

The Use of Whispering Game as Intervention to Enhance Students' Topographic Memory: A Qualitative Action Research

John Patrick Arcite ^{*ID}, Myra Fe Tomales, Tedd Joshua Ancla

Teacher Education Department, Davao de Oro State College, Philippines

**Corresponding Author: johnpatrick.arcite@ddosc.edu.ph*

Received: 15 January 2024 / Accepted: 07 December 2024 / Published: 19 December 2024

Abstract: Topographic memory plays a vital role in learning, significantly impacting learning efficiency however researchers recognized poor memory skills as a common hurdle for students in their academic pursuits. To tackle this issue, the researchers focused on employing the Whispering Game to enhance the topographic memory skills of fifteen (15) grade 8 students. Through in-depth interviews and focus group discussions, the researchers collected data on the students' memory skills in relation to the Topography of the Continents. After six weeks of implementing the intervention, data analysis revealed several themes. It became evident that the students possessed varying degrees of memory skills, ranging from decent to null. Moreover, the study shed light on the challenges that faced by the students in their learning, such as lack of concentration, information overload, unfamiliarity with certain concepts, and gaps in discussions. These factors directly influence students' behavior and interest in learning. However, the introduction of the Whispering Game proved beneficial. Students reported that the game facilitated knowledge acquisition and improved their memory skills by offering opportunities for practice and employing memory-enhancing tactics. Additionally, students recognized the importance of continuous learning, emphasized the need for concentration to retain information effectively, and enjoyed the learning experience. Overall, the utilization of the Whispering Game as a means to enhance topographic memory skills not only enables students to improve their present learning abilities but also equips them with valuable skills for future endeavors.

Keywords: Whispering Game, Memory Skills, Topographic Memory, Intervention, Action Research, Philippines

INTRODUCTION

Recalling and comprehending geographical knowledge is an essential skill for pupils, especially when learning maps. The retention of this knowledge, which is necessary for success in courses like geography and social studies, is a challenge for many students. Pupils frequently struggle to memorize important map information, such as the locations of prominent geographical landmarks, capital cities, and nations. This difficulty is increased by the fact that maps call for more than just rote memorization they also call for an awareness of spatial relationships and the capacity to use that knowledge in a variety of situations.

The conventional approaches to teaching geography, which frequently mostly focus on passive learning strategies, may be partly to blame for the lack of memory abilities in studying maps. These teaching strategies, which include having students read textbooks or listen to lectures, do not actively include them in the learning process, which results in low retention of material connected to maps. To improve students' retention and comprehension of geographical knowledge, more interactive teaching strategies have been proposed, such as the use of digital mapping tools or practical exercises. In many educational contexts, these approaches are still not widely used.

It was also observed in the local context of one of the secondary schools in New Bataan, Davao de Oro that students face several learning problems inside the classroom, such as difficulties in remembering important information from the discussion, which significantly impacts their memory skills and grades. Aside from that, the researchers discovered that students in the Araling Panlipunan subject needed assistance remembering different names of places, landforms, regions, and even countries in each continent of the world, which resulted in less interest in Topography topics as they only focused on discussing facts without deeper concentration. In most cases, students needed help to retain their knowledge from the previous lectures due to the teaching approach, which was mostly done through discussion or narration.

The problem has been identified in the field as it may affect student's academic performance, which is why the researchers are urged to conduct action research as well as this study to promote the use of whispering games, given that the current educational system emphasizes relevant learning in which students can cope with lectures of a subject based on societal demands. Students may improve their memory skills in retaining knowledge of the continent's topographic information by implementing this game, but it also creates enjoyment, good communication, and fosters unity.

REVIEW OF RELATED LITERATURE

Poor Working Memory Skills

Working memory and academic achievement are significantly linked, not a measure of intelligence but a unique cognitive capacity associated with academic performance. Early identification of a student's working memory profile can therefore identify strengths and deficiencies, enabling better management and assistance for academic performance (Almeyda et al., 2021). Furthermore, working memory is not a substitute for IQ but rather a distinct cognitive ability with particular ties to academic achievement, with working memory being a stronger predictor of future academic success than IQ at the beginning of formal education.

The learning difficulties these children face arise because they cannot meet the memory demands of many structured learning activities (Gathercole et al., 2006). As a result, their working memory fills up and they lose the essential knowledge required to direct the ongoing task, such as the sentence they are trying to compose or the series of instructions they must follow.

Furthermore, according to Gathercole et al. (2016), the inattentiveness of children with poor working memory arises for just this reason: the children lose the crucial information needed to guide the ongoing activity and shift their attention away from the task at hand. In this way, memory loss may masquerade as the failure of attention. Memory problems are relatively common during childhood and are typically associated with poor academic learning. Our capacity to process information, or working memory, is crucial to learning from kindergarten through college. Other than when items were repeated simultaneously, there was no convincing evidence that elaboration had an impact on working memory.

In addition, reading and listening disabilities can be characterized by marked difficulties in mastering skills, including word recognition, spelling, and reading comprehension. Common failures for children with poor working memory included forgetting lengthy instructions, place-keeping errors like missing out letters or words in a sentence, and failure to cope with simultaneous processing and storage demands. This is because the activity's concurrent storing and processing demands are more significant than the children's working memory capacity (Gathercole et al., 2016). Although in isolation, the child would likely be able to meet these storage requirements without difficulty.

Therefore, there is memory failure resulting from the increased working memory requirements caused by the increasing processing demands. However, it has been hypothesized that by reducing working memory demands in the classroom, learning outcomes for students with poor working memory skills could be significantly enhanced. It is crucial to employ various strategies to reduce, through efficient classroom management, the memory-related errors that children with working memory deficits typically suffer during classroom-based learning activities.

Topographic Memory

Topography is the study of Earth's physical features or the mapping of these features. Humans must be able to navigate to adapt successfully to the living environment and successfully master daily life. Hence, memory certainly plays a crucial role in navigation, where people spend much time recalling and figuring out a route or shortcut to reach a place (Palmiero & Piccardi, 2017).

Several studies have highlighted the importance of map reading in the study of geography. Maps are indispensable tools used by geographers at different levels and for various purposes (Filgona et al., 2016). Meanwhile, geographers make use of different types of maps where the topographical map is one such map which is an integral tool in map reading at the secondary school level in Ganye Educational Zone. According to the study of Filgona et al. (2016), studies have shown that it is essential that topography teachers incorporate hands-on learning into their daily instruction. There exists a likely gap between the use of this instructional technique in teaching topographical maps and students' performance in practical geography in schools.

Hence, reading and interpreting topographical maps demand specific skills from the students and teachers (Filgona et al., 2016). These skills include identifying relief features on topographical maps, perceiving three-dimensional features depicted as two-dimensional on the flat map, and describing human activities in the area mapped in a simple form. However, several factors have negatively impacted the effective teaching and learning of topographical maps. One of the main factors identified, which is the focus of this study, is the teacher-related factor, precisely, the instructional strategies adopted by geography teachers to teach topographical maps.

Thus, the teaching of topographical maps should be practically oriented. Students should be practically involved in teaching-learning through exposure to topographical maps and fieldwork. Students should be encouraged to construct models and distinguish between various geographic aspects.

Whispering Game as an intervention

The whispering game is one technique that can teach vocabulary mastery, which helps students demonstrate the importance of communicating clearly with others. The "whisper race" is played all over the world in which players send messages back and forth along a line of players until the last participant, who then records the message. One method for making the teaching-learning process more enjoyable and inspiring pupils to expand their vocabulary is the whispering game.

According to some research, this game is fun and challenging because it involves teamwork and race. It can be used to practice students' skills in memorizing words and sentences or reviewing old ones. This oral game makes the students improve their listening, speaking, and remembering skills. Hence, students in groups must work well together to whisper a word the teacher gives in, telling a sentence passed through the line of people until the last player announces the message to the whole group (Lubis et al., 2022). Students will be able to show how important to remember the messages as it can be easy to miss what others are saying and discuss what it means to communicate. Meanwhile, David Thomas claims that the Whispering Game, also known as "Chinese Whispers," is a party game where a whispered message is passed around a line with the hope that by the time it completes the circuit, it would become comically twisted or exaggerated.

Furthermore, according to the study of Holidiyah (2021) from Indonesia, he found that by using the whispering game, the students can memorize vocabulary unconsciously because the sentence conveyed by their friend will influence the mind constantly to remember what they are listening to. Therefore, the whispering game helps to develop an enthusiastic learner; to motivate and engage students; Reduce monotonous learning methods; and help students with focus, self-esteem, and memory (Hasibuan, 2020). The serial whisper is a game of quickly and accurately conveying information by whispering from one student to another quickly and accurately. The whispering game is a unique method that can make the learning process more enjoyable and

motivate the students. Therefore, others stated that games are beneficial and significant teaching and learning tools for students and teachers (Hasibuan, 2020).

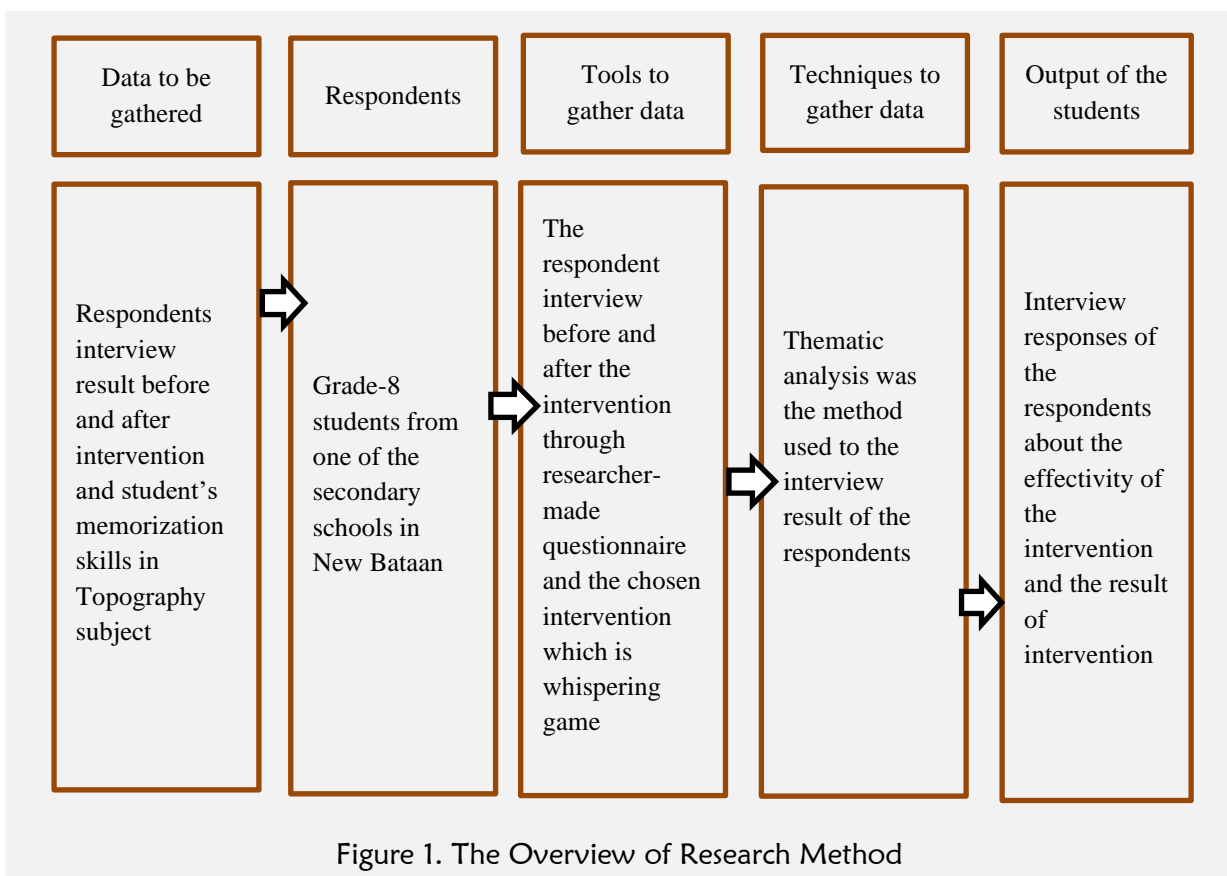
Research Questions

The researchers used whispering games to help students enhance their memorization skills to understand further the different forms and features of land surfaces in the Topography subject. The following questions will be addressed in the conduct of the study:

1. How do students describe their memorization skills before intervention?
2. How does the utilization of the whispering game as an intervention improve students' memorization skills in Topography?
3. What are the student's reflective insights on implementing the Whispering game as an intervention to improve their memory skills that can be shared to others?

METHOD

This paper will use Generic qualitative research, a type of qualitative approach that "can stand alone as a researcher's articulated approach." Unlike other qualitative inquiries, this type of approach does not base its concept on philosophical assumptions that could lead to any other methodologies. This will identify how the activity called the whispering game is as an intervention to help enhance students' memorization skills in the Topography subject. Generic qualitative research is a methodology that seeks to understand human experience by taking a qualitative stance and using qualitative procedures. It draws on the strengths of one or more qualitative approaches (Kostere & Kostere, 2021).

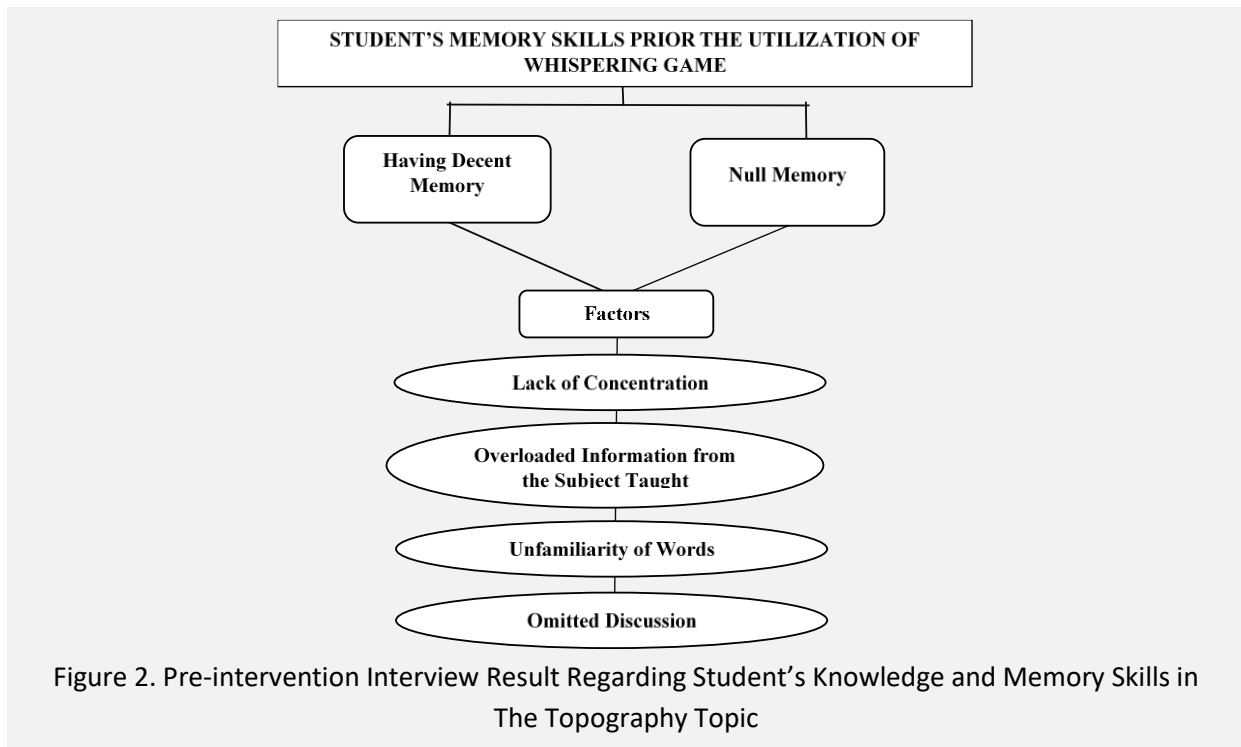


The participants of this study will be grade-8 students from one of the secondary schools in New Bataan Davao De Oro. There will be 15 participants in this study, consisting of eight (8) students from the in-depth Interview and seven (7) students from the focus group discussion.

According to the study of Hennink & Kaiser (2022) they found out that studies using empirical data attained saturation within a constrained range of interviews (9–17) or focus group discussion (4–8), particularly studies with reasonably homogeneous populations and constrained defined objectives. Furthermore, Fugard & Potts (2015) recommended that qualitative studies require a minimum sample size of at least 12 participants to reach data saturation. Thus, a sample of 12 was deemed sufficient for the qualitative analysis of this study.

RESULTS & DISCUSSION

Students' memory skills on the selected Topography Topics Prior the Intervention



As detailed from Data Collection Procedure, the researchers conducted a pre-intervention interview to attain the study's first objective, which is to assess the students' knowledge and memory skills in the Topography topics before the implementation phase (see figure 2). Through face-to-face platform, the researchers were able to meet the students and inquire them questions. To specifically describe the students' memory skills Topography, the topic under the topography of the seven continents was inquired to them to assess the knowledge and memory skills they have acquired from their first grading period.

Having Decent Memory

From the operational definition of the term 'decent', it is the adequate quality or level of the student's knowledge on the Topography topics that were discussed on their first grading period. Most of the general concepts of the topics were pointed by the students but not profoundly elaborated.

Several participants, were able to respond to the interview questions. However, they were unable to elaborate on any conspicuous topographic features on the largest land areas of the continent. It was evident that the students general understanding of the chosen topics of topography were moderate and limited, since they were unable to point out the detailed information of the topographical information on each continent. To mention, student 3 from in-depth interview and student 14 from focus group discussion stated their ideas base on what they have remembered about the topography on the Continent of Asia by saying,

“Kuan maam sa Asia kay naa tong taas kayo nga bukid ma’am kadtong Himalayas ma’am ambot kung asa to dapit ga lugar ...niya kanang sa mga topograpiya sa atong lugar sama anang dri sa atoa kay nay mga bukid naa tay mga falls mga ing-ana lang ma’am” (IDI_3)

("Kuan maam in Asia because it has high mountains, ma'am, those Himalayas, ma'am, I don't know where that place is...then the topography of our area just like in our area where there are mountains, we have falls. just say it ma'am")

“Dri sa atong lugar ma’am kay isa mani sa gi example sapag dicuss ma’am nga dri sa atoa kay naa tay mga bukid, mga sapa, naa poy falls tapos kanang patag pud nga lugar ma’am, kana ma’am” (FGD_6)

("In our area, ma'am, because this is one of the examples of dissucss, ma'am, that here we have fields, streams, there are also falls, then the flat area too, ma'am, that's it, ma'am")

Null Memory

Null is described as the voidness of knowledge in the selected topics, which is the complete opposite of the first theme from the investigation into students' prior knowledge before intervention. During the preliminary interview, majority of the students revealed that there are some topics which they could not recall any idea presented.

When the students were queried about on how they described their memory skills on the Topography topics, most of the students responded the same thoughts expressing that their memory skills are in moderate level based on what they might able to recall or remember on the topics presented. However, there are also some of the students who are not able to recall or remember any information based on the topics presented. For instance, student 2, 3 and 4 responded:

“Sa kini nga mga kontinente ma’am? nakalimot ko ma’am oii, wala kayo man to na focus amo discussion dri ma’am naa toy mga sample pero nakalimot nako unsa to ma’am” (IDI_2)

("on this continent ma’am? I forgot ma'am, because our discussion is not the focus here, there are examples but I forgot what that is ma'am")

“Kalimot mn ko dri ma’am” (IDI_3)

("I forgot, ma'am")

“Kalimot man ko dri ma’am, wala koy idea diri po” (IDI_4)

("I forgot, ma'am, I had no idea here po")

Lack of Concentration

Most of the students responded that one of the major reasons on why they encountered difficulties in memorizing facts or information regarding on the topography topics was because of having lack of concentration due to major destructions such as noises. Hence, most of the students from in-depth interview admitted to share their challenges on their memory skills by saying:

“Dili ko ka con concentrate ma’am, tungod sa saba kaayo maam, kajang ang mga classmates nako kay sigi og shagit shagit og murag ma tental maam ba, mao ng maglisod kog hinumdom og dali nako ma limtan” (IDI_1)

(“I can't concentrate, ma'am, because of how noisy you are, ma'am, my classmates are always shouting as if it's a temptation, ma'am, that's why it's hard for me to remember and I can easily forget”)

“Kanang kuan ma'am dili ko ka concentrate maong maglisod kog memorize niya naay magsinamok ma'am ba” (IDI_2)

(“That's when I can't concentrate ma'am because I'll have a hard time memorizing and there's a lot of distractions ma'am”)

Overloaded information from the subject taught

This factor was identified by the researchers as it can be associated to the student's interest in Topography topics resulted into poor memory skills. During the interview, some of the students revealed that because of the multiple information given, as well as the subjects which they need to acquire, it makes them difficult to retain knowledge and memorize information. In connection with this, students from in-depth interview responded:

“Kuan ma'am tungod bitaw sa paspas, mag sagol, mag sabay niya maong dili ko ka focus ma'am” (IDI_3)

(“Because of the very fast, mixing, and simultaneous information so I can't focus ma'am”)

“Niya isa pud ana ma'am kay kanang tungod nasa kadaghan a ma'am nga lisod na bitaw hinumdoman” (IDI_4)

(“Also, ma'am, because of the amount of information given, ma'am, it is difficult to remember.”)

Omitted discussion

The strategies of teachers in teaching Araling Panlipunan subjects were also recognized by students as a factor in having poor memory skills for topography topics. Some of the students responded that due to the teacher's lack of explanation and discussion of the lesson, it became a factor on why there was some information that they did not know or could not even recall. Some of the participants admitted that they were not satisfied by how their teacher taught the lesson on their Topography topics on the first grading period. In connection with this, students from in-depth interview stated their answers by saying:

“Sa Europe ma'am kay nakalimot man ko ma'am oii ..wala mn gud kayo namo gi focus ang mga topography diria sa discussion namo” (IDI_1)

(“In Europe, ma'am, because I forgot, ma'am, oii ..we did not focus on the topography here in our discussion”)

“...kanang maglisod gyud pud kog hinumdom ma'am, labi na kung wala kaayo na focus og discuss kana nga topic ma'am, kay kasagaran murag pahapyaw lang ang pag discuss ma'am or usahay pa sulat lang sa amoa” (IDI_5)

("...it's really hard for me to remember, ma'am, especially if there's not much focus and discussion on that topic, ma'am, because it's usually just a casual discussion, ma'am, or sometimes it's just a letter to us")

Additionally, students from the focus group discussion provided their explanations for why some information was difficult for them to remember or recall. For instance, student 10 stated:

"Tama-tama lang gyud akong ma hinumduman sa topography nga topics ma'am kay aside sa kadtong mga familiar akong kaya ma hinumduman kay naa gyud poy uban information ma'am nga wala na kaayo na focus og discuss, igo nalang gi pa sulat sa amoa labi na kung busy sila ma'am." (FGD_2)

("I can remember the topography topics moderately, ma'am, aside from those that I am familiar with, so I can remember because there is really other information, ma'am, because there is some information ma'am which does not given much time to focus and discussion, it is enough to write to It's okay if they're busy, ma'am.")

Based on the result, omitted discussion is also a factor of poor memory skills, where it is considered as the contrary to the complexity of the subject theme identified by the researchers. Therefore, teacher should use an appropriate method and technique in teaching process, so that student can understand and enjoy in learning process. Memory is essential to all learning, because it allows individual to store and retrieve the information that they learn.

The Utilization of Whispering Game to Enhance Student's Memorization Skills in Topography

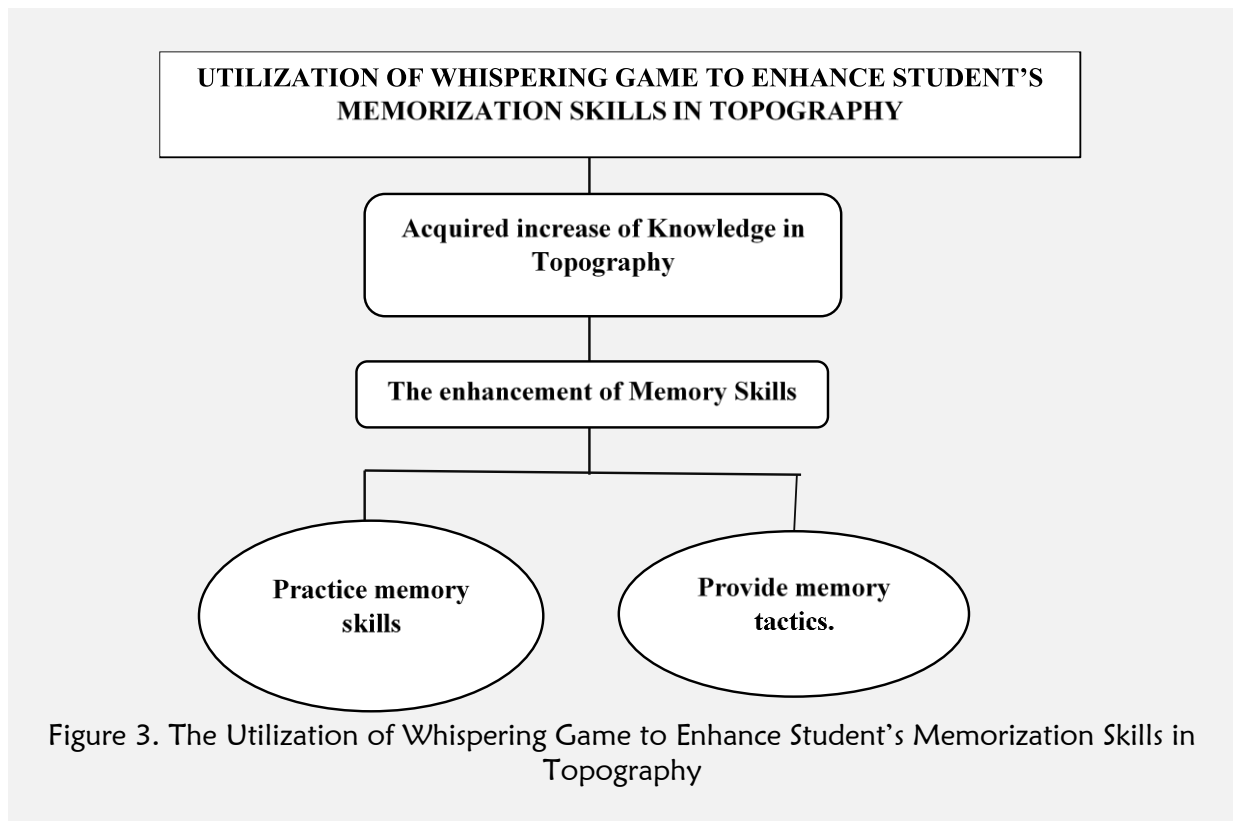


Figure 3. The Utilization of Whispering Game to Enhance Student's Memorization Skills in Topography

The researchers proceeded to second phase of the study which is the incorporation of a game called whispering game, known as message relay as intervention to enhance the students' memory skills in Topography topics under Araling Panlipunan subject. The implementation phase was carried out within a month where participants were tasked to participate in a whispering game per topic in each session. Aside from helping students to enhance their memory skills and inculcating knowledge, the researchers also took emphasis on addressing the challenges encountered by students based on data gathered from pre-intervention phase. With the study's goal of enhancing students' memory skills in Topography topics, the researchers divided each topic per session to make the learning gradual and effective.

Session 1. The topography on the Continent of Asia

The researchers conducted the first session on March 3, 2023. The topic that was played by the students using the whispering game is about the topography on the Continent of Asia. After the game the researchers ask the students to share what they have remember and learned from the topic that they played. For instance, Student 2 from in-depth interview and Students 13 from focus group discussion enthusiastically shared what they remember and learned from the topic they played on the game by saying:

“Ang natun-an nako sa atong dula og sa topic nga topograpiya sa Asia kay kanang kasagaran di I sa mga lugar ani nga continente kay kanang puno og mga bukid-bukid, dili lang dri sa atoa kundi pati na sa laing lugar sa Asya parehas atong Himalayas nga pinakadakong kabukiran sa tibook lugar, niya naay mga lake Baikal nga pinakalalom nga lawa sa tibook kalibutan. Niya naay mga talampas, kapatagan, steppes, naa pud di toy gamay nga desyerto.” (IDI_2)

(What I learned in our play and the topic of topography in Asia is that I don't usually find it in places on this continent that are full of fields, not only here but also in other places in Asia we have the Himalayas which are the biggest mountains in the whole area, they have Lake Baikal which is the deepest lake in the whole world. It has plateaus, plains, steppes, there is also a small desert.)

“After sa atong dula, isa sa akong na tun-an kay kanang ang mga impormasyon sa Asya nga continent, nga sa kini (continent of Asia) di I kay dili lang tong mga bukid, mga dagat or falls ang naa, naa pud di toy mga kanang steppes, kapatagan, kanang mga gagmay nga buntod o kanang talampas parehas ana chocolate hills diri sa Pilipinas, tapos kadto pong Himalayas mountain nga maoy pinaka taas nga bukid sa tanan, kana lang ma'am” (FGD_5)

(After our game, one of the things that I studied on the right was the information on the continent of Asia, so on this (continent of Asia) I don't know because there are not only fields, seas or falls, there are also toys right steppes, plains, right small hills or right plateaus like the chocolate hills here in the Philippines, then it was the Himalayas Mountain that was the highest mountain of all, that's all ma'am)

Session 2. The topography on the Continent of Africa

The second session, was still conducted at the same classroom and participants on March 23,2023, in which the topic that was played by the students using the whispering game is about the topography on the Continent of Africa. Using the same process, student 1 from in-depth interview and Student 11 from focus group discussion have shared what they remember and learned from the topic they played on the game by expressing:

“Ang natun-an nako sa topic kay kanang aside sa dessert nga naa aning nga continent (Africa) kay kanang naa di I ni kanang 8 ka klase nga naay mga pangalan, parehas atong kanang sahara desert, naay great lakes of kaang mga rainforest...” (IDI_1)

("What I learned in the topic, is that aside from the dessert, which continent (Africa) is there, I don't know the 8 classes, which have names, we have the same sahara desert, it's great lakes of kaang rainforests...")

“I learn nga sa Africa kay ang main topography didto kay kanang sahara desert og kanang sahel, naay Ethiopian highlands or kanang bukid, kanang abi nakog desyerto rato didto tanan” (FGD_3)

("I learned that in Africa, the main topography there is the sahara desert on the right and the sahel on the right, there is the Ethiopian highlands or the countryside on the right, I think it's all desert there")

Session 3. The topography on the Continent of North and South America

On the third session which was conducted on March 28, 2023, the topic that was played by the students using the whispering game is about the topography on the Continent of North and South America. Using the same process, student 2 from in-depth interview and Student 14 from focus group discussion have shared what they remember and learned from the topic they played on the game by expressing:

“Akong natun-an sa topic ma’am kay sa north og south America di I kay parehas silang naa mga dagkong mountains, naay patag nga lugar naatong canadian shield og caribbean, tapos sa south kay naa tong Andes Mountain ma’am, naay mga sapa like katong Amazon river ma’am, karon ko kabalo sa sa America d I na nga part dapat” (IDI_2)

(I learned from the topic, that in North and South America, they both have big mountains, there is a flat area in the Canadian shield and the Caribbean, then in the south, there is the Andes Mountain, ma'am, there are streams like the Amazon river, ma'am, now I don't know about the ones in America that I should be part of")

“Na learned nako nga dri sa north og south America nga kontinente kay naay mga dagkong mountains like katong Andes, mga rivers like katong Amazon, popular nga nga river pero wala koy ideya una kung aha na siya, kadtong mga oceans ma’am katong pacific og atlantic” (FGD_6)

("I learned that in the North and South America continents there are big mountains like the Andes, rivers like the Amazon, it's a popular river but I have no idea what it is, those oceans are the pacific and atlantic")

Session 4. The topography on the Continent of Antarctica

On April 05, 2023 the fourth session was conducted, and the topic played by the students using the whispering game is about the topography on the Continent of Antarctica. The same process process is still followed by the researchers before and after the game. For instance, Student 5 from in-depth interview and Student 9 from focus group discussion shared what they remember and learned from the topic they played on the game by saying:

“Akong natun-an ani kay sa kadtong akong unang gi ingon nga puno og ice dri nga lugar kulang pa di to... base sa atong dula aside sa ice kay ang lalom d l ato kay kanang mga bukid, mga dagkong valleys nga naa sa tunga mga ga mountains or hills murag kanang boundaries” (IDI_5)

(As what I have learned in Antarctica, my first ideas about this continent that is it full of ice is not enough, based on our game, aside from the ice, we are deep in the right fields, big valleys it's in the middle of the mountains or hills, it's like right boundaries")

“Ang Natun-an nako dri nga topic kay ang Antarctica kay naa poy mga valleys og kanang mga patag nga lugar nga naa lalom sa ice natabunan lang” (FGD_1)

("What I learned about the topic of Antarctica is that there are valleys and flat areas deep in the ice that are just covered)

Session 5. The topography on the Continent of Europe

On the fifth session it was conducted on April 14,2023, the topic that was played by the students using the whispering game is about the topography on the Continent of Europe. Using the same process, student 4 from in-depth interview and Student 15 from focus group discussion have shared what they remember and learned from the topic they played on the game by expressing:

“Sa Europe nga continent atong una kay dili kaayo ko familiar sa mga topography diri, pero sa atong dula ma’am, sa Europe kay naa tong Caspean sea, Black Sea, naa sab tong Ural Mountains, og platues ma’am” (IDI_4)

(Our first continent is Europe, I am not very familiar with the topography here, but our game is in interesting, we explore and study Europe. there is the Caspean sea, the Black Sea, there are also the Ural Mountains, and plateaus.)

“Base sa atong g dula karon ma’am nga about sa Topography sa Europe, kay natun-an nako nga kini dri kay naa kanang lowland og uplands nga type sa land nila ma’am, aisde ana naa pud tong mga platues, kadtong Black og Caspean Sea ma’am” (FGD_7)

(Based on our game today about Topography in Europe, I learned a lot that there are lowlands and uplands type in their land, and on the other hand there are also the plateaus, the Black and Caspean Sea)

Session 6. The topography on the Continent of Australia

The sixth session was conducted on April 17,2023, and the topic that was played by the students using the whispering game is about the topography on the Continent of Australia. Using the same process, the researchers gathered the learning of the students by their reflections. In connection with this, student 6 from in-depth interview and student 9 from focus group discussion share what they had learned by saying:

“Akong natun-an ani nga topic kay kanang ang Australia nga continent kay mao nag ang pinaka dakong landmass sa tanang continent, niya kini dri nga lugar kay daghan ang part nga kanang balason, same sa ubang continent naa gyapoy kanang

mga mountains, mga patag og kanang lawa then naay part nga dessert pud same sa Africa” (IDI_6)

(I learned this topic that the continent of Australia is the largest land mass in all continents, it is not the place because there are many parts that are sandy, same as in other continents there are mountains, plains and right lake, then there is a dessert part, same as in Africa")

“Natun-an nako nga sa Australia bisan og pinakagamay siya nga continent pero mao pud pinakadako og landmass sa tanang continent, naay balason nga area, dagkong mga bukid og mga basin ma’am nga bukid tong purma og mga murag bowl” (FGD_1)

("I learned that in Australia, even though it is the smallest continent, it is also the largest landmass in all the continents, there are sandy areas, large fields and basins, the fields are like bowls")

From the game, the researchers had observed how determined the students are to participate in the game and learned from the messages written on each piece of paper that they required to memorize and pass on to their teammates. On the other hand, the other reflections presented by the students, regardless of the language they used, also gave emphasis on the game they played and the topic that was included.

After completing the implementation phase, the researchers proceeded to re-gathering of data through in-depth interview and focus group discussion to the selected participants as a next step to attain the second objective of the study, which is to assess the Student’s Memorization Skills in Topography after the Utilization of Whispering Game. From the analysis of the responses, the researchers can assert that there are changes and modification of responses from students. From this, a new set of themes were created out of the participants’ ideas and answers.

Acquired increase of knowledge in Topography

It pertains to the improvement of the students’ knowledge in Topography of the seven (7) continents topics provided by the researchers. Majority of the students have shared their responses regarding on the progress that they had acquired after the intervention, as well as in comparison to their responses from pre-intervention interview. After almost a month of conducting and participating the game with different topics, most of the students were able to retain the knowledge that they acquire during the process of intervention.

In one of the interviews, Student 1, 2, 3 and 5 from in-depth interview responded to the question when he asks about how Whispering Game help him to improve his topographic memory skills by saying:

“Na improve akong knowledge about sa topography sa mga continent ma’am, kay parehas atong sa Africa nga kaabi nako og puro lang dessert ma’am pero naa sab d I mga lake didtoa nga continent parehas atong African Lakes” (IDI_1)

("I have improved my knowledge about the topography of the continents, ma’am, because same in Africa, I think it’s just full of dessert, ma’am, but there are also lakes on that continent like African Lakes")

“.... Kuan ma’am mas nadungagan ang akong nahibaw-an 9g natun-an Maam nga naa d I kanang sa asya nga naa díay mga ing-ana na klase sa parehas anang mga bundok, mga klase.x nga hayop” (IDI_2)

(“Kuan ma’am my knowledge has increased for what I know and learned ma’am that there is in Asia, that there are such classes like mountains and different types of animals.”)

“Daghan kog natun-an Maam Tungod kay atong dula kay

The data being gathered from the interview proved that there is a significant development on the student’s knowledge about the different topics presented by the researchers in the game. The response of students reveals that whispering game allows them to cultivate learning and interest to learn effectively.

The enhancement of memory skills

This theme was identified by the researchers as one of the effects of utilizing whispering game for the enhancement of student’s memory skills in Topography. With this, based on the data analysis result it consist two (2) sub-themes namely; practice of memory skills and provid memory tactics. Furthermore, these sub-themes will be discussed.

Practice memory skills

This theme was used and identified by the researchers based on the post-interview intervention responses by the students. According to the students, the whispering game help them to practice and assess their memorization skills specifically on their Topographic memory, in comparison to their pre-interview responses where they can describe their memory skills from lower to moderate memory level, where some of them are able to share what they have remember, while other cannot. In connection with this, students from in-depth interview have shared how whispering game help to practice their memory skills by saying:

“Mas napa improve ma’am, parehas anang pag mag memorize ta ma’am, tapos ibutang nato sa atog huna huna kung unsay akong i memorize para inag received sa uban mas matarong nila” (IDI_1)

(“It’s improved ma’am, just like when we’re going to memorize ma’am, then we put in our minds on what I memorize so that others can receive it more correctly”)

“.... Mas na improve akong skills ma’am akong natun-an kay nadungagan sa topograpiya saa subject”

And

“Sa pag send og information ma’am kanang nakatabang siya nga maa mapa improve nako the way mo send kog message sa akong kauban nga kinahanglan gyud siya tarungon og basa paminaw pag -ayo. Niya sa pag received pud ma’am nakatabang pud nga paminawon og tarong para tama atong pag deliver.” (IDI_3)

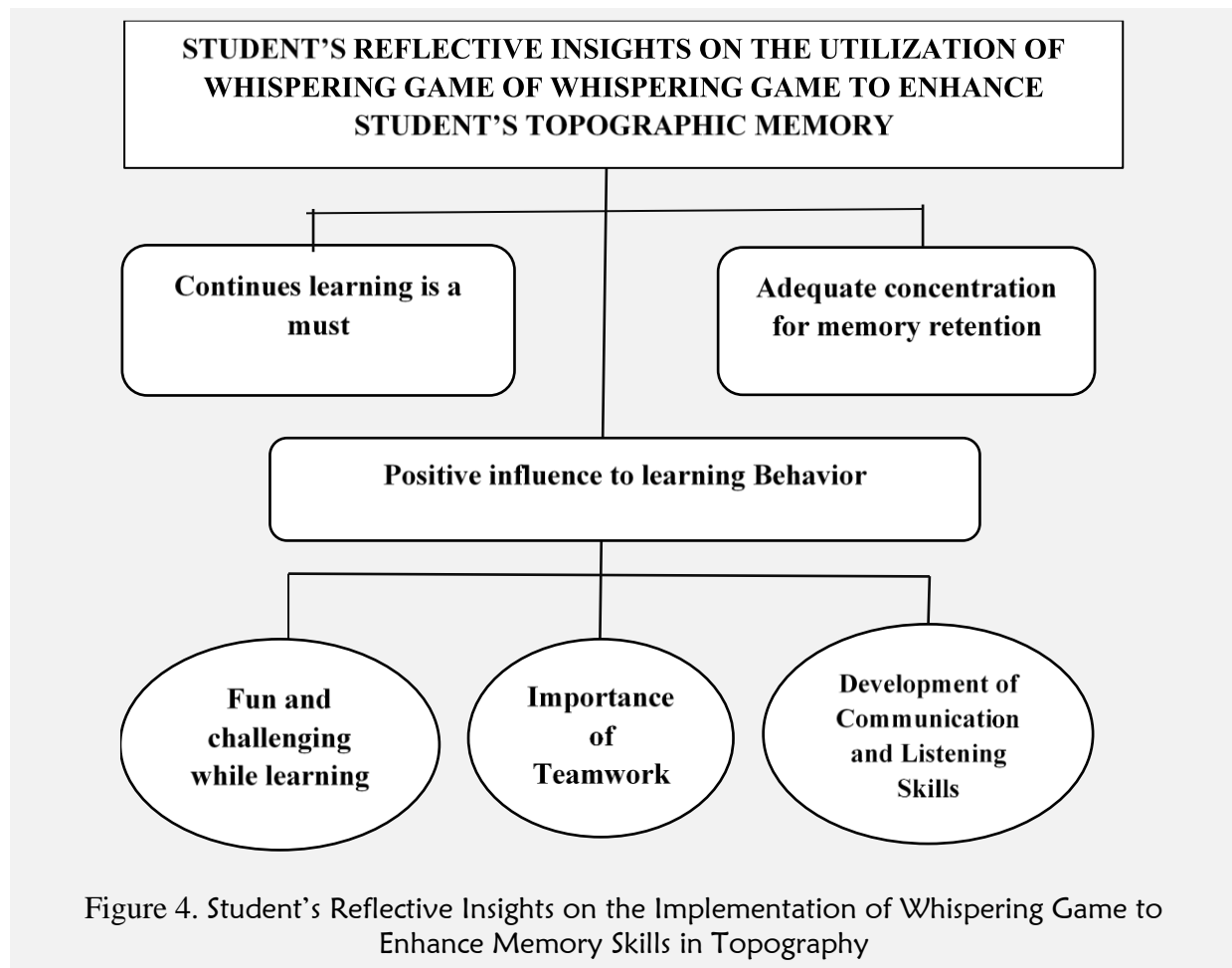
(“It improves my skills ma’am, my learning in Topography subject has been increased”)

And

(“In sending information ma’am, it helped me ma’am to improve the way how I send the message into my companion, for which it is really needed to read and listen carefully. And then in receiving messages it also helped me to listen carefully to be delivered correctly)

Student’s Reflective Insights on the Implementation of Whispering Game to Enhance Memory Skills in Topography

During the conduct of pos-intervention interview, the researchers also ask the student's regarding on their insights upon the utilization of Whispering Game. With this, the researchers identified three (3) essential main themes which are: the continues learning is a must; Adequate concentration for memory retention; and the positive influence of Whispering Game to the Student's Learning Behavior.



Continues learning is must

It pertains to the reflective insights acquired by the students from the game intervention using the different topics of Topography topic. After the implementation of intervention majority of the students from both in-depth interview and focus group discussion have shared what they feel and/or realize the things that they still needed to learn specifically on the topography topics under Araling Panlipunan subject. In connection with this, student 2, 3 and 4 from in-depth interview have shared their realizations by saying:

"Na realize nako ma'am nga daghan pa gyud di i dapat kong matun-an sa topograpiya nga topic sama anang mga isla, mga lake then mga klase klase sa hayop, kana bitawng mga lawa kanang abi namog og wa pero naa man d i sa Asya, Africa og saa uban pa nga kontinente." (IDI_2)

("I realized, ma'am, that there is still a lot that I should not learn about topography, such as islands, lakes, and animal species, and alone lakes. We thought they were not included, but there even in Asia, Africa and other continents.")

“niya ang pinaka na realize gyud nako ma’am kay importante gyud nga learning ma’am, kay dako manig tabang tabang, makadagdag og knowledge sa atoa ma’am....” (IDI_3)

(“The thing I realize the most, ma’am, is that it's really important to learn about the topic, ma’am where can you help to add knowledge to us ma’am...”)

“Maong na realize nako ma’am nga importante gyud nga maminaw

Adequate concentration for memory retention

This theme was used and identified by the researchers based on the responses of the students after the game intervention. Some of the students wanted to share the importance of concentration in terms of memorization to their peers, in which they realize that the retention of memory is also an integral part of remembering information as well as acquiring knowledge. For instance, student 1,2, 5 and 8 had shared what they realize by saying:

“Ang akong gusto i share sa ilaha kay kanang una, dapat naay concentration kay para nga makuha gyud ang tama nga impormasyon nga gihatag, paminawon gyud og tarong og basahon og tarong niya i familiarize...” (IDI_1)

(“What I want to share with them is that there is a lesson that can be learned to help them get information first, there must be concentration because in order to get the right and accurate detailed information, listen carefully and familiarize them with what they read...”)

Student 2, also expressed their responses;

“.....Niya kuan pud ma'am para ma improve atong memory kailngan mag concentrate, tas focus sa goal niya ato gyud isulod sa huna-huna pag-ayo para mahinumduman” (IDI_2)

(“.... Then in order to improve our memory, we need to concentrate, we must focus on our goal and put it in our minds carefully so that we can remember what we should learn”)

Positive influence to the Student’s Learning Behavior

During the continuation of the interview, the researchers gathered more responses from the students regarding on the positive influence of the Whispering Game, including their suggestions to improve the process of the game and possible skills that was also developed during the intervention. With this, the researchers gathered three essential themes from the influence of Whispering game to the students based on their experiences. In connection with this, the researchers identified three (3) sub-themes namely; Fun and challenging while learning, the importance of teamwork and the development of communication and listening skills. These sub-themes will be discussed.

Fun and challenging while learning

The students did not just acquired learnings regarding on the given topics about the topography of every continent, but they also got enjoyment while participating the game that positively gain their attention and interest on the game. In connection with this, student 1,2,4 and 6 stated

“.... Nindot pud ni siya nga dula ma’am kay maka enjoy gyud samot na pa unahanay” (IDI_2)

(".... This game is also interesting, ma'am, because you can enjoy it and you can still focus, it's even worse, you can even twist it before you line up an answered")

"Una ma'am kay nindot siya nga dula ma'am kay na enjoy mi, tapos didto na kita ang pagtinabangay..." (IDI_3)

("It's a good game, ma'am, because we enjoy it, then there's helping the students who learned a lot...")

The importance of Teamwork

This theme is one of the major suggestions acquired by the researchers from the student's responses. According to the student, teamwork is one of the important assets in playing games like whispering game which requires full participation in sending and receiving messages. They believe that if there is teamwork then success is never been impossible. For instance, student 8 from in-depth interview expresses her suggestion saying:

"Suggest nako ma'am naa gyud dapat ang teamwork ma'am kay mao nay importante gyud na sa ing ana nga dula, kay unsaon pagkadaog kung walay proper communication sa ka group...." (IDI_8)

("I suggest, ma'am, that there should be teamwork, ma'am, because that's what's really important in this game, because how can you win if the group doesn't have proper communication...")

In addition, students 1 from focus group discussion also share his suggestion saying:

"Para sa akona ma'am, kay base sa akong na experience kay need gyud pagtinabangay sa kada groupo ma'am, kay murag mawala mn gud kung kanang naay uban member sa groupo kay dili mag tarong, dili maminaw og tarong, makalangan sa time gyud" (FGD_1)

("For me, ma'am, based on my experience, it's really necessary to help each group, ma'am, because it seems to disappear if there are other members in the group can't find the solution because they don't speak correctly, they don't listen correctly, they lose time")

"Teamwork is the key gyud ma'am...heheheh" (FGD_3)

"Suggest nako ma'am kay kanang importante gyud ang teamwork ma'am ani nga dula, kay og walay teamwork wala.dli maka daog" (FGD_6)

("I suggest, ma'am, that teamwork is really important, ma'am, in this game, because without teamwork, you cannot win")

Development of Communication and listening skills

Majority of the students from both in-depth interview and focus group discussion had the same answers when they were asked by the researchers on what other skills has been used and developed during their participation in the conduct of intervention. For instance, student 8 from in-depth interview and student 12 and 13 from focus group discussion shares their responses saying,

“Aside sa memory skills ma’am.... kay nagamit nako akong skills sapag communicate sa akong mga ka team ma’am, pati akong listening skills kay pinaagi sa dula kay gina prepare na nako akong kaugalingon nga maminaw then nagasabot mi sa akong ka team sa sunod nga dula napud ma’am...” (IDI_8)

(“Aside from memory skills ma’am.... because I was able to use my skills when communicating with my teammates, ma’am, and my listening skills were used through the play. and I’m preparing myself to listen so that I can understand more when my team and I understand each other in the next play.”)

The whispering game is one technique that can teach vocabulary mastery, which helps students demonstrate the importance of communicating clearly with others (Indah, 2019). This oral game makes the students improve their listening, speaking, and remembering skills. Furthermore, according to the study of Yazdanparast & Gorjian (2018), this game will help the students to demonstrate the importance of communicating clearly with other; also, by playing this game, the students will able to demonstrate how easy it is to miss exactly what others are saying and discuss what that means for communicating.

To summarize the responses of students from the post-intervention interview, the figure below depicts the model of students' reflective insights on the implementation of Whispering Game to Enhance their Memory Skills in Topography.

CONCLUSION

Memory is essential to learning and is one of the key factors in learning that increases learning efficiency. Memory involves retaining key information, details, or concepts from a course or lesson, being able to apply them, and transferring knowledge. Thus, having poor memory skills is one of the common reasons or problems why students have difficulty in their studies. Students who suffer from poor memory squander valuable instructional time because they are unable to retain the information discussed in class.

Base on the findings of the study, the researchers concluded that the students had a lack of memory skills which severely effects on their academic studies and grades. It has also revealed that the student’s faces challenges and difficulties in learning and remembering facts and information due to major destructions, lack of concentration, the complexity of the subject, unfamiliarity of words and omitted discussion which affects student’s behavior and interest on learning. Thus, the problems and issues were needed to find a solution on how to help students improve their memory skills particularly in the Topography topics as part of their academic learning.

On the other hand, the researchers concluded that the utilization of Whispering Game as intervention to enhance student’s topographic memory is effective, as the results shows that through implementing this game it assesses the students to acquire increased of knowledge, practice their memory skills and provide them an opportunity to use this game as a new ways or strategies to enhance their memory skills. Furthermore, aside from the acquisition of knowledge and enhancement of their memory skills, the students also are able to give reflective insights about the importance of their memory skills, the importance and the influence of the game into their learning.

In conclusion, the utilization of Whispering game to enhance student’s memory skills allows them to make self-improvement, to acquire opportunities on how they will help themselves to improvement their memory skills, which can be use not just for present but for their future. This study is subject for further research especially to larger number of participants.

RECOMMENDATIONS

Based on the findings and conclusions, this paper suggests the following recommendations:

1. To the teachers who have problems addressing the rising issue on the students' lack of memory skills in Topography topics under Araling Panlipunan subject, this study recommends to encourage active learning intervention, which is to utilize a game used by the researchers. This aids the students in visualizing how a memory skill is being performed and provides them to understand and remember important facts and information.
2. To administrators, they should support student's performance-based tasks with active learning strategies that enable them to improve their memory skills, not only on the Araling Panlipunan subject but also to other subjects which needs the memorization skills of every student.
3. To the student, always be inspired and motivated to use your memory skills to develop and enhance your memory skills that are useful in the future.
4. Lastly, for future researchers, the research should be conducted on a large sample /population of participants and reedify the intervention to obtain more comprehensive results based on the researcher's experiences.

REFERENCES

- Almeyda, J. L., Bondad, E. D. A., Fabillo, M. R. A. S., Falic, J. F., Hipolito, F. D., Lagrosa, M. & Palisoc, A. (2021). A. Perceived Stress and Memory Performance: A Correlational Study among Students taking Undergraduate and Vocational Program during Online Learning in Luzon, Philippines.
- Filgona, J., Sababa, L. K., & Filgona, J. (2016). Effect of hands-on learning strategies on senior secondary school students' academic achievement in topographical map studies in Ganeye educational zone, Adamawa State, Nigeria. *International Journal of Social Science and Humanities Research*, 4(3), 276-287. <https://doi.org/10.1080/13645579.2015.1005453>
- Fugard, A. J., & Potts, H. W. (2015). Supporting thinking on sample sizes for thematic analyses: a quantitative tool. *International journal of social research methodology*, 18(6), 669-684.
- Gathercole, S. E., Lamont, E. M. I. L. Y., & Alloway, T. P. (2006). Working memory in the classroom. In *Working memory and education* (pp. 219-240). Academic Press. <https://doi.org/10.1016/B978-012554465-8/50010-7>
- Gathercole, S. E., Woolgar, F., Kievit, R. A., Astle, D., Manly, T., Holmes, J., & CALM Team. (2016). How common are WM deficits in children with difficulties in reading and mathematics?. *Journal of applied research in memory and cognition*, 5(4), 384-394. <https://doi.org/10.1016/j.jarmac.2016.07.013>
- Hasibuan, K. (2020). *The effect of whispering game to motivation in learning vocabulary at grade VIII students of MTs. S Al- Mukhlisin Sibuhuan* (Doctoral dissertation, IAINPadangsidempuan).
- Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social science & medicine*, 292, 114523. <https://doi.org/10.1016/j.socscimed.2021.114523>
- Holidiyah, S. (2021). *The Use of Whispering Game in Students' Listening Skill at Fifth Grade of MI Nurur Rahmah Kaduara Barat Larangan Pamekasan* (Doctoral dissertation, Institut Agama Islam Negeri Madura).
- Indah, O. D. (2019). Students' Ability in Understanding Simple Past Tense through Whisper and Write Game. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 7(2), 332-333. <https://doi.org/10.24256/ideas.v7i2.1047>
- Kostere, S., & Kostere, K. (2021). *The generic qualitative approach to a dissertation in the social sciences: A step by step guide*. Routledge.
- Lubis, B. N. A., Rambe, K. R., & Husda, A. (2022). Two stay two stray techniques to improve junior highschool students' English vocabulary mastery. *English Teaching and Linguistics Journal (ETLj)*, 3(2), 68-74. <https://doi.org/10.30596/etlij.v3i2.10379>

- Palmiero, M., & Piccardi, L. (2017). The role of emotional landmarks on topographical memory. *Frontiers in Psychology*, 8, 763. <https://doi.org/10.3389/fpsyg.2017.00763>
- Yazdanparast, M., & Gorjian, B. (2018). Using whispering game in teaching speaking skill to EFL learners. *Journal of Applied Linguistics and Language Learning*, 4(2), 40-48. <https://doi.org/10.5923/j.jall.20180402.03>



Copyright (c) 2024 by the authors. This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).