UNIVERSIDAD ESTATAL PENÍNSULA DE SANTA ELENA

INSTITUTO DE POSTGRADO

MAESTRIA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS MENCIÓN ENSEÑANZA DE INGLÉS

TÍTULO DE LA MONOGRAFÍA

THE EFFECTS OF NOTE-TAKING ON COLLEGE STUDENTS'

ATTENTION IN ONLINE LEARNING

PREVIO A LA OBTENCIÓN DEL TÍTULO DE MAGÍSTER EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS MENCIÓN ENSEÑANZA DE INGLÉS.

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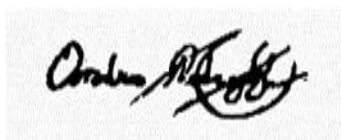Lic. ANDRÉS RODRÍGUEZ CAAMAÑO, MSc

SANTA ELENA - ECUADOR

2022

La Libertad, February 18th ,2022

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En calidad de Tutor de la **Monografía**, "THE EFFECTS OF NOTE-TAKING ON COLLEGE STUDENTS´ATTENTION IN ONLINE LEARNING", elaborado por el maestrando Prof. INGRID ELIZABETH MARÍN NARVÁEZ egresada de la **MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS MENCIÓN ENSEÑANZA DE INGLÉS PRIMERA COHORTE**, de la Universidad Estatal Península de Santa Elena, previo a la obtención del Título de Magíster **EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS MENCIÓN ENSEÑANZA**, me permito declarar que luego de haber orientado, dirigido científica y técnicamente su desarrollo y estructura final del trabajo, cumple y se ajusta a los estándares académicos y científicos, razón por la cual lo apruebo en todas sus partes.
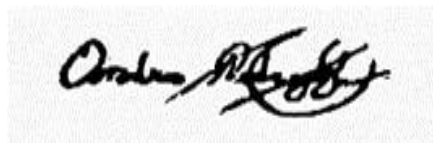
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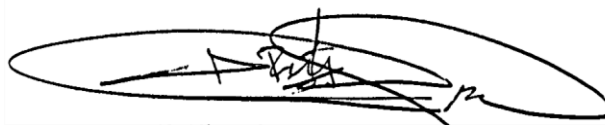**DOCENTE TUTOR**

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El Trabajo de **Monografía** "THE EFFECTS OF NOTE-TAKING ON COLLEGE STUDENTS´ATTENTION IN ONLINE LEARNING", previa obtención del Grado Académico de **MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS MENCIÓN ENSEÑANZA DE INGLÉS**, ha sido desarrollado con base a una investigación exhaustiva, respetando derechos intelectuales de terceros conforme las citas y cuyas fuentes se incorporan en la bibliografía. Consecuentemente este trabajo es de mi total autoría.

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Santa Elena, 19 de febrero del 2022

EL AUTOR

_____

Prof. Ingrid Elizabeth Marín Narváez

DEDICATION

In dedication to God for his endless love and blessings.

To my beloved spouse, children, and mom for being my pillar in moments of weakness.

Finally, to my remembered angels in heaven.

ACKNOWLEDGMENT

I would like to express my deepest appreciation to my mentors MSc. Diego Cajas, PhD and Lic. Evelyn Almedia, MSc for being very supportive and empathic, honoring me with their professionalism, and being very generous in sharing their knowledge.

I am so grateful to my colleagues who are kind and respectful and now I have memories that will last.

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Resumen

Anotación es una estrategia con muchos beneficios que mejora la atención, el rendimiento académico, y la memoria de los alumnos.

Tomar notas es una habilidad demandante adecuada para el contexto universitario debido a su madurez cerebral y disposición para aprender. Implica la escucha activa, la lectura, la escritura, y procesos cognitivos.

Una investigación breve en relación a la estrategia de tomar notas ha sido realizada. Este proyecto tiene como primer objetivo enumerar los beneficios del tomar nota para motivar el interés para futuras investigaciones. Como segundo objetivo explicar los desafíos de los estudiantes con relación a la atención en un contexto virtual.

Palabras Clave: toma de notas, atención, desempeño académico

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Abstract

Note-taking is a strategy with many benefits which improve students' attention, academic performance, and memory.

To take notes is a demanding skill suitable for college spheres on the grounds of their brain maturity and readiness to learn. It involves active listening, reading, writing, and cognitive processes.

A little actual research has been done regarding note-taking. This project aims to enumerate the benefits of note-taking in the interest of future investigations. A second attain is to explain students' challenges in attention in online learning.

Keywords: note-taking, attention, academic performance

INTRODUCTION

The technological advances that our society had been experienced in the last years were forced to accelerate on the grounds of an apocalyptic virus known as COVID-19. Humanity had to change its way of living and working spending almost 24 hours at home. The education field had to adapt to online learning. In the 21st century, E-learning became the most ubiquitous and familiar portal for all, the labor force and universities. In 2017, Hong. et al., described E-learning as the transmission of knowledge and experiences on the basis of technology and the Internet. According to Sahu (2020), education excellence has caused questioning about online learning. As a matter of fact, education quality has always been in constant query. However, it cannot be denied that unless the education community hadn't shifted to online learning, the world would have suffered a greater negative impact.

(Lathrop, 2011 as was cited in Balan & Montemayor, 2020) stated the influence on the online mode when flexible use of the Internet as a disadvantage affecting students' attention. E-learning has provided many positive contributions although it has flaws as well. Factors such as motivation, length of material, and virtual elements are mentioned in advance students' attention struggles.

Related to students' attention difficulties, note-taking is a useful technique for students to gather information as they read and listen to it. Note-taking may assist learners in remembering and comprehending better the subject content. (Graben & Christopherson, 2005 as was cited in Salame & Thompson, 2020) "At the college and university level, many instructors do not go over the importance of taking notes during lectures". An effective and efficient application of the strategy will result in the academic performance fostering, and pupils' attention as well.

CHAPTER I

**TITLE: "THE EFFECTS OF NOTE-TAKING ON COLLEGE STUDENTS'
ATTENTION IN ONLINE LEARNING".**

OBJECTIVES

❖ To enumerate note-taking benefits through a digital presentation to take into
consideration the strategy for future research.

❖ To explain college students' attention challenges through a written project to reflect on
the virtual modality role.

JUSTIFICATION

It has well experienced the changes and adaptations the society has made in the last two years
due to the pandemic caused by the COVID-19. The virtual learning took place a relevant
leadership. One of the most observable and perceived problems is the students' lack of attention
during the virtual classes and when executing the teachers' instructions. The plethora of effects
that note-taking provides in the contribution to academic and personal development are
significant.

The limitation that should be mentioned found when carrying out the project is the lack of actual
research regarding the note-taking strategy.

METHODOLOGY

This project is intended to gather information about the project topic using a descriptive
methodology.

CHAPTER II

LITERATURE REVIEW

ONLINE LEARNING COMMON SETTING

Coronavirus 2019 (Covid-19), is an unexpected and anticipated disease in which a global health emergency was declared due to its rapid spreading infection. A pandemic is "an outbreak of a disease that occurs over a wide geographic area and affects an exceptionally high proportion of the population" (Merriam-Webster Online Dictionary, 2020). All kinds of organizations, companies, institutions, and activities were forced to shut down. The educational field was not the exception on the grounds of social distancing as an essential means to curb the Covid-19 transmission.

(Shahnawaz.et al., 2021), considered "Online Learning has grown in popularity to the point where it is now offered in brick-and-mortar institutions that formerly solely offered face-to-face learning". These researchers concluded that approximately from 100% of learners, 91% became online students all around the world during the pandemic outbreak. However, digital platforms and online instruction are not a recent phenomenon in higher education institutions nor E-learning at primary and secondary levels. In most cases, a few institutions had had this teaching model as their principal. Fardoun.et al., (2020), stated that Covid-19 has reconstructed the education system into a virtual modality.

Online learning was for the stakeholders the opportune panacea in the sanitary emergent situation. It sharpened teachers' and learners' competences in the use of technology, platforms, and tools for sustainable lifelong teaching-learning. The advancement of cognition, abilities, and values to attain a personal and professional future had a pivotal role. In 2019, Al-Dowayan &

Mustafa stated that E-learning has been appointed as the solution for educators' enriching professional development. Beneath a changing educational setting, engagement in self-learning and self-development processes is assumed among the education community, particularly students.

Online learning aims to enable the learner to the responsibility regarding his/her personal and academic performance, his/her time management to fulfill the assigned task, and his/her active participation in synchronous classes. Paul & Jefferson, (2019) suggested that more freedom is provided in letting students attain their academic assignments. Students' learning style and almost all steadiness over their material and activities are influenced by the accessibility to the Internet. Notwithstanding several elements that influence tutees' performance in virtual classrooms, including the limitless use of the Internet at any time, results in peril towards the attention span of a student (B.B.K.King, 2020).

LEARNERS' ATTENTION

(Posner & Peterson, 1990 as was cited in Cicekci & Sadik, 2019) "Attention is a state of mental alertness and a focusing activity". "Attention is the mechanism to initiate learning" (Chen & Huang, 2014 as was cited in Cicekci & Sadik, 2019). According to these definitions, attention is predominant for the acquisition of knowledge. Gathering the attention on a specific stimulus makes the academic performance, behavior, and psychological features stored in the consciousness of an individual. According to Cicekci & Sadik, (2019), as far as the advantages that technology is concerned, it was corroborated that tutees still go to great lengths in maintaining their attentiveness to the material delivered to them.

On the other hand, distracting stimuli deviate his/her attention facilely. Despite the fact, individuals use different channels to learn that is by listening and speaking, by seeing, by touching and feeling, and by the intellect which are types of learning according to Vester or through a cognitive style; attention is related to and necessary in getting an intense level of feeling for learning manifestation. (Rosegard and Wilson, 2013 as was cited in Balan & Montemayor, 2020) they cited the teacher's role in stimulating the learner's arousal for higher information retention. If there is a lack of this brain's skill although positive factors are in existence, learning will be constrained. As a result, academic attainment won't succeed and errors will increase. In high education, attention level is the indicator that measures motivation.

In 2020, May affirmed that as more education institutions implemented online learning into their educational program, the accomplishment of the instruction method in this sphere is manifested in a variety of manners. One student's adversity is to pinpoint their attention concerning the material facilitated. The excess of content such as long readings and articles materials, virtual classroom and recorded lectures that could sometimes be 1-hour long, and timed tasks, causes anxiety or boredom, in consequence, learners' attention spans weaken on the grounds of the mentioned factors.

Deng & Wu, (2018a), claimed that preexisting investigations propone that a variety of factors influence students' attention spans in online classrooms, including eye-tracking when prompted to read in the virtual classroom; class feedback decrease but the interaction is essential to maintain the attention, and facial orientation when seen through the camera. E-learning is affected decreasingly by a shorter attention span and lower level of concentration (May, 2020). A fact that should be taken into account is the application of the questionnaire McVay Readiness for Online Learning in 2020, Balan & Montemayor.

The Moss Attention Rating Scale (MARS) mentioned in 2020, Balan & Montemayor, was deployed in the studies of Pandey & Singaravelan (2019) and Hart. et al., (2018) with high favorable results.

NOTE-TAKING SHOULD BE REBORN

The lack of significant findings from the '20s to the '70s evokes the spiral-bound notebook as a cause of a few pieces of research in note-taking in the actual times. Notwithstanding, the most possible reason would be technological advances that result from a more recent study in 2013. The most important digital or hand note-taking strategy is deployed by students when preparing for exams. Something to bear in mind is the time and place learners use note-taking and the different methods according to their learning style.

(Kobayashi, 2006 as was cited in Salame & Thompson, 2020) claimed based on one study that note-taking has a relevant impact on pupils' learning.

Advances regarding technology are undeniable influencing how learners take notes. In 2018, Luo, Peteranetz, and Flanigan described some earlier studies involving experiments likening the use of laptops and longhand as a note-taking medium in pro of the students' achievements. Bui. et al., (2013), Mueller and Oppenheimer (2014), and Fiorella & Mayer, (2017) concluded that note-taking through laptops was recorded in a greater amount than longhand means. However, when an individual uses their body which is the case of note-taking he/she is learning somatically. A significant fact that should be mentioned is the interconnection between note-taking and the grade point average (GPA), a note-taker gets higher GPAs.

As it has been aforementioned that E-learning as a lifejacket has saved the education community in an uncertain pandemic sea. Virtual platforms and Web applications contain a plethora of information students should be able to absorb for later reflection. (Sharpe, 2010 as was cited in Susanti, 2020) explained that note-taking strategy consists in annotating information while reading or listening.

The note-taking strategy has represented a century of debates on the grounds of it had been and is still crucial for teachers, learners, and researchers. In the last 40 years, three investigation lines have been mainly focused: note-taking influence on attention, memory, and comprehension; notes features and how important they are for learning; and instruction methodology enhancing note-taking. (Ward and Tatsukawa, 2003 as was cited in Reza, Biria, & Karimi, 2010) established that encoding and storage are the main functions of note-taking. In relation to the first function, the method used by students could be longhand in a notebook, with the use of an electronic device, or typing notes on a computer, laptop, or tablet. This process will assist the students to learn the content due to the organization and transformation learners are involved in when they hear and write the information. Extra writing supports particular encoding and better memory. (Sweller, 1994 as was cited in Luo. et al., 2018) maintained that memory is implied in the note-taking process.

Storage function consists of how students study or review their notes with the purpose of testing instead of just recording them (Dunlosky. et al., 2013 as was cited in Morehead & Rawson, 2019). In 2019, Morehead. et al., declared that studies about students' behavior through surveys reflect they trust less effective strategies and relevant evidence on how the notes enhance their preparation for examinations. Note-taking enhances self-leaning and attention, promoted in online learning. The comparison of the two functions claims the worth of note-taking is

pinpointed in the review rather than in the record of notes. On the contrary, Luo. et al., (2018), argued that both functions work in collaboration as a combined process.

According to Carter, Greenberg, & Walker, (2017); Luo. et al., (2018) longhand medium has had the best results in terms of performance during the investigation in a real-life context and the laboratory as well. Nevertheless, in the online modality, the facile access to the Internet during note-taking may be considered a disadvantage. Some tutees may choose not to take notes in the belief that test preparation may be based on reviewing online lectures and underlying resources, As a consequence, these students' performance is poor (Liles, Vuk, & Tariq, 2018).

The strategy by hand embraces cognition inclusion through information manipulation and transformation making the student a doer. Its importance is based on the fact that tutees are assisted when they concentrate and comprehend the information. (Howe, 1970, in Longman and Atkinson, 1999 as was cited in Susanti, 2020) claimed a learner has a 34 % of advantage of remembering the information if it is in notes. While a 5% likelihood will be remembered in nonexistence notes.
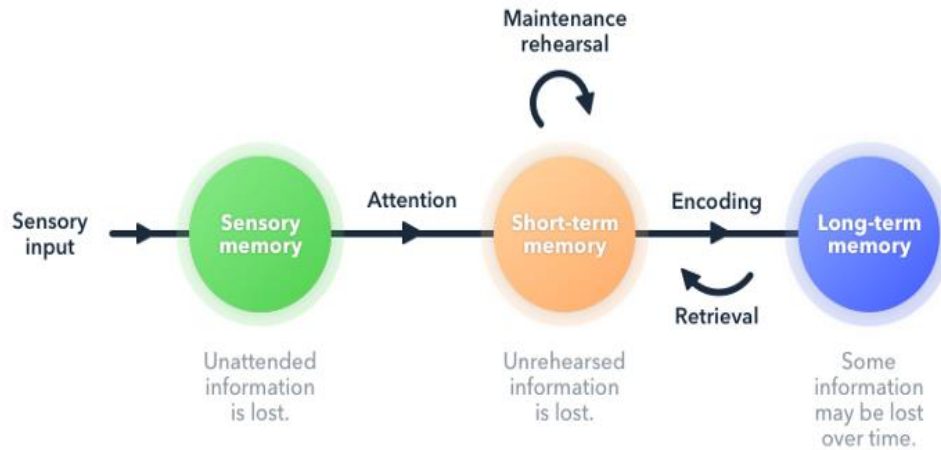
According to the theory of information processing, attention is the starting point in processing facts. It enhances to retain information correctly in the memory (Gathercole. et al., 2008 as was cited in Cicekci & Sadik, 2019). Information is hardened to forget or deteriorate when attention has intervened in a great amount.

The sensory element is where the information arrives first, keeping it for a short time. If learning takes place, it will be sent to the second element, the short-term memory. Attention's function is to select the information sent to the second element in the process.

Figure 1 showed the role of an important connector that attention plays in memory.

Figure 1

Attention's Role in the Theory of Information Processing

Source: The process from sensory to long-term memory. Adapted from How memory Works, Wooclap blog, 2018 (https://www.wooclap.com/blog/en-gb/why-teachers-need-to-understand-how-memory-works)

The note-taking strategy for learning disabilities students has significant importance for several reasons:

1. It allotted the pupil to be a doer in a lecturing context. Weishaar & Boyle, (1999) reported learning disabilities students have the tendency to be passive, and taking notes promotes activeness and engagement.

2. Encoding in conjunction with storage accomplish their function in clarifying unclear information.

3. Learning disability students' comprehension benefits due to the positive correlation between the quantity of notes he/s takes and test scores.

THE TEACHERS' ROLE

The transition from face-to-face classrooms to the virtual setting has not been at ease. In higher education, note-taking may play a significant role if the teachers reconsider promoting the strategy to the awareness of the students. Teachers' expertise in planning and choosing the teaching approaches continue to be predominant factors. The selected material to be presented and the activities to be worked on as well. Another relevant statement is that teachers should deepen about how memory works. In favor of note-taking, this strategy is adaptable to any approach and material.

NOTE-TAKING METHODS

"Quality versus quantity" needs to be the student's consideration. (Suristky, 1992 as was cited in Salame, 2020) suggested that other research has found that note-taking is a challenging strategy. Six methods can be used in note-taking. In this project they are not going to be described, the intention is to inform that according to students learning styles and necessities they have a variety of options to develop the strategy. They are:

The Cornell method: systematic format

The Outline Note: deals with listening

The Charting Note: uses columns and categories

Mapping Note: a graphic representation

Sentence Note: free writing

Boxing Note: digital note-taking

CHAPTER III

CONCLUSIONS

After a plethora of bibliographic material has been revised about note-taking strategy, attention in students, and E-learning the researcher concluded:

- ❖ Note-taking has many pivotal effects on college students, enhancing their academic performance and most important for their real-life.

- ❖ Note-taking is a versatile strategy that can perfectly be fitted in any teaching approach.

- ❖ Note-taking embrace all kind of students, it takes into consideration their learning styles, their cognitive process, and their educational setting.

- ❖ Attention is a process that can cause big challenges in university students. However, in favor of their development there are plenty of panaceas to maintain it.

RECOMMENDATIONS

The researcher recommends:

- ✓ On the grounds of the university students' maturity and readiness, note-taking can be deployed in this context.

- ✓ Note-taking provides a paradise for research opportunities, it would be taking into consideration for further investigations.

- ✓ Teachers will enhance the instructions process and will provide the students plenty of benefit if they include the note-take strategy.

BIBLIOGRAPHIC REFERENCES

Salame, I. I., & Thompson, A. (2020). Students' Views on Strategic Note-Taking and Its Impact on Performance, Achievement, and Learning. *International Journal of Instruction*, *13*(2), 1-16.

Morehead, K., Dunlosky, J., Rawson, K. A., Blasiman, R., & Hollis, R. B. (2019). Note-taking habits of 21st century college students: implications for student learning, memory, and achievement. *Memory*, *27*(6), 807-819.

Luo, L., Kiewra, K. A., Flanigan, A. E., & Peteranetz, M. S. (2018). Laptop versus longhand note taking: effects on lecture notes and achievement. *Instructional Science*, *46*(6), 947-971.

Mik, F. (2019). The effects of collaborative note-taking in flipped learning contexts. *Journal of Language and Education*, *5*(4 (20)).

Piolat, A., Olive, T., & Kellogg, R. T. (2005). Cognitive effort during note taking. *Applied cognitive psychology*, *19*(3), 291-312.

Kumar Basak, S., Wotto, M., & Belanger, P. (2018). E-learning, M-learning and D-learning: Conceptual definition and comparative analysis. *E-learning and Digital Media*, *15*(4), 191-216.

Balan, A. K., Jacintos, A. R., & Montemayor, T. (2020). The Influence of Online Learning towards the Attention Span and Motivation of College Students.

Zhang, T., Shaikh, Z. A., Yumashev, A. V., & Chłąd, M. (2020). Applied model of E-learning in the framework of education for sustainable development. *Sustainability*, *12*(16), 6420.

Susanti, N. (2020). The Use of Taking Notes on Report Text. *Journal of English Language Teaching and Learning (JETLE)*, *2*(1), 37-42.

Cicekci, M. A., & Sadik, F. (2019). Teachers' and Students' Opinions about Students' Attention Problems during the Lesson. *Journal of Education and Learning*, *8*(6), 15-30.