso de estrategias de lluvia de ideas y el desarrollo de la habilidad de escritura en estudiantes de primer semestre de la Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros de la Universidad Técnica de Ambato. Este estudio tuvo un enfoque cualitativo y cuantitativo y una modalidad cuasi-experimental con la participación de dos grupos de 17 estudiantes. Además, estos grupos de participantes realizaron un pretest de Cambridge (KET), pero solo el grupo experimental tomó un tratamiento basado en cuatro sesiones en las que se aplicaron estrategias de lluvia de ideas. Al final, se realizó una prueba posterior para comparar los resultados entre el grupo experimental y el de control. Los cuales fueron analizados mediante el software estadístico T-Student y mostró que hubo diferencia significativa en el desempeño de los estudiantes que formaron parte del tratamiento. Por último, se aplicó una encuesta a los estudiantes para conocer su perspectiva sobre la escritura en las clases diarias de inglés y esto ayudó a sacar las conclusiones. Finalmente, se determinó la efectividad de las estrategias de lluvia de ideas para mejorar la calidad de la habilidad de escritura.

Palabras clave: estrategias de lluvia de ideas, habilidad de escritura, proceso de escritura, idioma inglés.

CHAPTER I THEORETICAL FRAMEWORK

1.1 Investigative background

The following study is supported in various previous investigations. Those have a direct relation with the develop of this research. Trying to lead it in the right track, to obtain an impeccable work which contains clear information and foundations of the authors.

The first one, is based on the research of Virdania (2019) called "The improvement of English writing and students' motivation through brainstorming". This investigative work was developed in Indonesia at STIE Perbanas, Subaraya. It had aspurpose to examine the impact of employing brainstorming as a pre-writing strategy on second semester students of management major. The method employed for this investigation was classroom action research. For this reason, the twenty-five studentsparticipated in the application of brainstorming strategy once per week in English classes, which was essential to collect the necessary data. The findings of the study inbase of the results showed that there were significant differences on the writing performance of the students by using brainstorming strategy. Moreover, students made a great progress on the development of this skill. In conclusion, the results remarked the importance of the use of brainstorming strategy in classes and its effectiveness as a pre-writing strategy for EFL students.

On the second part, Hardiansyah (2020) explained in the study called "The effectiveness of using brainstorming technique in teaching English language writing classroom", written in Indonesia, aimed to find the difference between the performance of students who use brainstorming technique and the ones that not. The research method used was experimental to make distinctions on the two variables, the control group VIII A and experimental group VIII B with 21 students in each course. The population was not taken randomly. For that reason, the investigator used convenience sampling. Besides, the results showed better scores on the second group after the application of the treatment in comparison with the pre-test obtaining 61.80 points on it and 73.47 points in the post-test. Based on this information, the researcher concluded that brainstorming is helpful for teaching writing, students felt motivated,

there were new ideas and good organization and finally, the performance in class became more active.

On third place, Abedianpour and Omidvari (2018) in the investigative study "Brainstorming strategy and writing performance: effects and attitudes" examine the impact of employing brainstorming, as a pre-writing strategy, on advanced EFL students' writing ability. This research was essential to know the effectiveness of it when is applied for academic writings. It started at II course at Atlas Language Institute in Yasouj, Iran. Additionally, there were sixty participants randomly assigned. Moreover, the intention was to have a homogeneous group so, it was formed for the lowest and highest achievers. Working with the same teacher the experimental group of thirty students had an improvement taking into account the pretest and the posttest. Moreover, the methodology used was qualitative and quantitative. Besides, the instrument to collect the information was a questionnaire with twenty items. Finally, the conclusions obtained were that, brainstorming strategy increases the quantity of language students use, enhances the quality of English, equalizes the learning opportunities for all students, and creates a less threatening learning environment for language use.

Furthermore, Malkawi and Smadi (2018) in the investigative work called "the effectiveness of using brainstorming strategy in the development of academic achievement of sixth grade students in English grammar at public schools in Jordan" indicated the impact of the use of the strategy to teach for students and the improvement on their English language skills. It was done enhancing the critical thinking and stimulating them to work on the new abilities. For carrying out the investigation, it was considered the whole population of sixth grade at four schools of Jordan in which men and women were included. The methodology used was quasi experimental; in fact, students were divided into experimental and control group which were not randomly selected. The results showed that brainstorming strategies have a positive impact on English grammar and made significant differences on the achievement of language skills.

On the other hand, Masri (2018) in the research entitled "the impact of using brainstorming in the development of creative thinking and achievement in the English

language of the 10th grade students at King Abdullah II Schools of Excellence in Amman" aimed to identify the effect of brainstorming to enhance the creative thinking and achievement of the language. To prove this objective, the researcher made two different tools which were a test based on creative thinking and a test for evaluate the achievement on the language, both were verified to reaffirm the validity. In addition, the population consisted of 168 students which were divided in two groups, experimental and control. The methodology was semi-experimental which implied the application of the treatment just to one of the groups while the other was taught as usual. The results of the study showed that there were significant differences by the employment of brainstorming strategy, especially in creative skills such as: fluency, flexibility and originality.

Moreover, Minawati (2018) in the research called "Brainstorming technique to improve writing skill in descriptive texts of vocational high school students" focused on identifying the effectiveness of brainstorming to produce a written text. This investigation was developed at a school in Gondangrejo, Indonesia and the participants were thirty female students of tenth grade. The researcher used classroom action research method to carry out this investigation, it was done in two cycles of eighty minutes in which a pre-test and post-test were taken. In addition, the researcher employed a non-test which was useful to register what was observed during the intervention. To examine the data collected in an appropriate way, the investigator made use of qualitative and quantitative methods of analysis. To conclude, the results of this investigation showed evidence of the positive effects of brainstorming to improve the writing skill. Besides, the researcher found out that students work collaboratively, enjoyed and participate more actively in the class, which represented better opportunities for learning.

In addition, AlRababah (2018) in the investigative work called "The use of brainstorming strategy among teachers of Arabic for speakers of other languages (ASOL) in writing classes", examined how ten lecturers from the Language Center of Jordan University used brainstorming for their instruction. The methodology employed was qualitative and the researcher used observation and semi-structured interviews to collect the necessary data for the investigation. The results revealed that brainstorming had positive effects on the writing classes of the lecturers. Therefore,

students became more proficient on this skill because they could generate ideas and shared them in class for producing a writing. Moreover, it helped learners to build confidence on their writing abilities and encouraged them for practicing the language.

At last, Nugraha and Indihadi (2019) in the researched called "Brainstorming in scientific writing in elementary school", intended to prove the relationship between brainstorming strategy and the writing ability. The population for this investigation was the fifth grade of elementary school from Tasimalakya, Indonesia, it was composed by 13 male and 15 female students. The methodology was quantitative and qualitative since the researcher used a questionnaire, pre and post-test for measure the progress of the learners and it was based on this four aspects: accuracy, coherence, cohesion, and grammatical and lexical range. After the results were analyzed it was proven successfully that brainstorming helped students to use their prior knowledge to produce a scientific writing which involves a good organization so that it can be understandable to the target audience.

Finally, Loka (2018) in the work entitled "The effect of brainstorming technique on students' competence of VIII grade students at SMPN 23 Jambi", aimed to prove the effectiveness of brainstorming. The population for this research was composed by 64 students of VIII grade at SMPN 23 Jambi. On the other hand, the researcher used a quasi-experimental design to carry out this investigation. Moreover, the pre and posttest consisted on producing a descriptive text in which the group 1 used brainstorming and the group 2 used the teacher's usual strategy. After the analysis of the results it was possible to determine that brainstorming technique has a positive effect and a significant influence on the writing competence of students.

It can be demonstrated that brainstorming has a strong influence on students for increasing writing skill. In addition, it provides so many opportunities to emphasize in previous knowledge and to get critical on the content for the academic writings. Another good reason is that it saves time, gives a good organization and has a positive influence on the vocabulary of English language learners.

1.2 Independent variable theoretical support

Learning process

One important detail about learning process was established by Boser (2020). This author identified six steps that could be the key to understand how this process is developed. First, students need to recognize what is valuable and meaningful to learn. In that way, the motivation of the students will encourage them to be mentally active to acquire the knowledge. For example, if the learners are interested on what they are reading or listening, it is possible that they will remember that information for live. On the second hand, it is necessary to set goals because this is how students can dedicate the time and effort to reach the learning objectives. This leads the third step; it is called development of the knowledge. On it, the learners are responsible of evaluating and creating their own concepts in base of what was taught. The fourth step is related to the extension of learning in which is required to expand the knowledge. Students should practice what they have learned to ensure the apprehension. Besides, the teacher could give feedback and monitor the progress of the learners. The fifth step is relating skills; on it, the learners are prepared to build understanding by connecting the knowledge with their abilities or topics that they already know. It is because learning is accumulative, that is how it works in real life. The last step is rethink, it is about reflecting on what the learner knows and if it is correct. This step aims to prevent students from overconfidence which can be dangerous for a meaningful learning. Nevertheless, it is important to note that mistakes are not forbidden, these are part of the learning experience and even can be used as a reference point to review the students' progress.

With that been said, learning process is how people acquire knowledge and it will depend on various characteristics such as behavior, motivation, cognitive stage, environment, among others. It is crucial to notice that depending on these features the teacher must find a strategy, method or technique that can be usefulfor the student's needs. This process is linked with the transformation of the learner and its exposure to real world situations. In other words, it is related with the experience that the student achieves through practice. For instance, the teacher as the lecturer of the class is discarded and now is the learner who is in charge of building concepts. Following this idea, learning is creation and should

be emphasized on the student's capacities to face the reality. In addition, for Rossum & Hamer (2010), learning is the capacity to reproduce something that was taught. For that reason, it is essential that students work on activities to reinforce their progress.

Learning strategies

Montaño (2017) affirmed that learning strategies could facilitate the control of the learning process for both, teachers and students. The reason is because with a well addressed strategy, the teacher can involve students to acquire their own learning. Besides, learning strategies can be considered as conscious tactics, actions or procedures that could be taught. For that, it is necessary that teacher leads the process until students could develop those strategies by themselves. On the other side of the coin, Brown (2000) claimed that despite the methodology employed by the teacher, students can succeed on their learning acquirement. Better explained, there are some individuals which can work on their own design of strategies to practice and improve their abilities. Although, there are some other learners that will need help and the teacher understanding of what can be beneficial for them beyond the limitations.

In summary, learning strategies are specific actions which have as objective to improve the learning of students. Hence, learning strategies can be defined as activities that can lead students to achieve knowledge. However, not all the strategies will be helpful because in classes there will never be a homogenous group. That diversity is the bottom of the structure, because regardless of that inequality, educators must search for a balance and their role change to be guides of acquisition. Besides, learning strategies promote learning and facilitates teaching. In that way, students can have variety of instruments to improve their performance and they can recognize their advances as well.

Writing strategies

Writing strategies are specific ways of organizing resources such as time, thoughts, skills, feelings, and actions to obtain consistent results when doing work. Writing strategies are always oriented towards a positive goal and are supported by a theory. Furthermore, to develop a strategy, students must consider the purpose for writing,

what are the results that they want to obtain and what they have to do for reach the objective. The strategy takes significance in the reasoning and critical thinking process that the learner interacts with and understands with the topic. Furthermore, Abas and Noor (2018) explained in deeper detail the Mu's categorization of writing strategies (2005), in which is established five cognitive strategies. Rhetorical strategies refer to how writers present ideas to a native audience, these ideas need to be clear and the writer could make use of L1 and then translate it. Metacognitive strategies are about the implementation of the writing process. Moreover, communicative strategies refer to how writers can express ideas effectively. Finally, social/affective strategies refer to how writers can interact with others to solve doubts and regulate attitudes andemotions in their writings. Nevertheless, despite the differences of those strategies, allof them have as basis planning of a writing text for a better organization and production. Besides, it is important because the learner could use different ways to generate ideas that can be helpful to extend the content of the writing and hence the knowledge.

To identify the best strategy, it is necessary to comprehend the writing process and its basic parts: prewriting, drafting, revision, editing and publishing. Nevertheless, prewriting, not only includes to define the topic but also gets immerse on the revision. Additionally, in various cases the weakness of a written production is due to the lack of organization during the writing process. For example, there are learners who skip to the drafting stage and even do not revise their work. At the end, the result is not as good expected. This shows the importance of prewriting for a successful production and hence the value of strategies at this point.

Pre-writing strategies

According to the writing center of Kansas University (2019), pre-writing strategies refer to the use of writing for producing ideas and thoughts related to a topic. In addition, the theory of cognitivism stipulated that students can create new ideas for their own learning. Moreover, Bloom's taxonomy explains that learning is more than a process of memorization. Teachers should promote the evolution of thought taking into account the previous knowledge and the understanding and interpretation of a

topic for its subsequent application. On the other hand, it is important to analyze and evaluate the final product to realize whether there is an improvement or not. Following this statement, students have the necessity to obtain tools to address their weaknesses. In addition, those tools could provide another way to motivate students, create interaction, and awaken their minds.

Brainstorming

The author of brainstorming, Osborn (1954) affirmed that it is an informal way of generating topics to write about, or points to make about your topic. Brainstorming allows for others to freely propose ideas, inviting others into the conversation to figure out other ways of doing things. The important point about brainstorming is that there should be no pressure to reach the goal. Students should simply open their minds to whatever idea that they could consider useful. Furthermore, brainstorming will involve a selection and association development and this can be done at any time during the writing process.

Characteristics

Bass and Pfeiffer (1998) explained that brainstorming is a good strategy for promoting a group atmosphere without harm. Brainstorms do not happen without people, inviting co-workers into a brainstorming session contributes to enhancing the interaction among them. It allows that students can give their opinions with the conviction that there will never exist a wrong answer. Sometimes, it can be difficult to come up with new ideas; for that, motivating students to participate and propose new concepts and thoughts could be the key for getting familiar not only with the topic but also increasing the confidence of the learners in class.

Into the bargain, the purpose of brainstorming is to improve or solve a problem. Besides, it provides a solution with the collaborative work of every member of the class. In order to have variety of options to get a better result. On the other hand, it is suitable for exchanging ideas on a specific topic. On it, various concepts can appear in the process and the exchange of it could enrich the students' knowledge. Another good characteristic is that it stimulates creative thinking. It is about looking at something in a new way. Often, creativity in this sense involves what is called lateral thinking, or the ability to perceive patterns that are not obvious.

Brainstorming process

According to Emerald Works (2016) an effective brainstorming, requires preparation. In addition, for following the appropriate time and space guidelines for the session, the teacher should also know how to guide the learners through the process.

- Prepare the students

The tutor needs to be prepared for a brainstorming. It is essential to inform others about plans to work in groups or individually and explain what brainstorming consists of. The objective is to prepare learners for building ideas. In addition, it's not about moving forward on a topic, it has to be based on producing, discarding and converging ideas.

- Present the topic

The next step is to make sure everyone is in the right mental framework for brainstorming. Teachers must ensure that everyone works toward a common solution and that they understand the problem. In addition, if the activity is developed in large groups, be aware that each team member should have a voice to express what they consider significant.

- Guide the discussion

Once the problem has been summarized, start the brainstorming session by asking students to present their ideas. As the brainstorming session progresses, the teacher has to keep students focused on the topic. Although brainstorming is a relatively informal process, it could give quality results if everyone is focused on the main goal.

- Take action

At some point, the brainstorming session will end. The students will decide which of the ideas have merit and move forward with the solution. Regardless of the topic of the brainstorming session, it must end in action, it means, in a writing production.

Brainstorming strategies

William (2020) listed various brainstorming strategies that could lead the writer to have a successful experience on the written production. It is common to notice that ideas do not come spontaneously to the mind, for that reason, it is primordial to start searching for new ways to acquire them.

- Brainwriting

This strategy is done without any particular order. The students are free to write any thought that they consider important for their further writing. This process can take from 5 to 15 minutes and do not take into account aspects like grammar, spelling or style. At the end of the process, the writer can review what kind of ideas could be employed to the final work. It is important to mention that brainwriting cannot be done without a topic or time limit. The reason to do so, it is because the learner can lose the purpose of the activity and then the ideas could be useless. Furthermore, this strategy is considered as a good way to maintain students focused. Besides, as explained by Dewi (2015), brainwriting is a creative strategy which facilitates exchanging and comparing ideas from a group which can be useful for making a paragraph. Therefore, it involves every member of the group to write and work cooperatively which promotes participation in class.

- Listing

To write about a particular topic, listing could be the key to generate ideas without pressure. It consists on writing down words, facts, arguments or questions that have a relation among them. Furthermore, the writer can separate lists of elements to have more organization; then, it is necessary to connect the ideas using logic and coherence. In addition, listing provides students with clear ideas that might be relevant for a written production and prevents them from getting stuck on a blank page. According to Nordquist (2018), listing is about discovering ideas and it helps to produceconcepts. Nevertheless, learners need to select appropriately the ideas for their writing productions. Hence, listing also involves analysis and reflection which contributes to the students' learning development.

- Clustering

It is also called idea mapping; it is used to create connections between ideas. The process is pretty simple, the writer has to write the main idea or topic, then write ideas derived from it. When the web word is complete the students can start to make their productions. Besides, this strategy helps learners to understand and structure their ideas; by using a visual diagram they can write sentences or paragraphs according to the information presented in the branches of the map. Moreover, it encourages students to develop their critical thinking abilities and to keep their attention on the topic. As stated by Hennig (2015), clustering has constructive aims which means that it provides a structure and connection between ideas and it is effective to organize learners' writings because of the logic patterns created.

- Researching

In this strategy, it is necessary to create questions about the topic and then search information in order to complete ideas. To have success, it is essential to use many sources as possible. For example, dictionaries, books, internet, thesauruses among others. It is necessary to clarify that researching is usually done when the student face a new or unknown topic. As it is not possible to create ideas without having at least a definition or any characteristic, the learner has to investigate in order to plan the writing. Moreover, it encourages students who are shy to give ideas that could be useful and the opportunity to contribute in the group. Besides, according to William (2020), researching provides a good background information that will be relevant for the development of the topic and to give support to the students' previous ideas for producing a better writing.

1.3 Dependent variable theoretical support Linguistic competence

Linguistic competences can be understood as people capacity to express thoughts in an oral or a written form. Also, it is thought that this mental system is giving innate, it begins from birth when the individuals have contact with others that teach them the language. Besides, the experience is a source that change over time and helps to strength learning. Furthermore, to be competent on the language, the learner needs to understand the context, the situations and must be aware of producing grammar sentences correctly. Communication will depend on how humans can share knowledge with their peers. On the other hand, Chomsky (Aspects of the Theory of Syntax, 1965) claimed that "competence" is the general knowledge that people have from their language. In fact, this process is unconscious it means that native speakers can recognize the grammatical rules without having in mind the figure of its structure.

Talking about EFL students, it is understandable that teachers are intended to develop this ability on their learners. For meeting this purpose, it is necessary to get students familiarized with the English language. This could be done by practicing the language skills day by day and developing tasks or activities in which students can construct and produce the language.

English language skills

Language skills are related to the use of the language. There are four skills: listening, speaking, reading and writing and then those are divided in two main groups as receptive and productive skills; in words of Hernandez (2014), those are part of the linguistic capacities of the human being. Receptive skills facilitate the understanding as reading or listening while the productive ones are aimed at the production of the language as writing and speaking.

To transmit ideas and have an effective communication, people require an entire development of these ones to be competent on the language. Through them, people can be included in the society, culture, have a sense of belonging and being able to express themselves without problems. However, it does not mean that without one of these, communication will be impossible. As in the case of deaf-mute people who use signal language, because body can express thoughts too.

Productive skills

Bobojonova (2020) explained that productive skills can be known as "active" skills because those are the transmitters of information that can be done oral or written. Moreover, there is a coexistence between receptive and productive, both need support among them. In the process of acquire a new language, the first skills that are usually taught are reading and listening, these address the learner to achieve writing and speaking to become proficient and to have a better qualification for communication. Having this premise, it is fundamental to make differences between writing and speaking. Writing itself is permanent on time, depends on connected speech, is readable and it goes to a specific audience. On the contrary, speaking changes around the time, it has modulation of voice which can end in non-literal meanings and its objective is to connect with the audience. Nevertheless, writing and speaking are enchained to grammatical structures, words and their proper use, and certain extent of accuracy need to be respected.

Writing skill

Writing skills allow people to communicate in a clear and easy way with others. This skill allows to express ideas for further reading. Writing can be used for persuading, convince or have a register of the learner progress. Moreover, it is transferable, teachers can enhance students to achieve this skill with activities, well organized lesson plans, strategies or techniques that can be helpful in class.

Srinivas (2019) ensured that writing is one of the most difficult skills to acquire and this is due to the complexity that it has. Besides, it can be defined as the intellectual action of finding, arrange and analyze ideas. Organization is important and this will be reflected on words, sentences paragraphs and compositions that must make sense for the reader.

Writing develops critical thinking and encourage students to accurate the language to write as they think (Nur Komariyah, 2015). Therefore, people spend time on the writing production pondering on which words could fit better or have a closest significance to what they want to express. Finally, writing can be a tool to improve other skills this will depend in how this skill can be managed. For that, the implementation of writing strategies is required to improve learning in an EFL environment.

Importance

Writing is considered as the way of communication for excellence. It is because of the technological advances and the emergence of new communication devices focused on writing. One clear example is the use of social networks, because with their increasing in everyday life, writing is becoming the first communication resource. Furthermore,

it is clear to see how computers are uncharged of processing, receiving and organizing information in writing way rather than in other forms.

With this in mind, it is not a surprise that writing is present in different types such as letters, messages, emails, articles among others in the current technological age, and those can have a positive impact to the achievement of this skill on EFL learners. In the same way. Srinivas (2019) explained that with the increase of technology, writing has turned into a fast and easy way of communication for the individual. Then, writing has changed as human change. Every day, technological devices like laptops or smartphones create new forms and digital programs to facilitate writing to the modern society. Therefore, it could be a great tool for working on this skill.

The writing process

Murray (1972) faced the educators claiming that writing is a process instead of a product. This author introduced the idea in which is not possible to evaluate a final product without the contemplation of what is behind it. Besides, Spratt et al. (2011) affirmed that writing begins before putting a pen to a paper or start word processing and that it involves following several steps which have as objective to improve the quality of the final written production. Additionally, Craft (2020) described that for the usual development of a writing, there can be followed five important steps to have a good writing.

- Prewriting

This process involves anything that could be done before writing. It could include strategies like brainstorming that can help to think, analyze and create ideas to put it on a document. Furthermore, it is the step in which students can be engaged to work with motivation and effort during the writing activity.

Drafting

It is when the ideas turn into words, sentences and paragraphs. The ideas have to be developed with a strong explanation and support. This step could take so much time, because without a previous organization, the writer probably has to rearrange ideas or add new ones. To avoid these problems, it is recommended to use the notes or plan that was created on the first stage.

- Revising

It is considered as the step to refine the prose, it is a deeper consideration about the reader. For example, if the writing is comprehensible, the ideas are clear and accurate or if there are mistakes on the connection of ideas that could prevent the understanding of the topic. The writer has to consider some aspects such as: identifying the level of the audience for which the writing is addressed, the message, the presentation of concepts, tone and style.

- Editing

It is a general overview to check mistakes related to grammar, spelling and mechanics. Without editing, it is not recommended to proceed to the next step. This stage is an on-going process and it could be very helpful, especially for beginner learners who tend to make basic errors as they are not totally aware of the use of the language.

- Publishing

This final step allows the writer to share the content with other people. A writing aimed to be reading, that was the purpose for which it was created. It can be done in several ways, by books, articles, essays or just reading what was written in front of an audience or even for the writer as self-assessment.

Writing subskills

Sprat et al. (2011), divided the writing subskills in two simple but essential categories. The first ones are related to accuracy which involves the correct use of language forms. Meanwhile, the second division of subskills belong to communicating ideas.

The writing subskills based on accuracy correspond to aspects such as: correct spelling and punctuation, formation of letters, joining them correctly, legibility in writing, the well use of layouts, selecting appropriate vocabulary, the well use of grammar and joining sentences with coherence in the same way as in paragraphs.

On the other side, the subskills which have as purpose communicating ideas are focused on the following aspects. First, the use of a correct style and register; then, the organization of ideas which have to be clear. In addition, the use of features to identify writing text types. This includes, joining words and sentences correctly and finally, the use of correct functions that help to convey a message.

Writing assessment

Among the most common ways to assess writing, rubrics are one of the most effective ways to meet this objective. A rubric can be developed by the teacher or can be taken from an organization. It is necessary to remember that all the aspects from the rubric have to be related with the level of the students to be fair and give them an appropriate feedback.

As mentioned by Sprat et al. (2011), the teacher has to be aware of the students' needs that could be evidenced through their performance. Other types of assessment include self-assessment or group-assessment. Those could give students a sense of confidence and they can realize how good was their production or if there are some things to correct. To ensure that the work is done properly, the teacher can provide them with checklists and a constant monitoring of the class. Furthermore, this type of assessment is effective in beginner learners, because it allowed them to understand the language better and improve in their future productions.

1.4 Objectives

GENERAL OBJECTIVE

To determine the relationship in the use of brainstorming strategies and the development of writing skill.

SPECIFIC OBJECTIVES

- To identify the English language level of writing skill in students of first semester at Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros.
- To apply brainstorming strategies to see their influence on the quality of writing skill in students of first semester at Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros.
- To analyze the effectiveness of brainstorming strategies in the development of wring skill in students of first semester at Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros.

CHAPTER II METHODOLOGY

2.1 Resources

For carrying out the investigative work called "Brainstorming strategies and writing skill", the following resources have been taken into consideration to get the results of this research.

Human resources

Those resources refer to the people that was involved into the investigation, as is the case of:

- Students of first semester of Pedagogía de los Idiomas Nacionales y Extranjeros from Universidad Técnica de Ambato.
- Guidance of the assigned tutor.
- The researcher.

Institutional resources

It refers to the supplies that were needed for the research. In this case, the presence of the university was the only resource required for the development of the investigative process.

• Universidad Técnica de Ambato.

Materials

It refers to the tools that were indispensable during the investigation. For example, the researcher used E-books and articles that were a source of information for the development of this research work. Besides, computers, cellphones, zoom platform and internet connection were required to facilitate the process of data collection, interaction with the participants and the application of the treatment.

2.2 Basic method of research

2.2.1 Approach

For carrying out this investigative work it was considered to choose the quantitativequalitative approach.

As stated by Bhandari (2020), this research is quantitative because the base of this approach is the study of numerical data in a general way, leaving aside the individual characteristics of the subjects. On this research, it was essential to create a deep relationship between the two variables, which were analyzed together in order to comprehend the causes and effects that arise based on the problem observed. Besides, the quantitative approach permitted to demonstrate the results gotten by graphics statistics which provided numerical representations that explained the outcome of the investigation.

Daniel (2016) explained that qualitative approach helps to understand the behavior, context, reasoning and interaction of the participants which is required for having a better comprehension of their experiences. Besides, the phenomena were observed directly in a natural setting which was convenient to describe the current situation that they were living and how it could affect or not the development of the variables presented on this research.

2.3 Research modality

2.3.1 Field research

According to Graterol (2011), field research is based on a controlled environment which allows the researcher to understand the reality of the participants and make a diagnosis according to their needs. In this case, the investigative work was developed at the first semester of the program being this way fieldwork because it had to be part where the problem appeared. Thereby, it was possible to comprehend all factors that are involved, being a witness of how the educational system works. Moreover, the creation of questions that responds to the main problem taking into account different aspects like the environment, the learning process and others.

2.3.2 Bibliographic research

In base of what was explained by Matos (2020), bibliographic research consists on looking for reliable sources related with the study subject. Besides, it aims to give support to the investigation, because it creates a relation between the theory and the methodology. This whole work, was developed based on different articles, journals and books that were read to expand the researcher's knowledge about the topic that was intended to study. Furthermore, all the sources contributed with the most relevant information, in order to create an analysis and reflect on the problem that was observed during the fieldwork.

2.3.3 Experimental research

Tanner (2018) explained that an experimental investigation can be developed by manipulating the independent variable to measure the effects on the dependent variable and obtain results that will be useful to accept or reject the hypothesis raised by the researcher. In addition, the experiment must be carried out in a controlled environment in which the conditions should be equal to obtain reliable data which has to be measured or quantified for further analysis.

According to Walker et al. (2017), when there are large groups of population it is needed to take a sample to apply the experiment. Quasi-experimental research is done taking two different groups (control and experimental) in which the treatment is applied just in the experimental group. Moreover, the researcher has to give them both a pre-test to stablish their initial situation. Later on, it is required to observe the reaction to the treatment and then, compare the results of the first test with the ones obtained in the post-test. As final step, the researcher can verify the hypothesis based on the collected data.

2.4 Level or type of research

2.4.1 Exploratory

As established by Harland (2011), exploratory research investigates a specific phenomenon to identify the main characteristics presented in both variables. Moreover, it allowed to identify the problems that the population had by gathering information about them. This research work was considered exploratory because it allowed to

understand the topic from a new perspective, which gave rise to new questions that could be the subject of research for further investigations.

2.4.2 Descriptive research

Considering that during the fieldwork it was observed the behavior of the subjects in a specific way, it was produced a description about how these participants developed the strategies on their environment. For that, it was essential taking out statistical data for the analysis part which was fundamental to explain the phenomena.

2.4.3 Correlational

Hernandez et al. (2017) claimed that this type of research aims to determine the relationship between dependent and independent variables. With this in mind, the present investigative work was correlational because it tried to identify how effective could be brainstorming strategies to improve the writing skill on English learners.

2.5 Population

The population of this research consisted on thirty-four students; 8 men and 26 women from first semester at Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros at Universidad Técnica de Ambato. The students were divided in two groups, control and experimental with 17 participants each one. They were selected because it is notable that beginner learners have problems for producing a writing. Besides, it is usual to find very basic grammatical mistakes in several paragraphs or lack of coherence to connect ideas. For this reason, the researcher thought that working on brainstorming strategies with those learners could change the situation and motivate them to continue learning.

2.6 Instruments

Pre-test and post-test

To evaluate students writing skill, it was necessary a validated test from Cambridge Key English Test (KET) that has a very basic level of English which is appropriate to beginners. The exam has three parts to develop the four language skills. Furthermore, the first part of the exam considers reading and writing with seven sections in total. To develop this investigation, the seventh section was chosen, on it students are asked to write a short paragraph describing a story which is showed through three pictures. The length of the production needs to contain an amount of 35 words, with good

organization and an appropriate writing style. This test was chosen because through a paragraph the researcher can notice various aspects about the use of the language such as: grammar structure, coherence, content and how the students use vocabulary to express their ideas. These parameters were measured with a validated rubric over 15 points.

Student's survey

The researcher applied an online survey addressed to students in order to collect data based on their awareness about brainstorming strategies and their current knowledge about writing skill. The instrument was carried out effectively through a questionnaire that contained eight non-dichotomous questions which were validated for two experts from the PINE program. Furthermore, it is valuable to mention that the questionnaire was presented using google forms which facilitated the data collection and its interpretation. Finally, the importance of this procedure relies on determining the experience of students about the use of the language and their perception related to both variables.

Treatment

For doing the treatment intervention of this research, four sessions of 30 minutes were used. Moreover, the activities developed during the sessions consisted on practicing brainstorming strategies by doing short written productions to improve as much as possible the writing skill. For this reason, it was necessary to use appropriate material for beginner learners of the PINE program such as: GoConqr, MindMup, Zoom, Canva, Google Docs and Google forms which are easy to handle and some of them help learners to build concepts intuitively. Finally, lesson plans were required for an effective organization of the four sessions during the treatment.

2.7 Intervention procedure

- The first step was to send the necessary documents addressed to Universidad Técnica de Ambato requiring the permission to develop this study (See annex one).
- Once, this process was complete, the students of first semester from PINE program presented a pre-test taken from Cambridge. Specifically, the seventh

part of the writing exam elementary level KET standardized test. This action was developed through a zoom session due to the current pandemic situation.

- Then, the researcher determined the level of writing skill on the students, according to the parameters stablished by a validated rubric; the same that was used to assess the writing part on the test previously mentioned. This rubric aimed to give a qualification based on three basic aspects which are: content, organization and language; those that in turn are related to writing skill and its subskills.
- After, the researcher applied brainstorming strategies to the experimental group during four sessions to try to improve their development on writing skill and monitored the process with the rubric mentioned above.
 - The first session consisted on practicing brainwriting strategy with students. For that, the researcher prepared a short presentation using PowerPoint to introduce learners to the topic for engage them into the class. Moreover, the researcher asked questions in order to verify if the students understood what was explained. After that, the researcher provided an activity to practice the strategy with the whole group by using an online worksheet. The objective of this activity was to motivate students to participate and to produce as many ideas as possible about the topic. Then, students worked in pairs to write a paragraph using the previous concepts that they considered important. At the end, few writings were shared in class to check aspects related to grammar structure and coherence.
 - During the second session, students were divided in four groups of four participants each one. Then, they were asked to choose a topic to write a short story about. Once this activity was complete, students started to list ideas using a chart to organize their thoughts. As final result, students worked collaboratively for producing one writing per group. At the end, the researcher gave feedback to correct mistakes and solve some doubts.
 - On the third session, students created groups of four participants and the researcher presented to the class a task activity provided by prompts to produce a short article. To develop this activity, students had to cluster ideas by using MindMup or GoConqr as tool to create the outline for their written production. The researcher monitored the class to check how students

developed their thoughts to build the paragraphs. Finally, the teacher chose one writing to review what they had written and provide feedback to the whole class.

- The fourth session consisted on researching strategy. For this activity students were divided in six groups of three and they were provided with a topic to write a short article. For that, students had to create questions about the topic and then search on internet some important aspects that helped them to define ideas for their work. At the end, the groups revised together their writings in order to give feedback to their partners. In addition, the participants could ask for the researcher guidance when it was necessary.
- Later on, the researcher applied a post-test similar to the pre-test and taken from the same source (Cambridge KET Exam). This was done to verify if there was an improvement into the development of writing skill in students of First semester of the program.
- At the end, the researcher coded the data using the SPSS (Statistical Package for Social Sciences) program in order to obtain reliable information about the data collected during the five sessions. The results were shown using statistics based on graphs. It was important to verify if the hypothesis presented previously had positive or negative effects on the population. Besides, observation during classes was the process which facilitated to know whether or not there was an evolution among the phenomena. Moreover, the data collection instrument helped to have a broader view of the established problem.

2.8 Hypothesis

Null hypothesis

Brainstorming strategies DO NOT CONTRIBUTE to the development of the writing skill.

Alternative hypothesis

Brainstorming strategies DO CONTRIBUTE to the development of the writing skill.

CHAPTER III

ANALYSIS AND INTERPRETATION OF RESULTS

Analysis of results

The main aim of this chapter was to analyze the results obtained during the research process. Besides, it was done to identify the relationship between brainstorming strategies and writing skill. For that, a pre-test, an intervention process, a post-test and a survey were applied to 34 students of first semester at PINE program. The results obtained by the researcher were described and tables and figures for their interpretation and better visualization of the data.

To measure the pre and post-test, it was necessary a rubric which contained three stablished parameters: content, organization and language. These were rating in a scalefrom 0 to 5 with a total of 15 points. Moreover, the average of those parameters wererepresented in three figures in which can be noticed the differences between the control and experimental groups through their development on both tests. On the other hand, the results of the four interventions were tabulated to identify if there was a progress on the participants. In addition, a final table and figure were shown to demonstrate and compare the data collected from the population.

After that, the survey was addressed to know the perception and understanding of students about the theme of this investigative work. The participants respond to eight questions which allowed the researcher to recognize at first hand the reality of the learners. The answers given by them were tabulated and analyzed in deep to build theconclusions later.

By last, it was necessary to verify the hypothesis to determine if there was or not a positive relation between the two variables. For this purpose, the researcher employed the deductive statistic T-Student which is generated by the software IBM SPSS. It allowed to stablish if there was a notable difference in the population considering the gathered data from the pre and post-test.

3.1 Analysis and interpretation of results

First parameter: Content

Table 1

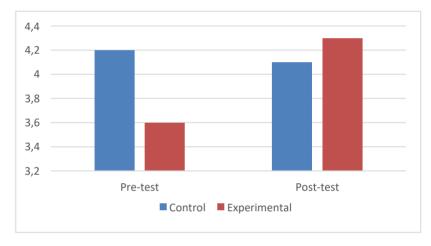
Content average scores over 5

Test	Control	Experimental
Pre-test	4,2	3,6
Post-test	4,1	4,3

Note: this table was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Figure 1

Content average scores over 5



Note: this figure was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Analysis and interpretation

Figure number 1 represents the results obtained between the pre and post-test in the content parameter. On the pre-test, the control group conformed by 17 students obtained 4,2 points, while the experimental had 3,6 points over 5. For the post test, the control group reduced its mark obtaining 4,1 points and the experimental group improve its development with 4,3 points in total.

Regarding the results, it can be said that students of the experimental group had an advance on their performance about the content. It means that students after the treatment could realize of what ideas are relevant for their production. On the other hand, the control group without the treatment present a reduction on their average. It

is because learners make omissions on their writings and it prevents the reader of having a complete information.

Second parameter: Organization

Table 2

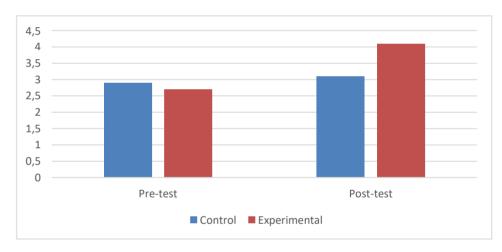
Organization average scores over 5

Test	Control	Experimental
Pre-test	2,9	2,8
Post-test	4,1	4,3

Note: this table was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Figure 2

Organization average scores over 5



Note: this figure was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Analysis and interpretation

The figure presented above demonstrated the average obtained by both groups on the application of pre and post-test in base of organization parameter. On the first test the control group had 2,9 points and the experimental 2,8 points over 5. However, for the post-test, the control group had a score of 4,1 and the experimental group collected 4,3 points over a total of 5.

The results showed that both groups had better results in comparison to their previous tests. Specially, the experimental group make a good advance with a difference of 1,5

in their performance. It means that they have progress on its ability to connect ideas with coherence, cohesion and the use of linking words to express their thoughts clearly.

Third parameter: Language

Table 3

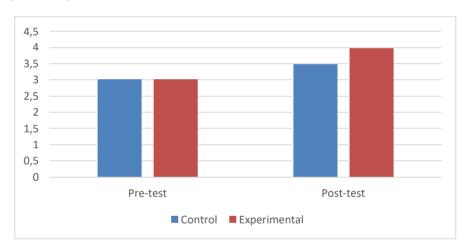
Language average scores over 5

Test	Control	Experimental
Pre-test	3,1	3,1
Post-test	3,4	4

Note: this table was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Figure 3

Language average scores over 5



Note: this figure was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Analysis and interpretation

This third figure illustrates the results achieved by the population in the language parameter of the pre and post-test. The control and the experimental group had an equal score of 3,1 over 5 points in the pre-test. Nevertheless, for the post test, both groups made an advance. In fact, the control group obtained 3,4 points and the experimental 4 points over the total.

The results showed that both groups had the same difficulties during the presentation of their pre-test. Nevertheless, for the post test, the control and the experimental group

increase their average. The group that took the treatment was less than 1 point to get a perfect score. It means that those students progress on their vocabulary recognition, the use of simple grammatical forms and without constant errors.

Results of the intervention

Table 4

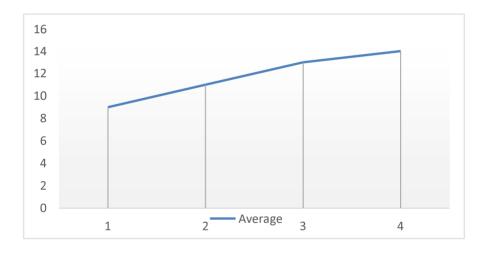
Process results over 15

Activities	Average	Expected average
1. Brainwriting	9	15
2. Listing	11	15
3. Clustering	13	15
4. Researching	14	15

Note: this table was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Figure 4

Process results over 15



Note: this figure was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Analysis and interpretation

This figure presented the results obtained during the four interventions by using brainstorming strategies and the progress of the control group in each session. On the first one, it can be noticed that students reached 9 points over 15. For the second one, the participants obtained 11 points. On the third session, they had an advance of 13 points and finally for the last intervention they achieved 14 points over the total.

The data demonstrated that students had a real progress on their writing skill. Each session ended with a practice that was developed to work on their weaknesses about the written language. They produced different text types by using various strategies, they recognized their mistakes and with the appropriate feedback they could improve their performance.

General average of the pre and post-test

Table 5

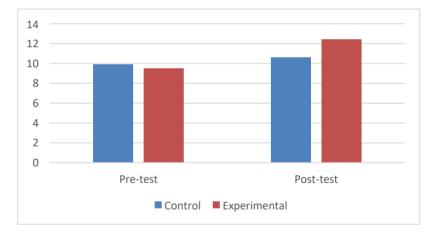
General average scores over 15

Test	Control	Experimental
Pre-test	9,9	9,5
Post-test	10,6	12,4

Note: this table was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Figure 5

General average scores over 15



Note: this figure was elaborated by Aguirre, A. (2021). The source was KET rubric for the writing test.

Analysis and interpretation

This figure represents the general average over 15 points obtained by the population after applying the pre and post-test respectively. The control group had 9,9 points on the pre-test, while the experimental had 9,5 over 15. For the post-test, the control group reached 10,6 points. On the other side of the coin, the experimental group achieved a score of 12,4 over 15 points.

As the evidence shown, the experimental group had an improvement in each parameter that was evaluated. This was deduced considering the scores of the pre-test and comparing it with the ones obtained in the post-test. It means that the treatment was effective, the writing skill in the learners increased by the time. This is a positive overview that contributes to determine the relationship between the use of brainstorming strategies and the development of writing in beginner learners.

3.2 Survey analysis and interpretation

Question 1.- How often does the teacher use brainstorming before a writing production?

Table 6

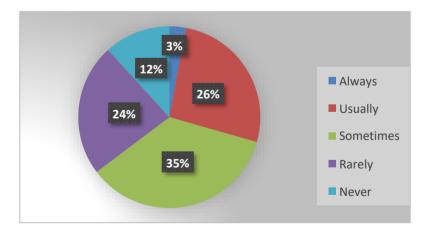
Brainstorming before a writing

Alternative	Frequency	Percentage
Always	1	3%
Usually	9	26%
Sometimes	12	35%
Rarely	8	24%
Never	4	12%

Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey.

Figure 6

Brainstorming before a writing



Note: this figure was elaborated by Aguirre, A. (2021). The source was the students' survey.

Analysis and interpretation

The item showed that 4 participants representing 4% of the population stated that teachers never use brainstorming before a writing in their classes. While 8 people or 24% of the population, assured that this activity is rarely carried out. In addition, 12 participants representing 35% confirmed that teachers sometimes use this activity. Other 9 students who belong to the 26% affirmed that brainstorming is usually done before a writing activity and just 1 participant or 3% explained that this strategy is always carried out.

This data allowed the researcher to identify that brainstorming does not take the importance required in the writing production. Most teachers skip this strategy because is not considered good enough. However, brainstorming has many advantages which must be included in the class for awake students' minds and organize their ideas. Prewriting strategies like brainstorming should be done always but according to the previous information obtained it is not a frequent task.

Question 2.- How often does the teacher help students to organize their thoughts to get better ideas and concepts about a topic?

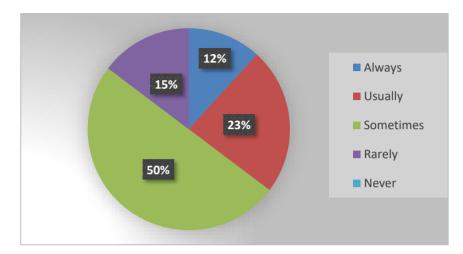
Table 7

Alternative	Frequency	Percentage
Always	4	12%
Usually	8	23%
Sometimes	17	50%
Rarely	5	15%
Never	0	0%

Teacher guidance for organizing thoughts

Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey.

Figure 7



Teacher guidance for organizing thoughts

Note: this figure was elaborated by Aguirre, A. (2021). The source was the students' survey.

Analysis and interpretation

It can be determined that 5 students who represents 15% affirmed that teachers rarely help students to organize their thoughts to get better ideas, while 17 students who represent 50% agreed that teachers sometimes do this work. Moreover, 8 students or the 23% claimed that teacher usually help them in this task. Finally, 12% of the participants which belongs to 4 students mentioned that they always receive help to build their writing production.

It could be shown that teachers guide the writing process but it is not frequent. Based on the results, the presence of the teachers is not so strong as expected. For that, teachers should help to create content and lead it in the right direction to avoid further mistakes about aspects like coherence in students' productions. It is necessary to understand that students from first semester do not have a good level in total, but this could change with more organization to obtain an advance on their performance. **Question 3.-** How often does the teacher give clear instructions before asking students to produce a written text?

Table 8

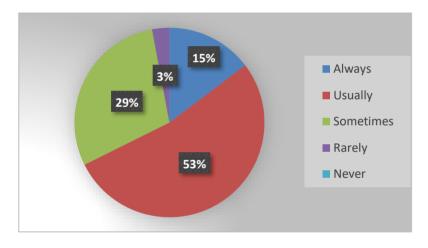
Clear instructions

Alternative	Frequency	Percentage
Always	5	15%
Usually	18	53%
Sometimes	10	29%
Rarely	1	3%
Never	0	0%

Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey.

Figure 8

Clear instructions



Note: this figure was elaborated by Aguirre, A. (2021). The source was the students' survey.

Analysis and interpretation

This chart demonstrated that 1 participant who is the 3% said that teachers rarely give clear instructions before asking students to produce a writing. Besides, 10 students who belong to the 29% of the population claimed that it is done sometimes. In addition,18 students or the 53% assured that the explanation is usually clear. Finally, 5 participants who represent 15% of the total, claimed that the written activities have appropriate instructions which facilitates the development of the writing.

As the results showed, teachers provide students with clear instructions which are required to reach the objectives proposed for the writing. It is important to remark the role of the teachers; they are guides who contribute with appropriate directions to facilitate students' tasks. Finally, the general view is not totally negative, because teacher's commands for written productions are usually done in an effective way. However, it could be appropriate to make questions to know if they understood the assignment.

Question 4.- How often do you find difficulties to organize sentences with coherence in a paragraph?

Table 9

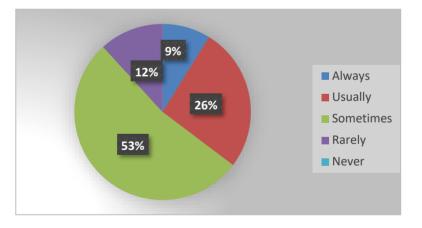
Alternative	Frequency	Percentage
Always	3	9%
Usually	9	26%
Sometimes	18	53%
Rarely	4	12%
Never	0	0%

Difficulty to organize sentences

Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey.

Figure 9

Difficulty to organize sentences



Note: this figure was elaborated by Aguirre, A. (2021). The source was the students' survey.

Analysis and interpretation

According to the results 4 students who represent the 12% of the population affirmed that they rarely have difficulties to organize sentences. Moreover, 18 students, 53 %

of the total, claimed that sometimes they have problems for developing this activity. In addition, 9 learners or 16% stablished that it is usual and 3 students or 9% stated that the difficulties to organize sentences are always present.

Taking into consideration that these students are beginners, it is easy to understand that that they could get confused at the moment of organizing sentences to create a wellstructured sentence or paragraph. It is common to find various ideas in the sameline but without a meaningful connection. For this reason, it is essential to teach students how to follow an order, develop their ideas and practice writing as much as possible.

Question 5.- How often does the teacher contribute with interesting topics that help you to develop or express your thoughts and ideas in a written production?

Table 10

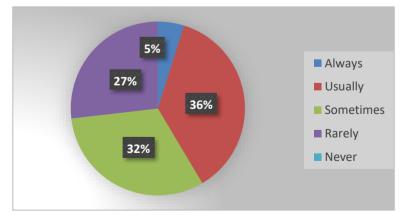
Interesting topics to develop writing skill

Alternative	Frequency	Percentage
Always	2	5%
Usually	15	36%
Sometimes	13	32%
Rarely	11	27%
Never	0	0%

Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey.

Figure 10

Interesting topics to develop writing skill



Note: this figure was elaborated by Aguirre, A. (2021). The source was the students' survey.

Analysis and interpretation

The figure above illustrated that, 11 students who belong to the 27% of the total stablished that teacher rarely contribute with interesting topics that help them to express their thought and ideas. Besides, 13 students or 32% ensured that the topics given by the teacher are attractive sometimes. On the other hand, 15 interviewees or 36% affirmed that the topics presented usually call their attention for expressing ideas through them. Finally, just 2 students that represent the 5% claimed that teacher always do this kind of contributions.

It can be evidenced that there are topics which catch the interest of students and help them to express thoughts and their own ideas which are important for the development of critical thinking. Therefore, teachers need to be aware of the information that they present for producing a writing, because attractive topics can motivate students to work in this skill by seeking for more resources to convey a message. On the opposite, it could bring negative consequences turning writing in something tedious.

Question 6.- How often do you write e-mails, paragraphs or short stories in English?

Table 11

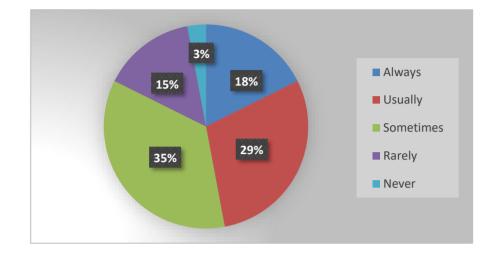
Alternative	Frequency	Percentage
Always	6	18%
Usually	10	29%
Sometimes	12	35%
Rarely	5	15%
Never	1	3%

Writing production

Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey)

Figure 11

Writing production



Note: this figure was elaborated by Aguirre, A. (2021). The source was the students' survey.

Analysis and interpretation

The analysis of this chart showed that 1 participant that is the 3% stablished that writing productions are never done in class. Besides, 5 participants who represent the 15% claimed that e-mails, paragraphs or short stories are done rarely. Continuing, 12 students who belong to the 35 % of the interviewees affirmed that sometimes they do these types of writing in class. At the end, 6 participants or the 18% agreed that those activities are always done.

It points that teachers do not spend a lot of time in writing activities, but those are present. It can be said that the lack of practice in daily classes could be the cause of the low performance of students in English language. Learners need to be involved in writing productions according to their level. For instance, e-mails, articles or short stories can be useful for developing writing skill. Those do not take a lot of time and could be included at the end of the lesson. **Question 7.-** How often do you make a list, a mind map or an outline before a writing activity?

Table 12

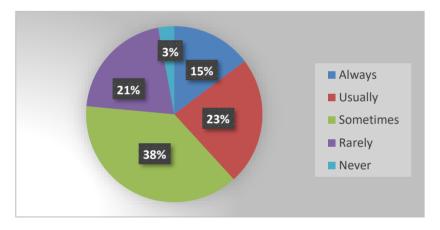
Use of brainstorming strategies

Alternative	Frequency	Percentage
Always	5	15%
Usually	8	23%
Sometimes	13	38%
Rarely	7	21%
Never	1	3%

Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey.

Figure 12

Use of brainstorming strategies



Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey.

Analysis and interpretation

In relation to the collected data, 3% which is 1 student, enunciated that brainstorming strategies such as: listing, making a mind map or an outline are never done before a writing. In addition, 7 students or 21% stablished that it is done rarely, while 13 students who represent the 38% affirmed that they do it sometimes. Furthermore, 8 students that are found in the 23% expressed that those strategies are used usually. Finally, 5 students or 15% of the total claimed that those strategies are always developed.

There are variety of brainstorming strategies that could be employed to produce ideas before a writing but those are not used very often. The importance of making a draft, thinking about previous concepts, discuss the topic or having a scheme to follow could be the difference between a good writing or a bad result. In summary, if the students have already thought about the main topic, definitions, characteristics and facts that they will include in their productions, the process will be easier for them, especially if those are beginners.

Question 8.- How often does the teacher give personal feedback based on grammar, vocabulary and coherence, after or during a written production?

Table 13.

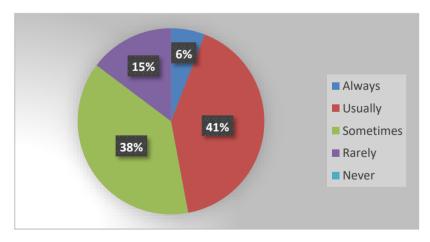
Feedback given by the teacher

Alternative	Frequency	Percentage
Always	2	6%
Usually	14	41%
Sometimes	13	38%
Rarely	5	15%
Never	0	0%

Note: this table was elaborated by Aguirre, A. (2021). The source was the students' survey.

Figure 13

Feedback given by the teacher



Note: this figure was elaborated by Aguirre, A. (2021). The source was the students' survey.

Analysis and interpretation

In this chart, it can be analyzed that 5 participants who represent the 15% of the population argued that teacher rarely provide feedback based on grammar, vocabulary and coherence during or after the writing production. Moreover, there are 13 participants represented by the 38% stated that sometimes teacher gives comments about their productions. Besides, 14 people or 41% affirmed that the educator usually give feedback and 2 students which represent the 6% stablished that it is done always. It can be demonstrated that feedback about the content of writing is given frequently during or after the process. However, students keep making basic mistakes. For obtaining better results, the teacher could give a solution or tips to improve writing instead of just pointing out students' errors. It could be a great advantage to overcome the barriers which prevent students to obtain a successful written production.

3.3 Hypothesis verification

Null hypothesis

H0: brainstorming strategies do not contribute to the development of the writing skill.

Alternative hypothesis

H1: Brainstorming strategies do contribute to the development of the writing skill.

Table 14

Mean	T-Stud	ent
------	--------	-----

Paired Samples Statistics					
		Mean	Ν	Std. Deviation	Std. Error Mean
Pair 1	PRETEST	9,59	17	1,770	,429
	POSTTEST	12,41	17	1,622	,394

Note: this table was elaborated by Aguirre, A. (2021). The source was taken from the general average of students' pre and post-tests.

The data generated by the use of the statistical software IBM SPPS showed a relevant difference between both tests. This was deduced considering that the pre-test presented an average of 9,59 and the post-test reached an average of 12,41. It means that the variance of the sample is 2,89 which indicates an improvement in the performance of the population.

Table 15

T-Student test

Paired Samples Test									
	Paired Differences								
					95% Co	nfidence			
				Std.	Interva	l of the			
			Std.	Error	Diffe	rence			Sig. (2-
		Mean	Deviation	Mean	Lower	Upper	t	df	tailed)
Pair 1	PRETEST -	-2,824	,951	,231	-3,312	-2,335	-12,241	16	,000
	POSTTEST								

Note: this table was elaborated by Aguirre, A. (2021). The source was taken from the general average of students' pre and post-tests.

In this table it was evidenced that there is a remarkable difference in the development evidenced in the application of both tests. Moreover, T-Student test determined that when P > 0.05 the H0 is accepted and the H1 is rejected. But, if P <= 0,05 the H1 is accepted and the H0 is rejected. In this case, P value is 0,000 which is less than 0,05. Therefore, the null hypothesis is rejected and the alternative one is accepted. It means that, brainstorming strategies do contribute to the development of the writing skill.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

After the careful analysis and interpretation of the data collected by the researcher, the following conclusions were raised:

- The use of brainstorming strategies has a direct relationship in the development of writing skill. It was demonstrated that brainstorming is necessary for the first stage of the writing process. As was stated in the theory of this investigation, it is a requirement to previously think and organize ideas to put them after in a written production. Besides, this could be proved thanks to the experiment, in which learners who have a good score on the organization parameter raised their total average with a difference of 2,9 points regarding their pre and posttest. (table 5).
- Regarding the tests taken to students of first semester at Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros it can be demonstrated that their current English language level of writing skill is A2. This conclusion was based on the rubric parameters evaluated on the pre-test, the intervention and the posttest. On the other hand, despite that the results revealed they did not reachthis level completely, they had a progress in their written productions in termsof organization with a final average of 4,3, content with 3,5 and language with4 points over 5.
- Brainstorming strategies such as: brainwriting, listing, clustering and researching were applied to students of first semester at PINE program. After the end of the intervention, it could be noticed that those strategies had a positive influence on the quality of the writing skill. This was deduced by comparing the scores of the different four sessions (table 4), in which can be seen that students advanced 3,7 points in comparison to their initial performance. In addition, it engaged learners to participate, work on their weaknesses and overcome those difficulties.
- This investigative work proved the effectiveness of brainstorming strategies in the development of writing skill. In view of the pre-test with an average of 9,5 and the post-test with 12,4 points over 15, it could be analyzed that students who participated on the treatment, increased their abilities on the written

language; especially, in aspects related to accuracy subskill such as: punctuation, vocabulary, coherence, organization and grammar.

4.2 Recommendations

The following recommendations are addressed to teachers who want to introduce brainstorming strategies in their classes and to help students in their learning process. But also, these recommendations are for learners who want to improve their writing skill to achieve language proficiency.

- It is highly recommended for teachers to work on writing activities in order to master their student's development on this skill. It was shown that students could organize ideas properly and sequentially by implementing brainstorming strategies. Moreover, teachers could find new brainstorming strategies to motivate students and facilitate their learning acquirement. Therefore, it is important to recognize that writing is essential as the other four skills and for this reason, it should be included with commonness in English classes. Besides, it also could be an opportunity to let students express themselves and integrate other skills like reading.
- Learners should practice improving their writing skills. They need to be engaged with their own education, and put the effort into everything that they have learned during their academic process to advance in their language acquisition. On the other hand, teachers should guide students in this process by providing essential and elemental feedback, activities and most importantly encourage them to reach their corresponding English level.
- Brainstorming strategies could be used in class to strengthen students' interaction. Based on the results students rather organize their ideas first before performing a task, and as it is preference developed in groups since students can share common ideas and provide examples to produce a well-structured writing paper. Nevertheless, the teacher should monitor the class constantly to avoid distractions and have a variety of resources that could help learners to achieve the lesson objectives.
- Some students could have difficulties succeeding in the development of writing skills. As a result of this, it is necessary for the teacher to be aware of the student's needs and plan activities according to their level. By doing this

important step, students can feel confident to raise their hand and ask when there is a doubt, especially when writing. Finally, it is important to maintain students' interest and attention, when a student is interested in the topic so they can brainstorm ideas easily. Then, the learning process becomes effective.

REFERENCES

- Abas, I., & Noor, H. (2018). Model of the Writing Process and Strategies of EFL Proficient Student Writers: A Case Study of Indonesian Learners. *Pertanika Journal of Social Science and Humanities*, 23(03), 1–22. <u>https://www.researchgate.net/publication/327972100 Model of the Writing P</u> <u>rocess and Strategies of EFL Proficient Student Writers A Case Study of</u> Indonesian Learners
- Abedianpour, S., & Omidvari, A. (2018). Brainstorming Strategy and Writing Performance: Effects and Attitudes. *Journal of Language Teaching and Research*, 09(05), 1084–1094. https://doi.org/http://dx.doi.org/10.17507/jltr.0905.24
- AlRababah, I. (2019). The Use of Brainstorming Strategy Among Teachers of Arabic for Speakers of Other Languages (ASOL) in Writing Classes. International Journal of English Linguistics, 09(01), 15–24. https://doi.org/10.5539/ijel.v9n1p15
- Bass, J. & Pfeiffer. (1998). Brainstorming. *The Pfeiffer Library*, 1–238. http://home.snu.edu/~jsmith/library/body/v26.pdf
- Bhandari, P. (2021). An introduction to quantitative research. Scribbr. https://www.scribbr.com/methodology/quantitative-research/
- Bobojonova, Z. (2020). Effective Teaching of Productive Language Skills to the English Language Learners. "Science and Education" Scientific Journal, 01(07), 430–435. <u>https://www.scribbr.com/methodology/quantitative-research/</u>
- Boser, U. (2020). The Learning Process and Why It Matters. *The Learning Curve*. <u>https://www.the-learning-agency-lab.com/the-learning-curve/six-key-steps-to-learn-better/</u>
- Brown, D. H. (2000). Styles and Strategies. In *Principles of Language Learning And Teaching* (4th ed., pp. 112–120).

Chomsky, N. (1965). Aspects of the Theory of Syntax. M.I.T. Press.

- Craft, C. (2020). *The 5 steps of the writing process*. Inspire First. <u>https://inspirefirst.com/the-5-steps-of-the-writing-process/</u>
- Daniel, E. (2016). The Usefulness of Qualitative and Quantitative Approaches and Methods in Researching Problem-Solving Ability in Science Education Curriculum. *Journal of Education and Practice*, 07(15), 91–100.
- Dewi, F. (2015). *The use of brainwriting 6-3-5 technique to improve students' writing ability of recount text.* http://eprints.walisongo.ac.id/id/eprint/5083/1/113411080.pdf
- Emerald work. (2016). *Brainstorming*. Mind Tools. <u>https://www.mindtools.com/brainstm.html</u>
- Graterol, R. (2011). La Investigación de Campo. In *Metodología de la Investigación*. <u>https://jofillop.files.wordpress.com/2011/03/metodos-de-investigacion.pdf</u>
- Hardiansyah, M. (2020). The effectiveness of using brainstorming technique in teaching English language writing classroom. https://doi.org/http://eprints.umm.ac.id/id/eprint/62748
- Harland, D. J. (2011). *An Introduction to Experimental Research*. https://cemast.illinoisstate.edu/downloads/hsrs/types_of_research.pdf
- Hennig, Christian. (2015). *Clustering strategy and method selection*. Handbook of Cluster Analysis.
- Hernández, E. (2014). El B-learning como estrategia metodológica para mejorar el proceso de enseñanza-aprendizaje de los estudiantes de inglés de la modalidad 82 semipresencial del departamento especializado de idiomas de la Universidad Técnica de Ambato. Universidad Complutense de Madrid. Madrid, España.

- Hernández, R., Fernández, C., & Baptista, P. (2017). Definición del alcance de la investigación. In I. Editores (Ed.), *Metodología de la Investigación* (6th ed., pp. 88–101). McGraw-Hill.
- Indihadi, D., & Nugraha, D. (2018). Brainstorming in scientific writing in elementary school. *Journal of Physics*. <u>https://iopscience.iop.org/article/10.1088/1742-6596/1318/1/012026/pdf</u>
- Komariyah, N. (2015). Writing Strategies Used by the Fourth Semester students of English Education Department. English Education Department, Faculty of Teacher Training and Education University of Muhammadiyah Purwokerto.
- KU Writing Center. (2019). *Prewriting Strategies*. Kansas University. <u>http://writing.ku.edu/prewriting-strategies</u>
- Lacy, S. M., & Gagich, M. (2018). The Writing Process, Composing, and Revising. In *A Guide to Rhetoric, Genre, and Success in First-Year Writing* (pp. 311–313).
- Loka, P. (2019). The effect of brainstorming technique on students' competence of VIII grade students at SMPN 23 Jambi. http://repository.uinjambi.ac.id/1580/1/PITRA LOKA-TE141024 - Dinni Computer.pdf
- Malkawi, N., & Smadi, M. (2018). The Effectiveness of Using Brainstorming Strategy in the Development of Academic Achievement of Sixth Grade Students inEnglish Grammar at Public Schools in Jordan. *International Education Studies*, 11(03), 92–100. <u>https://files.eric.ed.gov/fulltext/EJ1172133.pdf</u>
- Masri, A. (2019). The Impact of Using Brainstorming in the Development of Creative Thinking and Achievement in the English Language of the 10th Grade Students at King Abdullah II Schools of Excellence in Amman. *International Education Study*, *12*(02). <u>https://doi.org/10.5539/ies.v12n2p82</u>
- Matos, A. (2020). *Investigación Bibliográfica: Definición, Tipos, Técnicas*. Lifeder. <u>https://www.lifeder.com/investigacion-bibliografica/</u>.

- Minawati, C. (2019). Brainstorming technique to improve writing skill in descriptive texts of vocational high school students. *English Research Journal: Journal of Education, Language, Literature, Arts and Culture, 03*(01).
- Montaño, J. (2017). Learning Strategies in Second Language Acquisition. US-China Foreign Language, August 2017, 15(8), 479–492. <u>https://www.researchgate.net/publication/321214935_Learning_Strategies_in_S</u> <u>econd_Language_Acquisition</u>
- Nordquist, R. (2018). *The use of listing in composition*. Thought.Co. https://www.thoughtco.com/listing-composition-term-1691131
- Rossum, V., & Hamer, R. (2010). A Model of Students' Developing Conceptions of Learning and Teaching. In *The meaning of learning and knowing* (pp. 1–29). Sense Publishers. <u>https://doi.org/10.1163/9789460912535</u>
- Spratt, M., Pulverness, A., & Williams, M. (2011). The TKT Course Modules 1, 2 and3. Second Edition: Cambridge University Press.
- Srinivas, P. (2019). The Significance of Writing Skills in ELL Environment. SouthAsianAcademicResearchJournals,09(03).https://www.researchgate.net/publication/332188858_The_Significance_of_Writing_Skills_in_ELL_Environment
- Tanner, K. (2018). Experimental research. In *Research Methods (Second Edition)* (pp. 337–356). https://doi.org/10.1016/B978-0-08-102220-7.00014-5
- Virdania, V. (2019). The Improvement Of English Writing And Students' Motivation Through Brainstorming. *Media of Teaching Oriented and Children*, 03(01), 15– 25. <u>https://doi.org/https://doi.org/10.31090/m.v3i1.882</u>
- William, D. (2020). Brainstorming strategies for generating new writing ideas. The Web Writer Spotlight. <u>https://webwriterspotlight.com/8-brainstorming-</u> <u>strategies-for-generating-new-writing-ideas</u>

ANNEXES

Annex 1. Letter of commitment

CARTA DE COMPROMISO

Ambato 07 de mayo del 2020

Doctor Marcelo Núñez Presidente Unidad de titulación Carrera de Pedagogía de los idiomas Nacionales y extranjeros Facultad de Ciencias Humanas y de la Educación

Yo Mg. Sarah Iza Pazmiño, en mi calidad de Coordinador de la Carrera de Pedagogía de Idiomas Nacionales y Extranjeros de la Universidad Técnica de Ambato, me permito poner en su conocimiento la aceptación y respaldo para el desarrollo del Trabajo de Titulación bajo el Tema: "Brainstorming Strategies and Writing Skill" propuesto por la estudiante Angie Liliana Aguirre Acosta, portadora de la Cédula de Ciudadanía 1085949562 estudiante de la Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros, Facultad de Ciencias Humanas y de la Educación de la Universidad Técnica de Ambato.

A nombre de la Institución a la cual represento, me comprometo a apoyar en el desarrollo del proyecto.

Particular que comunico a usted para los fines pertinentes.

Atentamente.



Lcda. Mg. Sarah Iza Pazmiño 0901741060 0984060528 Sj.iza@uta.edu.ec

.....

Annex 2. Rubric for the pre and post-test

Assessment of Writing scale

Band	Content	Organisation	Language
5	All content is relevant to the task. Target reader is fully informed.	Text is connected and coherent, using basic linking words and a limited number of cohesive devices.	Uses everyday vocabulary generally appropriately, while occasionally overusing certain lexis. Uses simple grammatical forms with a good degree of control. While errors are noticeable, meaning can still be determined.
4		Performance shares features of Bands 3	and 5.
3	Minor irrelevances and/or omissions may be present. Target reader is on the whole informed.	Text is connected using basic, high-frequency linking words.	Uses basic vocabulary reasonably appropriately. Uses simple grammatical forms with some degree of control. Errors may impede meaning at times.
2	8.	Performance shares features of Bands 1	and 3.
1	Irrelevances and misinterpretation of task may be present. Target reader is minimally informed.	Production unlikely to be connected, though punctuation and simple connectors (i.e. 'and') may on occasion be used.	Produces basic vocabulary of isolated words and phrases. Produces few simple grammatical forms with only limited control.
0	Content is totally irrelevant. Target reader is not informed.	Performan	ce below Band 1.

Annex 3. Pre-test sample

CAMBRIDGE ENGLISH FIRST: KET EXAM – PRE-TEST

Name:

Date:

Difficulty: A2 Elementary Level.

In the writing section of the KET test there are seven parts. In part seven you have to write a short story based on pictures and using an amount of 35 words. For complete this task you will have 25 minutes.

- Look at the three pictures.
- Write the story shown in the pictures.
- Write 35 words or more.



#words

_	

Annex 4. Post-test sample

CAMBRIDGE ENGLISH FIRST: KET EXAM – POST-TEST

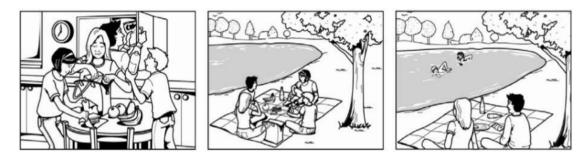
Name:

_____ Date: _____

Difficulty: A2 Elementary Level.

In the writing section of the KET test there are seven parts. In part seven you have to write a short story based on pictures and using an amount of 35 words. For complete this task you will have 25 minutes.

- Look at the three pictures.
- Write the story shown in the pictures.
- Write 35 words or more.



#words:_____

Annex 5. Lesson plans

DATE: June 21, 2021		
TEACHER:	TIME PERIOD:	
Angie Liliana Aguirre	30 minutes N° OF STUDENTS: 17	7
General objective: At the end of the lesson, students	will be able to write abo	ut family
holiday traditions by using simple present tense.		
Specific objectives: SWBAT		
- Use contrast conjunctions "but or however".		
- Practice affirmative and negative responses.		
THEME: Family holiday traditions	SKILL: Writing	
GRAMMAR:	VOCABULARY:	
Review of present simple in its affirmative and	Holidays.	
negative form.	Traditions.	
MATERIALS:		
Internet connection, Zoom application, PowerPoint pr	resentation, Google form	s, Kahoot,
Google Docs.	-	
PROCEDURE:		TIME
- Warm up activity: teacher starts the class with a Kah	noot game related to the	
common traditions in holidays to engage students into	o the topic.	2'
https://create.kahoot.it/share/holidays-and-traditions/8	82bd2e41-9dbd-4d0b-	
92d8-50afd497739f		
- The teacher presents a PowerPoint with various pictures and descriptions about holiday traditions. <u>https://utaedu-</u> my.sharepoint.com/:p:/g/personal/aaguirre6897_uta_edu_ec/EZYKNE52ach		3'
BIEvRXY0Y80wBd059WtwVjgdH7yTY7dbD2Q?e=F9h5hh		
- The teacher provides students with a worksheet in which they have to brainstorm and write some traditions in their families at holidays. <u>https://utaedu-</u> <u>my.sharepoint.com/:w:/g/personal/aaguirre6897_uta_edu_ec/EUDaKVy2R</u> <u>YtGi58A6cL0a1QBJ21RNF3s1GtPZIFmfc_6rg?e=r8EqKg</u>		5'
- Students work in pairs to complete a comparative differences about their family traditions at holidays. <u>https://utaedu-</u> my.sharepoint.com/:w:/g/personal/aaguirre6897_uta_ IpxxkEneFtfQBaKpQJd8iL1obiw25pEEhlg?e=DjEhg	edu_ec/ESZgJCG3Gt5	5 '
- In the same pairs, students write a short paragraph chart. On it, they have to compare their own family their partners by using the present simple and the con or however". They have to send their writings through	traditions with those of ntrast conjunctions "but	10

https://docs.google.com/forms/d/e/1FAIpQLSdUF2TiNeaZR0yILW4gz5fh KnqkBaKBOn0hkTzDK4ZXcxXpjA/viewform?usp=sf_link

- Some students read their writings in order to provide feedback to the whole 5' class.

Type of assessment:

Informal: teacher monitors the activity of students and they could raise their virtual hand to ask for help.

DATE: June 22, 2021		
TEACHER:	TIME PERIOD:	
Angie Liliana Aguirre	30 minutes	
	N° OF STUDENTS: 17	
General objective: At the end of the lesson, stude	nts will be able to write abo	ut their
vacation experiences by using simple past.		
Specific objectives: SWBAT		
- Use adjectives to describe a place.		
- Practice the past tense usage for regular and	d irregular verbs.	
THEME: Vacation experiences.	SKILL: Writing	
GRAMMAR:	VOCABULARY:	
Review of past simple tense usage and form.	Adjectives.	
	Vacation stuff and activ	ities.
MATERIALS:	· · ·	
Internet connection, Zoom application, Educaplay,	Canva presentation, Google	e forms,
Google Docs.		,
PROCEDURE:		TIME
- Warm up activity: teacher starts the class with a	n alphabet soup related to	
vacation vocabulary.	1 1	2'
https://es.educaplay.com/recursos-educativos/9733926-vacation.html		
* * *		
- The teacher presents a Canva presentation with	vacation vocabulary and	3'
adjectives to describe it in past simple.		•
https://www.canva.com/design/DAEiLJ7tISY/b5E	yFdRWLkmbWYYJ99Ff	
5A/view?utm_content=DAEiLJ7tISY&utm_campa	aign=designshare&utm_m	
<u>JAANUW (uun_coment_DALILJ/US I &uun_camp</u>		
• • • • • • • • • • • • • • • • • • •		
edium=link&utm_source=sharebutton		
edium=link&utm_source=sharebutton	et in which they have to	5'
<u>edium=link&utm_source=sharebutton</u>The teacher provides students with a workshe	-	5'
 edium=link&utm_source=sharebutton The teacher provides students with a workshe brainstorm in groups of four their vacation experies 	-	5'
 edium=link&utm_source=sharebutton The teacher provides students with a workshe brainstorm in groups of four their vacation experie <a :w:="" aaguirre6897_u"="" g="" href="https://utaedu-https://utaed</td><td>nces.</td><td>5'</td></tr><tr><td> edium=link&utm_source=sharebutton The teacher provides students with a workshe brainstorm in groups of four their vacation experie https://utaedu-my.sharepoint.com/:w:/g/personal/aaguirre6897_u 	nces. ta_edu_ec/EUwlTsUvnzh	5'
 edium=link&utm_source=sharebutton The teacher provides students with a workshe brainstorm in groups of four their vacation experie 		

- Students work collaboratively in their teams to complete a chart to categorize	
their vacation activities.	
https://utaedu-	
my.sharepoint.com/:w:/g/personal/aaguirre6897_uta_edu_ec/EUwlTsUvnzh	
PjI8YNezlWfIBq4Hac88s4WAkI_mu7QlycA?e=GGeDCk	
- In the same groups students have to write a short story about their vacation	10'
experiences by using adjectives and the simple past. They have to send their	
writings through google forms.	
https://docs.google.com/forms/d/e/1FAIpQLSdMgSZCOBovHvbRTxz	
PJUMnhFru_c6wb3dpgcCP72KgmK1A/viewform	
- Some students read their writings in order to provide feedback to the whole	5'
class.	
Type of assessment:	
Informal: teacher monitors the activity of students and they could raise their vi	rtual hand

Informal: teacher monitors the activity of students and they could raise their virtual hand to ask for help.

DATE: June 23, 2021		
TEACHER:	TIME PERIOD:	
Angie Liliana Aguirre	30 minutes	
	N° OF STUDENTS: 17	
General objective: At the end of the lesson, students		
past habits.		
Specific objectives: SWBAT		
- Use the modal verb "used to" in a sentence.		
- Describe past habits .		
THEME: My past habits.	SKILL: Writing	
GRAMMAR:		
Review of the modal verb "used to".	People habits.	
MATERIALS:		
Internet connection, Zoom application, YouTube, Po	werPoint, Google forms,	Google
Docs.		
PROCEDURE:		TIME
- Warm up activity: teacher starts the class with a m	ix of songs that include	
"used to" in the lyrics.		3'
https://www.youtube.com/watch?v=RAoqQto8-IY		
- The teacher presents a PowerPoint presentation de	escribing past habits by	5'
using "used to".		
https://utaedu-		
my.sharepoint.com/:p:/g/personal/aaguirre6897_uta_e		
MrGqEX611z4kB_bPgW7z8WhNNRWacLychoQ?e	<u>=k/q115</u>	

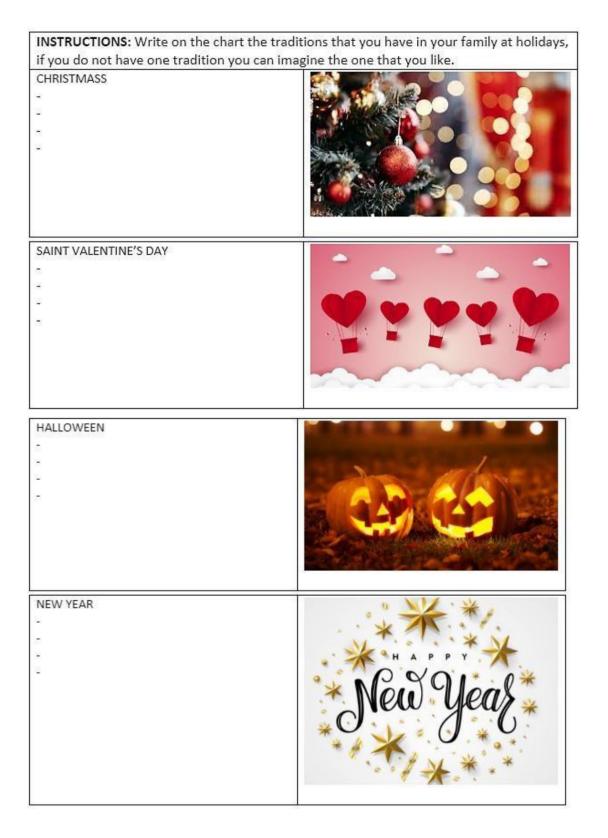
- The teacher creates groups of four students and they get together in breakout rooms to discuss their past habits.	2'
- Students create a mind map by using their previous discussion. On it, they	5'
have to cluster all member's ideas.	
https://app.mindmup.com/map/new/1624430912690	
- Students write a short article based on the information of the mind map and	10'
using the modal verb "used to". They have to send their writings through	
google forms.	
https://docs.google.com/forms/d/e/1FAIpQLSdzFym9Arc4jeoiQwgkwYvcoUuSZ	5'
WNw Matdzhu028WrDmC8w/viewform	
- The teacher choose one writing in order to provide feedback to the whole	
class.	
Type of assessment:	
Informal: teacher monitors the activity of students and they could raise their vi	rtual hand
to ask for help.	
-	

DATE: June 24, 2021		
TEACHER:	TIME PERIOD:	
Angie Liliana Aguirre	30 minutes	
	N° OF STUDENTS: 17	7
General objective: At the end of the lesson, students	s will be able to write abo	ut
possible future events.		
Specific objectives: SWBAT		
- Explain future events.		
- Use modal verb "will" in a sentence.		
THEME: Future events	SKILL: Writing	
GRAMMAR:	VOCABULARY:	
Review of the simple future tense.	Review of the simple future tense. Possible future events.	
MATERIALS:		
Internet connection, Zoom application, Canva, Goog	le forms, Google Docs.	
PROCEDURE:		TIME
- Warm up activity: The teacher provides students v	with a timeline in which	
they must locate various actions depending on wheth	er these are developed in	3'
the past, present or future.		
https://utaedu-		
my.sharepoint.com/:w:/g/personal/aaguirre6897_uta_	edu_ec/Ecp3Ibqki6JA1	
zfb3iRspfMBOw5_YvO6cPFJVv5NiXt1vQ?e=JvqV	<u>VK0</u>	

- The teacher makes a review of the simple future tense with the students".	5'
https://www.canva.com/design/DAEiRr-	
QOHA/51KWXySoxfs2lmY2NBUbgw/view?utm_content=DAEiRr-	
<u>QOHA&utm_campaign=designshare&utm_medium=link&utm_source=shar</u>	
ebutton	
- The teacher creates groups of three students and give them a worksheet in which they have to write questions about all the possible events of the future. <u>https://utaedu-</u> my.sharepoint.com/:w:/g/personal/aaguirre6897_uta_edu_ec/EU21Q5PFUd	2'
9BnrukfENjVf8BtAXhtEeZWSLatke3hz_NJA?e=3jIrYc	
<u>9DilluktenjvtoblazilleezwSLaikesilz_NJA?e=5jil1c</u>	
- In the same groups, students search on internet information to solve their questions, and discuss about their findings. https://utaedu-	5'
my.sharepoint.com/:w:/g/personal/aaguirre6897_uta_edu_ec/EU21Q5PFUd	
9BnrukfENjVf8BtAXhtEeZWSLatke3hz_NJA?e=3jIrYc	
 Students write an article per group based on the previous questions and the information selected from internet. Besides, the teacher gives to them a document with useful tips for their writings. At the end, students send their answers through google forms. https://utaedu-my.sharepoint.com/:w:/g/personal/aaguirre6897_uta_edu_ec/EdIwcF8_7SRJthdLu https://utaedu-my.sharepoint.com/:w:/g/personal/aaguirre6897_uta_edu_ec/EdIwcF8_7SRJthdLu https://www.sharepoint.com/: https://wwww.sharepoint.com/: https://wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww	10'
	5,
	5'
Tune of aggaggments	
Type of assessment: Informal: teacher monitors the activity of students and they could raise their vito ask for help.	irtual hand

Materials for the intervention

Session 1



INSTRUCTIONS: complete this comparative chart to identify the differences about your family traditions at holidays.

HOLIDAYS	MY FAMILY TRADITIONS	MY PARTNER'S FAMILY TRADITIONS
CHRISTMASS		
SAINT VALENTINES' DAY		
HALLOWEEN		
NEW YEAR		

My family traditions

Write a short paragraph that contains at least 50 words. Be sure to mention and compare your own family traditions with those of your partner using the present simple. To make the comparison you can use "but or however". Work in pairs.

Names:

Tu respuesta

Write here your paragraph and when you finish click the SUBMIT button to register your answer.

Tu respuesta

Enviar

Session 2

INSTRUCTIONS: Think about your vacation experiences, then complete the chart.

Examples:

- I went to Peru and I like the people and the food.
- Last vacation, I lost my baggage at the airport.

STUDENT 1	STUDENT 3	
-	141	
-	-	
-		
-	-	
STUDENT 2	STUDENT 4	
-	-	
-	-	
-	-	
-	-	
STUDENT 5		
-		
-		
-		
-		

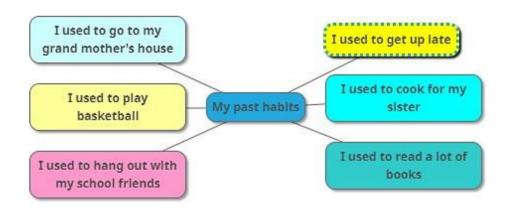
 On this chart you can categorize you vacation experiences in good experiences or bad experiences.

GOOD EXPERIENCES	BAD EXPERIENCES
-	-
-	-
-	-
-	-
-	-

My vacation experience Work in teams of four people. Once you finish click the SUBMIT button to register your answer.
Names: Tu respuesta
Write a short story about your vacation experiences by using the simple past tense and at least two adjectives to describe places. (50 words)
Tu respuesta
Enviar

Session 3

Cluster sample:



PAST HABITS Work in groups of four people. Once you finish click the SUBMIT button to register your answer.
NAMES: Tu respuesta
Write a short article based on the information from the mind map you have made. Remember that to describe an action in the past that you no longer do,
you need to use the modal verb "used to". (50 words) Tu respuesta
Enviar

Session 4

WORKSHEET #4

INSTRUCTION: In your teams, think about possible events in the future. Then, write questions about them to search information on internet.

Example: Will there be medical advances in the future?

Here you have some possible events:

- Climate change.
- Development of new technologies.
- Space travels.
- Virtual jobs.
- Medical advances.

POSSIBLE FUTURE EVENT	QUESTION	ANSWER

FUTURE EVENTS

Work in groups of three people. Once you finish click the SUBMIT button to register your answer.

Name:

Tu respuesta

Using the simple future tense, write an article per group based on the previous questions and the information selected from internet. Try to use the writing tips as well, those will help you to have a better production. (50 words)



Tu respuesta

Enviar

Survey validation by experts

Expert 1

UNIVERSIDAD TÉCNCA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

GENERAL INFORMATION FROM THE EXPERT:

Full Name: Sarah Jacqueline Iza Pazmiño.

Profession: English Professor

Workplace: Universidad Técnica de Ambato

Degrees

Undergraduate: Awarded degree in Human and Educational Sciences, specialized in English.

Institution: Universidad Técnica de Cotopaxi

Year: 2005

Postgraduate: Linguistics applied to Bilingual Teaching English - Spanish.

Institution: Pontificia Universidad Católica del Ecuador Sede Ibarra

Year: 2017

UNIVERSIDAD TÉCNCA DE AMBATO

FACUALTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALELS Y EXTRANJEROS

EXPERT JUDGMENT AND GENERAL EVALUATION

Instructions: Select the option that you consider pertinent to each question.

 Do you consider that the indicators of the study variable are immersed in their theoretical context:

Enough: X	Fairly Sufficient:	Insufficient:
Observations:		

Do you consider that the items of the knowledge test measure the indicators selected for the study variable:

Enough: X	Fairly Sufficient:	Insufficient:
Observations:		

Do you consider that the indicators and the items of the knowledge test measure the selected variable in the following way:

Enough: _X	Fairly Sufficient:	Insufficient:
Observations:		

4. Do you consider that the designed instrument measures the variables:

Enough: X	Fairly Sufficient:	Insufficient:
Observations:		. ,

5. Do you consider that the designed instrument is valid:

	Enough: X	Fairly Sufficient:	Insufficient:
0	bservations:		

UNIVERSIDAD TÉCNCA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

SURVEY INSTRUMENT VALIDATION

Theme: Brainstorming strategies and writing skill.

General Objective: To determine the relationship in the use of Brainstorming strategies and

the development of writing skill.

Instructions: Select the option that you consider pertinent to each item. R: Relevant NR: Not Relevant

NAME OF THE EXPERT: Mg. Sarah Jacqueline Iza Pazmiño

	Obj	ective	Varia	ble	Dim	ension	Ind	icator	Dra	fting	OBSERVATION
ITEM	R	NR	R	NR	R	NR	R	NR	R	NR	
1	Х		Х		Х		Х		X		
2	Х		Х		Х		Х		Х		
3	Х		Х		Х		Х		Х		
4	Х		Х		Х		Х		Х		
5	Х		Х		Х		Х		Х		
6	Х		Х		Х		Х		Х		
7	Х		Х		Х		Х		Х		
8	Х		Х		Х		X		X		

UNIVERSIDAD TÉCNCA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

EVIDENCE OF EXPERT JUDGMENT

Mg. Sarah Jacqueline Iza Pazmiño with identity card number: 0501741060, certify that I make the expert judgment of this instrument designed by the Student: Angie Liliana Aguirre Acosta, with identity card number: 1085949562 for undergraduate research titled Brainstorming Strategies and Writing Skill, a fundamental requirement to qualify for the Bachelor's degree in Pedagogía de los Idiomas Nacionales y Extranjeros mención Inglés at Universidad Técnica de Ambato.

In Ecuador, on the 16th June of the Year 2021.

Sincerely,



Mg. Sarah Jacqueline Iza Pazmiño.

C.I. 0501741060

UNIVERSIDAD TÉCNICA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

GENERAL INFORMATION FROM THE EXPERT:

Full Name: Edgar Guadia Encalada Trujillo
Profession: Professor
Degrees
Undergraduate: Bachelor degree in Education Sciences with major in the English Language
Institution: Universidad Técnica de Cotopaxi
Year: 2005
Postgraduate: Magister in Linguistics Applied to Bilingual Education English - Spanish
Institution: Universidad Católica del Ecuador – Sede Ibarra
Year: 2015

UNIVERSIDAD TÉCNCA DE AMBATO

FACUALTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALELS Y EXTRANJEROS

EXPERT JUDGMENT AND GENERAL EVALUATION

Instructions: Select the option that you consider pertinent to each question.

 Do you consider that the indicators of the study variable are immersed in their theoretical context:

	Enough:X_	Fairly Sufficient:	Insufficient:
--	-----------	--------------------	---------------

Observations:

Do you consider that the items of the knowledge test measure the indicators selected for the study variable:

Enough: _X	Fairly Sufficient:	Insufficient:

Observations:

Do you consider that the indicators and the items of the knowledge test measure the selected variable in the following way:

	Enough: _X	Fairly Sufficient:	Insufficient:	
o	bservations:		- • •	
				-

4. Do you consider that the designed instrument measures the variables:

Enough:X_	Fairly Sufficient:	Insufficient:

Observations:

5. Do you consider that the designed instrument is valid:

_

Enough:X_	Fairly Sufficient:	Insufficient:

Observations:

UNIVERSIDAD TÉCNCA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

SURVEY INSTRUMENT VALIDATION

Theme: Brainstorming strategies and writing skill.

General Objective: To determine the relationship in the use of Brainstorming strategies and

the development of writing skill.

Instructions: Select the option that you consider pertinent to each item. R: Relevant NR: Not Relevant

NAME OF THE EXPERT: Mg. Edgar Encalada Trujillo

ITEM	Objective		Variable		Dimension		Indicator		Drafting		OBSERVATION
	R	NR	R	NR	R	NR	R	NR	R	NR	
1	x		х		x		X		X		
2	x		х		х		x		x		
3	x		X		X		х		X		
4	X		х		х		х		x		
5	X		х		х		х		X		
6	x		х		х		х		х		
7	X		Х		Х		х		x		
8	х		Х		Х		Х		Х		

UNIVERSIDAD TÉCNICA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

EVIDENCE OF EXPERT JUDGMENT

I, Mg. Edghar Encalada Trujillo with identity card number: 0501824171 certify that I made the expert judgment of this instrument designed by the student: Angie Liliana Aguirre Acosta, with identity card number: 1085949562 for undergraduate research titled Brainstorming Strategies and Writing Skill, a fundamental requirement to qualify for the Bachelor's degree in Pedagogía de los Idiomas Nacionales y Extrajeros mención Inglés at Universidad Técnica de Ambato.

In Ecuador, on June 16th ,2021.

Sincerely,



Mg. Edgar Encalada Trujillo 0501824171 Students' survey

UNIVERSIDAD TÉCNCA DE AMBATO FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALELS Y EXTRANJEROS STUDENTS' SURVEY

THEME: Brainstorming strategies and writing skill.

Objective: To determine the relationship in the use of brainstorming strategies and the development of writing skill.

Instructions: Read carefully the following questions and choose the answer most related to your experience. All the answers are needed to be as genuine as possible.

1. How often does the teacher use brainstorming before a writing production?

- o Always
- Usually
- Sometimes
- o Rarely
- o Never

2. How often does the teacher help students to organize their thoughts to get better ideas and concepts about a topic?

- o Always
- o Usually
- Sometimes
- o Rarely
- o Never
- **3.** How often does the teacher give clear instructions before asking students to produce a written text?
 - o Always
 - o Usually
 - o Sometimes
 - Rarely
 - o Never

4. How often do you find difficulties to organize sentences with coherence in a paragraph?

- o Always
- o Usually
- Sometimes
- o Rarely
- o Never

5. How often does the teacher contribute with interesting topics that help you to develop or express your thoughts and ideas in a written production?

- o Always
- o Usually
- Sometimes
- o Rarely
- o Never

6. How often do you write e-mails, paragraphs or short stories in English?

- o Always
- o Usually
- o Sometimes
- o Rarely
- o Never

7. How often do you make a list, a mind map or an outline before a writing activity?

- o Always
- o Usually
- Sometimes
- o Rarely
- o Never

8. How often does the teacher give personal feedback based on grammar, vocabulary and coherence, after or during a written production?

- o Always
- o Usually
- Sometimes
- o Rarely
- o Never

Urkund analysis

Curiginal

Document Information

Analyzed document	THESIS CHAPTERS I - IV.docx (D110597975)
Submitted	7/19/2021 10:23:00 PM
Submitted by	
Submitter email	aaguirre6897@uta.edu.ec
Similarity	8%
Analysis address	elsamchimboc.uta@analysis.urkund.com
rces included in t	he report

W	URL: https://www.researchgate.net/publication/308556626_The_Effect_of_Brainstorming_as_a_Pr e-writing_Strategy_on_EFL_Advanced_Learners'_Writing_Ability Fetched: 12/14/2019 8:15:13 AM	88	3
w	URL: https://repositorio.uta.edu.ec/bitstream/123456789/31062/1/18004788022%20Llerena%20Go mez%20Rosa%20Gabriela.pdf Fetched: 12/26/2020 8:06:21 PM	88	1
w	URL: https://repositorio.uta.edu.ec/jspui/bitstream/123456789/31198/1/Jefferson%20Javier%20Pove da%20Taipe%201804921326.pdf Fetched: 12/15/2020 8:01:14 AM	88	1

Dra. Mg. Mayorie Chimbo Cáceres TUTOR TRABAJO TITULACIÓN