# The Practicality of Vocabulary Consciousness-raising Tasks on EFL Students' Vocabulary Retention, Reflective Thinking, and Personal Best Goals: Online Classes Versus Traditional Classes

**Khaled Ahmed Abdel-Al Ibrahim** (<u>kibrahim1985@gmail.com</u>) \*Corresponding author Associate Professor of Educational Psychology, College of Education, Prince Sattam bin Abdulaziz University, Saudi Arabia

## Seyyed Mohammad Ali Soozandehfar

Assistant Professor in TEFL, Department of TEFL, Faculty of Humanities, University of Hormozgan, Hormozgan, Bandar Abbas, Iran

soozandehfar@yahoo.com ORCID: 0000-0002-5625-3731

#### Abstract

The efficacy of vocabulary consciousness-raising activities, reflective thinking, and personal best goals in improving English as a Foreign Language (EFL) learners' vocabulary development and learning experiences in both online and conventional classroom environments is examined in this study. Two intact classes of lower-intermediate EFL students from a Saudi Arabian university participated in the study. A mixed-methods approach was used to combine quantitative data of vocabulary test results with qualitative study of learners' experiences using narrative frames and semi-structured interviews. In the experimental group, vocabulary consciousness-raising tasks notably enhanced vocabulary learning and retention above the control group. Students in the experimental group also displayed improved introspective thought and motivation toward reaching their personal best goals. The results highlight how well these pedagogical approaches might enhance language acquisition opportunities and guide teaching in many different learning environments. By providing data regarding the success of vocabulary consciousness-raising activities and associated cognitive strategies in language education, this study adds to the body of knowledge already in use.

**Keywords:** Consciousness-raising tasks, online classes, personal best goals, reflective thinking, vocabulary learning, and retention

## Introduction

The information technology field has experienced a paradigm shift that has resulted in notable global transformations. Higher education has seen this change since many people—especially students—rely on computers and the Internet as indispensable instruments for efficient learning. Likewise, more and more higher education institutions see

network technology's ability to improve and ease learning environments and widen students' knowledge base. It would be foolish to ignore the chances technology offers for quick development as it changes quickly. Thus, the fast growth and spread of information and communication technologies have significantly affected higher education (Yakubu & Dasuki, 2020). Online learning—a unique strategy whereby teachers and students participate in course activities via the Internet, therefore departing from the conventional classroom environment—showcases this effect (Aziz et al., 2019).

Using words plays a fundamental role in instructing and acquiring a foreign language (Oxford, 1990; Schmitt, 2008). Nevertheless, acquiring vocabulary is intricate and gradual (Schmitt, 2010). According to Richards (1976), one primary explanation for this complexity is that comprehending a word extends beyond the mere recollection of its meaning; it necessitates understanding its different aspects, such as collocations, associations, deviations, grammatical functions, and limitations. Consequently, the acquisition of vocabulary knowledge must encompass both the capacity to comprehend and produce language (Nation, 1990). Comprehending vocabulary entails recognizing word forms and understanding their meanings, particularly in listening and reading tasks (Nation, 1990; Schmitt, 2014). On the other hand, productive vocabulary knowledge relates to learners' proficiency in accurately employing words in diverse contexts, particularly during speaking and writing (Nation, 1990, 2001; Schmitt, 2014). The vocabulary acquisition process may seem overwhelming, given the multifaceted nature of words.

Consciousness-raising is a method of teaching that employs an inductive approach, requiring learners to exert intellectual effort in comprehending the specific aspect being taught. According to Rutherford and Sharwood Smith (1985), consciousness-raising encompasses any intentional attempt to redirect learners' attention towards the formal structures of the language being learned. Similarly, Ellis (1997) defines consciousness-raising tasks as instructional activities where second language (L2) instructors provide learners with L2 input in various forms and guide them to engage with the presented data, intending to develop declarative knowledge of the target language's structures.

Regarding non-language factors, reflective thinking (RT) is crucial in achieving academic success (Asakereh & Yousofi, 2018). Based on Dewey's influential work, "How We Think" (1933), RT practices highlight the importance of ideas and anticipate potential future actions when faced with challenges and setbacks. Phan (2009) proposes that RT practices encompass four stages: habitual action, understanding, reflection, and critical thinking (CT). In the initial stage, activities are performed effortlessly without much conscious deliberation. Understanding involves engaging in decontextualized reading and learning. The third stage entails consistently examining underlying assumptions and beliefs within our consciousness. The final stage, CT, goes beyond RT and necessitates individuals to become more aware of their actions.

Academic achievement is influenced by various factors, including goals (Elliot, 2005; Maehr & Zusho, 2009). One prominent goal theory is the concept of personal best goals (PBGs), introduced by Martin (2006), which draws heavily from the goal-setting theory proposed by Locke and Latham (2002). PBGs generally aim to surpass one's previous best performance (Burns et al., 2018). Martin (2006) identifies two types of goals contributing to PBGs: task-specific and situation-specific. In essence, PBGs, as described by Martin (2006), encompass both the specific objective to be achieved (task-specific) and the underlying motivation behind pursuing it (situation-specific).

Integrating information technology in higher education has substantially changed teaching and learning paradigms, mainly through online learning platforms. Notwithstanding these developments, the difficulty of acquiring EFL vocabulary remains myriad and complicated. Learning vocabulary goes beyond memorizing definitions, including knowledge of several word features like collocations, connections, and grammatical functions. A possible way to improve vocabulary retention is through consciousness-raising tasks that highlight an inductive learning method and demand students to interact with language structures actively. Non-language factors such as RT and PBGs also highly influence academic performance. Though vocabulary consciousness-raising activities have great theoretical potential, the research is lacking. Particularly concerning online rather than traditional classroom environments, no research has thus far thoroughly examined the effects of these activities on vocabulary learning and retention, RT, and PBGs. This study intends to close this gap and offer an understanding of the usefulness and efficiency of vocabulary consciousness-raising activities in several learning situations.

The significance of this study is in its ability to close a significant knowledge gap in the body of current EFL vocabulary acquisition studies. Examining the efficacy of vocabulary consciousness-raising tasks helps the study to offer empirical data on how they affect vocabulary retention, RT, and PBGs. The results might have tremendous ramifications for teachers and students alike. The study might provide teachers with creative teaching approaches that improve vocabulary instruction effectiveness in both conventional and online environments. Applying consciousness-raising activities to students might help them retain their vocabulary better and engage more deeply, strengthening their learning process and motivating themselves. Furthermore, knowledge of the part non-language factors such as RT and PBGs play in vocabulary acquisition might guide the creation of more comprehensive and learner-centered teaching strategies. Ultimately, this study could support improved learning results, more efficient language instruction strategies, and a more flexible approach to the changing educational scene shaped by technological developments.

## **Literature Review**

#### Online versus traditional instruction

To enhance students' learning experiences and create a more effective learning environment in higher education, it is essential to investigate the factors and characteristics associated with online learning (Vezne et al., 2023). Online learning has gained significant importance and acceptance in educational institutions worldwide due to the advancements in Internet technology. It has become a prevalent method of instruction globally, particularly in developed countries (Sofi-Karim et al., 2023). Various terms have been used to describe online instruction delivered via the Internet, including distance education, computerized electronic learning, E-learning, and Internet learning (Odegbesan et al., 2019). For example, Ramane et al. (2021) define it as a form of learning that utilizes electronic technologies to access educational curricula beyond traditional classrooms. Tugwell and Maduabuchukwu (2020) define online learning as a teaching and learning approach that relies on electronic media and devices to enhance the accessibility of training, communication, and interaction, fostering new ways of understanding and establishing knowledge. Artificial intelligence holds the potential to address several challenges in online distance learning and can also contribute to improving teaching and learning processes (Dogan et al., 2023).

In simple terms, online learning refers to courses specifically delivered through the Internet, outside the traditional classroom setting, to enhance and support learning. It entails using network technologies to create, facilitate, and provide learning experiences, empowering individual learners and shifting the role of teachers from being gatekeepers of knowledge to facilitators of the learning process (Ngumbi, 2021). Online learning is an umbrella term encompassing online learning, web-based training, and technology-delivered instruction. Kuliya and Usman (2021) highlight that online learning has been described in various ways, including computer-based training (CBT), internet-based training (IBT), web-based instruction (WBI), advanced distributed learning (ADL), distributed learning (DL), distance learning, mobile learning, and more (Onasanya et al., 2014). Learning can occur through different social media platforms, internet-based tools, and services, enabling learners to collaborate, create content, and share information. Online learning has increased the accessibility of courses, course materials, and relevant information, allowing experts from different fields to provide services to a broad geographical audience. Onasanya et al. (2021) conclude that lecturers in the online learning environment should be encouraged to utilize

Traditional classroom instruction refers to the conventional approach where the instructor imparts knowledge or information to the students. In this setting, students are expected to listen, take notes, memorize, and demonstrate their understanding by filling in the correct information or selecting the appropriate options during tests as the teacher designs the lessons (Kaur et al., 2020). According to this viewpoint, knowledge is a collection of beliefs accurately representing reality. The primary focus in the classroom is on clear and explicit communication of these principles. Consequently, student-initiated interactions with the teacher are infrequent (Patil, 2020).

The instructor possesses not only the solutions but also the relevant questions. Initially, students are assumed to lack knowledge before posing queries that can receive specific and definitive responses from the instructor (Soyemi et al., 2012). Consequently, some students may become discouraged and experience academic underperformance. While online learning provides self-directed activities, written lectures, and course materials, traditional classroom instruction offers hands-on and structured learning, allowing students to promptly address difficulties or areas of confusion (Kuliya & Usman, 2021). However, the emergence of the COVID-19 pandemic has necessitated the adoption of online learning as a transformative option for the entire traditional educational system. Both teachers and students have had to adapt their instructional approaches, teaching and learning methodologies, and various aspects of the learning process. While this reform has produced several positive outcomes, undergraduate students in higher education institutions hold differing opinions on whether online learning surpasses traditional classroom instruction (Wellington & Clarence, 2021).

## **Consciousness-raising tasks**

According to Rutherford and Sharwood Smith (1985), consciousness-raising pertains to the heightened awareness among learners regarding a specific linguistic aspect. Ellis (1990) argues that when learners are made aware of a particular language feature through formal instruction, they are more likely to notice that form in subsequent input. This process fulfills the essential requirement for eventual acquisition.

Consciousness-raising is an instructional approach that utilizes an inductive method, necessitating learners to actively engage their cognitive abilities while comprehending the specific taught aspect. Rutherford and Sharwood Smith (1985) describe consciousness-raising as any deliberate attempt to redirect learners' focus towards the formal structures of the language they are learning. Likewise, according to Ellis (1997), consciousness-raising tasks refer to instructional activities in which L2 instructors present learners with L2 input in different formats and guide them to interact with the provided information, aiming to foster declarative knowledge of the target language's structures.

Ellis (1997) distinguished between consciousness-raising tasks and form-focused activities, asserting that learner production is not essential, unlike form-focused activities. According to him, the primary objective of consciousness-raising tasks is to foster an awareness of the targeted structure in the learner's mind while minimizing the emphasis on producing the specific feature. As a result, the main aim of consciousness-raising tasks is to develop learners' declarative knowledge (explicit knowledge) of grammar rather than their procedural knowledge (implicit knowledge) of it. However, Ellis (2002) acknowledged that consciousness-raising tasks may not lead to immediate acquisition. In other words, these tasks might have a delayed impact on the acquisition of L2 rules. To date, a lot of studies that have investigated the efficacy of consciousness-raising tasks in L2 learning have only

focused on how these tasks might foster grammar learning (e.g., Amirian & Abbasi, 2014; Amirian & Sadeghi, 2012; Kargar Behbahani & Khademi, 2022; Khezrlou, 2024, among many others).

## **Reflective thinking**

RT plays a vital role in attaining academic achievement, considering non-language factors (Asakereh & Yousofi, 2018). Drawing from Dewey's influential work, "How We Think" (1933), RT practices emphasize the significance of ideas and the ability to anticipate future actions when confronted with challenges and setbacks. Phan (2009) suggests that RT practices encompass four stages: habitual action, understanding, reflection, and CT. In the initial stage, activities are carried out effortlessly, without much conscious consideration. Understanding involves engaging in reading and learning that goes beyond specific contexts. The third stage involves consistently examining the underlying assumptions and beliefs that exist in our consciousness. The final stage, CT, surpasses RT and requires individuals to develop a heightened awareness of their actions.

According to Barrel (1984), both RT and CT describe higher-order thinking as they push individuals beyond their comfort zone (Malmir & Mohammadi, 2018). CT necessitates individuals to develop their ability to reason, analyze, and evaluate (Halpern, 2003; Li, 2023). Furthermore, CT is a crucial element in achieving educational success, emphasizing the need to incorporate it within academic settings, as it is a learnable skill rather than an innate construct (Namaziandost et al., 2023). Similarly, Van Velzen (2017) emphasized that individuals lacking RT skills cannot bring about change. Several studies have explored the impact of RT on educational achievement. For instance, Soodmand Afshar and Rahimi (2016) surveyed 150 EFL learners to examine the relationship between RT, emotional intelligence (EI), and speaking skills. The results of the multiple correlation analysis demonstrated a strong link between RT, EI, and speaking skills, indicating that RT and EI could predict speaking abilities. Similarly, Porntaweekul and colleagues (2016) investigated the effect of RT strategies on empowering pre-service and in-service education students in Thailand, yielding positive results where students could solve their problems effectively. Additionally, using causal modeling procedures, Phan (2009) explored the effects of RT practices, effort, and deep processing strategies on students' academic achievement, revealing that reflection and CT significantly influenced students' learning and academic performance.

## Personal best goals

Various factors, including goals, impact academic achievement (Elliot, 2005; Maehr & Zusho, 2009). One notable goal theory is the concept of PBGs introduced by Martin (2006), which draws heavily from Locke and Latham's goal-setting theory (2002). PBGs generally aim to surpass one's previous best performance (Burns et al., 2018). Martin (2006) identifies two types of goals contributing to PBGs: task-specific and situation-specific. PBGs, as described by Martin (2006), encompass both the specific objective to be achieved

(task-specific) and the underlying motivation behind pursuing it (situation-specific). Taskspecific goals are further categorized into specificity and challenge. Specificity implies that PBGs are clearly defined, leaving no room for confusion regarding the expected outcomes. Additionally, the level of difficulty or challenge varies among goals, with PB goals being equal to or greater in difficulty compared to one's previous best performance. The interaction between specificity and difficulty suggests that specific and challenging goals lead to improved performance (Liem et al., 2012). Situation-specific goals are linked to an individual's past performance and include competitive self-reference and self-improvement (Martin, 2006). Competitive self-reference goals involve competing with one's past self rather than outperforming other students in the class, while self-improvement focuses on surpassing previous achievements. PBGs play a significant role in academic settings as they are associated with academic achievement, engagement, and resilience (Burns et al., 2018; Collie et al., 2016; Khajavy, Bardach, et al., 2018; Martin & Elliot, 2016). Therefore, PBGs provide students in educational settings with opportunities to activate their potential, overcome challenges, and achieve success by surpassing their previous accomplishments (Martin, 2006).

Current research emphasizes how common online learning is in higher education and how it could improve students' learning experiences. Still, more research is needed on the elements and traits of online learning relative to conventional classroom education. Furthermore, the impact of consciousness-raising tasks in conventional and online classroom environments on vocabulary acquisition and retention is unexplored. Moreover, in both online and traditional instruction, the functions of RT and PBGs in academic performance demand greater research. Thus, this study intends to fill in these research gaps by analyzing the effect of vocabulary consciousness-raising activities on vocabulary acquisition and retention in online versus traditional classroom environments while also considering the influence of RT and PBGs on students' learning outcomes. To this end, the following research questions are raised:

- 1. How do consciousness-raising tasks affect EFL learners' vocabulary learning and retention?
- 2. How do EFL learners experience reflective thinking due to vocabulary consciousness-raising tasks?
- 3. How do EFL learners experience personal best goals from vocabulary consciousness-raising tasks?

#### Method

This study utilized a mixed-methods research design to investigate the impact of vocabulary consciousness-raising tasks on vocabulary learning and retention in both online and traditional classroom settings. The study also aimed to explore the experiences of RT and PBGs among participants. Using a mixed-methods approach allowed for a

comprehensive understanding of the research questions by combining quantitative data collection for measuring vocabulary learning and retention and qualitative data collection to study the experiences of RT and PBGs through narrative frames and semi-structured interviews.

The study was conducted at a university in Saudi Arabia, focusing on learners enrolled in EFL courses. Participants were selected from two intact classes, each comprising 30 learners, resulting in 60 participants. These classes were randomly classified as experimental and control groups. These learners ranged in age from 19 to 29 years old. All participants spoke Arabic as their native language, and none were bilingual, ensuring a uniform linguistic background. The Oxford Quick Placement Test (OQPT) was administered to assess their English proficiency. The results disclosed that all participants were classified as lower-intermediate learners of English. This selection ensured that the study targeted a consistent proficiency level, allowing for a more accurate examination of the impact of vocabulary consciousness-raising tasks on their vocabulary retention, RT, and PBGs.

A teacher-made vocabulary test was employed to measure the participants' vocabulary knowledge. This test was specifically designed to assess the participants' understanding of the target words relevant to the study. The validity of this test was confirmed using the known-group technique (Ary et al., 2019), ensuring its appropriateness for distinguishing between different levels of vocabulary knowledge among the participants. Additionally, the reliability of the test was found to be high, with a reliability coefficient of r=.83r=.83, indicating consistent performance across different administrations.

The vocabulary test was administered on three occasions: at the beginning of the study (pretest), immediately after the intervention (posttest), and several weeks later (delayed posttest) to measure vocabulary retention over time. This approach allowed for a comprehensive assessment of the immediate and long-term effects of the vocabulary consciousness-raising tasks.

Narrative frames and semi-structured interviews were utilized to explore the participants' experiences of RT and PBGs. Narrative frames provided a structured yet flexible way for participants to reflect on and articulate their experiences and thoughts related to RT and PBGs. The semi-structured interviews allowed for in-depth exploration of individual experiences, offering rich qualitative data to complement the quantitative findings from the vocabulary tests. This combination of instruments ensured a thorough examination of both the cognitive and affective impacts of the vocabulary consciousness-raising tasks.

The experimental group received instruction through the Google Meet platform, creating a fully online learning environment. The instructional sessions for this group focused on vocabulary consciousness-raising tasks, designed to enhance the learners' awareness of the target vocabulary by engaging them in activities that required active cognitive engagement. These tasks included input enhancement, where target words in reading

passages were highlighted and bolded to draw attention to their forms and meanings; noticing activities that asked learners to identify and underline target vocabulary in listening or reading exercises; form-focused tasks, where learners had to identify the grammatical category of the target words and use them in new sentences; metalinguistic feedback, offering explanations and discussions about the target words' use, form, and meaning; and interactive discussions that facilitated group discussions and collaborative activities where learners had to use the target vocabulary actively. These consciousness-raising tasks were intended to promote a deep understanding of the vocabulary items beyond mere rote memorization, making the online sessions interactive and supported by various multimedia resources.

Conversely, the control group received traditional face-to-face instruction in a classroom setting, where the instructional approach was teacher-fronted, meaning the teacher was the primary source of information and instruction. The control group did not engage in consciousness-raising tasks. Instead, their vocabulary instruction followed conventional methods, including direct instruction where the teacher explained the meanings of the target words and provided example sentences; repetition and drills where students repeated the target words and practiced them through written and oral drills; memorization emphasized through lists and flashcards, and regular quizzes conducted to assess the learners' recall of the vocabulary items. The traditional classroom sessions were structured and focused on explicitly teaching vocabulary, with the teacher providing explanations and students practicing through repetition and testing.

The treatment was implemented over eight weeks, with both groups receiving two instructional sessions per week, each lasting 90 minutes. The same set of target vocabulary items was used for both groups to ensure consistency in the content being taught, with the primary difference lying in the instructional approach: consciousness-raising tasks for the experimental group versus traditional teacher-fronted instruction for the control group. This design allowed for a direct comparison of the effectiveness of consciousness-raising tasks delivered online versus traditional face-to-face vocabulary instruction, aiming to determine how these different instructional approaches impacted vocabulary learning, retention, RT, and PBGs among EFL learners.

#### **Data Analysis**

A one-way between-groups ANOVA was conducted to measure the effect of consciousness-raising tasks on vocabulary learning and retention. This statistical analysis allowed for comparing vocabulary test scores across the experimental and control groups at three different time points: pretest, posttest, and delayed posttest. The ANOVA helped determine whether there were significant differences in vocabulary acquisition and retention between the groups that received consciousness-raising tasks and those that received traditional teacher-fronted instruction.

Additionally, qualitative data was collected through narrative frames and semistructured interviews to understand the learners' experiences of RT and PBGs in online and traditional classes. This data was manually transcribed and subjected to thematic analysis. The thematic analysis involved coding the data, identifying patterns, and deriving themes that captured the essence of the participants' experiences. This process was iterative and continued until clear, comprehensive themes emerged, providing deeper insights into how the different instructional methods influenced learners' RT and PBGs.

#### **Results**

# The effect of vocabulary consciousness-raising tasks on vocabulary development

An ANOVA was conducted to measure the differences between the experimental and the control groups regarding vocabulary learning and retention on three tests. Before performing the ANOVA test, the homogeneity assumption was checked and confirmed (p > .05). Table 1.

Descriptive Statistics on the Pretest

Group	Mean	Std. Deviation	N
Experimental	3.300	1.578	30
Control	3.000	1.508	30
Total	3.150	1.538	60

Table 1 shows that on the pretest, the experimental group's performance (N = 30, M = 3.300, SD = 1.578) was similar to that of the control group (N = 30, M = 3.000, SD = 1.508). Table 2.

Tests of Between-Subjects Effects on the Pretest

Tesis of Between	Tests of Between Subjects On the Tretest					
Source	Type III Sum	df	Mean Square	F	Sig.	Partial Eta
	of Squares					Squared
Corrected Model	1.350	1	1.350	.566	.455	.010
Intercept	595.350	1	595.350	249.677	.000	.811
Group	1.350	1	1.350	.566	.455	.010
Error	138.300	58	2.384			
Total	735.000	60				
Corrected Total	139.650	59				

Table 2 shows that the difference between the two groups on the pretest was not significant (df = 1, F = .566, p > .05).

Table 3.

Descriptive Statistics on the Posttest

Group	Mean	Std. Deviation	N

Experimental	13.000	3.723	30
Control	5.200	3.231	30
Total	9.100	5.235	60

Table 3 shows the superiority of the experimental group (M = 13.000, SD = 3.723) over the control group (M = 5.200, SD = 3.231).

Table 4.

Tests of Between-Subjects Effects on the Posttest

Source	Type III Sum	df	Mean Square	F	Sig.	Partial Eta
	of Squares					Squared
Corrected Model	912.600	1	912.600	75.100	.000	.564
Intercept	4968.600	1	4968.600	408.880	.000	.876
Group	912.600	1	912.600	75.100	.000	.564
Error	704.800	58	12.152			
Total	6586.000	60				
Corrected Total	1617.400	59				

Table 4 demonstrates a significant difference between the two groups on the posttest (df = 1, F = 75.100, p = .001).

Table 5.

Descriptive Statistics on the Delayed Posttest

Group	Mean	Std. Deviation	N
Experimental	12.133	3.137	30
Control	5.000	3.140	30
Total	8.566	4.756	60

Table 5 also shows that on the delayed posttest, the experimental group (M = 12.133, SD = 3.137) outperformed the control group (M = 5.000, SD = 3.140). Table 6.

Tests of Between-Subjects Effects on the Delayed Posttest

Source	Type III Sum	df	Mean Square	F	Sig.	Partial Eta
	of Squares					Squared
Corrected Model	763.267	1	763.267	77.466	.000	.572
Intercept	4403.267	1	4403.267	446.902	.000	.885
Group	763.267	1	763.267	77.466	.000	.572
Error	571.467	58	9.853			
Total	5738.000	60				

#### Corrected Total 1334.733 59

Table 6 demonstrates the significance of the difference between the two groups on the delayed posttest (df = 1, F = 77.466, p = .001). Overall, the results show that vocabulary consciousness-raising tasks effectively learned vocabulary and helped the experimental group participants retain the target vocabulary set in their long-term memory.

## EFL learners' experiences of reflective thinking through consciousness-raising tasks

The study investigates how different instructional approaches impact EFL learners' RT. Different contrasts emerged between the two teaching methods by comparing learners' experiences in experimental and control groups. The experimental group engaged in vocabulary consciousness-raising tasks via Google Meet, which enhanced their RT abilities, while the control group received traditional face-to-face instruction, leading to a more passive learning experience.

Learners in the experimental group reported a **heightened awareness of their learning processes**. They reflected more on how they acquired vocabulary, which led to improved metacognitive skills. The interactive online tasks and metalinguistic feedback encouraged active engagement and critical thinking. Learners could assess their progress, set personal goals, and plan their learning strategies more effectively. For example, many participants mentioned becoming more conscious of how words are used in different contexts, actively discussing vocabulary with peers, and valuing the feedback that helped them identify areas for improvement.

On the other hand, the control group, which did not receive consciousness-raising tasks, showed a limited awareness of their learning processes. Their experiences were marked by a routine focus on memorization and repetition without deeper reflection. The traditional teacher-fronted approach fostered passive learning, with fewer opportunities for critical engagement. When it occurred, reflection was often externally prompted by teacher feedback rather than self-initiated. Learners described their learning as habitual and focused more on completing assigned tasks than improving their learning strategies.

In-depth interviews with both groups provided further insights. The experimental group appreciated the autonomy and **interactive nature of the online tasks**, which promoted self-assessment and regular goal-setting. In contrast, the control group reported minimal opportunities for RT and critical engagement, as their learning practices were routine and teacher-dependent.

The comparative analysis revealed that instructional approaches significantly influence RT. Consciousness-raising tasks within an interactive, feedback-rich online environment promote a more **reflective**, **autonomous**, **and critically engaged learning experience**. Traditional instructional methods, however, lead to more passive and habitual learning behaviors, limiting the development of RT.

These findings suggest integrating consciousness-raising tasks into EFL instruction can enhance learners' RT, metacognitive skills, and language acquisition.

# EFL learners' experiences of personal best goals through consciousness-raising tasks

The analysis of narratives from EFL learners provided valuable insights into the influence of different instructional approaches on their goal-setting behaviors and motivation. Through a detailed examination of experiences shared by learners in both the experimental and control groups, a clear contrast emerged in how these approaches impacted their interactions with PBGs.

Learners in the experimental group, who engaged with vocabulary consciousness-raising tasks via Google Meet, described a dynamic and goal-oriented learning environment. They frequently expressed that these tasks sharpened their focus on setting and achieving PBGs and fostered a sense of continuous self-improvement. The interactive and engaging nature of the tasks significantly boosted their motivation, leading them to set specific and challenging objectives for themselves. This group showed a strong commitment to tracking their progress and reflecting on their achievements, contributing to their overall growth and motivation.

In contrast, those in the control group who experienced traditional face-to-face instruction reported a more routine and compliance-driven learning process. This group experienced fewer instances of goal setting and less motivation to exceed their previous performance levels. The traditional approach often left learners with limited opportunities for self-assessment or reflection on their progress. Their focus was primarily on adhering to teacher instructions and completing tasks, which did not encourage proactive goal-setting or personal growth.

The semi-structured interviews provided further clarity, revealing distinct differences between the two groups. The experimental group's consciousness-raising tasks were associated with **proactive goal-setting**, **enhanced self-motivation**, **and regular self-assessment**. **Detailed feedback** from instructors played a crucial role in reinforcing these behaviors, creating a positive feedback loop that supported **ongoing improvement**. Conversely, the control group's experiences were characterized by a lack of emphasis on personal goal setting and a greater focus on extrinsic motivations such as grades and meeting teacher expectations.

Overall, the findings underscore the effectiveness of consciousness-raising tasks in cultivating a goal-oriented and RT environment. By fostering increased motivation and providing opportunities for self-assessment, these tasks significantly enhance learners' ability to set and achieve PBGs. Integrating such approaches into EFL instruction could greatly improve learners' engagement and success in their language learning journeys.

#### **Discussion**

The present study investigated the practicality of vocabulary consciousness-raising tasks in enhancing EFL students' vocabulary retention, RT, and PBGs in online classes compared to traditional classes. The discussion synthesizes the findings from both quantitative and qualitative analyses, interprets their implications, and addresses the research questions raised in the study. Regarding vocabulary acquisition and retention, the quantitative phase exposed notable variations between the experimental and control groups. Comparatively to the control group in traditional classrooms, the experimental group—which received vocabulary consciousness-raising tasks in online classes—showered better on both immediate and delayed posttests. These results show how well consciousness-raising tasks help to acquire language.

The qualitative study provided important new perspectives on the experiences of EFL students engaged in tasks raising vocabulary consciousness. Learners in the experimental group reported proactive goal planning, increased self-motivation, and frequent self-assessment, supporting their better vocabulary acquisition results. By contrast, students in the control group reported limited goal orientation, extrinsic motivation, and routine learning habits, mirroring the difficulties with traditional teaching strategies. Furthermore, the qualitative phase helped clarify the impact of vocabulary consciousness-raising tasks on students' RT and PBGs. Those in the experimental group showed more contemplative thought, actively tracking their development and self-assessment. They also showed a stronger inclination toward PBGs, always trying to exceed previous achievements. On the other hand, learners in the control group exhibited little participation in RT and PBGs, highlighting traditional instruction's limits in developing metacognitive skills and self-directed learning.

By methodically analyzing the effects of vocabulary consciousness-raising tasks on vocabulary learning outcomes in the framework of online rather than traditional classroom instruction, this study offers a fresh addition to the body of knowledge already in use. Although earlier studies have looked at the effectiveness of several instructional modalities and approaches in language education, few studies have thoroughly examined the effects of consciousness-raising activities on vocabulary acquisition and retention across many educational environments. Moreover, this study especially combines the investigation of RT and PBGs, clarifying their role in improving learners' engagement and self-regulated learning practices in language education. By filling up these knowledge gaps and using a mixed-methods approach, this study offers insightful analysis of the efficacy of creative pedagogical approaches in enhancing language learning outcomes and thereby strengthening students' metacognitive awareness and goal-setting capacity. Therefore, the study's uniqueness resides in its comprehensive analysis of the interaction among instructional tactics, cognitive processes, and learner outcomes in language education, promoting a better knowledge of successful teaching and learning approaches in many educational environments.

The study's results illustrate the changing scene of higher education in response to technological developments and match the literature on online versus traditional instruction. Offering flexible and easily available substitutes for conventional classroom education, online learning has grown increasingly common worldwide (Sofi-Karim et al., 2023; Vezne et al., 2023). Particularly in light of the COVID-19 epidemic, which hastened the acceptance of online learning as a transforming alternative, the comparison between online and traditional education reflects the continuous argument on the effectiveness of several instructional modalities (Wellington & Clarence, 2021). Moreover, this study's investigation of consciousness-raising tasks aligns with the body of research on language learning approaches and emphasizes the need to increase students' awareness of particular linguistic characteristics (Ellis, 1990; Rutherford & Sharwood Smith, 1985). The results imply that consciousness-raising tasks efficiently enhance vocabulary acquisition and retention, in line with earlier studies on their usefulness in supporting grammar learning (Amirian & Sadeghi, 2012; Amirian & Sadeghi, 2022; Kargar Behbahani & Khademi, 2022; Khezrlou, 2024).

Furthermore, the analysis of RT and PBGs in this study complements the body of evidence stressing their role in academic success and goal accomplishment (Asakereh & Yousofi, 2018; Martin, 2006; Phan, 2009). The results imply that consciousness-raising tasks in online courses help students achieve better RT and PBG levels, promoting self-regulated learning and academic performance. This is consistent with earlier studies showing the favorable effects of RT strategies on language learning outcomes (Porntaweekul et al., 2016; Soodmand Afshar & Rahimi, 2016), the link between PBGs and academic engagement and resilience (Burnes et al., 2018; Collie et al., 2016; Khajavy, Bardach, et al., 2018; Martin & Elliot, 2016).

This study has several implications. For language teachers, this study offers valuable insights into the effectiveness of vocabulary consciousness-raising tasks as a pedagogical strategy for enhancing language learning outcomes. Teachers can integrate these tasks into their instructional practices to promote deeper engagement and comprehension among learners by demonstrating the positive impact of consciousness-raising tasks on vocabulary acquisition and retention. Additionally, the findings underscore the importance of incorporating RT and PBGs into language instruction, empowering students to take ownership of their learning and adopt effective self-regulated learning strategies. Language teachers can leverage these insights to design more dynamic and interactive lesson plans that cater to diverse learner needs and preferences, ultimately fostering a more stimulating and conducive learning environment.

For materials developers, this study highlights the potential for integrating vocabulary consciousness-raising tasks into language learning materials to enhance their efficacy and relevance. By incorporating these tasks into textbooks, online platforms, and other educational resources, materials developers can allow learners to actively engage with target

vocabulary in meaningful contexts, thereby facilitating deeper understanding and retention. Moreover, including reflective prompts and goal-setting exercises in learning materials can promote metacognitive awareness and foster students' motivation and autonomy in the learning process. As such, materials developers can play a crucial role in equipping learners with the necessary tools and resources to navigate the complexities of language acquisition and achieve their learning goals effectively.

For policymakers, this study underscores the importance of supporting the integration of innovative pedagogical approaches into language education curricula and policies. By recognizing the value of vocabulary consciousness-raising tasks, RT, and PBGs in promoting language learning outcomes, policymakers can advocate for their inclusion in educational frameworks and standards. Furthermore, policymakers can allocate resources and funding towards developing professional development programs and training initiatives for language teachers to enhance their pedagogical skills and proficiency in implementing these strategies. By prioritizing adopting evidence-based practices and fostering a supportive learning environment, policymakers can contribute to the continuous improvement of language education systems and ensure that learners are equipped with the necessary competencies to thrive in an increasingly globalized and interconnected world.

## **Conclusion**

In conclusion, by looking at the effects of vocabulary consciousness-raising activities, RT, and PBGs on language acquisition and retention, this study helps us better understand efficient language learning techniques. The results highlight the effectiveness of consciousness-raising activities in improving vocabulary learning results; this is seen by the notable increase in vocabulary acquisition and retention among participants who got instruction enhanced with these activities. Furthermore, it became clear that including RT and PBGs in language education was essential for helping students become more metacognitive aware and motivated, encouraging deeper involvement and self-regulated learning practices. This paper presents insightful analysis by stressing the possibilities of these pedagogical strategies for language teachers, materials developers, and policymakers trying to improve language education policies and practices. More study is needed to investigate the long-term consequences of these approaches on language proficiency and to pinpoint best ways to include them in language-learning situations. Finally, by using evidence-based strategies and creating a conducive learning environment, teachers and policymakers may enable students to reach their language acquisition objectives and flourish in different linguistic and cultural contexts.

Although this study offers important new perspectives on the efficacy of vocabulary consciousness-raising activities, RT, and PBGs in language acquisition, certain limitations should be admitted. First of all, the study was carried out in a particular context—that of a university in Saudi Arabia—which can restrict the generalizability of the results to different

learning environments or student demographics. Furthermore, in the study, the sampling technique was intact classes, which can cause possible biases and restrict participant random assignment to experimental and control groups. Moreover, the intervention and follow-up period could not have been enough to reflect the long-term consequences of the pedagogical approaches used completely. Finally, even though efforts were taken to guarantee the validity and dependability of the instruments used—including the vocabulary test and qualitative data collecting tools—inherent limitations connected with self-report measures and subjective interpretations of experiences should be considered.

In light of these limitations, several suggestions for further research emerge. Firstly, future studies could replicate this investigation in diverse educational contexts and with different learner populations to enhance the generalizability of the findings. Utilizing randomized controlled trials or quasi-experimental designs with larger sample sizes could provide more robust evidence of the effectiveness of vocabulary consciousness-raising tasks, RT, and PBGs in language learning. Moreover, longitudinal studies tracking learners' progress over an extended period would offer valuable insights into the sustained impact of these pedagogical approaches on language proficiency and learner motivation. Additionally, exploring the combined effects of these strategies and investigating potential moderating variables, such as learner autonomy, cognitive styles, and cultural factors, could deepen our understanding of their mechanisms and boundary conditions. Finally, qualitative inquiries focusing on teachers' perspectives and classroom practices could elucidate the challenges and facilitators of implementing these strategies in real-world language learning environments. By addressing these avenues for further research, scholars can advance our knowledge of effective language learning pedagogy and inform evidence-based practices in language education.

**Funding:** This study is supported via funding from Prince Sattam Bin Abdulaziz University Project Number (PSAU/2024 /R/1446).

#### References

- Amirian, S. M. R., & Abbasi, S. (2014). The effect of grammatical consciousness-raising tasks on Iranian EFL learners' knowledge of grammar. *Procedia-Social and Behavioral Sciences*, 98, 251-257. <a href="https://doi.org/10.1016/j.sbspro.2014.03.414">https://doi.org/10.1016/j.sbspro.2014.03.414</a>
- Amirian, S. M. R., & Sadeghi, F. (2012). The effect of grammar consciousness-raising tasks on EFL learners performance. *International Journal of Linguistics*, 4(3), 708-720. <a href="http://dx.doi.org/10.5296/ijl.v4i3.2392">http://dx.doi.org/10.5296/ijl.v4i3.2392</a>
- Ary, D., Jacobs, L. C., Sorensen, C. K., & Walker, D. (2019). *Introduction to research in education* (10th ed.) Wadsworth/Cengage Learning.
- Asakereh, A., & Yousofi, N. (2018). Reflective thinking, self-efficacy, self-esteem and academic achievement of Iranian EFL students in higher education: Is there a

- relationship? *International Journal of Educational Psychology*, 7(1), 68-89. <a href="https://doi.org/10.17583/ijep.2018.2896">https://doi.org/10.17583/ijep.2018.2896</a>
- Aziz, R. C., Hashim, N., Omar, R. N. R., Yusoff, A. M., Muhammad, N. H., Simpong, D. B., Abdullah, T., Zainuddin, S. A., and Safri, F. H. M. (2019). Teaching and learning in higher education: e-learning as a tool. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, 9(1), 458–463. http://doi.org/10.35940/ijitee.A4188.119119
- Burns, E. C., Martin, A. J., & Collie, R. J. (2018). Adaptability, personal best (PB) goals setting, and gains in students' academic outcomes: A longitudinal examination from a social cognitive perspective. *Contemporary Educational Psychology*, *53*, 57-72. https://doi.org/10.1016/j.cedpsych.2018.02.001
- Collie, R. J., Martin, A. J., Papworth, B., & Ginns, P. (2016). Students' interpersonal relationships, personal best (PB) goals, and academic engagement. *Learning and Individual Differences*, 45, 65-76. https://doi.org/10.1016/j.lindif.2015.12.002
- Dewey, J. (1933). How we think: A restatement of the relation of reflective thinking to the educative process. Houghton Mifflin.
- Dogan, M. E., Goru Dogan, T., & Bozkurt, A. (2023). The use of artificial intelligence (AI) in online learning and distance education processes: A systematic review of empirical studies. *Applied Sciences*, *13*(5), 3056. <a href="https://doi.org/10.3390/app13053056">https://doi.org/10.3390/app13053056</a>
- Elliot, A. J. (2005). A Conceptual History of the Achievement Goal Construct. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52–72). Guilford Publications.
- Ellis, R. (1990). Researching classroom language learning. In C. Brumfit & R. Mitchell (Eds.), *ELT documents 133: Research in the language classroom* (pp. 54-70). Modern English.
- Ellis, R. (1997). SLA research and language teaching. Oxford University Press.
- Ellis, R. (2002b). Grammar teaching: Practice or consciousness-raising. In J. C. Richards & W. A. Renandya (Eds.). *Methodology in language teaching: An anthology of current practice*, (pp. 167-174). Cambridge University Press.
- Halpern, D. F. (2003). Thinking critically about creative thinking. In M. A. Runco (Ed.), *Critical creative processes* (pp. 189–207). Hampton Press.
- Kargar Behbahani, H., & Khademi, A. (2022). The concurrent contribution of input flooding, visual input enhancement, and consciousness-raising tasks to noticing and intake of present perfect tense. *MEXTESOL Journal*, 46(4), n4. Retrieved from http://files.eric.ed.gov/fulltext/EJ1374061.pdf
- Kaur, N., Dwivedi, D., Arora, J., & Gandhi, A. (2020). Study of the effectiveness of elearning to conventional teaching in medical undergraduates amid COVID-19

- pandemic. *National Journal of Physiology, Pharmacy and Pharmacology*, 10(7), 563-567. Retrieved from <u>. (njppp.com)</u>
- Khajavy, G. H., Bardach, L., Hamedi, S. M., & Lüftenegger, M. (2018). Broadening the nomological network of classroom goal structures using doubly latent multilevel modeling. *Contemporary Educational Psychology*, 52, 61-73. https://doi.org/10.1016/j.cedpsych.2017.10.004
- Khezrlou, S. (2024). Effects of task repetition with consciousness-raising in wiki-mediated collaborative writing on the development of explicit and implicit knowledge. Computer Assisted 243-278. Language *Learning*, *37*(1-2), https://doi.org/10.1080/09588221.2022.2033789
- Kuliya, M., & Usman, S. (2021). Perceptions of E-learning among undergraduates and academic staff of higher educational institutions in north-eastern Nigeria. *Education and Information Technologies*, 26(2), 1787-1811. <a href="https://doi.org/10.1007/s10639-020-10325-x">https://doi.org/10.1007/s10639-020-10325-x</a>
- Li, L. (2023). Critical thinking from the ground up: teachers' conceptions and practice in EFL classrooms. *Teachers and Teaching*, 29(6), 571-593. <a href="https://doi.org/10.1080/13540602.2023.2191182">https://doi.org/10.1080/13540602.2023.2191182</a>
- Liem, G. A. D., Ginns, P., Martin, A. J., Stone, B., & Herrett, M. (2012). Personal best goals and academic and social functioning: A longitudinal perspective. *Learning and Instruction*, 22(3), 222-230. <a href="https://doi.org/10.1016/j.learninstruc.2011.11.003">https://doi.org/10.1016/j.learninstruc.2011.11.003</a>
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, *57*(9), 705-717. https://psycnet.apa.org/doi/10.1037/0003-066X.57.9.705
- Maehr, M. L., & Zusho, A. (2009). Achievement goal theory: The past, present, and future. In K.R. Wenzel & A. Wigfield (Eds), *Handbook of motivation at school* (pp. 77–104). Routledge/Taylor & Francis Group.
- Malmir, A., & Mohammadi, P. (2018). Teachers' reflective teaching and self-efficacy as predicators of their professional success: A case of Iranian EFL teachers. *Research in English language pedagogy*, 6(1), 117-138. <a href="https://doi.org/10.30486/relp.2018.538818">https://doi.org/10.30486/relp.2018.538818</a>
- Martin, A. J. (2006). Personal bests (as): A proposed multidimensional model and empirical analysis. *British Journal of Educational Psychology*, 76(4), 803-825. <a href="https://doi.org/10.1348/000709905X55389">https://doi.org/10.1348/000709905X55389</a>
- Martin, A. J., & Elliot, A. J. (2016). The role of personal best (PB) goal setting in students' academic achievement gains. *Learning and Individual Differences*, 45, 222-227. https://doi.org/10.1016/j.lindif.2015.12.014
- Namaziandost, E., Rezai, A., Heydarnejad, T., & Kruk, M. (2023). Emotion and cognition are two wings of the same bird: insights into academic emotion regulation, critical

- thinking, self-efficacy beliefs, academic resilience, and academic engagement in Iranian EFL context. *Thinking Skills and Creativity*, *50*, 101409. https://doi.org/10.1016/j.tsc.2023.101409
- Nation, ISP (1990). Teaching and learning vocabulary. Heinle and Heinle.
- Nation, ISP (2001). *Learning vocabulary in another language*. Cambridge University Press. <a href="https://doi.org/10.1017/9781009093873">https://doi.org/10.1017/9781009093873</a>
- Ngumbi, E. (2021). Challenges of e-learning in higher education and possible solutions. *Education & Child Development*, *I*(1), 50-57. Retrieved from <u>View of Challenges of e-Learning in Higher Education and Possible Solutions (ojld.org)</u>
- Onasanya, T. O., Attah, J. O., Otemuyiwa, B. I., & Onasanya, S. A. (2021). Impact of the classmaker app on the performance of undergraduates in online learning of ICT: The university of ilorin experience. *West African Journal of Open and Flexible Learning*, 9(2), 55-74. Retrieved from <a href="https://wajofel.org/index.php/wajofel/article/view/72">https://wajofel.org/index.php/wajofel/article/view/72</a>
- Odegbesan, O. A., Ayo, C., Oni, A. A., Tomilayo, F. A., Gift, O. C., and Nnaemeka, E. U. (2019). The prospects of adopting e-learning in the Nigerian education system: A case study of Covenant University. *Journal of Physics: Conference Series, 1299*(1), 012058. Retrieved from <a href="mailto:iopscience.iop.org/article/10.1088/1742-6596/1299/1/012058/pdf">iopscience.iop.org/article/10.1088/1742-6596/1299/1/012058/pdf</a>
- Onasanya, S. A., Nathaniel S., Sofoluwe A. O., and Onasanya T. O. (2014). Influence of internet surfing on senior school students' acquisition of hidden curriculum in Nigeria. *Bingham Journal of Social and Management Studies*, *3*(1), 758-768.
- Oxford, RL (1990). Language learning strategies: What every teacher should know. Heinle.
- Phan, H. P. (2009). Exploring students' reflective thinking practice, deep processing strategies, effort, and achievement goal orientations. *Educational Psychology*, 29(3), 297-313. https://doi.org/10.1080/01443410902877988
- Porntaweekul, S., Raksasataya, S., & Nethanomsak, T. (2016). Developing reflective thinking instructional model for enhancing students' desirable learning outcomes. *Educational Research and Reviews*, 11(6), 238-251. Retrieved from <a href="http://files.eric.ed.gov/fulltext/EJ1094371.pdf">http://files.eric.ed.gov/fulltext/EJ1094371.pdf</a>
- Ramane, D. V., Devare, U. A., and Kapatkar, M. V. (2021). The impact of online learning on learners' education and health. *The Online Journal of Distance Education and E-Learning*, 9(2), 12–19. Retrieved from v09i02-14.pdf (tojqih.net)
- Richards, J.C. (1976). The role of vocabulary teaching. *TESOL Quarterly*, 10(1), 77–89. https://doi.org/10.2307/3585941
- Rutherford, W. E., & Sharwood Smith, M. (1985). Consciousness-raising and universal grammar. *Applied Linguistics*, 6(3), 274-282. <a href="https://doi.org/10.1093/applin/6.3.274">https://doi.org/10.1093/applin/6.3.274</a>

- Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329–363. https://doi.org/10.1177/1362168808089921
- Schmitt, N. (2010). Researching vocabulary: A vocabulary research manual. Palgrave Macmillan.
- Schmitt, N. (2014). Size and depth of vocabulary knowledge: What the research shows. *Language Learning*, 64(4), 913-951. <a href="https://doi.org/10.1111/lang.12077">https://doi.org/10.1111/lang.12077</a>
- Sofi-Karim, M., Bali, A. O., & Rached, K. (2023). Online education via media platforms and applications as an innovative teaching method. *Education and Information Technologies*, 28(1), 507-523. https://doi.org/10.1007/s10639-022-11188-0
- Soodmand Afshar, H., & Rahimi, M. (2016). Reflective thinking, emotional intelligence, and speaking ability of EFL learners: Is there a relation? *Thinking Skills and Creativity*, 19, 97-111. <a href="https://doi.org/10.1016/j.tsc.2015.10.005">https://doi.org/10.1016/j.tsc.2015.10.005</a>
- Soyemi, J., Ogunyinka, O. I., & Soyemi, O. B. (2011). Integrating self-paced e-learning with conventional classroom learning in Nigeria educational system. *Journal of Humanistic and Social Studies*, 2(2), 119-129. Retrieved from <a href="Integrating Self-paced">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria Educational System-ProQuest">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria Educational System-ProQuest">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria Educational System-ProQuest">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria Educational System-ProQuest">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria Educational System-ProQuest">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria Educational System-ProQuest">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Learning in Nigeria">Integrating Self-paced</a>
  <a href="E-learning with Conventional Classroom Lear
- Tugwell, O. O., & Maduabuchukwu, A. P. (2020). Impediments to effective utilization of elearning platforms for quality teaching and learning in universities in Niger-Delta, Nigeria. *International Journal of Innovative Research and Development*, *9*(7), 18-24. https://doi.org/10.24940/ijird/2020/v9/i7/JUL20021
- Van Velzen, J. H. (2017). Measuring senior high school students' self-induced self-reflective thinking. *The Journal of Educational Research*, 110(5), 494-502. <a href="https://doi.org/10.1080/00220671.2015.1129596">https://doi.org/10.1080/00220671.2015.1129596</a>
- Vezne, R., Yildiz Durak, H., and Atman Uslu, N. (2023). Online learning in higher education: Examining the predictors of students' online engagement. *Education and Information Technologies*, 28(2), 1865-1889. <a href="https://doi.org/10.1007/s10639-022-11171-9">https://doi.org/10.1007/s10639-022-11171-9</a>
- Wellington, R. J. O., and Clarence, A. U. (2021). Benefits of e-learning method as a pedagogical technique for secondary school education in Nigeria in the face of covid-19 pandemic. *Journal of Educational Planning and Administration*, *6*, 93-103.
- Yakubu, M. N., & Dasuki, S. I. (2020). Adoption of e-learning technologies among higher education students in Nigeria. *Education and Information Technologies*, 2(1), 12-18. Retrieved from <u>Factors-affecting-the-adoption-of-e-learning-technologies-among-higher-education-students-in-Nigeria-A-structural-equation-modelling-approach.pdf (researchgate.net)</u>