Enlivening Pedagogical Practices in EFL Grammar Classrooms Based on Kolb's Four- Facet- Model

Iman El-Nabawi Abdel Wahed Shaalan[a,b], [a] College of Science and Humanities, Prince Sattam bin Abdulaziz University, KSA, [b] College of Humanities, Al-Azhar University, Cairo, Egypt, Email: [a]i.shalaan@psau.edu.sa, iman.nabawi40@gmail.com

Kolb's Experiential Learning Theory (ELT) is one among several theories and models that have been raised in order to understand students' various learning styles. This theory postulates creating a learning environment that makes it easier for students to link their prior knowledge to real-life situations; allowing them to transfer what they learned in one context to another by applying their new experiences to real-life situations. The present study investigated the impact of Kolb's experiential learning theory to enliven pedagogical practices in EFL grammar classrooms at the English Language Department, College of Humanities, Prince Sattam bin Abdulaziz University, KSA. A need has been felt to adopt such pedagogical practices and suitable teaching methodologies that might motivate students to learn according to their different individual learning styles. This objective was implemented in this study by exploring learners' different learning styles that facilitated the modeling of the content in a way that created a creative, live and authentic relationship between learners and the learning environment. The study sampled a total of sixty EFL students who were divided equally between control and experimental groups. The experimental group received teaching through Kolb's four facet cycle, while the control group was taught according to the conventional teaching method. A t-test was used to measure the difference between the mean scores of both the control and experimental groups. Significance of the difference between the mean of both groups was tested at a 0.05 level. Results of the post-test proved the improvement of the experimental group class interaction in grammar skills due to the application of the experiential learning as an innovative teaching/learning method, taking into consideration the learners' learning preferences.

Keywords: *Kolb' Experiential Learning Theory, Learning Styles Inventory, Pedagogical Practices, Grammar Skills*

INTRODUCTION

Kolb's Experiential Learning Theory (ELT) has popularised the concept of students' individual learning processes and learning styles reiterating that knowledge is linked to experience through hands on learning. This theory is built on constructivist theory where learners relate their prior knowledge to their existing knowledge to form and construct new knowledge. The theory explains how learning enables students to transfer what they learned in one context to another and apply their new experiences to real-life situations. It is argued that learners learn better when they get involved in a highly active environment and share their cognitive, affective and behavioural knowledge and skills with their peers (Hoover and Whitehead, 1975).

Kolb's ELT model engages learners in classroom activities by understanding their learning preferences. As a learning model, it emphasises the importance of a learning experience that makes sense in the learning process. It views the learning process as a combination of discovery and experience in which students are involved in real life learning situations that enable them to build upon their prior knowledge and learn in a more meaningful atmosphere. Moreover, the ELT model also fosters learners' critical thinking, motivation, learner-centred education and group work that may lead learners to benefit from experiential learning in their future career (Krista 2001; Quay 2003; Kolb and Kolb 2005; Sims 1983).

Kolb's ELT model can be understood in four experiential stages: Divergent, Assimilators, Convergent and Accommodators, each involving a distinct learning style. Divergent learners learn best through concrete experiences and reflective observation; Assimilator learners learn best through reflective observation and disturb conceptualisation; Convergent learners learn best through abstract conceptualisation and active experiments; and Accommodator learners learn best through concrete experiences and active experimentation (Sudria, Redhana, Kirna, & Aini, 2018). Bearing in mind this classification, teachers, as well as learners, face many problems in learning languages as it involves several skills that depend mainly on the interaction between all of these four stages (Kolb, Boyatzis, & Mainemelis, 2000).

Based on this classification, Kolb recommends four stages of the learning cycle. These stages are: Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualisation (AC) and Active Experimentation (AE). If students went through these four stages, they would gain experiences and higher-order thinking skills for their future. However, they can start the learning cycle at any stage but then they should be followed in sequence. This learning cycle also caters for supportive learning environments which make it easy for students to link their prior knowledge to real-life situations with results that foster meaning in their learning process. However, this model requires students to understand and reflect, to think about those tasks and transfer their prior knowledge to real situations. In this way they deepen their learning and master new skills which ultimately lead to the creation of self-motivated and autonomous learners (Linn, Howard, and Miller 2004).

Kolb's Learning Cycle has received mixed reaction. Zuber-Skerritt (1992) opined that in order to achieve learning goals, learners may be required to go through this four stage cycle many times during their individual learning processes. Boud, Keogh & Walker (1985) accepted Kolb's Learning Styles but reiterated that knowledge is linked to experience through hands on learning, which must also be given due significance. Wilson and Lee (1989) observed that learners should reflect on their learning experiences frequently. Through reflection, they do not repeat the same mistakes each time when answering questions because they understand situations and draw links between their personal experiences and the society which fosters knowledge and enriches the overall learning process.

Several programs at university level are expected to start adapting Kolb's ELT model to their specific needs in order to help students to link classroom knowledge to real world experiences and satisfy the needs of society. In this manner, students get the opportunity to discover new facts, get engaged in real-life experiences and connect their prior knowledge with their current experiences (The National Research Council, 2009). Likewise, if teachers realise that their students' achievement depends among other things on the intrinsic relationship between their individual different learning styles and their learning process, it would be easier for them to vitalise and give spirits to the classroom by choosing the teaching methodologies and pedagogical practices suitable to each learning style.

With this rationale, the current research was envisaged. The researcher anticipated that in the context of Saudi EFL students, Kolb's ELT model would help promote an understanding of the learning process and enliven the grammar classroom with innovative teaching methods. The researcher planned to adopt the model with the aim to motivate students to develop their grammar skills along with achieving the course objectives, despite their varying personalities and different learning modes. Besides, the model would also act as a teacher's guide assisting in fostering a learning atmosphere of critical thinking, problem solving and learner-centred strategies (Akella, 2010; Wright, 2011).

PROBLEM STATEMENT

Grammar classrooms in the English Language Department, College of Humanities, Prince Sattam bin Abdulaziz University, KSA, lack the adoption of pedagogical practices and suitable teaching methodologies that might motivate students to learn according to their different individual learning styles. Students study the English grammar course for three semesters consecutively; still they show serious weakness in their grammar skills in particular, and writing skills in general. Their writing is very poor, as if they have no background grammar skills or rules that can enable them to write properly. This comes in line with the fact that many teachers and faculty members still teach according to the conventional methods that best suit their teaching preferences and not the students' learning styles. They ignore individual learning styles of students, nature and requirements of the courses taught, as well as students' skills and

competences. Moreover, they concentrate on learning outcomes and generating information more than hands-on experience that enables students to put theory into practice and foster knowledge that is inseparable from students' behaviour and affection.

Therefore, Kolb's Experiential Learning Theory (ELT) model along with his learning style inventory was chosen for this study to vitalise the pedagogical practices of grammar classrooms and to adopt innovative teaching methodologies that could motivate EFL learners for active learning. Moreover, this would also enable teachers to create an educational atmosphere of cooperative learning, problem solving and learner-centred education. Since this was a pioneer study with this sample and in this region also, this study first sought to understand the meaning and scope of Kolb's learning style model, its role in enlivening pedagogical practices in an EFL grammar classroom, and finally whether this model affects EFL learners' different learning styles and their learning preferences of English grammar.

HYPOTHESIS OF THE STUDY

The present study stated the following hypothesis:

Ho[1] *There is a statistically significant difference between the mean scores of the experimental*
 group and the control group on the post-test of English grammar skills in favour of the experimental group after the application of Kolb's ELT.

LITERATURE REVIEW

  i. *Background of Experiential Learning Theory*

Kolb's Experiential Learning Theory (ELT) model draws on the works of John Dewey, Kurt Lewin, Jean Piaget, Lev Vygotsky, William James, Carl Jung and Paulo Freire. Dewey (1938) presented two types of educational models that most instructors follow. First, the traditional education model where students learn in a structured, didactic atmosphere and teachers dominate and orient the classroom. Second, the progressive model in which learning is mostly unstructured and the learning environment is student-centred. However, Dewy declared that neither of these two paradigms is satisfactory in understanding learners' human experiences; therefore; he called for a need to shift to an environment that engages learners in real situations with what they need, want and desire to create their experiences themselves (Ord and Leather, 2011). Dewy believed that experience did not lie in gaining external knowledge but in thinking about an idea, observing and watching it, acting upon its results, and finally applying these results and acquiring knowledge. In this sense, learners learn that experience is not simply a matter of getting knowledge but also linking this knowledge to consequences and experience to meaning.

Dewy further proposed, as quoted in Schunk (2012), that learning is not an internalised behaviour, but that it requires a change on the part of the learners as a result of this experience. In this sense, learning occurs due to a change in behaviour which in turn occurs due to a number of practices that result from different forms of experiences. Therefore, Dewy added, that learning from experience requires an encouraging environment that enjoys four important characteristics; first, acceptance to new ideas and thoughts, second; psychological safety, third; understanding and appreciation to individual differences; and fourth; time for observation and reflection. Henceforth, Dewey (1938) was thus proposing a shift from the traditional paradigm of structured educational environments to applying his theory of experience to evolve around students' prior experiences and accept the role of the teacher as a learning guide creating more learner-centred educational environments. It is on the basis of these principles that Kolb built his ELT theory (Kolb, 1984).

In his theory, Kolb sought an initiative for effective instruction and program design that went beyond learning outcomes and which focuses on skills acquired by learners. He considered that students attempt to discover their learning abilities is a skill that should be highlighted. To emphasise his notion that the learning process is achieved through experience, he defined learning as "the process whereby *knowledge* is created through the transformation of experience" (Kolb, 1984, p.38). In this sense, Kolb imitated Dewey's theory stressing the importance of lifelong learning process in a learner-centred classroom environment that fostered meaningful learning through hands-on experience in real life situations. Kolb's innovative model thus catered for supportive learning environments which made it easy for the students to link their prior knowledge to real-life situations with results that foster meaning in their learning process.

ii.   Kolb's four stage Learning Cycle

Kolb's four stage cycle starts with Concrete Experience (CE), followed by Reflective Observation (RO), then Abstract Conceptualisation (AC), and finally Active Experimentation (AE). (See Figure 1) Learning arises from the interaction among these four cycles where learners get involved in all four stages in a recursive manner to acquire knowledge (Kolb &Kolb, 2005). These four stages are executed in two continuums: The first continuum includes the Concrete Experience and the Abstract Conceptualisation stage that conveys the perception meaning of the model. In this continuum, learning is achieved through learners' feeling and thinking and is manipulated by their intellectual or emotional response. The second represents the Reflective Observation and Active Experimentation stage of the model that conveys the processing meaning of the model. In this processing continuum, learning is achieved through the way learners' approach their learning tasks, and the way they actually perform them.

Figure 1. Kolb' ELT
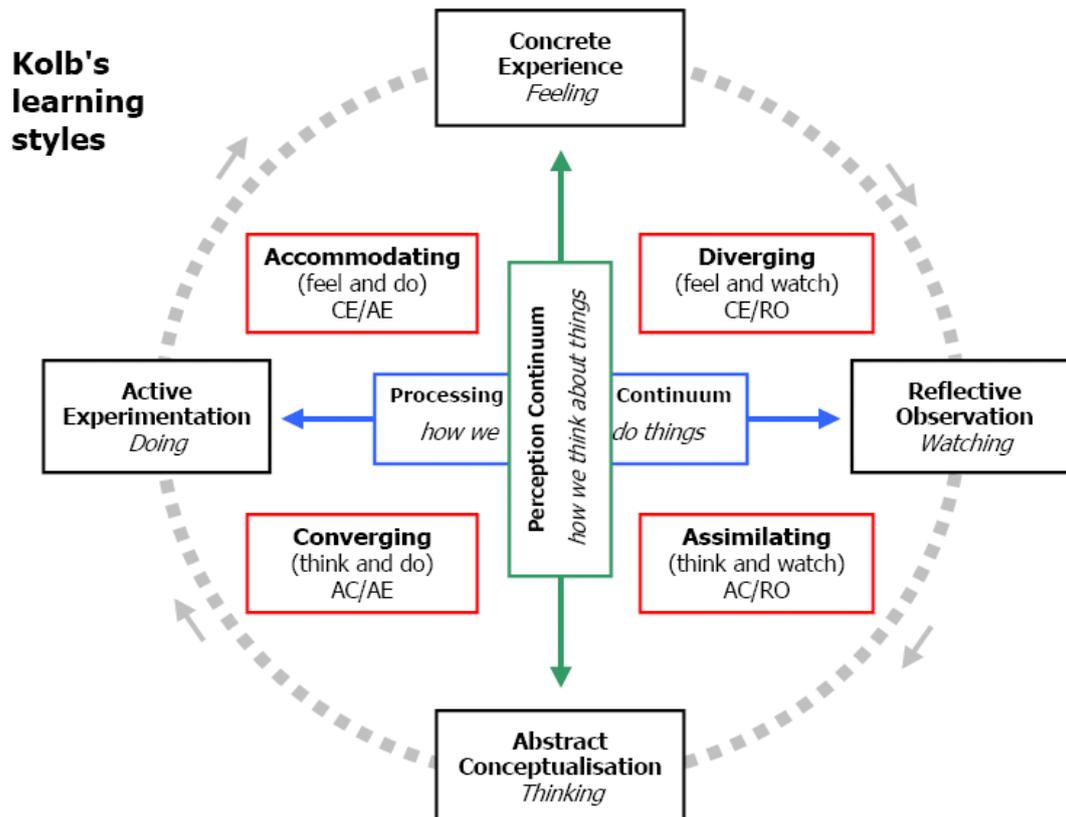
Source: Kolb (1984)

In order for learners to go through these four stages, the nature of each one should be made clear. The CE and AC processes, for example, which form the perception continuum, represent the learning process of taking in information and grasping knowledge where learners are actively immersed in real-life experiences through discovering, experiencing, conceptualising and doing things themselves. To explain this further, when the learning process begins in the CE stage, learners are exposed to visible or tangible immediate experiences also often called the *apprehension* process. Once learners apprehend a learning experience, their learning ability enters the abstract learning stage, the AC stage, where they try to understand through thinking about a theory or model they have been exposed to. This may be called the *comprehension* learning process (Armstrong & Mahmud, 2008; Kolb, 1984; Kolb & Kolb, 2013; Passarelli & Kolb, 2011). Teaching tools and techniques also vary in each stage. Audio-videos, class demonstrations, presentations, storytelling, newspapers and simulations are among the techniques that help learners in the CE stage to acquire concrete knowledge as they need to perceive the learning process with open mindedness rather than in a systematic way. On the other hand, home assignments, asking for feedback, drawing dichotomies and analogies are among the techniques that may help learners in the AC stage (Healey & Jekins, 2000).

In the other two stages; the RO and AE stages, learners intentionally think back on the experience they have been presented, try to test a theory and build upon it a plan for future experience (Akella 2010). They represent the process of transforming experience. The way learners interpret this information and act upon it through internal reflection is called the *intention* process of learning; and through external manipulation of information which is called the *extension* learning process. In this way, learners take in information and create knowledge through a combination of two grasping cycles and transmit this knowledge to the external world through both transformation cycles (Armstrong & Mahmud, 2008; Kolb, 1984; Kolb & Kolb, 2013; Passarelli & Kolb, 2011). Teaching tools and techniques that teachers may use in the RO stage include asking students questions related to the subject matter, brainstorming and discussion sessions, keeping journals or logs where students record their reflections and observations to discuss later with each other and with the teacher. The techniques in the AE stage include simulations, lab experiments, field work, assignments, and projects that focus on hands on experience that teachers may use with their learners (Healey & Jekins, 2000).

It is noteworthy that Kolb did not determine a starting or end point to his model. Conversely, his model suggested that learners start and end at any point going through different cycles till reaching the final stage of performance. Furthermore, Kolb stressed the fact that completing the cycle did not mean the end of the learning process, but the start of a new experience with new ideas and results.

iii.   *The Four Learning Styles of Kolb's ELT*

Figure 1 also exhibits Kolb's four distinct learning styles based on the four stages along both continuums. Each style represents a separate type of personality, career preference, field of specialisation and job tasks that signal individual preferences and inclinations towards its respective experiential learning cycle stage (Kolb, 2005). Kolb (1984, 2005), proposed that these learning styles play an important role in influencing an individual's future career as they determine how learning takes place in each of Kolb's cycle and even orient preferences towards career choices. In other words, individuals' learning styles shape their personal development that impacts their lifelong learning process (Kolb, 1984).

According to Kolb (1984), experience and knowledge that is grasped through apprehension, CE, and transformed through intension, RO, is called *diverging* knowledge where divergent learners who possess these two learning styles (CE & RO) view things from different perspectives. They depend mainly on taking in information on collecting data, brainstorming and generating ideas. They are sensitive and creative and are best at studying arts, sociology, history, linguistics, and English (Nulty & Barrett, 1996). On the other hand, experience that is grasped through comprehension, AC, and transformed through intension, RO, is called *assimilating* knowledge, where assimilative learners, who possess these two learning styles (AC & RO) are characterised by their abilities to analyse ideas, take in a lot of information and put it in a logical order. They also have a predisposition towards concepts and ideas,

defining problems, establishing criteria, and are apt at chemistry, physics, economics and astronomy (Nulty & Barrett, 1996)

When experience is grasped through AC and transformed through AE, *converging* knowledge results where convergent learners are good at making decisions; they think and do well when there is no more than one answer and focus their efforts on pragmatics and on their abilities to find solution to abstract ideas. These learners excel in computing, engineering, law and forestry (Nulty & Barrett, 1996). Finally, experience that is grasped through apprehension, CE, and transformed through extension, AE, is called *accommodating* knowledge where accommodators adopt the trial and error style, set objectives and schedules, are interested in actions and plans and are adaptive to circumstances. They prefer to get knowledge from hands on experience rather than depending on logic or reason. Theses styles of learners are best at commerce, sales & marketing, political science, education and geography (Nulty & Barrett, 1996).

iv. *Pedagogical implications of Kolb's ELT model*

Recently several studies have investigated the pedagogical implication of Kolb's ELT model and students' learning styles (Biabani & Izadpanah, 2019; In'am, Akhsanul, & Hajar, 2017; Smith & Rayfield, 2017; Sudria , Redhana, Kirna, & Aini. 2018; Yousafzai, Baseer, Fatima, Ali, & Shah, 2018; Vizeshfar, & Torabizadeh, 2018; Reshmad'sa & Vijayakumari, 2017; Chiu 2019; Zhu et al, 2018). Biabani & Izadpanah (2019), for instance, examined the relationship between Kolb's learning styles and learning slang among Iranian EFL students with a gender-based focus and found a significant and high correlation between Kolb's learning styles and slang learning. Chiu (2019) studied the implications of Kolb's experiential learning on innovative pedagogical approach of implementing experiential learning with (out) adopting ICT in a general education course offered by one of the universities in Hong Kong. Kempen & Kruger (2019) conducted a study on Kolb's Learning styles to find out how students perceived and processed learning in order to enhance their learning environment accordingly. Kozlova (2018) compared male and female students' learning styles to investigate whether gender can affect a student's learning style.

Healey and Jenkins (2000) conducted a study in which they applied Kolb's ELT model on university students. They concluded that the results were highly positive due to the wide range of pedagogical practices that they developed based on Kolb's theory and applied them to meet students' different learning styles. Arnold, Warner and Osborne (2006), too, emphasised positive results after the application of Kolb's ELT model due to active participation and engagement of students in the learning process that fostered their higher thinking skills and motivation. In another study, Fox (2012) examined the impact of Kolb's ELT on designing a training course to improve pre-service teachers' IT skills. The results proved positive due to the pedagogical practices used with the teachers that proved to be a very essential and efficient component in framing the IT course.

In another empirical study, Ernst (2013) explored the impact of Kolb's ELT on teacher preparation in technology where one sample was taught by the theory, and the other sample was not. The results proved significantly high in favour of the sample taught by the theory due to the active engagement of the teachers in the learning process and receiving knowledge. Joshi, (2015) studied the impact of Kolb's theory on developing learning aptitudes for girls and boys, and the results proved highly significant for both samples, each according to its learning mode and students' attitude. This echoes a study by Williams (1990), who had considered the impact of Kolb's theory on acquiring knowledge, skill mastery and investigating students' different attitudes. Results of the study had proved that the theory had a high significance on acquiring knowledge, skill mastery and raising students' different attitudes towards learning. Last, but not the least, studies conducted by Konak, Clark & Nasereddin (2014) and Wu et al (2016) emphasised that the need to use multiple forms of techniques and activities inside the same educational setting is highly appreciated by the learners as it creates an environment that respects their different individual learning styles. Moreover, such environments rise students' motivation and increase their interests in the learning process that leads in turn to enrich and develop their perceived competency.

RESEARCH METHODOLOGY

i. Research Design

The present study used a quantitative and qualitative research design in the form of a pre-test / post-test to compare students' improvement in English language grammar skills before and after implementing the experiential learning theory. The sample of the study was divided into two equal groups: one experimental group in which the experiential learning model was experimented; and second was a control group who was not involved in the learning model but was used to assess the differences between the scores of both groups in the post-test. The experimental group was trained to grasp what was learnt in the context of one classroom, relate it to their existing knowledge, and build upon their prior knowledge to transform their experiences and knowledge to another real context.

ii. Sample of the Study

Thirty female students from the English Language Department, College of Humanities, Sattam bin Abdulaziz University, KSA, were chosen as an experimental group to experiment the experiential learning model. Another thirty female students were chosen as a control group from the same department, but were not involved in experimenting with the learning model. The control group was however used to assess the differences between the scores of both groups in the post-test. Students in both groups were in the second year of their Bachelor Program of English language, who studied grammar for three terms consecutively. They were of the same age, gender, and linguistic background.

iii.   Instruments

The following instruments were used in this research:

i.   Written test

A pre-test with the aim of assessing students current level in grammar skills, in particular, and in writing skills, in general was prepared. The test consisted of two parts; the first part tested students' writing skills with special reference to their prior knowledge of grammar; and the second part was to test specifically their grammatical skills. The question in the first part on writing included composition of a four paragraph essay about a place they had visited. This question carried 25 marks and was marked on five criteria: tenses, nouns, adjectives, adverbs and word order. The question in the second part, for grammatical skills, also carried 25 marks and comprised five sub-sections with objective questions based on previously studied writing criteria in their grammar course book. The test was rated by an experienced panel of juries who validated the items of the test. A Pearson correlation formula was used to estimate the coefficient of stability; (r=.85) of the test which indicated the test reliability. Results obtained from the students' pre-test scores were used as a source to build upon the students' learning needs and construct the teacher's guide in the light of the course description and the prescribed textbook.

ii.   Questionnaire (LSQ)

A Learning Style Questionnaire (LSQ) based on Kolb's Experiential Learning Theory was administered to detect students' learning preferences and to help prepare a teacher's guide that would orient them and facilitate the learning/teaching process with the help of this learning model. The questionnaire consisted of 80 items that were answered on a three- point Likert scale, ranging from 1 (Yes), 2 (No), and 3 (Somehow), to reflect the students' different individual learning modes. The students were asked to tick (√) in front of their choices. An Alpha coefficient was calculated and (0.80) was obtained to validate the internal consistency and reliability of the inventory.

This questionnaire (LSQ) was developed by Honey and Mumford (1986) who were inspired by Kolb's learning styles model but made a few changes in their questionnaire. They had found that Kolb's model had a lower validity as it asked learners how they learnt. Hence, instead of asking leaners how they learnt, unlike in Kolb's model, Honey and Mumford preferred to probe whether learners were aware of their own learning styles and what behavioural tendencies helped them develop their learning style. They developed a questionnaire built on a continuum (See Figure 1). The rationale behind this was that knowing one's learning style helped learners to make smarter decisions in availing learning opportunities and make preferences for best learning; it also added a new range and variety to their learning experiences, to improving learning skills and developing awareness (Van Zwanenberg Wilkinson & Anderson, 2000). This questionnaire would also help teachers not only to understand students' learning

preferences but also to consolidate their own teaching process and ability to choose pedagogical practices and teaching methodologies suitable to each style of learning.

iv.   Procedures

A pre-test was conducted for both experimental and control groups to assess their current level in grammar and writing skills. Subsequently, one month before the start of the experiment, the questionnaire (LSQ) was introduced only to the experimental group and the process of preparing a teacher's guide or manual also started which would guide how the experimental group would be taught the grammar course. The teacher's guide was based on the course description of the grammar course which included several objectives including: (1) to provide a grammar course to enhance the existing knowledge of students; (2) to strengthen students' basic grammar skills; (3) to familiarise students with the basic grammatical principles of tenses, adjectives, adverbs, nouns, word order and sentence structure etc. (4) to develop general writing skills with special reference to some grammatical rules; (5) to improve students' accuracy and effectiveness in writing; and (6) to develop students' autonomous learning and motivation skills.

Both groups studied grammar for twelve weeks, one class per week with three hours, with a total teaching duration of 36 hours. The experimental group was taught based on experiential learning theory principles, while the control group studied through conventional teaching methods. After this three month period of experimenting with the theory, both groups were given a post-test to assess their improvement in relation to the experiment.

RESULTS AND FINDINGS

Taking into consideration different individual learning styles, the sample students were grouped according to their learning preferences and styles. Prior to the conduct of the experiment, both groups had been informed about the aim, activities and procedures of the study. They were also informed that having a preferred learning style meant that they can improve their learning using a variety of styles in different learning modes of the cycle like *sharing* knowledge and experiences, and *sharing* the implementation of a variety of activities and learning strategies that facilitate their learning process and make the learning class a vivid, active one. All through the experiment, activities and teaching methodologies were carefully selected to ensure students total involvement in an active learning process that would put them in situations to investigate, reflect, ask questions, think critically, experiment, be curious to learn, interact with their peers, solve problems, be creative, make decisions and take initiatives to apply their knowledge.

Findings and observations through each of the four stages of Kolb's learning cycles are as follows:

1. Stage One: Concrete Experience (CE); The teacher ensured that students during this stage pass through a tangible experience. Hence, throughout the experiment period, they were asked to read individually about each lesson of the textbook from more than one source. It was explained that all sources explained the same topic but in different perspectives. This provided them with concrete experience about the lesson in question. Subsequently, students started working in groups, according to their learning styles. Each group chose the type of activities that they liked to use in order to express their experience.

2. Stage Two: Reflective Observation (RO); During this stage, the teacher took the lead and asked some questions to let the students reflect back on their reading and answer the questions. The students were asked to work again in groups and discuss the questions and get ready for the next stage. The questions had pushed the students to reflect on and look for differences among rules and theories they had already read from different sources in the first stage. Though the teacher had initiated the process, it was the students themselves who were involved in the reflection process.

3. Stage Three: Abstract Conceptualisation (AC); During this stage, the teacher was required to explain different concepts of the topic at hand and analyse the underlying ideas of the lesson. This is the abstract conceptualisation phase of the cycle. The students were seen trying to understand through thinking about a kind of a learning model they were systematically being exposed to. This was really found to be the *comprehension* learning stage.

4. Stage Four: Active Experimentation (AE); During this stage, students were directed to a sort of active experimentation, where they were required to give examples of contrasting theories that explained the same idea. Each group was required to present an activity that would explain its theoretical aspects. Next, students were asked to write, either individually or in groups, a paragraph that revealed different theoretical positions of the idea in question. In this way, students were actively experimenting with the idea to show their understanding of it. After completing, they were asked to *share* their experiences and writings with other groups of different styles. This step was taken to *share* knowledge and to understand how other students with different styles handled the same idea.

After the completion of four stages over one topic or grammatical rule, the teacher would ask students to move to another grammatical rule. Thus, Kolb's four cycles were replicated as a chain to structure the learning process. It was revealed that whenever students started a new topic or grammatical rule, they would reflect back on their previous experience and relate the learning experiences together. Finally, they would *share* with one another their learning experiences. Throughout the experiment, a variety of activities and techniques that suited each cycle were used.

Meanwhile, the *LSQ* questionnaire was also administered to detect students' learning preferences and their individual mode of learning. Based on the responses, four types of learning styles were identified in line with Kolb's four stage Learning Cycle (Figure 1): Diverging, Assimilating, Converging, and Accommodating. Diverging learning style scored highest among styles with a percentage of 60% and an average of 73.2. Divergent students showed greater preference to imagine, investigate and generate ideas. In this style, learners focused on what and how to study through depending on a theoretical framework. Accommodating style was second place, with a percentage of 23% and an average of 62.3, where students adopted the trial and error style to reach results. It was followed by Assimilative style with a score of 10% and an average of 31.3, where students showed creative abilities to compare, define and establish models to facilitate the learning process. Finally, the Converging learning style was placed with a percentage of 7% and an average of 26.5 where students showed abilities to make decisions and practical applications of the rules. Figure 2 exhibits students' overall learning style responses of the LSQ questionnaire.

Figure 2. Learning Style Responses
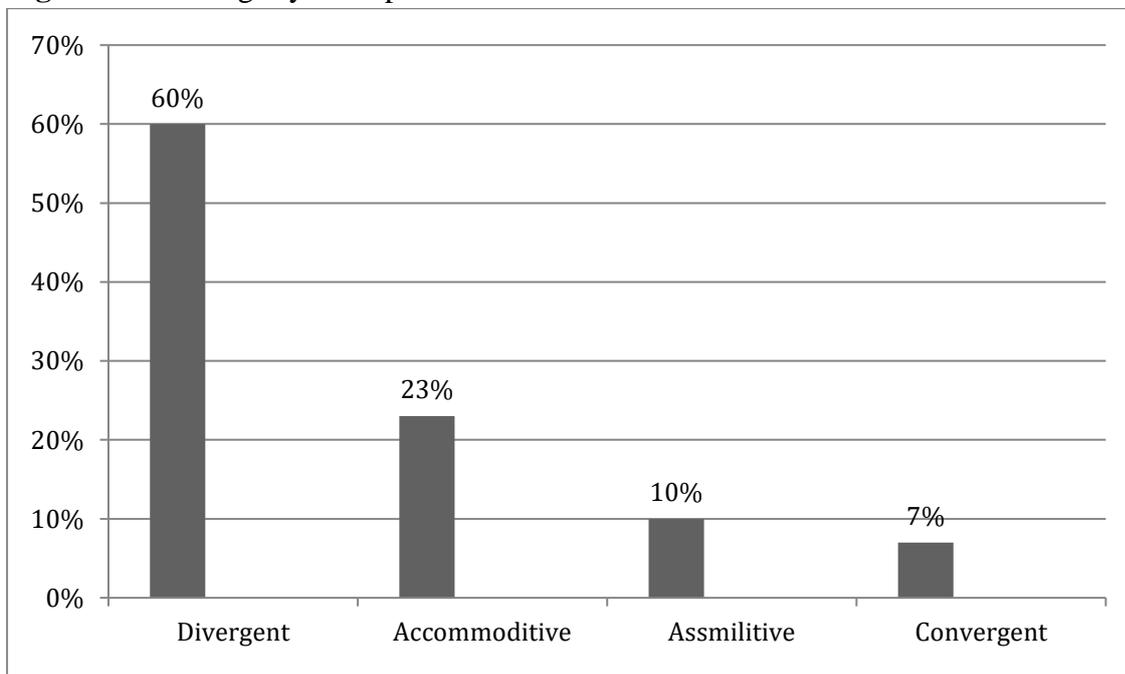
The teacher's guide was also updated at regular intervals in the light of the above results. It was essential to record students' learning style preferences as they extracted meaning from real experiences of investigating and generating ideas.

At the end of the experiment, a post-test was given to both groups in order to assess the improvement in relation to the experiment. Figure 3 shows the mean scores of both groups which reveals that the experimental group experienced significant differences in the five sub-skills of grammar in the post-test after being exposed to Kolb's ELT when compared to the control group that did not go through any experiment. In the post-test, the control group scored an average of 9.3 in tenses, 7.7 in nouns, 5.1 in adjectives, 3.7 in adverbs and 4.1 in word order whereas the experimental group showed a significant difference with an average of 11.3 in tenses, 10.7 in nouns, 10.5 in adjectives, 9.4 in adverbs, and 8.1 in word order.

Figure 3. Mean Score of Experimental and Control Groups in Post-test
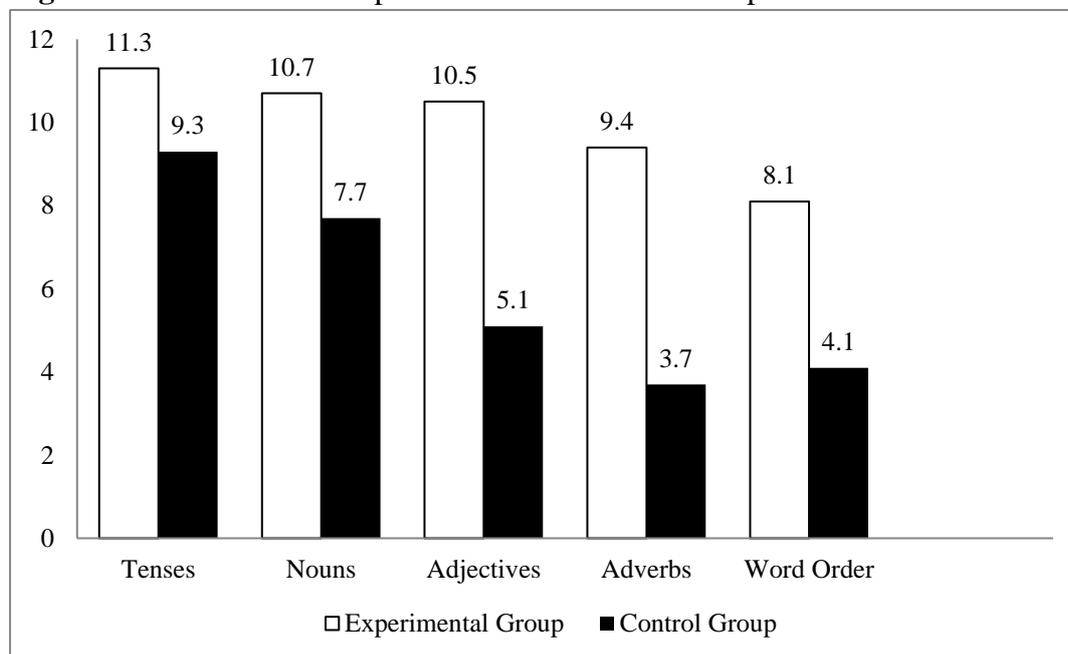
This validates the hypothesis of the study: "*There would be statistically significant differences between the mean scores of the experimental group and the control group on the post-test of English grammar skills in favour of the experimental group after the application of Kolb's ELT.*"

To conclude the experiment, a t-test was used to measure the difference between the mean scores of both control and experimental groups. Significance of the difference between the mean of both groups was tested at a 0.05 level.

DISCUSSION

Results obtained from the experimental group show a positive impact of Kolb's ELT model on grammatical skills. The theory thus proves to be effective in explaining and modifying the teaching methods used, and analysing and drawing attention to the importance of considering the diverse learning styles inside the same classroom setting. It also draws the attention to the fact that teachers' own learning styles may affect their teaching style and the selection of the approaches used in the course design. Therefore, there should not be one exclusive approach in the learning/teaching process (Ernst, 2013; Fox, 2012).

Despite student's different learning preferences, it was discovered that Kolb's ELT model stimulated throughout its four stages students' creativity and imagination. Students were found having developed effective skills towards critical thinking and creativity. Moreover, the model fosters their self- confidence, motivation to learn at their pace, to act like peer models for each other and participate actively in different learning activities. The model did not impose the idea of a set learning pattern; however, it opened the door for wise adaptation according to the nature of the course. The model in the real sense actually offered students opportunities to use their learning preferences to complete the learning process (Brock & Cameron,1991).

These findings are consistent with those of several studies (Healey & Jenkins, 2000; Arnold, Warner and Osborne 2006; Fox, 2012; Ernst, 2013; Joshi, 2015; Williams, 1990; Reshmad'sa, & Vijayakumari, 2017; Alzain, Clark, Ireson, & Jwaid, 2018) who have made use of Kolb's four cycle model in their studies coming to the conclusion that ignoring students' differences in their learning styles may explain why some students have difficulties in their academic progress. A recent study (Kempen & Kruger, 2019) also achieved a response rate of 94.6% with female students representing the majority (72.6%) wherein the Converging learning style was identified as the most preferred learning style, followed by Assimilating, Accommodating and Diverging learning styles. Other studies such as Ata and Cevik, (2018) and Silver, Strong and Perini (1997) have also emphasised that there is significant correlation among different types of learning styles thus creating a balance. Parallel studies have also recognised the use of learning styles in developing business writing skills and reducing writing anxiety of EFL learners through wikis (Kassem, 2017) and have suggested in-service teacher training program based on MALL applications on developing EFL students' vocabulary acquisition (Kassem, 2018).

CONCLUSION

This study has made several revelations about Kolb's theory. First, it is a theory that is easy to be applied in one classroom and by one teacher as its features are not difficult to grasp. Second, it suggests a variety of teaching methods that can be used and developed by classroom teachers in a way that can lead to learning/teaching improvement. Third, it provides an exposure to a

wide range of learning styles that students may show in the classroom. Fourth, it allows teachers to choose a teaching methodology to suit students' learning style and at the same time avoid a single use of one teaching method in any teaching course. Fifth, it checks teachers' bias towards adopting a specific teaching approach and a specific teaching style (Entwistle, 1994). Last, but not least, Kolb's theory suggests that designing any course is not limited just to its content, objectives or assessment tasks, but it extends to include the teaching methodologies that engage students in the learning process to achieve the course's objectives, reflect its content and determine its assessment tasks.

Kolb's model has proved very influential for both teachers and students. On one hand, it helps teachers improve their skills and develop a variety of teaching approaches that benefit the students and serve the nature of the course. On the other hand, it helps students understand their strengths and weaknesses through experiencing a variety of experiential opportunities to develop better learning habits. As time passes, students' needs and capabilities to learn also change. Therefore, this study has shown that it is not only important to know the learning outcomes that students gain from learning a course, but it is also equally important to know how they gained this knowledge. Therefore, a strong call to adopt, modify and experiment new teaching methods inside the classroom setting is recommended. Moreover, understanding students' learning preferences would help in reaping the fruits of a course's learning outcomes. Learners would learn according to their pace, capabilities, as well as their individual differences (Seibel et al., 2012).

The significance of the present study is manifold: first, it has attempted to explore the effectiveness of Kolb's experiential learning model in enlivening pedagogical practices in EFL grammar classrooms. It has also sought to emphasise the importance of considering students' different learning modes that determine their learning aptitudes in EFL grammar classrooms. Moreover, it is hoped that results of the study would draw teachers' and course planners' attention and prove useful in adopting the effective teaching methodologies in EFL grammar classrooms that suit learners' different individual preferences. The results of the study also aimed to draw instructors' attention to the importance of extracting information from experience, and that knowledge, cognition, behaviour and affection are inseparable.

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