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## **Regular Article**

## Utilizing Embodiment Learning to Develop Kindergarteners' EFL Oracy Skills and Classroom Engagement

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#### Abstract

The present study examined the effects of embodiment learning on developing KG2 children's EFL oracy skills and classroom engagement. Thirty-five KG2 children enrolled at Future International and Language Schools, Sadat City, Menoufia Governorate, Egypt participated in the this study. They were assigned into a treatment group that was tested in EFL oracy skills and classroom engagement both before and after the intervention using a pre-post EFL oracy skills test and a pre-post classroom engagement scale. Statistical analysis of the study results illustrated that there are significant differences on the pre- and post-administrations of the study instruments in EFL oracy skills and classroom engagement in favour of the post administrations. Consequently, it was concluded that utilizing embodiment learning was beneficial and positively affected the development of KG2 children's EFL oracy skills and classroom engagement.

**Key words:** Embodiment learning, EFL oracy skills, Classroom engagement, Kindergartners

#### Introduction

English as a foreign language is expanding internationally and the starting age of learning it, around the world, has become the primary and even the pre-school educational levels. Parents and guardians, in Egypt and all over the world, have developed a deep understanding of the importance of raising their children to be good speakers of more than one language. This belief has been entrenched in their minds as an inevitable necessity of education and the requirements of the contemporary life. They have become sure that teaching children English from an early age beside their mother tongue (Arabic in Egypt) would later facilitate their learning of other languages. English with no doubt has become a dire need for the learners' school, university and professional lives. So, the attention of the language educators and researchers has strongly turned to the necessity of designing appropriate curricula for pre-school children to qualify them for acquiring the proper language skills.

Teaching English as a Foreign Language (TEFL) for pre-schoolers or kindergartners has become recently on its rise. Some kindergartens offer English classes (i.e. national or private kindergartens) and others provide a whole tuition in English (i.e. international kindergartens). In pre-school education, young learners are normally classified according to their age into two groups or levels: level one (KG1) involves 3-4 year-old children and level two (KG2) involves 5-6 year-old children. These acceptance ages may certainly differ from a place to another according to the stated acceptance regulations. Teaching English for pre-school children relies on: using indirect teaching, boosting imagination, changing activities, activating all senses, providing reinforcements, applying individual approaches of learning, motivating learners, using the native language and activating games as well as movements (Klimova, 2013).

Pre-school education as stated by Burchinal et al. (2023) has both direct along with indirect influences on the general outcomes of EFL learners during early elementary educational levels. The direct influence is represented in gaining academic skills that are not gained by those who did not receive pre-school education. While, the indirect impact is shown when EFL teachers realize that their elementary school learners had received pre-school education and start providing them with challenging instruction that deeply promotes positive interactions, classroom engagement and linguistic proficiency that includes oracy skills (Macaro et al. 2018).

EFL oracy is a sociocultural vehicle for learning, thinking and negotiating in English to construct mutual understanding. It is that kind of classroom talk between the learners and their teachers or amongst the learners and their peers to share knowledge through exploring and debating (Barens, 2010). Oracy skills are listening and speaking skills that have to be taught to EFL learners at a young age (Goh, 2014). Although EFL oracy consists of listening and speaking skills, they cannot be taught separately. They occur together within

four strands that form proficient orators. Those strands as indicated by Bangkom and Sukavatee (2021) are social and emotion, linguistics, cognitive as well as physical facets. Firstly, social and emotion strand of EFL oracy stands for the interaction involved in the communication process (i.e. listening attentively and checking understanding). Secondly, the linguistics strand is the vocabulary and grammatical rules used in the talk. Thirdly, the cognitive strand is reflected in the ability to organize events, priorities and contents. Finally, the physical strand is represented in body language and pronunciation abilities. Those skills are beneficial for boosting EFL learners' language acquisition and classroom engagement as they encourage the learners to ask questions and voice ideas.

Classroom engagement is the process of learning that occurs when EFL learners actively participate in classroom tasks and activities (Alpaslan & Ulubey, 2021). It is the result of active classroom practices that focus on collaborative activities rather than lecture or traditional formats of teaching (Freeman et al., 2014; Menekse et al., 2013). There are four ways to get learners engaged in EFL classrooms. The four ways are interactive (I), construction (C), Active (A), and passive (P). If the learners realize how to argue or defend their points of views with their teachers or peers they become interactive. When they ask and inquire about the learning activities they are constructive and if they simply take and write verbatim notes they are active. Yet, when they listen without doing anything else they become engaged in the passive way (Victorino et al., 2019). The more learners engage in school work the more they achieve academically. Accordingly, classroom engagement can be directly related to EFL learners' regular classroom attendance and learning motivation (Joseph et al., 2014).

Similarly, classroom engagement enhances EFL learners' abilities to benefit from the provided learning experiences, follow the rules and directions of instruction, obtain self-organize skills and fulfill activities and tasks on time (Dent & Koena 2016; Fitzpatrick & Pagani 2013). In order to measure the level of classroom engagement among EFL learners, instructors can observe their behaviours, their interactions in classroom work and activities as well as their attitudes towards learning the English language. That is to say that highly engaged EFL learners do not usually encounter the problems of increased distraction levels, low academic achievement, alienation and dropout rates (Mazumder, Sultana & Mazumder, 2020).

## **Context of the Problem**

An academic achievement gap is found between non-native English learners and native English learners. Non-native English learners need support to narrow the gap and achieve proficiency in English from their early entry into the school system (Institute of Education Sciences, 2020). Despite the importance of EFL oracy skills for both EFL tutors and learners, they are inhibited by some factors as linguistic challenges, teachers' lack of awareness towards EFL oracy skills required for their learners and reluctance of EFL

teachers to improve and support their linguistic abilities (Heron et al., 2021). Thus, oracy skills are not gaining adequate concern in EFL classrooms. Moreover, reviewing literature (i.e. Abdelhaq, 2018; Abeed, 2020; Elragall et al., 2022) has also confirmed the lack of oracy skills among EFL learners at various educational levels particularly among young learners.

To document the study problem, a pilot study was conducted on some KG2 learners (No= 22) enrolled in Future International and Language Schools, on October 18<sup>th</sup>, 2022. The pilot study was an oracy skills test (Appendix A) and a classroom engagement scale (Appendix B). The test was adopted from Elragall et al. (2022) while the scale was adopted from Kundu, Bej and Dey (2021). The learners' answers for the test and their levels in classroom engagement were analyzed. The analysis of the attained data has revealed that KG2 learners did lack oracy skills and they had low levels of classroom engagement in EFL contexts.

## **Statement of the Problem**

The problem of this study was crystalized in the weakness of KG2 children in EFL oracy skills and their low levels in EFL classroom engagement.

## Questions

This study is an attempt to answer the following questions:

- 1. What are the EFL oracy skills required for KG2 children?
- 2. What is the level of KG2 children in EFL oracy skills?
- 3. What is the level of KG2 children in classroom engagement?
- 4. What are the features of embodiment learning instruction?
- 5. What are the effects of embodiment learning on developing KG2 children's EFL oracy skills?
- 6. What are the effects of embodiment learning on developing KG2 children's classroom engagement levels?

## Hypotheses

The following hypotheses were verified:

- There is a statistically significant difference between the mean scores of the experimental group participants on the pre- and post- administrations of the overall EFL oracy skills test in favour of the post-administration.
- There is a statistically significant difference between the mean scores of the experimental group participants on the pre- and post- administrations of the EFL oracy skills test at each of its skills in favour of the post-administration.

- There is a statistically significant difference between the mean scores of the experimental group participants on the pre- and post-administrations of the classroom engagement scale in favour of the post-administration.
- There is a statistically significant difference between the mean scores of the experimental group participants on the pre- and post-administrations of the classroom engagement scale at each of its dimensions in favour of the post-administration.
- There is a positive, statistically significant correlation between the scores of the study participants on the post-administration of the EFL oracy skills test, and their scores on the classroom engagement scale.

#### **Delimitations of the Study**

The present study was delimited to the following:

- 1. Thirty-five KG2 children enrolled at Future International and Language Schools, Sadat City, Menoufia Governorate, Egypt.
- 2. Some EFL oracy skills required for KG2 children (i.e. listening and responding, expression and delivery along with organization and prioritization skills).
- 3. The first semester of the academic year 2022/2023.

#### **Instruments and Materials**

The following instruments and materials were prepared and used:

- 1. An EFL oracy skills checklist.
- 2. An EFL oracy skills test with a rubric to assess the children's performance.
- 3. A classroom engagement scale.
- 4. A teacher's handbook.

## **Definition of Terms**

## **Oracy Skills**

Oracy skills are operationally defined as KG2 children's abilities to develop EFL speaking and listening skills necessary for achieving positive communication through covering the various learning aspects (i.e. emotional and social, cognitive, physical along with linguistic) as part of their literacy education.

#### **Classroom Engagement**

Classroom engagement is operationally defined as KG2 children's active participation, interest and involvement in classroom learning activities and varied practices.

#### **Embodiment Learning**

Embodiment learning is operationally defined as a pedagogical method that basically depends on applying non-mental factors in teaching and learning to integrate the body and the mind during the learning/teaching process.

#### **Literature Review**

This part of the study is divided into three sections that present the theoretical framework for the study variables (the EFL oracy skills, classroom engagement and embodiment learning).

#### **EFL Oracy Skills**

The term oracy was presented for the first time by Wilkinson (1965). Unlike the literacy skills (written expressions and reading comprehension), oracy skills were used to refer to the oral language skills (speaking and listening). In various EFL classrooms, a major concern among EFL teachers has become helping EFL learners improve their negotiation knowledge and abilities to build positive relationships. This aim can be achieved in EFL classrooms that are called oracy skills. Hence, oracy skills are the abilities of learners to appropriately apply the spoken features of the foreign language through dialogues that foster learners' participation in EFL classrooms. In this regard, it can be impeded that dialogically-based EFL classrooms as pointed out by Van der Veen (2017) can consolidate learners' positive participation and EFL oracy skills.

Learners' participation in EFL classrooms is of different levels and various degrees (i.e. attending classes, providing feedbacks, assessments and proposing topics of the courses....etc.). These different types of participation are influenced by certain pragmatic issues as learner's readiness, learner/tutor time and relation, cohort size along with the context. Among all these issues, the class dialogue is the core point of classroom engagement (Brooman, Darwent, & Pimor, 2015). Fundamentally, the classroom dialogue occurs within definite standards and it requires a mastery over some EFL skills that are called the oracy skills. These skills are crucial for: developing the learners' voice both in and outside of the educational context, enhancing their effective communicative abilities to participate in social and educational events, confirming the equitable interaction and participation of all learners in and outside EFL classes regardless of any cultural, pedagogical or linguistic abilities and backgrounds (Heron & Palfreyman, 2019).

However, there is a common belief that oracy skills are merely talking or simply listening and speaking. Primary levels of speaking and listening are significantly essential, but they do not help learners be proficient orators. Oracy skills are the result of a unique art which is called the oratory art. This art cannot be consolidated without providing a formal study of the rhetorical skills (Hill, 2021). The more these skills are adequately applied and presented in EFL environments, the more EFL learners become well-equipped with the skills of sophisticated communication. Accordingly, they become spontaneous orators who depend on the monologic delivery of various perspectives (Conrad & Newberry, 2012).

For their necessity and significance, EFL oracy skills have to be taught to learners at young ages (Alexander, 2010). Moreover, it has been confirmed that oracy goes beyond equipping young learners with the basics of building their strategic speaking, active listening or critical thinking skills. Rather, it empowers them with the skills of democratic deliberations (i.e. empathy, appreciating being a part of a community, agency and belonging?) and positive social participation skills that include: abilities to positively participate in community events, positive Behaviours and leadership capabilities. Oracy skills qualify the learners to be distinguished future thoughtful citizens (Holmes-Henderson, Zmavc & Kaldahl, 2022).

## **Oracy Dimensions**

Oracy skills include specific dimensions. Mercer, Warwick and Ahmed (2017), have presented an oracy skills framework that is situational and enables teachers to construct an oracy profile for their learners. This oracy framework consists of four areas (physical, linguistic, cognitive as well as social and emotional) that need to be accompanied by assessment tasks (i.e. map, talking points and presentation tasks). The map task as indicated by its name relies on creating a map to find hidden treasures through consulting peers and instructors. The talking points task is related to addressing a topic or an idea, then having the learners talk together and decide whether they agree or disagree with this topic or point and why. The third assessment task that was created in this oracy framework was the presentation task that depends on having each learner presenting a two-minute presentation on a definite issue or subject.

Each dimension of Oracy skills reflects the EFL learners' abilities to tackle definite skills. First, the physical oracy strand is represented in the learners' abilities to speak fluently using tonal variation, clear pronunciation, body language and facial expressions. Second, the linguistic strand is reflected in the learners' vocabulary use, grammar and organization or prioritization skills. Third, the cognitive dimension refers to their capabilities to listen to others to build new knowledge for conveying meaning, focus on tasks, ask questions, summarize, give reasons and critically explore the provided ideas or views. The fourth dimension, the social and emotional, focuses on the learners' acquisition of self-assurance and turn taking (Bangkom, & Sukavatee, 2021). The oracy skills framework and glossary were illustrated as follows:

Physical • Voice • Body language	<ul> <li>Fluency and pace of speech, tonal variation, clarity of pronunciation, voice projection</li> <li>Gesture and posture</li> </ul>		
Linguistic • Vocabulary • Language variety • Structure • Rhetorical techniques	<ul> <li>Appropriate vocabulary choice</li> <li>Register, grammar</li> <li>Structure and organisation of talk</li> <li>Metaphor, humour, irony, mimicry</li> </ul>		
Cognitive • Content • Clarifying and summarising • Self-regulation • Audience awareness	<ul> <li>Choice of content, building on the views of others</li> <li>Seeking information and clarification through questions, summarising</li> <li>Maintaining focus on task, time management</li> <li>Giving reasons to support views, critically examining ideas</li> <li>Taking into account level of audience</li> </ul>		
Social and emotional • Working with others • Listening and responding • Confidence in speaking	<ul> <li>Guiding or managing interactions, turn-taking</li> <li>Listening actively and responding appropriately</li> <li>Self-assurance, liveliness and flair</li> </ul>		

#### **Figure (1): The Oracy Skills Framework**

#### Adopted from (Mercer, Warwick & Ahmed, 2017)

As illustrated in the previous figure, each oracy dimension is divided into some subdimensions. Then, each sub-dimension tackles specific skills or abilities. For instance, the first oracy dimension, the physical dimension, is divided into voice and body language. Both require a good command over pronunciation, tonal variation posture, gesture and fluency. Then, the linguistic dimension comprises the vocabulary, structure, rhetorical techniques and language variety sub-dimensions. These, sub-dimensions reflect the learners' abilities to apply appropriate word choice, grammatical structure, metaphors, humors and organization of talks. After that, the third dimension, the cognitive dimension, includes content, self-regulation, audience awareness and clarifying along with summarizing subdimensions. The fourth dimension, the social and emotional, consists of working with others, listening and responding and self- confidence.

In spite of the growing body of studies and research that emphasized the significance of EFL oracy skills for EFL learners, those skills are neglected. In order to cultivate teaching oracy in EFL classes, language experts have noted that this can be achieved through a frame of two perspectives (oracy for learning and oracy as competence). First, oracy for learning means integrating oracy within the disciplinary studies so as to help learners know how to share ideas. Second, oracy as competence refers to teaching oracy as a discrete subject. Apparently, both perspectives shed light on the importance of oracy as a crucial vehicle for higher order thinking skills, negotiation and learning (Mah, 2016).

In order to develop oracy skills among EFL learners, the oracy culture has to be enriched and rooted through some techniques (i.e. group work protocols, coaching groups, Eportfolios, and story of learning and teaching (Maxwell et al., 2015). In this context, EFL teachers should help their learners recognize how to structure their inner ideas and perspectives in a way that is clear and understandable to others. Besides, they should cultivate the proper vocabulary use among their learners. They should teach them how to use the English language for boosting connections of symbols of language meaning (Sembiante, Bengochea & Gort, 2020). Accordingly, a major step that follows the development of oracy skills among EFL learners generally and kindergartners in particular, is the assessment step.

When it comes to oracy assessment, some key aspects as pointed out by Bailey (2010) should be covered. These aspects include operationalizing construct aspects (i.e. testing the teaching approaches and methods, analyzing the purposes of teaching a language and considering the administrative restrictions and regulations) along with classroom assessment aspects (i.e. discourse abilities, listening skills, phonology, vocabulary, pragmatics, standards setting and speaking skills).

Further, oracy assessment has to be situation-based not skills-based as oracy skills are situational and applicable in nature. Wall (2018) emphasized this indicating that oracy assessment should undergo the oracy norms in four essential areas. First, the learners' abilities to apply standards of interaction while negotiating. Second, their abilities to attentively listen to achieve comprehension and respond in the most appropriate way. The third area is related to the learners' capabilities to produce oral speech. While the fourth area, is about their proficiency in using the English language in various educational tasks as well as some interactional choices and simulations.

For their considerable significance and contribution the EFL learners' academic progress, some researchers tried to investigate the effects of some methods and techniques in order to develop oracy among EFL learners. For instance, the study of Aboho and Issa (2014) has examined the impact of the phonics method on developing oracy skills among EFL beginning readers. The participants of the study were 30 EFL primary school pupils. They were distributed equally between the experimental and the control groups. The findings of the study revealed that the phonics method has positively impacted the oracy skills of the study participants.

Besides, Tahriri, Tous MovahedFar (2015) studied the influence of applying digital storytelling on developing oracy skills and motivation among EFL learners. Thirty EFL learners participated in the study and were divided into two groups (experimental and control). The study participants were tested using listening and speaking tests as preposttests, and a motivation questionnaire. The results confirmed that digital instruction is a crucial component in EFL language instruction.

In their study, Omachonu, Akanya and Unwaha (2019) have also explored diverse learning environments to replace the regular boring environment in order to develop oracy among EFL learners. 207 EFL learners participated in the study. They were pre- and posttested using an oracy skill achievement test to collect data. The most important findings have illustrated that the peer team gritty method is effective in developing oracy skills among EFL learners. Moreover, Zafiri and Georgiadou (2021) have studied the effectiveness of using YouTube videos in differentiated instruction environment in order to develop oracy skills among EFL young learners. The study was a case study where a speaking and listening test was administered both before and after the experiment. The results confirmed the positive effectiveness of the YouTube videos in developing EFL young learners' oracy skills.

The previous studies have illustrated that EFL learners often start school with a lack in the most essential oracy skills. Those skills, without any doubt, are vital for young EFL learners to develop their affective, social and interpersonal skills. Oracy then, is important for boosting young learners' resilience, self-confidence and awareness from the earliest educational levels. Thus, most of the studies have ensured the significance of helping EFL instructors become aware of the necessity of developing oracy skills to help EFL learners avoid later behavioral, emotional and psychological problems and obstacles. They have to implement recent pedagogical strategies and methods that favour the development of oracy skills among EFL young learners.

Fortunately, EFL teachers and instructors can apply diverse methods and techniques to develop oracy. Whether the teachers are following subtle or formal ways, this with no doubt contributes to the learners' enthusiasm, interest and academic progression in EFL classes. In other words, the learners become dynamically involved in the teaching and learning process. Their hands become on the learning. They become more interactive, constructive, active and engaged in the classroom (Chi & Wylie, 2014).

#### **Classroom Engagement**

Learners' classroom engagement is the way to success and academic achievement. However, it cannot be directly observed (Harboura et al., 2015). It refers to the level of learners' involvement within the teaching/learning process. It is the learners' situational interest, increased motivation and self-efficacy to do effort, be enthusiastic, think systematically and strategically, as well as actively contribute to their classrooms and learning environments (Christenson, Reschly & Wylie, 2012; Wang, Bergin & Bergin, 2014). According to the self-determination theory, the learners need to possess competence, relatedness and autonomy to be fully engaged in their classes. Additionally, in light of the achievement goal theory, classroom engagement is a direct result of four mastery-oriented goals namely: personality dispositions, learning climates, expectancies of task-specific competence and the need to fulfill achievement (Elliot & Church, 1997; Ryan & Deci, 2000; Urdan & Schoenfelder, 2006).

Early on, three distinct categories of engagement were presented by Archambault et al. (2009): student, affective and behavioral engagement. The, first category, student engagement, refers to students' compliance to classroom regulations and their entire involvement within in-class and out-of-class extracurricular activities. Affective engagement is the learners' interests, excitement and feelings towards teachers and school.

The third category, behavioral engagement, is imbedded in the learners' efforts and participations regarding the required academic activities, drills and tasks.

In the same harmony, different classifications were also presented. For instance, it has been added that classroom engagement has three main dimensions, namely the learner's feelings towards the classroom environment, the teacher and other students. These dimensions are catogrized into other three sub-dimensions labled the cognitive, affective and the behavioral engagement (Aycicek & Yanpar Yelken, 2019; Danker, 2015). The first dimension of classroom engagement, the cognitive engagement, is related to the learners' participation in asking for clarifications, providing examples, solving problems or applying higher order thinking skills to implement their daily tasks. The second dimension, affective or emotional engagement, is reflected when the learners' emotions towards classroom activities change from anxiety and confusion to apathy, anticipation and excitement. The classes become enjoyable and supportive for learners during failure and success times. This dimension is related to the learners' perceptions, sense of belonging, liking of school, willingness to learn and positive attitudes towards learning. The third dimension, the behavioral engagement, represents the indicator for both cognitive and affective dimensions of engagement. It is all about the physical behaviors of learners (i.e. body language, facial expressions and gestures) that translate their level of engagement (Navir, 2017).

Classroom engagement is crucial for EFL young learners' achievements. It depends on the teachers' abilities to get their learners involved in the learning process through capturing their attention and reducing their classroom boredom or confusion. Learners who have high levels of classroom engagement are most likely to become proficient language learners. In this regard, teachers have to be fully aware of their effects on their learners' engagement that, in turn, impacts their general academic attainment. Accordingly, classroom engagement is determined not to be merely an outcome of a successful class, rather, it is a contributor to this success (Abla & Fraumeni, 2019).

In order to maximize EFL learners' engagement in EFL classes, teachers have to boost their instruction. Numerous studies have provided tips for EFL teachers to be able to consolidate their instruction and get their learners involved and engaged (i.e. Gilboy, Heinerichs & Pazzaglia, 2014; Hoang, Holopainen & Siekkinen, 2019; Goodman, 2016). These tips are simpler than strategies, but they are beneficial and they can be illustrated as follows: applying various instructional techniques and practices, implementing innovative teaching methods to overcome the problem of large class sizes, reflecting on each educational activity, particularly if it is not interesting for the learners, personalizing the content of the learning process, helping the learners make some choices in the class regarding classroom activities or assignments, creating collaborative classroom activities to foster building positive relations among the learners, applying the most appropriate technological tools, using Gamification-based techniques, following debate and discussion techniques, and helping the learners to move while learning.

For, more manipulation of EFL learners' classroom engagement, Bender (2017) has presented twenty strategies that are effective for increasing learners' classroom engagement. These strategies fall under four sections as clarified in the following table:

Strategies for enhancing learners' classroom engagement					
Section one	Section two	Section three	Section four		
Instructional organization	Tech strategies	Collaborative instruction	Personal responsibility and student engagement		
1. Differentiated instruction.	5. Augmented reality	12. Blogging	17. Mindfulness		
		13. Social			
2. Flipped classroom.	6. Games, Gamification and simulations.	networks.	18. Reward and respond cost.		
		14. Wikis.	19. A growth mindset.		
3. Project-based learning.		15. Peer tutoring			
	7. Virtual field trips.	16. Role play			
			20. Goal setting		
4. Maker space and genius hour			monitoring		
	8. Coding and Robotics.				
	9. Individualized computer-				
	driven instruction.				
	10. Story boarding.				
	11. Animation.				

 Table (1): Strategies for Enhancing Learners' Classroom Engagement

It is therefore profitable for EFL teachers to consider applying one, two or a combination of these strategies so as to help their learners comprehend the course material, increase their self-confidence and increase their classroom engagement.

#### **Assessing Classroom Engagement**

Generally talking, classroom engagement is not easy to assess as it is made up of some factors that make the assessment process difficult (i.e. family, community, relations, climate, support, expectations, intrinsic and extrinsic motivation). Some of these factors or items were clarified by Victorino et al. (2019) as follows:

#### Figure (2): The Multiple Indicator-Multiple-Causes Model Tested with the Classroom Engagement Items



Adopted from (Victorino et al., 2019, p. 39)

Based on the previously represented figure, to assess engagement, EFL instructors have to tackle the majority of these factors. The instruments that are designed to measure classroom engagement are administered to investigate: ratios of learners' dropping out and disengagement, classroom engagement levels and learners' personal desires in learning (Hadre & Reeve, 2003).

Linguists and educators have given considerable attention to study the various aspects of the classroom engagement so as to find out methods of their development. For instance, Fitzpatrick (2012) studied children's school preparedness and classroom engagement as essential predictors of their personal success, health and academic attainment. The findings of the study confirmed the necessity of developing curricula that seek cognitive control for

enhancing preschoolers' classroom engagement. In their study, Sandberg, Cory and Kathleen (2013) emphasized that young learners require active physical and cognitive instruction to learn. The study indicated that EFL teachers can maximize their learners' classroom engagement through integrating music and movement in classroom activities.

Besides, Merlin-Knoblich et al. (2019) compared between the impacts of flipped and non-flipped courses on learners' classroom engagement through applying a causal comparative method. The results clarified that learners' in flipped classrooms showed statistically higher engagement in classrooms than learners in non-flipped classes. Fitzpatrick et al. (2020) have examined the effects preschool family adversity and cognitive control on young learners' classroom engagement. This study presented three trajectories that can influence learners' classroom engagement namely, child working memory, maternal hostility and social support.

Other studies (i.e. Bauernfeind, 2016; Ferrer & Laughlin, 2017; Ozkan Bekiroglu, Ramsay & Robert, 2022) clarified the importance of teaching through physical movements to foster the levels of classroom engagement. These studies assured that motion in classrooms enhances learners' attention and concentration, relieves tension, anxiety or worry and supports retention. Accordingly, embodiment learning can be a beneficial instructional method for increasing classroom engagement and developing oracy skills.

## **Embodiment Learning**

Within the last three decades, embodiment learning has emerged to focus on involving the whole body in teaching instead of depending solely on the intellectual way of teaching. This teaching method is basically against the separation between the body and the mind (Macedonia, 2019). Embodiment learning belongs to the embodied cognition (EC) theories in which the mind is not considered an isolated or an abstract part. On the other hand, it is deeply rooted to the sensorimotor systems of the body. The responses of those systems according to the neuroscientific studies can be evoked through the body activities, music, spatial information, moving around, smelling things and even eating (Barsalou, 2008; Pulvermuller, 2005). EC is concerned with illuminating that our body is considerably related to the cognitive processes (Beilock, 2015; Shapiro, 2010).

Some attempts were carried out to present taxonomy for EC. However, no definite taxonomy was provided. Yet, different frameworks for EC with various classifications and categories were found. Johnson-Glenberg et al. (2014) presented taxonomy of three major aspects for EC: gestural congruency, perceived immersion and motoric engagement. Another category was provided by Melcer and Isbister (2016) who designed a seven-category taxonomy that involves mode of play, environment, mapping, coordination, transforms, physicality, and correspondence. Further, Skulmowski and Rey (2018) have

proposed a two- dimension framework for EC that included bodily engagement and task integration.

Undoubtedly, learners understand anything around them in a better way through experiencing it. The concept "experience" here is of two forms: first, learners initially attempt to provide a description and interpretation of this thing, and then they start to form an interpretation that comes out as a result of active movements. Therefore, what makes embodied learning educationally important is the synthesized and holistic view of learners. It basically concentrates on getting learners fully engaged in their educational environment cognitively, theoretically, emotionally, aesthetically and practically (Stolz, 2014). In order to apply embodiment learning in EFL classes, some pillars and principles must be considered as: a) the body and the mind are not separated but integrated and intertwined, b) motion and cognition are completely interrelated, c) thinking occurs simultaneously with acting, d) science and art are complementary, and e) reality and imagination work together (Thompson, 2007).

For successful embodiment learning (EL) implementation in EFL classes, an authentic environment for learning has to be created. Such environment is characterized by definite aspects that require clear identification from the beginning of the implementation. These aspects are; a) the roles of the teacher (i.e. instructor, facilitator, supporter, monitor, regulations provider and adviser), b) the technological aids that should be utilized for EL purposes to guarantee flexibility and proper physical movements in the class, c) active collaboration among learners who need to learn how to be engaged in pair and group work, d) classroom environment that requires wide spaces for physical activities, easy access to the instructional tools and materials along with availability of technological facilities, and e) systematic organization of in-class and out-of-class activities (Kosmas, 2021).

The implementation of EL in EFL classes cannot achieve its goal without referring to the multimodal aspects also labeled the sensory modalities (i.e. auditory, visual, kinesthetic and tactile). In EFL classes, EL considers the illustrative representations of real things through gestures, pictures, active communication and effective interaction. In this regard, the sensory modalities are applied to consolidate learners' language acquisition in light of multiple modes (i.e. pictures, speech, action, posture, and sounds). EL helps learners acquire the language in EFL classes when they move and interact with the environments and other components of the educational process (Bezemer & Kress, 2015; Juntunen, 2020).

According to Duijzer, Heuvel-Panhuizen and Veldhuis (2019), EL consolidates learners' bodily involvement along with immediacy. The bodily involvement is about learners' motions and others motions. Learners' motions are directly related to their bodily experiences and others motion is indirectly observed (i.e. the mirror neural activity). Immediacy includes immediate and non-immediate reactions or synchronous and asynchronous interactions. This can be clarified in the following figure:

#### Figure (3): Taxonomy for Embodied Learning Environments

		A Motor mirroring	Motor execution
ediacy	Reactivated enactment	<ul> <li>Observing and influencing others/objects' motion in which bodily involvement takes place in the absence of direct environmental stimuli</li> </ul>	<ul> <li>Whole and part bodily motion in which bodily involvement takes place in the absence of direct environmental stimuli</li> </ul>
Ē	Direct enactment	<ul> <li>Observing and influencing others/objects' motion in which bodily involvement takes place in the presence of direct environmental stimuli</li> </ul>	<ul> <li>Whole and part bodily motion in which bodily involvement takes place in the presence of direct environmental stimuli</li> </ul>

#### **Bodily involvement**

#### Adoted from (Duijzer, Heuvel-Panhuizen & Veldhuis, 2019)

In order to apply embodied learning in EFL classes, Hrach (2021) and Sanako (2022) have provided some fruitful and practical steps, for EFL teachers, to embed motion or physical movements in the class:

- Prepare a convenient classroom environment and make sure that the light, height of the ceiling, class size and furniture arrangements are all suitable and well-set.
- Provide an encouraging teaching/learning atmosphere full of respect and positive social interaction.
- Plan and design various activities (i.e. games, role-play, acting, comic strips, art, sensory play, mazes, dance and music).
- Illustrate each single activity during the direct instruction transparently in details.
- Design various sharing opportunities for learners through specifying spaces for sharing on (i.e. whiteboards, chalkboards, sticky notes, and big paper pads).
- Map the classroom to make it easy for learners to move from one place to another without barriers or obstacles.
- Regularly check that the learners are completely engaged in the classroom activities not only dozing in their own seats.

Reviewing literature to figure out the effects of embodiment learning on developing different language skills among EFL learners, has confirmed the necessity of applying embodiment learning activities and methods in EFL contexts. Lonescu and Ilie (2018) investigated whether the embodiment learning strategies facilitate language learning among EFL preschoolers more than the regular strategies. The Results illustrated that embodiment learning strategies developed the preschoolers' language skills (i.e. introducing new words and idioms along with retelling or narrating in sequence) more than the regular strategies.

Schmidt et al. (2019) examined the impact of designed physical activities based on embodiment learning on EFL children's vocabulary learning as well as attentional performance. The results ensured that embodiment learning is effective in teaching new words for EFL children than regular activities. In addition, Kosmas and Zaphiris (2020) explored the influence of embodiment learning classroom intervention on EFL learners' foreign language acquisition and emotional practices. The study concluded that embodiment learning has positive effects on EFL learners' academic achievements and emotional engagement. Besides, Jusslin et al. (2022) studied the effects of various embodiment learning activities on achieving EFL learners' language learning. The results assured that embodiment language learning enhances language skill, increases motivation to learn and supports the holistic engagement of the learners.

Hereafter, the incorporation of embodiment learning practices that relate the learners' brains to their body movements to fulfill language proficiency and academic achievement was important. Thus, the researchers applied embodiment learning so as to develop kindergarteners EFL oracy skills and classroom engagement.

## Method

## Design

The present study is an experimental pre-post quasi-experimental one that applied the mixed research methodology with its descriptive and experimental approaches. The descriptive approach was used in investigating the importance of the study variables. While the experimental approach was applied to figure out the effects of using embodiment learning on developing kindergarteners' EFL oracy skills and classroom engagement.

## Variables

This study tackles three variables: one independent variable (embodiment learning) and two dependent variables (EFL oracy skills and classroom engagement).

## Participants

The Participants were thirty-five KG2 children enrolled at Future International and Language Schools, Sadat City, Menoufiya Governorate, Egypt, during the first semester of the academic year 2022/2023. They were assigned to one experimental group that was taught using embodiment learning.

## Rationale

Learning a foreign language is better to start at early ages as recommended by linguistics. The research has proved that when children learn a foreign language at early ages, they unintentionally apply definite language acquisition strategies (i.e. innate and instinctive) similar to those utilized to acquire their mother tongue. Accordingly, the early acquisition of foreign languages is considered a kind of mothering extension not an entire intellectual enterprise. Pre-schoolers do not usually receive huge amount of data and information during school times, thus their brains become open and ready for acquiring languages. They become more likely to absorb language skills (i.e. reading, writing and oracy skills). Therefore, the children who learn foreign languages during pre-schooling stage are found to surpass those who have picked up the languages later. They become incredibly intellectual developed learners (Darwish, 2013; Hashemi & Azizinezhad, 2011; Oliveira & Wright, 2014). So, the current study tried to develop the oracy skills among KG2 children to boost their language acquisition and intellectual development later on.

## **Instruments and materials**

For fulfilling the purpose of the present study, the authors have prepared and used the following instruments and materials:

## The EFL Oracy Skills Checklist

The EFL oracy skills checklist was prepared to find out the appropriate oracy skills for KG2 children. After reviewing literature that tackled the oracy skills, the checklist was initially prepared. The initial form of the checklist consisted of four main skills along with fourteen sub-skills. Later, the initial form was introduced to two TEFL professors for achieving face validity. Some modifications were requested and the initial form was modified. The EFL oracy skills checklist in its final form (Appendix C) included four skills (listening and responding, reasoning and evidence, expression and delivery as well as organization and prioritization). Then, the main skills were categorized into ten sub-skills (i.e. choosing relevant answers, expressing agreement, disagreement and basic opinions, producing clear pronunciation and narrating and telling stories).

#### The EFL Oracy Skills Test (OST)

The OST (Appendix D) was designed and used as a pre-posttest to assess the participants' level and performance in oracy skills before and after the intervention. It was divided into four parts. Part one consisted of two questions that aimed at measuring the participants levels in listening carefully to others and choosing relevant answers. The second part also consisted of two questions that were directed to measure the participants' abilities to provide evidence and express agreement, disagreement along with basic opinions. The third part included two more questions to examine the participants' expression and delivery skills. The final part of the OST was designed to figure out the actual level of KG2 children in organization and prioritization skills.

In order to downsize the degree of subjectivity and assure the objectivity while test scoring a rubric (Appendix E) was prepared and used as a marking criteria for the OST. The

sub-skills distributed within the rubric (expressing agreement, disagreement and basic opinions, logically organizing the events of the story, narrating and telling stories, showing tonal variation of voice and giving priority to the main events, as well as spending less time on those that are not important) were scored in light of a five-point Likert scale. Consequently, each sub-skill represented in a test question was given a maximum five in addition to a minimum one score. Accordingly, the whole test scores ranged from 10 to 50 marks.

Part	Skill	Qs	Measured Sub-skill	Mark
1	Listening and responding	A and B	1- Listen carefully to others	5
			2- Choose relevant answers	5
2	Reasoning and evidence	C and D	3 Provide evidence	5
			4- Express agreement, disagreement and basic opinions	5
3	Expression and delivery	E and F	5 Apply appropriate word choice	5
			6- Produce clear pronunciation	5
4	Organization and	G and H	7- Logically organize the events of the story	5
	prioritization		8- narrate and tell stories	5
			9- show tonal variation of voice	5
			10-give priority to the main events and spend less time on those that are not important	5
			Total mark = 50 marks	

## Table (2): Specification of the EFL Oracy Skills Test

## **Piloting the OST**

The OST has been administered to thirty KG2 children, other than the study participants in order to determine the following:

## Validity of the Test

In order to calculate the validity of the OST, the following methods were applied:

## 1. Face Validity of the OST

The OST was presented to two professors of TEFL to determine the validity of the test in terms of: the clarity of its instructions, the linguistic accuracy of its items, the appropriateness of its questions, its suitability to the study participants and its inclusion to all the required skills.

## 2. Validity of the Test Internal Consistency

The Statistical Package for Social Sciences (SPSS) program, version (18) was used to figure out the validity of the test internal consistency through computing: a) the internal consistency between the score of each sub-skill and the overall score of the main skill to which the sub-skill belongs and b) the internal consistency between the score of each main skill and the total score of the test.

## a) Internal consistency between the score of each sub-skill and the overall score of the main skill to which the sub-skill belongs

The internal consistency between the score of each sub-skill and the overall score of the main skill to which the sub-skill belongs was calculated through examining Pearson Correlation between the participants' scores in each sub-skill and the total score of the main skill to which the sub-skill belongs. The following table displays the validity coefficients for the OST sub-skills:

## Table (3): Values of the Correlational Validity Coefficients for the Score of Each Sub-Skill and the Total Score of the Main Skill to Which the Sub-Skill Belongs

skills	Sub-skills	Correlation	Sub-skills	Correlation
Listening and responding	Listening carefully to others	0.509**	Choosing relevant answers	0.435*
Reasoning and evidence	Providing evidence	0.614**	Expressing agreement, disagreement and basic opinions	0.599**
Expression and delivery	Applying appropriate word choice	0.407*	Producing clear pronunciation	0.708**

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skills	Sub-skills	Correlation	Sub-skills	Correlation
	Logically organizing the events of the story	0.678**	Narrating and telling stories	0.795**
Organization and prioritization	Showing tonal variation of voice	0.812**	Giving priority to the main events, and spending less time on those that are not important	0.684**

\* Correlation is significant at the 0.05 level & \*\*. Correlation is significant at the 0.01 level

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The results displayed in table three show that all correlation coefficients ranged between (0.407) and (0.812) and are significant at the (0.05) along with (0.01) levels of significance. Consequently, the internal consistency of the OST sub-skills was confirmed.

# b) The internal consistency between the score of each main skill and the total score of the test

The internal consistency among the score of each main skill and the total score of the OST was figured out by calculating the Pearson Correlation Coefficient between the participants' score in each main skill and the total score of the OST. The results are illuminated in the following table:

## Table (4): Correlation Coefficient between the Score of Each Main Skill and the Total Score of the OST

Main skills	Main skillsListening and respondingRea and		Expression and delivery	Organization and prioritization
Correlation	0.879**	0.894**	0.907**	0.927**

\*. Correlation is significant at the 0.05 level & \*\*. Correlation is significant at the 0.01 level

As crystalized in the previous table, the correlation coefficients are (0.879, 0.894, 0.907 and 0.927) and they are significant at (0.05) and (0.01) levels assuring the internal consistency of the main skills of the OST.

## **Discriminant validity**

To find out the discriminatory abilities of the EFL OST; the discriminant validity was calculated; Where 27% of the study participants' high scores were taken from the scores obtained during piloting the OST. Similarly, 27% of the participants' lower scores during test piloting were also taken. The Mann-Whitney non-parametric test was used so as to recognize the significance of the differences between these averages. The following table

illustrates the results of the differences between the mean ranks and the value of Z between the two groups. The results are shown in table (5):

Table (5): The Differences between the Mean Ranks and the Z-Value between the Tw	vo
Groups on the OST	

Group	Ν	Mean Rank	Sum of Ranks	Z- Value	Sig
High level group	8	12.50	100	2.251	0.01
Low level group	8	4.50	36	3.361	0.01

Table (5) indicates that there is a statistically significant difference at the (0.01) level of significance between the two levels. Hence, these results assure that OST has a high degree of discriminatory validity.

## **Reliability of the OST**

The reliability of the OST was calculated through the following methods:

#### a) Cronbach's Alpha method

The Cronbach's Alpha Coefficient value was (0.785) indicating that the OST was highly reliable.

#### b) The test re-test method

The OST was administered to the participants who participated in piloting the test, and then it was re-administered to the same participants at an interval of two weeks. The Pearson Correlation Coefficient was computed between the participants' scores in the two applications using the SPSS program, version (18). The results are shown in table (6):

 Table (6): Reliability Coefficient of the OST Using the Test Re-Test Reliability Method

Skills	Listening and responding	Reasoning and Expression and evidence delivery		Organization and prioritization	All Over The Test
Correlation	0.893**	0.799**	0.834**	0.875**	0.952**

\* Correlation is significant at the 0.01 level

## The Classroom Engagement Scale (CES)

According to Carpenter (2018) there are some basic steps that researchers have to undergo when developing scales (i.e. researching the theoretical background of the intended variable, recognizing the procedures and participants, investigating the quality and validity of the collected data, evaluating the scale's items in light of a pre-determined criteria, communalizing of the stated items and finally revealing results). Thence, in order to prepare the CES (Appendix F), the researchers started to review literature related to classroom engagement (i.e. Archambault et al., 2009; Aycicek & Yanpar Yelken, 2019; Bergin, 2014; Danker, 2015; Harboura et al., 2015; Reschly & Wylie, 2012). Literature review supported the researchers with appropriate data to initially prepare the CES. In its initial form, the CES consisted of three facets (intellectual engagement, social engagement and affective engagement).

After setting the initial form of the CES it was introduced to two TEFL professors to validate its appropriateness to the purpose of the study and the level of the participants. Then, it was recommended that the scale was a valid instrument that is convenient to fulfill the study's purpose and to measure the participants' level in classroom engagement. Therefore, the final form of the CES was prepared. Each of the three classroom engagement facets was divided into some items (i.e. Pay attention to the teacher's instruction, rules and directions in EFL classes and follow them, attend EFL classes on time every day, cooperate in group work, have a positive attitude towards English as a foreign language and respect diversity, feelings and properties of others). The fourteen-item scale with its three facets was scored according to three levels (To a large extent – To a moderate extent – No extent). The teacher was asked to accurately and honestly answer the items of the scale. If the item applied to the child moderately, she had to put ( $\sqrt{}$ ) in front of "To a large extent". But if the item did not apply to the child, she had to tick ( $\sqrt{}$ ) in front of "No extent".

## Validity of the CES

## a) Validity of the CES Internal Consistency

The researchers have applied the SPSS program Version (18) to examine the validity of the internal consistency of the CES by finding out:

- The internal consistency between the score of each item and the overall score of the dimension to which that item belongs.
- The internal consistency between the score of each dimension and the overall score of the CES.

# 1) The internal consistency between the score of each item and the overall score of the dimension to which that item belongs:

The internal consistency between the score of each item and the total score of the dimension that the item belongs was examined. Pearson Correlation coefficient between the participants' scores in each item and the total score of the dimension was computed. The following table pinpoints the validity coefficients of the items of the CES:

## Table (7): Correlation Coefficient between the Score of Each Item and the Total Score of the Dimension

Item	Correlation	Item	Correlation	Item	Correlation	Item	Correlation
1	0.870**	2	0.705**	3	0.652**	4	0.706**
5	0.754**						

#### **Intellectual engagement**

Item	Correlation	Item	Correlation	Item	Correlation	Item	Correlation
6	0.687**	7	0.815**	8	0.409*	9	0.685**
10	0.742**						

#### Social engagement

#### Affective engagement

Item	Correlation	Item	Correlation	Item	Correlation	Item	Correlation
11	0.687**	12	0.700**	13	0.417*	14	0.786**

\*. Correlation is significant at the 0.05 level & \*\*. Correlation is significant at the 0.01 level

The results of table (7) confirms that all correlation coefficients are significant at (0.05) and (0.01) levels of significance indicating the validity of the internal consistency between the items of the CES.

## 2) The internal consistency between the score of each dimension and the overall score of the CES:

The internal consistency between the score of each dimension and the overall score of the CES was examined through investigating the Pearson Correlation coefficient. The following table clarifies the validity coefficients of the main dimensions of the CES:

## Table (8): Correlation Coefficient between the Score of Each Dimension and the Total Score of the CES

Skills	Intellectual	Social	Affective
	engagement	engagement	engagement
Correlation	0.857**	0.925**	0.931**

The previous table assures that all correlation coefficients of intellectual, social and affective engagement are (0.857, 0.925 and 0.931) and they are found significant at (0.01) level of significance reflecting the validity of the main dimensions of the CES.

## The Reliability of the CES

In order to depict the reliability of the CES, two methods were applied (Cronbach's Alpha method and the test re-test method).

#### a) Cronbach's Alpha method

The value of Cronbach's alpha coefficient was measured for the main dimensions of the scale, and it was itemized also for the scale as a whole. The results were as presented in table (9):

Skills	Intellectual engagement	Social engagement	Affective engagement	All Over The Scale
Cronbach's Alpha	0.806	0.813	0.738	0.934

Table (9): Cronbach's Alpha coefficient or the CES

The high values of Cronbach's Alpha that are elucidated in table (9), confirm that the CES is highly reliable. As the values, were found (0.806) for the intellectual engagement, (0.813) for the social engagement, (0.738) for the affective engagement a long with a value of (0.934) for the whole CES.

#### b) The test re-test method

The CES was administered to the participants during the piloting process. Back then, at an interval of fifteen days, it was re-administered to the same participants. After that, the Pearson Correlation Coefficient was totalized between the participants' scores in the two administrations through the SPSS program, version (18). The results are speculated in the following table:

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Skills		Intellectual engagement	Social engagement	Affective engagement	All Over The Scale	
	Cronbach's Alpha	0.852**	0.917**	0.796**	0.946**	

 Table (10): The Reliability Coefficients of the CES through the Test Re-Test Method

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Table (10) certifies that the correlation coefficients are high and all of them are significant at (0.01) level of significance foreshowing the reliability of each dimension as well as the scale as a whole.

#### **Experimental Procedures**

#### **Pre-administration**

The OST and the CES were pre-administered to the participants of the experimental group on Tuesday 25<sup>th</sup> of October, 2022.

## Experimentation

The study was a pre-post experimental group study including one intervention group. Thirty-five KG2 children were assigned before the pre-administration of the study instruments, to receive instruction based on embodiment learning. Over around seven weeks, the children were allocated to various learning activities based on involving whole-body movements to the learning and teaching process. The teacher of the classroom was trained on how to apply embodiment learning in EFL classrooms. She organized and implemented the class intervention sessions.

During the period of intervention, two or three sessions of 45-minute duration were accomplished each week. Some lessons were completed during one session and others were completed within two sessions. The direct instruction and activities of the experimental treatment focused on the acquisition of oracy skills through increasing the classroom engagement of the young learners. The last two sessions before the post-testing were allocated to the repetition and revision of the other sessions. For each session, the classroom teacher was asked to keep an attendance log for each child along with the exercises that were completed each session.

The motor modality of the young children varied throughout the intervention. They have learnt how to apply specific language movements and carefully listen to the teachers' directions before starting. They learnt with the help of their teacher how to use their whole body to move while learning both individually or with assigned groups. During guided practice time, the children learnt how to be fully engaged in distinguished embodiment learning activities (i.e. the circle time, the language games, act and express exercises, sight word toss game, colouring as well as play dough games, and telling stories).



## Figure (4): Samples of the Participants' Participations during the Intervention

## Post administration

After the intervention, the Post-administration of the study instruments was held on Thursday, December 15<sup>th</sup>, 2022.

### The Teacher's Handbook

The teacher's handbook (Appendix G) of using embodiment learning to develop KG2 children's EFL oracy skills and classroom engagement was prepared to help EFL teachers comprehend how to apply the implementation procedures.

## **Results and Discussion**

In light of the pre- and post-administrations of the OST and the CES, this section presents with the results and discussion based on the presented hypotheses.

## **1. Verifying the First Hypothesis:**

To verify the first hypothesis, which states that there is a statistically significant difference between the mean scores of the experimental group participants on the pre and post administration of the overall EFL oracy skills test in favor of the post administration, the "t" value was calculated. To indicate the differences between the mean scores of the participants of the experimental group on the pre and post administration of the overall EFL oracy skills test, and to investigate the effect size of the intervention on the development of the oracy skills among KG2 children, the effect size ( $\eta$ 2) was also calculated. The results are presented in the following table:

## Table (11): t- test Differences between the Participants' Mean Scores on the Pre- and<br/>Post- Administration of the OST

Test	No.	Mean	Std. Deviation	t-value	DF	α Sig	η2
Pre	35	11.97	1.04	70 109	34	0.01	0 993
Post	35	38.06	2.09	/0.10/	54	0.01	0.775

Table (11) indicates that there is a statistically significant difference at the ( $\alpha \le 0.01$ ) level of significance between the mean scores of the participants of the experimental group on the pre- and post-administration of the overall EFL oracy skills test in favour of the of the post-administration. Thus, the first hypothesis was verified. Besides, the effect size ( $\eta$ 2) of the use of embodiment learning on the development of EFL oracy skills reached (0.993), which is considered a large value. The value of ( $\eta$ 2) assures the positive effects of embodiment learning on developing EFL oracy skills among KG2 children. These results are found consistent with the results of (Abeed, 2020; Aboho & Isa, 2014; Hill, 2021; Omachonu, Akanya & Unwaha, 2019).

The following statistical representation presents the differences between the participants' mean scores in the pre- and post- administrations of the overall OST.



Figure (5): Mean Scores in the Pre- and Post- Administrations of the Overall OST

#### 2. Verifying the Second Hypothesis

The second hypothesis states that there is a statistically significant difference between the mean scores of the experimental group participants on the pre and post administrations of the EFL oracy skills test at each of its skills in favour of the post-administration. To verify the second hypothesis, "t" value was measured to examine the differences between the mean scores of the participants of the experimental group on the pre and post administrations. Further, the effect size ( $\eta$ 2) was also figured out to investigate the effects of using embodiment learning on developing each oracy skill (listening and responding, reasoning and evidence, expression and delivery as well as organization and prioritization). The attained results are as follows:

Table (12): t- test Differences between the Participants' Mean Scores on the Pre- and<br/>Post- Administration of the OST for each skill

Skills	Test	No.	Mean	Std. Deviati on	t-value	DF	a Sig	η2
Listening	Pre	35	2.43	0.50	30.046	34	0.01	0.066
responding	Post	35	7.26	0.74	30.940	34	0.01	0.700
Reasoning	Pre	35	2.43	0.50	33.022	34	0.01	0.970

and evidence	Post	35	7.40	0.74				
Expression	Pre	35	2.69	0.72	30,809	34	0.01	0 965
delivery	Post	35	8.06	0.64	- 50.007	51	0101	0.705
Organizati on and	Pre	35	4.29	0.61				
on and prioritizati on	Post	35	15.34	1.63	39.524	34	0.01	0.979

The results illuminated in the previous table assures that there is a statistically significant difference at ( $\alpha \le 0.01$ ) level of significance between the mean scores of the participants of the experimental group on the pre- and post-administrations of the EFL oracy skills test at each of its skills in favor of the post-administration. Accordingly, the second hypothesis was also confirmed. Secondly, The effect size of applying embodiment learning on each EFL Oracy skill ranged between (0.965 - 0.979), representing a large value that emphasizes the positive effects of embodiment learning instruction on developing the skills of listening and responding, , expression and delivery organization and prioritization along with reasoning and evidence among KG2 children. Results are displayed in the following statistical representation:

#### Figure (6): Mean Scores in the Pre- and Post- Administrations of the (Listening and Responding, Reasoning and Evidence, Expression and Delivery As Well As Organization and Prioritization) Skills



#### **3.** Verifying the Third Hypothesis

The third hypothesis of the current study states that there is a statistically significant difference between the mean scores of the experimental group participants' on the pre- and post-administration of the classroom engagement scale in favour of the post-administration. In order to verify the third hypothesis of the study, t-test was applied to find out the differences between the mean scores of the study participants on the pre- and post-administrations of the CES. In addition, the effect size of the use of embodiment learning on the development of the classroom engagement level among KG2 children was also measured. The results are shown in table (13):

Test	No.	Mean	Std. Deviatio n	t-value	DF	α Sig	η2
Pre	35	18.11	1.91	49.746	34	0.01	0.986
Post	35	36.26	1.07				

## Table (13): t- test Differences between the Participants' Mean Scores on the Pre- and<br/>Post- Administration of the CES

The results displayed in the previous table emphasize that a statistically significant difference at ( $\alpha \le 0.01$ ) level of significance between the mean scores of the experimental group participants on the pre- and post- administrations of CES as a whole is found in favour of the post-administration. Thus, the third hypothesis was verified. These results were consistent with the studies of (Chang et al., 2022; Sulis, 2022; Yang et al., 2022) Moreover, the effect size of applying embodiment learning on developing and increasing the level of KG2 children's classroom engagement levels reached (0.986). This effect size value is considered a large positive value that reflects that embodiment learning instruction was enormously effective in increasing classroom engagement levels among KG2 children in EFL classrooms. The following statistical representation clarifies these results:

Figure (7): Mean Scores on the Pre- and Post- Administrations of the CES as A Whole



## 4. Verifying the Fourth Hypothesis

As stated in the fourth hypothesis, there is a statistically significant difference between the mean scores of the experimental group participants on the pre- and post-administration of the classroom engagement scale at each of its dimensions in favour of the postadministration. t-value and the effect size were examined to figure out the differences between the mean scores along with the effects of embodiment learning instruction on the development of KG2 learners' level in classroom engagement. The following table demonstrates the reached results.

Skills	Test	No.	Mean	Std. Deviati on	t-value	DF	α Sig	η2
Intellectual	Pre	35	6.69	1.21	25.271	34	0.01	0.949
engagement	Post	35	12.86	0.81				
Social	Pre	35	6.23	1.03	34.666	34	0.01	0.972
engagement	Post	35	12.89	0.68				
Affective	Pre	35	5.20	0.87	33.728	34	0.01	0.971
engagement	Post	35	10.51	0.51				

 Table (14): t- test Differences between the Participants' Mean Scores on the Pre- and

 Post- Administration of the CES for Each Dimension

A statistically significant difference at ( $\alpha \le 0.01$ ) level was found between the mean scores of the study participants on the pre- and post- administrations of the CES at each of its dimensions in favour of the post-administration. Hence, the fourth hypothesis was verified. Besides, the effect size of the application of embodiment learning on the increase of classroom engagement at each dimension among KG2 learners ranged between (0.949) and (0.971) confirming the positive influence on the intervention on developing classroom engagement levels. The following statistical representation classifies the mean scores of the study participants on both pre- and post-administrations of the CES at each dimension (intellectual, social and affective):





## **5.** Verifying the Fifth Hypothesis

To verify the fifth hypothesis that states that there is a positive, statistically significant correlation between the scores of the study participants on the post-administration of the EFL oracy skills test, and their scores on the classroom engagement scale, Pearson's Correlation Coefficient was calculated and the results are as follows:

## Table (15): The Correlation Coefficient between the Scores of the Study Participantson the Post-Administration of the EFL OST, and Their Scores on CES

Variables	Correlation coefficient value	α Sig
-EFL oracy - Classroom engagement	0.905	0.01

Therefore, a strong, direct and positive, statistically significant correlation at the (0.01) level of significance between the study participants' scores on the post-administration of the EFL OST, and their scores in the CES, was found. Then, the fifth hypothesis was verified and accepted.

## Discussion

The basic purpose of this study was to develop KG2 children's EFL oracy skills and classroom engagement through utilizing embodiment learning. It aimed at getting the learners emotionally and physically engaged in learning practices and activities in order to leverage their levels of classroom engagement, sociality and belonging. Embodiment learning involves the learners' whole body within the cognitive process in EFL classrooms. It tightly connects the three domains of learning (cognitive, psychomotor and the affective). Distinguished instructional activities were applied (i.e. clapping words songs, singing and tossing bags). These activities were used to develop KG2 children's oracy skills and classroom engagement.

Based on the findings of the current study, it seems that the young learners have enjoyed the EL activities. They were motivated and interested to participate in the entire activities. EL has made the delivery of the instruction easy and enjoyable. The analysis of the videotapes of the sessions has revealed that by the end of the intervention, the young learner became highly engaged in English language classes and as a result their oracy skills were developed. They have learnt new words and expressions. Their abilities to memorize the learnt words and expressions have increased because of their full immersion in the EL educational activities that were enjoyable, motivating, situational, practical and emotional in distinguished and unforgettable experiences. The young learners' enthusiasm and interest in EFL classes has increased due to the use of embodiment learning that focuses on the experiential learning or learning by moving and doing.

Moreover, the story corners or (circles) along with role-play activities have enriched the participants' skills of narrating short stories showing differentiation in their tones. For instance, the children have learnt that the meaning of the pronounced words may change when they change the volume of their voice or the speed of their words (i.e. a clam voice may reflect curiosity while a loud voice may reflect anger). A major point of strength that was observed during the intervention was that the young children became encouraged to ask about things that they were unsure about.

Embodiment learning instruction provided KG2 children with various opportunities to move freely instead of sitting on their desks fulfilling worksheets. It connected learning to playing in a positive way. Thus, the teaching process became situational and the learning process took place as a result of trial and error. In this context, the young children's abilities to listen carefully to the teachers' instructions and guidelines have increased. They have learnt how to give time to listen attentively to others and how to be so picky in responding to others or choosing the correct answers. Besides, they acquired skills and new expressions that enabled them to express their ideas and points of views. They became cognizant of how to show agreement or disagreement in different learning contexts. Undoubtedly, the implementation of music-based activities was so beneficial in helping the young learners acquire the proper pronunciation of words and expressions easily in funny atmospheres.

At the beginning of the intervention, the young learners encountered some obstacles at the early stages of the experimental treatment. They lacked fundamental vocabularies that hindered their positive classroom participation. They struggled to acquire new words within the first three sessions particularly because they did not pick up those new words from people around them in daily contexts. Gradually, this barrier was resolved as embodiment learning guaranteed progressive practice and diverse entertaining and highly engaging instruction techniques and activities.

When young learners began to learn about the oracy skills, they puzzled over how to imitate or produce them as was shown by the class teacher. However, when they got involved in role-play, conversation, negotiation, music and Gamification-based activities their classroom engagement was noticeably increased leading to the reduction of their fear and overthinking and they become enthusiastic and eager to participate in classroom along with out-of-classroom activities.

Another limitation that was observed during the early implementation of the intervention was resistance of some young learners to participate in physical activities because of shyness or fear of unfamiliar things. Then, step by step, due to the strong teacher-learner relation, the positive reward techniques, positive feedback, praise, and the entertaining classroom environment, the learners actively began to participate in physical activities. Back then, this participation paved the way for promotion of the cognitive, affective and psychomotor aspects of their characters. Thus, the results suggested that embodiment learning with its exemplary educational practices can be considered an efficient educational approach in EFL contexts.

By the end of the experimental treatment a competition entitled "young orators" was held among the participants. This competition was prepared and lunched to help the young orators illustrate and apply the acquired oracy skills in a motivating educational environment. The children were highly enthusiastic to participate in all the phases of the competition. They were self-confident and highly engaged.

## Conclusions

In light of the most prominent findings of the current study, it may be concluded that embodiment learning has proved to be effective in developing oracy skills and classroom engagement among KG2 children. Embodiment learning has the potential of connecting bodies and minds during the learning process, offering distinguished classroom atmosphere and environment that can boost the various classroom practices, stimulating different classroom experiences that challenge learners' abilities and presenting physical activities with many various options and techniques. Despite the short time of the implementation of the experimental treatment, a significant progress was observed in the participants' levels in EFL oracy skills and classroom engagement.

Consequently, some pedagogical implications may be presented in light of the findings of the present study (i.e. significance of investigating and studying embodiment learning, importance of consistency between the three domains of learning and reducing inconsistency between the body and the mind while learning). In conclusion, it might be concluded that the use of embodiment learning instruction in EFL classrooms has led to the existence of considerable progress and development within KG2 children's oracy skills represented in their abilities to attentively listen and appropriately respond, show reasoning abilities, express and deliver some ideas, and rearrange events according to their priority and organize them. Moreover, embodiment learning is found also beneficial for enhancing intellectual, social and affective classroom engagement levels among KG2 children.

## **Recommendations of the Study**

The following recommendations are presented in light of the obtained results:

- EFL teachers should be well trained and equipped to apply embodiment learning to their learners in different educational levels.
- EFL teachers should plan to develop oracy skills among preschoolers to help EFL learners be proficient orators in the upcoming educational stages.
- Curriculum designers should include embodiment learning instruction and activities in EFL courses and programs to increase classroom engagement and develop various EFL skills among learners of English at various educational levels.

## **Suggestions for Further Research**

The findings of this study have led to the following suggestions:

- Utilizing embodiment learning to develop other EFL language skills (i.e. reading and writing) at various educational levels.
- Investigating the effects of other instructional approaches and methods on developing KG2 children's EFL oracy skills and classroom engagement.
- Examining the effects of embodiment learning on developing EFL oracy skills and classroom engagement for EFL learners at elementary, secondary or university levels.

## References

Abeed, S. A. (2020). Using an artificial intelligence application for developing primary school pupils' oral language skills. *Educational Journal, Faculty of Education, Sohag University*, 67-110.

Abdel-Haq, E. M. (2018). Enhancing EFL oral language skills using back to screen strategy among primary stage pupils. *Faculty of Education Journal, Benha University*, 53-83.

Abeed, S. A. (2020). Using an artificial intelligence application for developing primary school pupils' oral language skills. *Educational Journal*, Faculty of Education, Sohag University, 67-110.

Abla, C., & Fraumeni, B. R. (2019). *Student engagement: Evidence-based strategies to boost academic and socialemotional results*. McREL International. Retrieved from: <u>https://files.eric.ed.gov/fulltext/ED600576.pdf</u>

Aboho, M. R., & Isa, E. Y. L. (2014). Use of phonics method on the teaching of oracy skills to beginning readers: implications to curriculum implementation. *Knowledge Review*, *30*(*1*), 1-6.

Alexander, R. J. (2010). Children, their world, their education: Final report and recommendations of the Cambridge Primary Review. Routledge.

Alpaslan, M. M. & Ulubey, O. (2021). Examining the relations between emotions, motivation, classroom engagement and achievement in mathematics. *International Journal of Research in Education and Science (IJRES)*, 7(4), 1042-1057. https://doi.org/10.46328/ijres.195

Archambault, I., Janosz, M., Morizot, J., & Pagani, L. (2009). Adolescent behavioral, affective, and cognitive engagement in school: Relationship to dropout. *Journal of School Health*, 79(9), 408-415.

Ayçiçek, B., Yanpar Yelken, T. (2021). The effect of flipped classroom model applications on high school students' classroom engagement and classroom life perceptions in teaching English. *International Online Journal of Education and Teaching (IOJET)*, 8(4). 2523-2539.

Bailey, A. L. (2010). Assessment in schools- oracy. *International Encyclopedia of Education (Third Edition)*, 285-292.

Bangkom, K., & Sukavatee, P. (2021). Effects of oracy building instruction via blended learning environment on Thai students' metacognitive awareness and oracy skills. *LEARN Journal: Language Education and Acquisition Research Network*, *14*(1), 240-293.

Barnes, D. (2010). Why talk is important. *English Teaching*, 9(2), 7–10.

Barsalou, L. W. (2008). Grounded cognition. Annu. Rev. Psychol. 59, 617-645.

Bauernfeind, N. M. (2016). *The impact of movement on student learning and engagement*. School of Education Student Capstone Theses and Dissertations. <u>https://digitalcommons.hamline.edu/hse\_all/4175</u>

Beilock, S. (2015). *How the body knows its mind: The surprising power of the physical environment to influence how you think and feel.* New York, NY: Atria Books.

Bender, W.N. (2017). 20 strategies for increasing student engagement. West Palm Beach, USA :Learning Sciences International.

Bezemer, J., & Kress, G. (2015). *Multimodality, learning and communication: A social semiotic frame.* London: Routledge.

Brooman, S., Darwent, S., & Pimor, A. (2015). The student voice in higher education curriculum design: Is there value in listening? *Innovations in Education and Teaching International*, 52(6), 663–674.

Burchinal, M., Pianta, R., Ansari, A., Whittaker, J., & Vitiello, V. (2023). Kindergarten academic and social skills and exposure to peers with pre-kindergarten experience. *Early Childhood Research Quarterly*, 62, 41-52.

Carpenter, S. (2018). Ten steps in scale development and reporting: A guide for researchers. *Communication Methods and Measures*, *12(1)*, 25-44.

Chang, C-F, Hall, N. C., Lee, S. Y., & Wang, H. (2022). Teachers' social goals and classroom engagement: The mediating role of teachers' self-efficacy. *International Journal of Educational Research*, *113*.

Chi M. T. H., Wylie R. (2014). The ICAP framework: Linking cognitive engagement to active learning outcomes. *Educational Psychologist*, 49(4), 219–243.

Christenson, S.L., Reschly, A.L., & Wylie, C. (2012). Handbook of research on student engagement. New York: Springer. <u>https://doi.org/10.1007/978-1-4614-2018-7</u>.

Conrad, B., & Newberry, R. (2012). Identification and instruction of important business communication skills for graduate business education. *Journal of Education for Business*, 87(2), 112-120.

Danker, B. (2015). Using flipped classroom approach to explore deep learning in large classrooms. *The IAFOR Journal of Education*, 3(1), 171-186.

Darwish, S. (2013). Kindergarten children and language learning: Missing pillars for language Acquisition. *International Journal of Higher Education*, 2(1), 44-52.

Dent, A.L. & Koenka, A.C. (2016). The relation between self-regulated learning and academic achievement across childhood and adolescence: A meta-analysis. *Educational Psychology Review*, 28(3), 425–474.

Duijzer, C., Heuvel-Panhuizen, M., & Veldhuis, M. (2019). Embodied learning environments for graphing motion: A systematic literature review. *Educ Psychol Rev, 31*, 597–629.

Elliot, A. J., & Church, M. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72, 218–232. doi:10.1037/0022-3514.72.1.218

Elragall, M. M. H., Abdelhaq, E. M., Khamees, M. A., & Sallam, A. A. (2022). *A game-based strategy for developing EFL oracy skills among primary stage pupils*. Unpublished MA Thesis, Faculty of Education, Damanhour University, Egypt.

Ferrer, E. M., & Laughlin, D. D. (2017). Increasing college students' engagement and physical activity with classroom brain breaks. *Journal of Physical Education, Recreation & Dance,* 88(3), 53-56.

Fitzpatrick, C. (2012). Ready or not: Kindergarten classroom engagement as an indicator of child school readiness. *South African Journal of Childhood Education*, (1), 1-32.

Fitzpatrick, C., Archambaut, I., Janosz, M. & Pagani, L.S. (2015). Preschool working memory forecasts high school dropout risk. *Intelligence*, *53*, 160–165.

Fitzpatrick, C., Archambault, I., Barnet, T., & Pagani, L. (2020). Preschool cognitive control and family adversity predict the evolution of classroom engagement in elementary school. *South African Journal of Childhood Education*, *10*(*1*).

Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences of the United States of America*, 111(23), 8410–8415.

Gilboy, N. B., Heinerichs, S., & Pazzaglia, G. (2014). Enhancing student engagement using the flipped classroom. *Journal of Nutrition Education and Behavior*,47(1).

Goh, C. C. (2014). Reconceptualising second language oracy instruction: Metacognitive engagement and direct teaching in listening. *The Asian Journal of English Language and Pedagogy*, 2(1), 1-31.

Goodman, A. (2016). The Manifestation of student engagement in classrooms: A phenomenological case study of how teachers experience student engagement and how it influences pedagogical decision making. Unpublished Ph.D dissertation, College of Education, University of Nevada, Las Vegas, USA.

Hadre, P. L., & Reeve, J. (2003). A motivational model of rural students' intentions to persist in versus dropout of high school. *Journal of Educational Psychology*, 95, 347-356.

Harboura K.E., Lauren L.E., Chris A.S., & Lindsay E.H. (2015). A brief review of effective teaching practices that maximize student engagement, Preventing School Failure. *Alternative Education for Children and Youth*, *59*(*1*), 5-13.

Hashemi, M., & Azizinezhad, M. (2011). Teaching English to children: A unique, challenging experience for teachers, effective teaching ideas. *Procedia-Social and Behavioral Sciences*, 30, 2083-2087.

Heron, M. (2019). Making the case for oracy skills in higher education: Practices and opportunities. *Journal of University Teaching and Learning Practice*, 16(2).

Heron, M., Palfreyman, D.M. (2019). Developing Oracy Skills for Student Voice Work. In S. Lygo-Baker, I. Kinchin, & N. Winstone (Eds.), *Engaging Student Voices in Higher Education*. Palgrave Macmillan, Cham. <u>https://doi.org/10.1007/978-3-030-20824-0\_6</u>

Heron, M., Dippold, D., Hosein, A., Sullivan, A. K., Aksit, T., Aksit, N., Doubleday, J., & Mckeown, K. (2021). Talking about talk: Tutor and student expectations of oracy skills in higher education. *Language and Education*, *35*(*4*), 285-300.

Hill, B. (2021). It's good to talk: Speaking up for oracy in the management classroom. *The International Journal of Management Education*, 19(2).

Hoang, N., Holopainen, L., & Siekkinen, M. (2019). Children's classroom engagement and disaffection in Vietnamese kindergartens. *Educational Psychology*, *39*(2), 254-270.

Holmes-Henderson, A., Zmavc, J., & Kaldahl, A. (2022). Rhetoric, oracy and citizenship: curricular innovations from Scotland, Slovenia and Norway. *Literacy*, *56*(*3*), 253-263.

Hrach, S. (2021). Embodied learning: How to bring movement into the classroom, and why<br/>it matters. *Times Higher Education*. Retrieved from:<br/>https://www.timeshighereducation.com/campus/embodied-learning-how-bring-movement-<br/>classroom-and-why-it-matters

Institute of Education Sciences. (2020). Progress of Arizona Kindergartners toward English Proficiency in Grade 3 by English Learner Student Classification. Appendixes. REL 2020-024. ERIC database (ED607062). Johnson-Glenberg, M. C., & Megowan-Romanowicz, C. (2017). Embodied science and mixed reality: How gesture and motion capture affect physics education. *Cognitive Research: Principles and Implications*, 2(24).

Joseph, M., Quaglia, R.J., Croso, M., & Haywood, D. E. (2014). Promoting Student Engagement in the Classroom. *Teachers College Record*, *116*(4), 50-61.

Juntunen, M.-L. (2020). Embodied learning through and for collaborative multimodal composing: A case in a Finnish lower secondary music classroom. *International Journal of Education & the Arts*, 21(29). 1-30.

Jusslin, S., Korpinen, K., Lilja, N., Martin, R., & Lehtinen-Schnabel, J. (2022). Embodied learning and teaching approaches in language education: A mixed studies review. *Educational Research Review*, *37*, 1-21.

Klimova, B. F. (2013). Teaching English to pre-school children. *Procedia- Social and Behavioral Sciences*, 93, 503 – 507.

Kosmas, P., & Zaphiris, P. (2020). Words in action: investigating students' language acquisition and emotional performance through embodied learning. *Innovation in Language Learning and Teaching*, 14(4).

Kosmas, P. (2021). The integration of embodied learning in a language learning classroom: Conclusions from a qualitative analysis. In S. Papadima-Sophocleous, E. Kakoulli Constantinou & C. N. Giannikas (Eds.), *Tertiary education language learning: a collection of research* (pp. 133-149).

Kundu, A., Bej, T. & Dey, K.N. (2021). Time to grow efficacious: Effect of teacher efficacy on students' classroom engagement. *SN Soc Sci, 1*.

Lonescu, T., & Ilie, A. (2018). Language learning in preschool children: An embodied learning account. *Early Child Development and Care*, 188(1).

Macaro, E., S. Curle, J. Pun, J. An, and J. Dearden. (2018). A systematic review of English medium instruction in higher education. *Language Teaching*, *51*(*1*), 36–76.

Macedonia, M. (2019). Embodiment learning: Why at school the mind needs the body. *Front. Psychol.* <u>https://doi.org/10.3389/fpsyg.2019.02098</u>

Mah, A. S. H. (2016). Oracy is as important as literacy: Interview with Christine CM Goh. *RELC Journal*, 47 (3), 399–404.

Maxwell, B., Burnett, C., Reidy, J., Willis, B., & Demack, S. (2015). *Oracy curriculum, culture and assessment toolkit: Evaluation report and Executive summary.* Sheffield Hallam University: Centre for Education and Inclusion Research.

Mazumder, Q. H., Sultana, S., & Mazumder, F. (2020). Correlation between classroom engagement and academic performance of engineering students. *International Journal of Higher Education*, 9(3), 240-247.

Melcer, E. F., & Isbister, K. (2016). Bridging the Physical Divide: A Design Framework for Embodied Learning Games and Simulations. *In Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems (pp. 2225–2233). New York, NY: ACM.* 

Menekse, M., Stump, G. S., Krause, S., Chi, M. T. H. (2013). Differentiated overt learning activities for effective instruction in engineering classrooms. *Journal of Engineering Education*, *102(3)*, 346–374.

Mercer, N., Warwick, P., & Ahmed, A. (2017). An oracy assessment toolkit: Linking research and development in the assessment of students' spoken language skills at age 11-12. *Learning and Instruction*, 48, 51-60.

Merlin-Knoblich, C., Harris, P. N., McCarty, M., & Erin, C. (2019). Examining student classroom engagement in flipped and non-flipped counselor education courses. *Professional Counselor*, *9*(2), 109-125.

Nayir, F. (2017). The relationship between student motivation and class engagement levels. *Eurasian Journal of Educational Research*, *71*, 59-78.

Oliveira, C. S. F., & Wright, V. (2014). Teaching English to children as a second language through a genre-based approach. *Revele Revista Virtual dos Estudantes de Letras*, 7(38).

Omachonu, C. G., Akanya, J., & Unwaha, C.G. (2019). Stimulating students' interest in English oracy skills using the peer team gritty method. *Journal of the Nigerian Academy of Education*, 15(2), 295 – 302.

Ozkan Bekiroglu, S., Ramsay, C.M., & Robert, J. (2022). Movement and engagement in flexible, technology-enhanced classrooms: investigating cognitive and emotional engagement from the faculty perspective. *Learning Environ Res*, *25*, 359–377.

Pulvermuller, F. (2005). Brain mechanisms linking language and action. *Nat. Rev. Neurosci, 6*, 576-582.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*, 68 –78. doi:10.1037/0003-066X.55.1.68

Sandberg, H., Cory, H., & Kathleen, P. (2013). Increasing engagement through music and movement. *Academic Exchange Quarterly*, *17*(*4*), 1-6.

Sanako. (2022). An introduction to embodied learning techniques. *Language Teaching Strategies*. Retrieved from: <u>https://sanako.com/an-introduction-to-embodied-learning-techniques</u>

Schmidt, M., Benzing, V., Wallman-Jones, A., Mavilidi, M-F, Lubans, D. R., & Paas, F. (2019). Embodied learning in the classroom: Effects on primary school children's attention and foreign language vocabulary learning. *Psychology of Sport and Exercise*, *43*, 45-54.

Shapiro, L. (2010). *Embodied cognition*. New York, NY: Routledge.

Skulmowski, A., & Rey, G. D. (2018). Embodied learning: introducing a taxonomy based on bodily engagement and task integration. *Cognitive Research: Principles and Implications*, 3(6), 1-10.

Sembiante, S. F., Bengochea, A., & Gort, M. (2020). Want me to show you?": Emergent bilingual preschoolers' multimodal resourcing in show-and-tell activity. *Linguistics and Education*, 55, <u>https://doi.org/10.1016/j.linged.2019.100794</u>

Stolz, S. A. (2014). Educational philosophy and theory: incorporating access. *Educational Philosophy and Theory*, *47*(5), 474-487.

Sulis, G. (2022). Engagement in the foreign language classroom: Micro and macro perspectives. *System*, *110*, 1-13.

Tahriri, A., Tous, M. D., & MovahedFar, S. (2015). The impact of digital storytelling on efl learners' oracy skills and motivation. *International Journal of Applied Linguistics & English Literature*, *4*(*3*), 144-153.

Thompson, E. (2007). *Mind in life: Biology, phenomenology and the sciences of mind.* Cambridge, UK: Belknap Press.

Urdan, T., & Schoenfelder, E. (2006). Classroom effects on student motivation: Goal structures, social relationships, and competence beliefs. *Journal of School Psychology*, *44*, 331–349.

Van der Veen C., De Mey, L., Van Kruistum, C., & Van Oers, B. (2017). The effect of productive classroom talk and metacommunication on young children's oral communicative competence and subject matter knowledge: An intervention study in early childhood education. *Learning and Instruction*, 48, 14–22. https://doi.org/10.1016/j.learninstruc.2016.06.001

Victorino, C., Denson, N., Ing, M., Nylund-Gibson, K. (2019). Comparing STEM majors by examining the relationship between student perceptions of campus climate and classroom engagement. *Journal of Hispanic Higher Education*, 21(1), 33-48.

Wall, H. (2018). Early years oracy assessment: Developing an assessment for implementation in classroom settings. Retrieved from: <u>https://www.mmu.ac.uk/media/mmuacuk/content/documents/languages/baal-2019/Wall,-Helena.pdf</u>

Wang, Z, Bergin, C., & Bergin, D. A. (2014). Measuring engagement in fourth to twelfth grade classrooms: The classroom engagement inventory. *School Psychology Quarterly*, 29(4), 517-535.

Wilkinson, A. (1965). Spoken English. University of Birmingham Press.

Yang, Q., Bartholomeu, C. P., Ansari, A., Purtell, K. M. (2022). Classroom age composition and preschoolers' language and literacy gains: The role of classroom engagement. *Early Childhood Research Quarterly*, *60*, 49-58.

Zafiri, M., & Georgiadou, M. (2021). The development of oracy skills in an EFL context using YouTube videos: a case study. *Proceedings of the 7th International Conference on Advances in Education*, 90-99.