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**ESMERALDAS**

ESCUELA DE DERECHO, EDUCACIÓN Y  
SOCIEDAD

**CARRERA DE PEDAGOGIA DE LOS IDIOMAS  
NACIONALES Y EXTRANJEROS**

RESEARCH REPORT

**THE EFFECT OF INTERACTIVE TEACHING METHODS TO ENHANCE  
STUDENTS' ATTENTION IN THE CLASSROOM**

INFORME DE INVESTIGACIÓN:

**EL EFECTO DE LOS MÉTODOS DE ENSEÑANZA INTERACTIVOS PARA  
MEJORAR LA ATENCIÓN DE LOS ESTUDIANTES EN EL AULA**

PREVIO AL TÍTULO ACADÉMICO DE:

**LICENCIADO EN PEDAGOGÍA DEL IDIOMA  
INGLÉS**

LÍNEA DE INVESTIGACIÓN:

**EDUCACIÓN, COMUNICACIÓN, CULTURA, SOCIEDAD Y VALORES**

AUTOR:

**NATHALY GRACIANA CANO CHILA**

ASESOR:

**Mgst. RODRIGO MEDIA VILLAVICENCIO**

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**COMITÉ EVALUADOR**

COMO MIEMBROS DEL COMITÉ EVALUADOR DEL TRABAJO DE INTEGRACIÓN CURRICULAR DE LA PUCE ESMERALDAS, CERTIFICAMOS QUE HEMOS LEÍDO EL TRABAJO ELABORADO POR NATHALY GRACIANA CANO CHILA, TITULADO *EL EFECTO DE LOS MÉTODOS DE ENSEÑANZA INTERACTIVOS PARA MEJORAR LA ATENCIÓN DE LOS ESTUDIANTES EN EL AULA*, Y SUGERIMOS SU APROBACIÓN POR CUMPLIR CON LOS REQUISITOS ESTABLECIDOS PARA LA OBTENCIÓN DEL TÍTULO DE LICENCIADA EN PEDAGOGÍA DE LOS IDIOMAS.

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Lector 1

Dr. José Suarez Lezcano, Pdh

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Lector 2

MSc. Marjorie Perlaza Rodriguez

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Director de carrera

MSc. Marjorie Perlaza Rodriguez

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Docente asesor

MSc. Rodrigo Medina Villavicencio

La aprobación y aceptación final de este trabajo están condicionadas a la entrega, por parte del/la estudiante, de las copias finales del mismo. Por medio de la presente, certifico que he leído este trabajo elaborado bajo mi dirección y recomiendo que sea aceptado por cumplir con los requisitos exigidos para la obtención del grado correspondiente.

**CERTIFICADO DEL DIRECTOR**

Yo, Dr. Haydeé Ramírez Lozada, en calidad de directora de este trabajo, certifico haber revisado que el mismo cumple los requisitos de calidad, originalidad y presentación exigibles y que se han incorporado las sugerencias del tribunal al trabajo de grado.

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Dr. Haydeé Ramírez Lozada, PhD

### **DECLARACIÓN DEL AUTOR**

Yo, Nathaly Graciana Cano Chila, afirmo que la investigación contenida en el presente informe de investigación es única, auténtica y de carácter personal.

El contenido de este trabajo constituye una responsabilidad legal y académica legítima de la autora y de la PUCE Esmeraldas.

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Nathaly Graciana Cano Chila  
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## **DEDICATORIA**

Con profunda gratitud, dedico este trabajo, en primer lugar, a Dios, quien me brindo fuerzas y guio por este proceso.

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### **Abstract**

The objective of this study was to determine if interactive teaching methods have a positive effect on the attention span of secondary school students during English classes. A quantitative approach and a correlational design were used. Data were collected through a survey that was answered by 12 English teachers from an educational institution in Esmeraldas. The instrument gathered information on the frequency, types, and perceived effectiveness of the interactive strategies that teachers employed. The results were organized and analyzed using Google forms and Excel.

The results showed that interactive teaching methods are indeed effective in improving students' attention. Teachers reported that students were noticeably more engaged and focused when these strategies were implemented. Nevertheless, was observed that the duration of activities plays an important role. When interactive tasks last more than necessary, students' attention tended to decrease. Therefore, while these methods are beneficial, they should be used in a balanced way, considering the time.

**Keywords:** interactive teaching methods, student attention, English language learning, active learning.

## Resumen

El objetivo de este estudio fue determinar si los métodos de enseñanza interactivos tienen un efecto positivo en la capacidad de atención de los estudiantes de secundaria durante las clases de inglés. Se utilizó un enfoque cuantitativo y un diseño correlacional. Los datos se recopilaron mediante una encuesta que respondieron 12 profesores de inglés de una institución educativa de Esmeraldas. El instrumento recopiló información sobre la frecuencia, los tipos y la eficacia percibida de las estrategias interactivas que empleaban los profesores. Los resultados se organizaron y analizaron utilizando formularios de Google y Excel.

Los resultados mostraron que los métodos de enseñanza interactivos son realmente eficaces para mejorar la atención de los estudiantes. Los profesores informaron de que los estudiantes se mostraban notablemente más interesados y concentrados cuando se aplicaban estas estrategias. No obstante, se observó que la duración de las actividades desempeña un papel importante. Cuando las tareas interactivas duraban más de lo necesario, la atención de los estudiantes tendía a disminuir. Por lo tanto, aunque estos métodos son beneficiosos, deben utilizarse de forma equilibrada, teniendo en cuenta el tiempo.

**Palabras clave:** métodos de enseñanza interactivos, atención de los estudiantes, aprendizaje del inglés, aprendizaje activo.

## Introduction

It is recognized that, in the constantly evolving educational context, innovative strategies are required to enhance learning achievements and students' participation. Nonetheless, Fanbo and Li (2023) stated that conventional teacher-centered methodologies often undermine the enthusiasm and proactive involvement of students in the learning process. Conversely, nowadays there is an increasing body of literature attributing the capacity of technology in classes, discussions, and collaborative exercises as interactive teaching strategies to promote critical thinking, engagement and a deeper comprehension of concepts (Qatrunnida & Ardini, 2023).

Interactive teaching approaches distinguished by their emphasis on communication and teamwork have been shown to foster an atmosphere in which students actively participate rather than passively absorb knowledge. The proposed approach is consistent with actual education objective that emphasize the development of students' creativity (Michael & Langworthy, 2014). It has been demonstrated by means of investigations that these methodologies result in enhanced levels of students' cognitive engagement and meaningful motivation that impact positively in their own academic performance (Fisher et al., 2020)

In order to improve their learning experience, teachers can integrate technological tools. They can learn how to use virtual collaboration tools and multimedia platforms to design personalized and immersive learning experiences. This approach has been shown to facilitate greater student engagement in the learning process. The efficacy of such pedagogical methodologies in bridging the divide between theoretical and practical domains is well-documented, with the acquisition of skills by students being demonstrably applicable to an evolving world.

However, Fanbo and Li (2023) considered that despite the demonstrated advantages, interactive teaching methodologies are frequently prevented from being widely adopted by obstacles such as classroom dynamics, teacher training, and technological limitations, especially in city where investment in education is insufficient. To overcome these aspects, it is essential that teachers receive comprehensive training, that educational technology must be purchased, and that pedagogical paradigms must change to emphasize student-centered learning.

Despite the proven benefits of interactive teaching, many classrooms continue to primarily utilize conventional methods. Consequently, in places characterized by a lack of engagement and stimulation, students' participation and concentration level remain low. This apparent disinterest can be attributed to a lack of motivation, which in turn can have a negative impact on academic performance. It is imperative that research is conducted on the potential of interactive teaching strategies to overcome the identified obstacles and promote enhanced student focus and involvement. Therefore, according to this information the following question arises: What is the effect of interactive teaching methods in student's attention span?

The general objective of this research was to analyze the effect of interactive teaching on students' attention span in the English language class. To accomplish this, it was necessary to identify the types of interactive teaching methods used to enhance attention in students at the middle school level. Then, it measured the changes in students' attention levels when using these interactive methods. Finally, it described the specific advantages of interactive methods to enhance students' attention.

## **Theoretical Framework**

Sweller (1988) proposed that, according to the cognitive load theory, also known as CLT, the most effective learning occurs when the cognitive demands of the student correspond to their working memory capacity. This concept posits the existence of three distinct categories of cognitive load. First, the author stated that the intricacy of the subject matter is very associated with “intrinsic load”. Then, through instructional materials, extraneous load arises. Finally, the relevant load which fosters learning through efficient mental effort.

So, by employing organized and engaging formats that eliminate superfluous distractions, interactive teaching methodologies can effectively reduce psychological distress. Let’s consider the case of a teacher who employs group problem-solving exercises, for instance, helps divide the cognitive load among the students, allowing them to focus on understanding fundamental ideas.

Additionally, because students must make connections between new and background knowledge, interactive approaches enhance relevant cognitive load by encouraging active participation. As assignments become more relevant and achievable, they are better able to focus during class. Students are better able to devote their mental resources to learning tasks when unnecessary cognitive load is reduced, which helps them stay focused and involved during class activities (Mayer & Moreno, 2016).

A key component in learning is attention, and knowledge of its mechanisms, selective and sustained attention, helps explain how interactive techniques might improve concentration. By removing distractions, selective attention enables people to concentrate on relevant information (Abercrombie, 1966). When students participate in interactive activities such as discussions, they must focus on the subject, which naturally develops

their selective attention abilities. According to Posner and Petersen (1990), sustained attention, on the other hand, is the capacity to stay focused over an extended period of time, which is necessary for finishing longer assignments or classes.

Interactive teaching methods break up the monotony of standard lecture-based approaches in the classroom by bringing variation and innovation. The implementation of role-playing has been demonstrated to sustain student interest over prolonged intervals by rotating between diverse tasks and stimuli, thereby fostering sustained attention. Moreover, these methodologies frequently incorporate active reaction, ensuring sustained engagement in the activities.

On the other hand, the idea that students assimilate information effectively through active participation in the construction of their own knowledge comes from Piaget and Vygotsky, who attribute interaction with world as the central axis. Thus, constructivism prioritizes the correlation of prior knowledge and social interaction in learning (Vygotsky, 1978). As pedagogical support, these premises are reflected in project-based learning and collaborative activities, where students actively participate in the classroom, develop hypotheses, and relate unknown information to their own experiences.

To illustrate this point, consider a scenario in which an English conversation is to discuss a quotidian and familiar topic, with the objective of encouraging students to engage in critical thinking and articulate their own opinions. This pedagogical approach is designed to not only enhance students' comprehension but also to sustain their attention, thereby enhancing the efficacy of their learning process. This finding serves to reinforce the notion that the constructivist approach is instrumental in ensuring that students do not function as passive recipients of information. Instead, they are considered active participant in a dynamic process of knowledge.

In developing self-determination theory, Deci and L. (1958) identified an important aspect to consider, focusing on 3 psychological needs of autonomy, relatedness and competence. These needs have been demonstrated to be instrumental in motivating individuals and fostering their engagement with a given activity. For instance, interactive education approaches directly address these demands by fostering situations in which students experience a sense of empowerment, gain mastery through challenges, and establish bonds with their peers.

The improvement in attention levels that is observed in most of students as they become more immersed in the learning process is indicative of their motivation. It is evident that interactive approaches are efficacious in this respect since they provide opportunities for meaningful interactions. Ryan and Deci (2020) stated that these interactions have been shown to enhance students' natural motivation and engagement, thus leading to improved academic performance and overall educational experience. These aspects enhance the quality of learning achievement and sustain attention.

The Dual Coding Theory that Clark and Paivio (1991) developed, consider that information is processed efficiently when delivered through both verbal and visual ways. This concept can be found in several strategies such as authentic role-playing, the integration of physical movement, and the design of mind maps. For instance, in an English class, a teacher can combine oral explanation with pictures and mimics to assist students remember and comprehend the topic. With these strategies teachers can keep and improve students' attention depending on their needs, since the combination of verbal and visual aspects can build a meaningful learning experience. This technique has been found to be especially good in keeping the focus of students who may otherwise encounter difficulties with more extensive verbal explanations.

Vygotsky is one of the most famous exponents of constructivism movement. Returning to his principles, especially his sociocultural theory, he highlighted the importance of social interaction for the cognitive development of individuals. This premise is related to this study and interactive teaching techniques that allow students to cooperate, communicate, and solve problems. This is where the zones of development come from. The author believed that the zone of proximal development gave students the opportunity to acquire high levels of understanding when guided by experts (Vygotsky, 1978). During this gradual process, the need for independence arises. Waiting for the moment when they consciously know that they no longer need help, and they can do everything themselves.

### **Antecedents**

Eastman et al. (2011) conducted a study that focused on the utilization of interactive technology in classroom settings. The application of interactive technology in higher education contexts was investigated, and the authors proposed that by rendering classes more engaging and attractive, this technology has the potential to enhance students' attitudes towards learning. However, the study revealed that there was no meaningful impact on factors such as retention, attendance, and course preparation, despite an observed increase in interest and satisfaction levels.

As stated by Flor et al. (2024) in the study of las metodologías activas y su impacto en el desempeño académico de los estudiantes. This study examines the beneficial effects that active approaches, which promote students' active engagement, have on their academic achievement. The authors point out that by encouraging critical thinking and teamwork, these approaches raise students' attention and engagement in the classroom.

Freeman & Scott (2014) researched in how active learning increases student performance in science, engineering, and mathematics, where, in comparison to

traditional lecturing, this meta-analysis of 225 studies found that active learning improves tests performance and lower rates. The result provides support to the use of interactive techniques in STEM teaching to enhance students' focus and learning.

According to Guaita (2024), *Las metodologías activas en el desarrollo del aprendizaje de los estudiantes* shows the impact of active learning approaches, like project-based learning and collaborative learning, on student engagement and attention is examined in this study. According to the results, these tactics greatly raise students' interest in their educational process.

Qatrunnida and Ardini (2023) researched the perceived influence of interactive teaching method and the technological integration on student engagement of junior high school in the English subject. This study examined the effects of interactive teaching strategies and technology integration on student engagement with a focus on junior high school English language learners. According to the study, encouraging open discussion and active participation through interactive techniques greatly improves the learning environment in the classroom and raises student interest and engagement.

Pirmazarova (2023) examined the impact of engaging minds, igniting potential and exploring interactive teaching methods in primary education. The author explored the significance of interactive teaching strategies with a particular emphasis on their potential to enhance student engagement, development of teamwork, and critical thinking abilities. Additionally, Pirmazarova related the design of authentic assessments with the empowerment of students through technological integration at an early age. He emphasized that importance of designing learning environments that are both engaging and dynamic. Such environments are required to improve students' focus and develop a sense of enjoyment of learning.

## **Methodological Framework**

The current research was carried out in the province of Esmeraldas, specifically situated on Avenida del Pacifico and Beato Luis Monza, kilometer 2,5 Margen Izquierdo Valle San Rafael, at “María Auxiliadora school”. In this school, English is given as a Foreign Language in each level. The sample involved in this research consisted of 12 middle school English teachers, based on their availability and willingness to participate. The group were around 20 and 50 years and included both male and female teachers.

The research was based on a quantitative approach, as the numerical data obtained through a survey which was organized and analyzed using the program of Google Forms. Additionally, it was descriptive and correlational in design since they allowed the identification and analysis of the statistical relationship between interactive teaching practices and students’ attention. Finally, each result was described and interpreted in Excel Microsoft program.

## **Results**

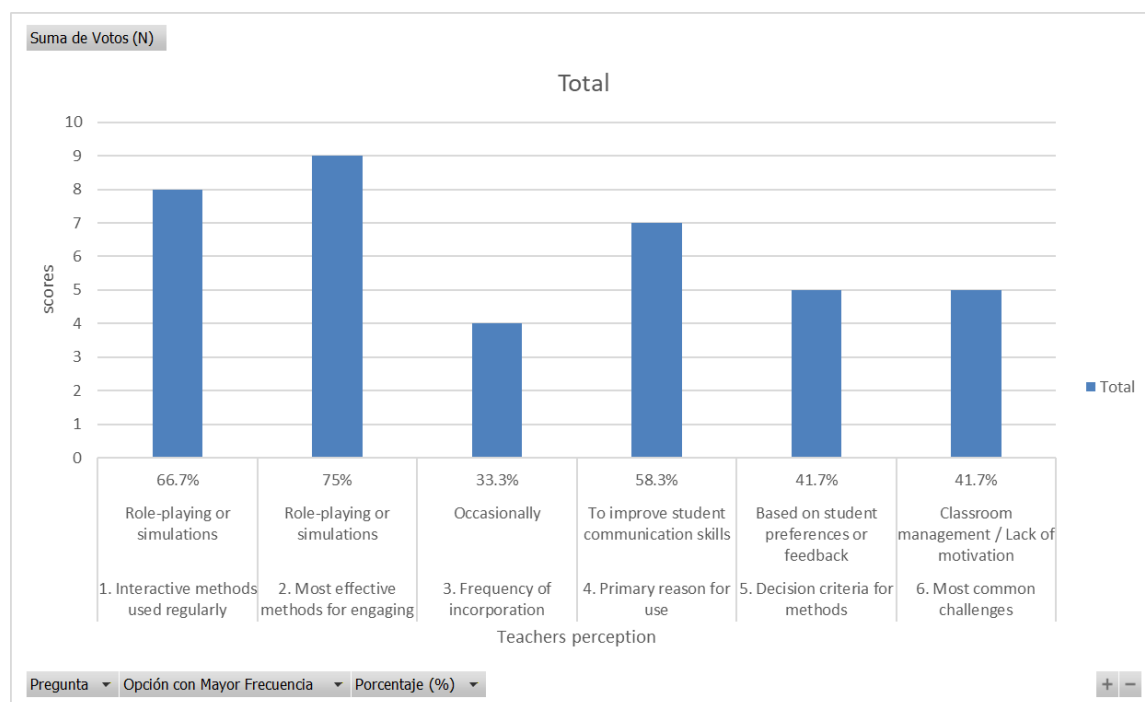
As indicated in Figure 1, teachers’ perceptions of interactive teaching methods and their impact on student attention can vary. The results demonstrated that 41.7% of teachers based their choice of teaching methods on students’ preferences, reflecting an effort to encourage autonomy and active participation in the classroom. However, an equal percentage of responders identified classroom management and lack of motivation as the primary obstacles, in that way limiting the application of these strategies. In addition, the use of interactive methods is not frequent, suggesting that students may continue to face extended periods of passive learning and a traditional process that can negatively affect their attention, and in that way lowering their academic performance.

Despite these limitations, role-playing and authentic simulations were identified as the most widely used (66.7%) and most effective techniques (75%), especially for

improving communication skills, emphasizing the meaning of interactive activities. Therefore, it is important that teachers think about the improvement that their students can achieve if the classroom has as a principal aspect sociability and a proper environment.

**Figure 1**

**Types of interactive teaching methods according to teachers' perceptions**



*Note. Data collected from teachers' perceptions regarding interactive teaching methods that improve students' attention in middle school. Own elaboration*

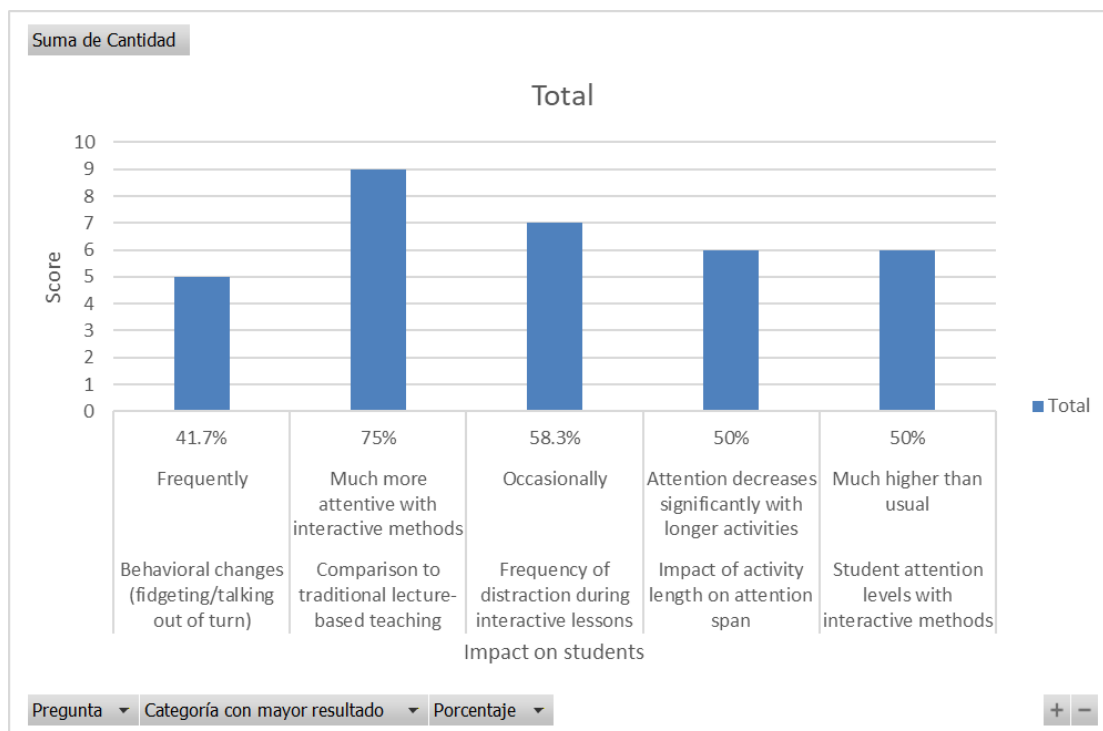
As Figure 2 indicates, teachers notice real changes. With 41.7% and 75% reporting behavioral improvement that is linked with attention, suggesting that interactive activities may contribute to the reduction of disruptive behaviors by enhancing participation. Most teachers agree that these methods positively affect learning.

On the other hand, 50% of participants observed that attention still drops significantly during longer tasks. That finding highlights an issue in structure in lessons, without clear segmentation, cognitive load accumulates and as a result students fail to focus.

This last data is interesting and important because some teachers do not consider the emotional needs of students at that moment, and they can consider the activities as an obligation and not something that they can enjoy and interact with.

**Figure 2**

### Impact of Interactive Teaching Techniques on Students' attention levels



*Note. Students' attention and behavioral responses during teachers' application of interactive teaching methods. Own elaboration.*

## Discussion

The findings of this study indicated significant insights regarding to the impact of interactive teaching methods on students' abilities to maintain attention. Initial findings indicated that 41.7% of teachers occasionally notice behavioral issues, such as talking out of turn. This finding suggest that the implementation of interactive strategies may contribute to the improvement of a more regulated classroom environment. This outcome aligns with the findings of Tiamson et al. (2024) research, which demonstrated that the incorporation of interactive techniques significantly enhances the learning environment in English language classes. Furthermore, Pirmazarova (2023) emphasizes the significance of dynamic environments in supporting the diverse needs of students, in that way facilitating their attention on the lesson.

In addition to improvement in behavior, a significant 75% of the participants reported that students' attention levels are much higher than usual during interactive lessons. This finding is strongly supported by the studies of Flor et al. (2024), who found that active methodologies enhance students' attention and interest in their own educational process. These findings align with the constructivism theory that students learn more effectively when they are active participants rather than passive listeners.

However, it is important to note that 50% of teachers observed that students' attention decreases significantly with longer activities. This finding is a significant addition to this study because it shows that even for interactive method there is a limit. Pirmazarova's (2023) findings suggests that a dynamic environment can improve attention, but the time is an important factor. In the cognitive load theory, the length and difficulty of an activity can influence the performance of students because it can be overwhelming their working memory (Sweller, 1988) because of the amount of information. In consequence, even the most engaging method can fail if it exceeds the cognitive capacity of students. This

reinforces the idea of teachers organizing the lessons in a way that supports sustained attention over time (Posner & Petersen, 1990).

Finally, 50% of teachers reported that students demonstrated a significantly higher level of attention when engaging with interactive methods compared to traditional teaching methods. This result is supported by a broad meta-analysis conducted by Freeman and Scott (2014), which concluded that active learning methods lead to significant enhancement in students' performance in comparison to traditional methods. This suggests that the incorporation of interactive teaching methods is necessary to break the monotony of a traditional lesson. By moving away from teacher centered methods, educators can foster a higher state of cognitive engagement.

The significance of these results lies in the confirmation that interactivity is not just for motivation, but a cognitive necessity for middle school students. The implication for educational practice is clear. Teachers should prioritize methods like role-playing and simulations, as these were identified as the most effective. However, they must also be mindful of activity duration. The transition from a 75% peak in attention to a 50% drop during long tasks suggests that instructional design must be balanced between high engagement and cognitive relief.

## **Conclusions**

The present study aimed to examine how interactive teaching methods influence the attention span of students in the English lesson. The findings reveal that these methodologies represent a positive impact on students' attention.

In relation to the first objective, which was focus on identifying the types of interactive teaching methods that enhances students' attention at the middle school level, the results demonstrate that role-playing and simulation activities are the most frequently used

because of its effectiveness. Teachers have reported that these methods increase students' attention by integrating verbal, visual, and physical elements, in that way supporting Dual Coding Theory (Clark & Paivio, 1991). Additionally, these strategies represent variation and innovation in the classroom, reducing the monotony of a Traditional lecture-based lesson, and in that way promoting sustained attention, as suggested by Posner & Petersen (1990).

Addressing the second specific objective, which was to measure changes in students' attention levels when interactive methods are implemented, the findings demonstrate a notable improvement in students' attention. Most of the teachers reported higher levels of attention. These results are consistent with the Constructivism theory (Vygotsky, 1978), which emphasizes that active participation is an important factor for effective learning. The integration of interactive methodologies in educational practices supports sustained attention and cognitive involvement.

The third specific objective focused on describing the advantages of interactive methods in enhancing students' attention, and the results obtained demonstrate increased motivation, improved communication skills, and better social interaction. The opportunity for students to participate actively and make decisions about their learning has been demonstrated to address their needs for autonomy (Ryan & Deci, 2020). This is in relation with the Self-Determination Theory. However, the findings also indicated that students' attention may decrease if activities are too long, which means that is important to design lessons that prevent a cognitive overload, as described in the Cognitive Load Theory (Sweller, 1988).

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