

- Yaman, S. (2010). Technology supported learning platform: Moodle integrated academic course. *Turkish Online Journal of Distance Education*, 11(2), 146-160.
- Yang, C. D. (2004). Universal grammar, statistics or both?. *Trends in Cognitive Sciences*, 8(10), 451-456 .
- Yates, N., & Delgado, R. (2008). A study concerning the use of Moodle at Kanda University of International Studies. *The Journal of Kanda University of International Studies*, 20, 405-426.
- Zahroh,L. F.( 2019). *Developing Moodle e-learning media to teach descriptive text writing. : A study at X grade of SMK NU Ma'arif 01 Semarang in the academic year of 2018/2019* . Doctoral thesis, Education and Teacher Training Faculty , Walisongo State Islamic University.

- Su, C. C. (2006). Moodle for English teachers. *Proceedings of the 2006 International Conference and Workshop on TEFL & Applied Linguistics*. Min Chuan University.
- Tang, J. (2013). The research on blended learning of ESL based on Moodle platform. *Studies in Literature and Language*, 6(2), 30-34.
- Tayebinik, M., & Puteh, M. (2012). Blended learning or E-learning?. *International Magazine on Advances in Computer Science and Telecommunications (IMACST)*, 3(1), 103-110.
- Tsai, Y., & Talley, P. (2014). The effect of a course management system (CMS) - supported strategy instruction on EFL reading comprehension and strategy use. *Computer Assisted Language Learning*, 27(5), 422-438.
- Umek, L. , Aristovnik,A. , Tomažević,N. , & Keržič,D. (2015). Analysis of selected aspects of students' performance and satisfaction in a Moodle-based e-learning system environment. *Eurasia Journal of Mathematics, Science & Technology Education*, 11(6), 1495-1505.
- Wall, J., & Ahmed, V. (2008). Lessons learned from a case study in deploying blended learning continuing professional development. *Engineering, Construction and Architectural Management*, 15 (2), 185-202.
- Warth-Sondheimer, C. (2011). *Using Moodle for language teaching*. Retrieved July 10, 2020, from [http://www.wideminds.eu/moodle/file.php/1/tutorials/Using\\_Moodle\\_for\\_Language\\_Teaching\\_v1.2.pdf](http://www.wideminds.eu/moodle/file.php/1/tutorials/Using_Moodle_for_Language_Teaching_v1.2.pdf).
- Watson, J. (2008). *Blended learning: The convergence of online and face-to-face education*. Retrieved April 3, 2020, from [http://www.inacol.org/research/promisingpractices/NACOL\\_PPæBlendedLearningælr.pdf](http://www.inacol.org/research/promisingpractices/NACOL_PPæBlendedLearningælr.pdf).
- Wong, K. T., Hwang, G. J., Choo Goh, P. S., & Mohd Arrif, S. K. (2020). Effects of blended learning pedagogical practices on students' motivation and autonomy for the teaching of short stories in upper secondary English. *Interactive Learning Environments*, 28(4), 512-525.
- Wu, J., Tennyson, R. D., & Hsia, T. (2010). A study of student satisfaction in a blended e-learning system environment. *Computers & Education*, 55(1), 155–164.
- Wu, W. (2008). The application of Moodle on an EFL collegiate writing environment. *Journal of Education and Foreign Languages and Literature*, 7(1), 45-56.

- Plomteux, B. (2013). Moodle to the rescue to practice grammar in remediation classes. *Proceedings of the Sixth International Conference: ICT for Language Learning* (pp. 102-105). Florence, Italy.
- Pumjarean,W., Muangnakin ,P. ,& Tuntinakhongul,A. (2017). The development of blended e-learning using Moodle's LMS for EFL grammatical and writing instruction for first-year students in the English major. *Journal of Education and Social Sciences*, 7 (1), 81-89.
- Qindah,S.(2018). The effects of blended learning on EFL students' usage of grammar in context. *The Eurasia Proceedings of Educational & Social Sciences (EPESS)*,10, 11-22.
- Radia, B.(2019). *Approaching a reading course via Moodle-based blended learning: EFL learners' insights*. Retrieved March 5, 2020, from [http://mail.mjltm.org/browse.php?a\\_id=555&sid=1&slc\\_lang=en&ftxt=1](http://mail.mjltm.org/browse.php?a_id=555&sid=1&slc_lang=en&ftxt=1).
- Rhem, J. (2012). *Blended learning: Across the disciplines, across the academy*. Sterling, VI: Stylus Publishing .
- Rice, W. H. (2006). *Moodle: E-learning course development: A complete guide to successful learning using Moodle*. Packt Publishing.
- Richards, J. C., & Renandya, W. A. (2002). *Methodology in language teaching: An anthology of current practice* (Eds.). New York: Cambridge University Press.
- Richards, J. C., & Reppen, R. (2014). Towards a pedagogy of grammar instruction. *RELC Journal*, 45(1), 5-25.
- Rovai, A.P., & Jordan, H.M. (2004). Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *International Review of Research in Open and Distance Learning*, 5(2), 1-13.
- Sanprasert, N. (2010). The application of a course management system to enhance autonomy in learning English as a foreign language. *System*, 38(1), 109–123.
- Senffner, D., & Kepler, L. G. (2015). *Blended learning that works*. Alexandria, VA: Association for Talent Development.
- Shehata,M. (2019). Using blended learning for developing Faculty of Dar Al-Uloom first year EFL students' reading comprehension and grammatical competence. *Journal of Research in Curriculum, Instruction and Educational Technology*,5(2),131-158.

- Journal of Digital Content Technology and its Applications*, 5(6), 190–197.
- Lien, C. (2015). Enhancing writing skills for second-year English majors through a Moodle-based blended writing course: An action research at Hue University of Foreign Languages. *Proceedings of the 6th TESOL Conference*.
- Littlejohn, A., & Pegler C. (2007). *Preparing for blended e-learning*. London: Routledge.
- Liu, J. (2013). *E-learning in English classroom: Investigating factors impacting on ESL (English as Second Language) college students' acceptance and use of the Modular Object-Oriented Dynamic Learning Environment (Moodle)*. Master thesis, Iowa State University.
- Marsh, D. (2012). *Blended learning: Creating learning opportunities for language learners*. Cambridge: Cambridge University Press.
- Mart, C. T. (2013). Teaching grammar in context: Why and how?. *Theory and Practice in Language Studies*, 3(1), 124-129.
- Mason, R., & Rennie F. (2006). *E-learning: The key concepts*. London: Routledge.
- Moore, J.L., Dickson-Deane, C., & Galyen, K. (2011). E-learning, online learning, and distance learning environments: Are they the same?. *Internet and Higher Education*, 14, 129-135.
- Mynard, J. (2011). Learning environments that facilitate reflection on language learning. *The Jalt Call Journal*, 7 (3), 293-306.
- Nedeva, V., Dimova, E., & Dineva, S. (2010). Overcome disadvantages of e-learning for training English as a foreign language. *Paper presented at the fifth International Conference on Virtual Learning ICVL*. University of Bucharest and University of Medicine and Pharmacy Târgu-Mures.
- Neumeier, P. (2005). A closer look at blended learning-parameters for designing a blended learning environment for language teaching and learning. *ReCALL*, 17(2), 163–178.
- Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *Quarterly Review of Distance Education*, 4( 3), 227-233.
- Pardede, P. (2012). Blended learning for ELT. *Journal of English Teaching (JET)*, 2(3), 165-178.
- Picciano, A. G., Dziuban, C. D., & Graham, C. R. (2013). *Blended learning: Research perspectives*. New York: Routledge.

- Huang, R. H., Zhou, Y. L., & Wang, Y. (2006). *Blended learning: Theory into practice*. Beijing: Higher Education Press.
- Isti'anah, A. (2017). The effect of blended learning to the students' achievement in grammar class. *IJEE (Indonesian Journal of English Education)*, 4 (1), 16-30.
- Jeong, K. (2016). Integrating a web-based platform to promote creativity and authenticity in language classrooms. *International Journal of Knowledge and Learning*, 11(2-3), 127–136.
- Jeong,K. (2017). The use of MOODLE to enrich flipped learning for English as a foreign language education. *Journal of Theoretical and Applied Information Technology*,95 (18), 4845- 4852.
- Jia, J., Chen ,Y., Ding, Z., & Ruan, M. (2012). Effects of a vocabulary acquisition and assessment system on students' performance in a blended learning class for English subject. *Computers & Education*, 58 (1) , 63-76.
- Kaminski, J. (2005). Moodle-A user-friendly, open source course management system. *Online Journal of Nursing Informatics*, 9(1).
- Kaur, M. (2013). Blended learning-its challenges and future. *Procedia- Social and Behavioral Sciences*, 93, 612 – 617.
- Kosar,G. ( 2016 ) . A study of EFL instructors' perceptions of blended learning . *Procedia - Social and Behavioral Sciences*, 232, 736 – 744.
- Krasnova, T.I., & Vanushin, I.S. (2016). Blended learning perception among undergraduate engineering students. *International Journal of Emerging Technologies in Learning*, 11(1), 54-56.
- Kristanto,B.,& Suryani,R.(2019). *Developing a vocabulary learning medium through MOODLE platform in English for nursing program*. Retrieved May 15, 2020, from <http://www.unika.ac.id/scubicon/wp-content/uploads/sites/24/2019/10/15-Proceeding-Barlian-UHB.pdf>.
- Larsen, L. (2012). *Teacher and student perspectives on a blended learning intensive English program writing course* . Doctoral thesis, Iowa State University, USA.
- Larsen-Freeman, D. (2009). Teaching and testing grammar. In Long, M.H., & Doughty ,C. J. (Eds.). *The handbook of language teaching* (pp. 518-542). Malde, MA: Wiley- Blackwell.
- Levy, M. (2009). Technologies in use for second language learning. *The Modern Language Journal*, 93(1), 769-782.
- Liao, C. W., Chen, F. S., & Chen, T. H. (2011). Perspectives of university students on cooperative learning by Moodle. *International*

- Goertler, S., Bollen, M., & Gaff, J. (2012). Students' readiness for and attitudes toward hybrid FL instruction. *Calico Journal*, 29(2), 297-320.
- Graham, C. R. (2004). Blended learning systems: Definition, current trends, and future directions. In Bonk, C. J., & Graham, C. R. (Eds.). *Handbook of blended learning: Global perspectives, local designs* (pp. 19-34). San Francisco, CA: Pfeiffer Publishing.
- Graham, C. R., Allen, S., & Ure, D. (2005). Benefits and challenges of blended learning environments. In M. Khosrow-Pour (1st ed.). *Encyclopedia of information science and technology* (pp. 253-259). IGI Global.
- Gunduz, N., & Ozcan, D. (2017). Implementation of the Moodle system into EFL classes. *Profile : Issues in Teachers' Professional Development*, 19, Supplement 1, 51-64.
- Harb, I. (2013). *The effectiveness of a blended learning program on developing and retention of Palestinian tenth graders' English writing skills*. Master thesis, Faculty of Education, The Islamic University, Gaza.
- Harmer, J. (2007). *How to teach English*. London: Pearson Education Limited.
- Harrer, I., Kachalov, N., Borodin, A., & Kachalova, O. (2015). Sociocultural component in the content of teaching foreign languages to pre-school children. *Procedia-Social and Behavioral Sciences*, 166, 344-350.
- Hirschel, R. (2012). Moodle: Students' perspectives on forums, glossaries and quizzes. *The Jalt Call Journal*, 8 (2), 95-112.
- Hodgson, K. (2010). *Sharing time in a blended learning space*. Retrieved March 15, 2020, from <http://instructify.com/2010/06/10/blendedlearnin-online-face-toface-learning/>.
- Holmes, B. , & Gardner, J. (2006). *E-learning: Concepts and practice*. London: Sage Publications.
- Hsieh, P. (2009). *The effects of computer-mediated communication by a course management system(Moodle) on EFL Taiwanese students' English reading achievement and perceptions* .Doctoral thesis, Faculty of the School of Education, La Sierra University ,USA .
- Huang, J. (2010). Grammar instruction for adult English language learners: A task-based learning framework. *Journal of Adult Education*, 39(1), 29-37.

- Deadman, M. (2014). Students' reactions to the use of CALL (Computer Assisted Language Learning) in their English studies. *Maebashi Kyoai Gakuen College Journal*, 14, 44-77.
- Deadman, M. (2017). *Practice and assessment of reading classes using Moodle*. Retrieved May 10, 2020, from <https://core.ac.uk/download/pdf/153417637.pdf>.
- Dougiamas, M. (2004). Moodle: A virtual learning environment for the rest of us. *TESL-EJ*, 8(2), 1-8.
- Dvorak, R. (2011). *Moodle for dummies*. John Wiley & Sons, Inc.
- Dykes, B. (2007). *Grammar for everyone: Practical tools for learning and teaching grammar*. Victoria: ACER Press.
- Dziuban, C. D., Moskal P. D., & Hartman, J. L. (2005). Higher education, blended learning and the generations: Knowledge is power-no more. In J. Bourne & J.C. Moore (Eds.). *Elements of quality online education: Engaging communities*. Needham, MA: Sloan Center for Online.
- Ellis, R. (2006). Current issues in the teaching of grammar: An SLA perspective. *TESOL Quarterly*, 40(1), 83-107.
- Eskandari, M., & Soleimani, H. (2016). The effect of collaborative discovery learning using MOODLE on the learning of conditional sentences by Iranian EFL learners. *Theory and Practice in Language Studies*, 6(1), 153-163.
- Fathi, J., & Torabi, S. (2019). The contribution of a Course Management System (CMS)-supported instruction to developing grammar performance: A case of Iranian EFL learners. *CALL-EJ*, 20(2), 89-98.
- Feizabadi, N., Aliabadi, K., & Ahmadabadi, M. (2016). The impact on English learning software Moodle. *International Journal of Humanities and Cultural Studies, Special Issue*, 1427-1437.
- Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. San Francisco, CA: John Wiley & Sons.
- Garrison, D.R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, 7(2), 95-105.
- Gildin, A., & Sorlovich, N. (2013). Teaching EAP in a blended environment: The MOODLE experience. *Paper presented at the 4th CELC symposium conference proceedings*.

- Beatty, B., & Ulasewicz, C. (2006). Online teaching and learning in transition: Faculty perspectives on moving from blackboard to the Moodle learning management system. *TechTrends*, 50(4), 36-45.
- Bonk, C. J., & Graham, C. R. (2012). *The handbook of blended learning: Global perspectives, local designs*. San Francisco, CA: John Wiley & Sons.
- Bonk, C.J., & Zhang, K. (2006). Introducing the R2D2 model: Online learning for the diverse learners of this world. *Distance Education*, 27(2), 249-264.
- Brandl, K.(2005). Are you ready to “Moodle”?. *Language Learning & Technology*, 9(2), 16-23.
- Buran, A., & Evseeva, A. (2015). Prospects of blended learning implementation at Technical University. *Procedia - Social and Behavioral Sciences*, 206, 177- 182.
- Caner, M. (2012). The definition of blended learning in higher education. In Panagiotis, A. (Eds.). *Blended learning environments for adults: Evaluations and Frameworks* (pp 19-34). IGI Global.
- Carman, J. M. (2005). *Blended learning design: Five key ingredients*. Retrieved May 9, 2020, from <http://www.agilantlearning.com/pdf/Blended%20Learning%20Design.pdf>.
- Cordova, J. V., & Dechsubha, T. (2018). Using Moodle in improving listening abilities in English for specific purposes of vongchavalitkul university students. *Paper presented at the 6th Asian Academic Society International Conference (AASIC)* .
- Corich, S. (2005). Is it time to Moodle?. *Paper presented at the eighteenth Annual NACCQ Conference*. Hawke's Bay, New Zealand.
- Crystal ,D. (2003). *The Cambridge encyclopedia of the English language* (2nd ed.). Cambridge: Cambridge University Press.
- Cuadrado-García, M., & Ruiz-Molina, M. E. (2009). *The use of Moodle in higher education for improving English skills in non-language courses*. Paper presented at the 2<sup>nd</sup> edition of the International Conference: ICT for Language Learning. Retrieved July 15, 2020, from [https://conference.pixel-online.net/ICT4LL2009/common/download/Abstract\\_pdf/pdf/ILT12\\_Cuadrado-Garcia,Ruiz-Molina.pdf](https://conference.pixel-online.net/ICT4LL2009/common/download/Abstract_pdf/pdf/ILT12_Cuadrado-Garcia,Ruiz-Molina.pdf).
- Daniels, P. (2012). Technically speaking: Moodle, mobile apps and mobile content. *The Jalt Call Journal*, 8 (1), 33-44.

## References

- Adas, D., & Bakir, A. (2013). Writing difficulties and new solutions: Blended learning as an approach to improve writing abilities. *International Journal of Humanities and Social Science*, 3(9), 254-266.
- Al Bataineh, K. B., Banikalef, A.A.A., & Albashtawi ,A. H. (2019). The effect of blended learning on EFL students' grammar performance and attitudes: An investigation of Moodle. *Arab World English Journal(AWEJ)*, 10 (1)324-334.
- Albiladi ,W.S.,& Alshareef,K.K.(2019). Blended learning in English teaching and learning: A review of the current literature. *Journal of Language Teaching and Research*,10(2), 232-238.
- Althothli ,N.I.(2015).*Investigating the impact of using MOODLE as an e-learning tool for students in an English language institute*. Master thesis, The University of Montana, Missoula, Montana.
- Ali, M. N., & Jaafar, M. J. (2010). Transforming Moodle as a reflective tool in learning French language. *International Journal of Academic Research*, 2(3), 238-240.
- Al-Jarf, R.S. (2005). The effects of online grammar instruction on low proficiency EFL college students' achievement. *Asian EFL Journal*,7 (4) , 166-190.
- Alshalan,W.(2012). *Relative effectiveness of teaching writing as process vs. product using Moodle to Saudi EFL students of Imam University*. Master thesis, College of Languages & Translation, Al-Imam Muhammad Ibn Saud Islamic University.
- Aslani, S. M., & Tabrizi, H. H. (2015). Teaching grammar to Iranian EFL learners through blended learning using multimedia softwares. *Journal of Applied Linguistics and Language Research*, 2 (8), 76-87.
- Banados, E. (2006). A blended-learning pedagogical model for teaching and learning EFL successfully through an online interactive multimedia environment. *CALICO Journal*, 23(3), 533-550.
- Barrs, K. (2012). Fostering computer-mediated L2 interaction beyond the classroom. *Language Learning & Technology*, 16(1), 10-25.
- Bataineh, R. F., & Mayyas, M. B. (2017). The utility of blended learning in EFL reading and grammar: A case for Moodle. *Teaching English with Technology*, 17(3), 35-49.

- 3- Further studies are needed in the area of utilizing MOODLE platform-based blended learning to demonstrate its effectiveness in developing students' foreign/second language skills.
- 4- A follow-up study should be conducted to investigate students' attitudes towards utilizing MOODLE platform-based blended learning.
- 5-The effect of MOODLE platform-based blended learning on different EFL skills among students' learning difficulties should be examined.
- 6- A research about evaluating blended learning courses and programs in the Egyptian higher education institutions should be researched.
- 7- A study about exploring EFL lecturers' perspectives regarding MOODLE platform-based blended learning should be studied .

## **Conclusion**

According to the achieved results of the study, it can be concluded that MOODLE platform-based blended learning played a significant role in developing EFL students' grammar learning. In addition, the experimental (treatment) group students performed better than the students of the control group in EFL grammar learning. Moreover, MOODLE platform-based blended learning not only made EFL grammar learning motivating, interesting and effective for both lecturer and students, but also helped to maximize students' learning opportunities to enhance their EFL grammar learning outside the classroom.

- 1- Faculties and higher education institutions should consider MOODLE platform-based blended learning as a significant part of teaching and learning EFL .
- 2- Faculties and higher education institutions should be supplied with the necessary equipment for employing and utilizing MOODLE platform-based blended learning (i.e., enough computer labs, interactive smart boards, multi-media resources , Internet access, etc.).
- 3- EFL lecturers and instructors should be provided with various references, books and resources about methods and techniques of implementing and utilizing MOODLE platform-based blended learning.
- 4- Training courses and workshops should be held for EFL lecturers and instructors in order to enhance their competencies of implementing MOODLE platform-based blended learning.
- 5- Activating the role of MOODLE platform-based blended learning in changing EFL lecturers' role from instructors who dominate the class into educators whose roles are to facilitate, guide, support and direct students towards self-learning.
- 6- Family should co-operate with administrations of faculties and higher education institutions in helping their sons and daughters to safely access online sessions of MOODLE platform-based blended learning.
- 7- Enriching EFL courses and programs with relevant materials and activities that enhance students' use of EFL either in-class (face-to-face) or out-class (online) .

### **Insights for further research**

The following areas are suggested for further research:

- 1- Conducting qualitative studies in the area of utilizing MOODLE platform-based blended learning in order to develop students' foreign/second language skills in general and their EFL grammar in particular.
- 2- Further studies can be conducted in the EFL classroom at other educational stages using other LMS other than MOODLE (i.e., WebCT, Blackboard , Nicenet, etc.) in order to develop students' foreign/second language skills in general and their EFL grammar in particular.

Eskandari and Soleimani (2016), Feizabadi, Aliabadi and Ahmadabadi (2016), Bataineh and Mayyas (2017), Deadman( 2017 ), Gunduz and Ozcan (2017), Isti'anah (2017), Jeong (2017), Pumjarean, Muangnakin and Tuntinakhongul (2017), Qindah (2018), Al Bataineh, Banikalef and Albashtawi (2019), Fathi and Torabi ( 2019 ), Kristanto and Suryani ( 2019 ) and Zahroh (2019) , which all supported and confirmed that MOODLE platform-based blended learning has a positive impact on foreign /second language learning.

### **Implications**

In the light of the results of the study, the following implications have been provided:

Firstly, EFL lecturers should be aware of their students' needs and abilities , choose the appropriate blend for them, train them on self-learning strategies in order to develop blended learning potentials, move towards student-centered classes and avoid teacher-centered ones, benefit from all facilities and features offered by MOODLE platform, be up-to-date with modern technology in order to keep up with the fast- paced society, provide comprehensive feedback for EFL grammar quizzes and assignments, be aware of various learning management systems(i.e., MOODLE, WebCT, Blackboard , Nicenet, etc.) and be trained to be familiar with such various learning management systems .

Secondly, EFL lecturers should avoid student disappointment, make sure that what is posted on MOODLE platform is closely linked to what have been presented in class and allow for differentiation through taking into consideration weaker students as well as those getting ahead of the class.

Lastly, MOODLE platform is equipped with a variety of features and tools that can help EFL lecturers integrate various types of learning resources. This, in turn, can enable their students to learn with flexibility for their daily routines , develop their foreign/second language skills in general and their EFL grammar in specific and cultivate their self-management for their learning.

### **Recommendations**

According to the results of the study, the following recommendations should be considered:

different from those of traditional face-to-face lectures (i.e., peer correction, immediate feedback, diversity of activities, self-pacing capabilities, etc.). These opportunities reduced learning time, raised self-confidence, viewed their grading of their answers immediately after submission and developed a sense of accomplishment towards learning, hence, developed their EFL grammar learning.

Furthermore, self-assessment, which the participants did with diligence and enthusiasm, was another catalyst for their improved EFL grammar performance. They expressed their willingness to do the assessment more than once to improve their grammar, especially after working on the PowerPoint slides, YouTube videos and hyperlinks to further resources. These allowed participants to strengthen their knowledge, determine their points of weakness and remedy them through frequent practice.

Furthermore, the differentiated resources, materials, assignments, activities, forums as well as quizzes that were presented via MOODLE platform helped students to learn in different ways, meet their interests, allow them to learn in an enjoyable and interesting way, learn according to their own pace, retain information as it gave them extra materials for practice , access extra exercises to revise the pre-learned grammatical structures in a practical way, interact in the target language with an authentic audience, negotiate meaning, attend mindfully in the learning process and produce creative language.

In addition, providing students with immediate feedback on their answers helped them a lot to manage their own learning, interact socially, learn from their mistakes, decrease their mistakes, motivate and initiate their interests and repeatedly revise the structures by themselves.

Students' ability to view discussions and their peers' replies motivated and encouraged them to post replies and learn from their peers' errors. In turn ,they found learning EFL grammar using MOODLE useful, motivating ,interesting and fun and they considered it a new way for leaning EFL grammar . This was reflected in their responses to the grammar forums as well as their keenness for synchronous and asynchronous communication with the researcher.

The results of the study are compatible with many previous studies such as those by Al-Jarf (2005) , Alshalan (2012) , Gildin and Sorlovich ( 2013 ), Harb (2013), Alhothli(2015), Aslani and Tabrizi (2015) ,

regularly posted on MOODLE platform in order to supplement grammar materials covered in class. These slides and videos provided hyperlinks to extra information, activities and quizzes on each grammar point covered in class. Students were keen on studying them and they got feedback immediately after submitting their responses. They were allowed unlimited attempts, which enabled them to get even more grammar practice.

Also, MOODLE platform helped students to: update and modify information easily, maximize communication to exchange ideas, experiences and opinions between them and their lecturer and among themselves, overcome the crowded classes, supply them with ongoing feedback during the learning process , vary learning resources and simulate them to ease learning. It also enabled them to interact using different styles of discussion and interaction, provide them with less stressful practice environment for EFL grammar, allow time for them to reflect on their ideas , give more informed and considered responses, offer more learner-friendly environments and allow more learner-centric activities.

Besides, MOODLE platform expanded students' exposure to EFL , allowed more flexibility to both of them and their lecturer, provided them with the opportunity to continue learning outside the classroom in an authentic environment, provided them with the opportunity to control their own learning ,engaged them in their own learning , enabled them to choose the time and place for checking their progress, provided a visible summary of results for all of them, encouraged them to become more skilled in self-evaluation and engaged all of them including shy ones in learning .

Additionally, it performed communicative activities out of class time, helped them to better understand the three dimensions of grammar instruction : form, meaning and use, created interactive and collaborative opportunities to engage them, disseminated materials to them at their own pace, heightened their motivation , raised their self-esteem, created a warm-climate between them and their lecturer and among themselves, provided more practice , clarified difficult points and helped them review for the in-terms.

Moreover, MOODLE offered various activities with different functionalities. The activities which were offered via MOODLE platform provided students with many new opportunities which were very

## **Discussion**

As evidenced by the study results, MOODLE platform-based blended learning helped the experimental group students to develop their EFL grammar learning as they became active participants , in turn, achieved higher gains than the passive students of the control group. The experimental group students outperformed and surpassed the control group students on the posttest of EFL grammar as there was statistically significant difference in mean scores of the two groups, in favor of the experimental group students. This means that using MOODLE platform as a supplement to face-to-face instruction proved to be a powerful tool for developing EFL first year MIS students' grammar learning. These results can be attributed to a number of factors and reasons as follows:

The unique features, tools and options of MOODLE platform may be an essential factor (i.e., chat, forum, hotpot, dictionaries, etc.). They enabled students to have text-based, real-time synchronous discussions, share and exchange documents, forum, blogs, bookmarks and folders, share and exchange ideas and experiences independently, with or without their lecturer's participation, develop and solidify students' independent learning as they were engaged in acquiring information from others, maintain and search a collection of entries (i.e., records), interact with learning resources and activities on other web sites, distribute interactive learning materials to their classmates and get instant feedback . This, in turn, influenced positively their level of EFL grammar.

Besides , such features , tools and options of MOODLE platform enabled the researcher to act as a facilitator ,enhance the collaborative nature of learning, motivate students to be much more engaged , help students to take more responsibility for their learning, save time of delivering content , enhance the course content development, practice EFL grammar activities in interesting and flexible ways, create quizzes and questions of various types (i.e., matching, numerical, short-answer , multiple choice, etc.) , ask single questions and offer a selection of possible responses and stimulate students' thinking via a poll. This enabled them to be exposed to their peers' views through votes and allowed them to understand and use EFL grammar efficiently and purposefully at their own pace.

Another possible factor may be related to students' engagement through studying PowerPoint slides and YouTube videos which were

statistically significant difference in mean scores of the experimental group ( $M=22.16$ ,  $SD=2.230$ ,  $df=158$ ) and that of the control group ( $M=7.46$ ,  $SD=1.876$ ,  $df=158$ ) on the posttest of EFL grammar, in favor of the experimental group ( $t=45.122$ ,  $p < 0.01$ ). This result shows that the experimental group students outscored and surpassed the control group students on the posttest of EFL grammar. Thus, the second hypothesis is rejected.

On the other hand, Table 2 shows that there was statistically significant difference in mean scores of the experimental group on the pretest ( $M=5.90$ ,  $SD=1.673$ ,  $df=79$ ) and posttest ( $M=22.16$ ,  $SD=2.230$ ,  $df=79$ ) of EFL grammar, in favor of the posttest ( $t=59.923$ ,  $p < 0.01$ ). This result shows that the experimental group students' performance on the posttest of EFL grammar was better than their performance on the pretest of EFL grammar. Thus, the third hypothesis is rejected. Moreover, there was not statistically significant difference in mean scores of the control group on the pretest ( $M=5.51$ ,  $SD=1.458$ ,  $df=79$ ) and posttest ( $M=7.46$ ,  $SD=1.876$ ,  $df=79$ ) of EFL grammar . This result shows that the control group students experienced a slight increase from the pretest to the posttest. The above results are visualized graphically in the following figure:

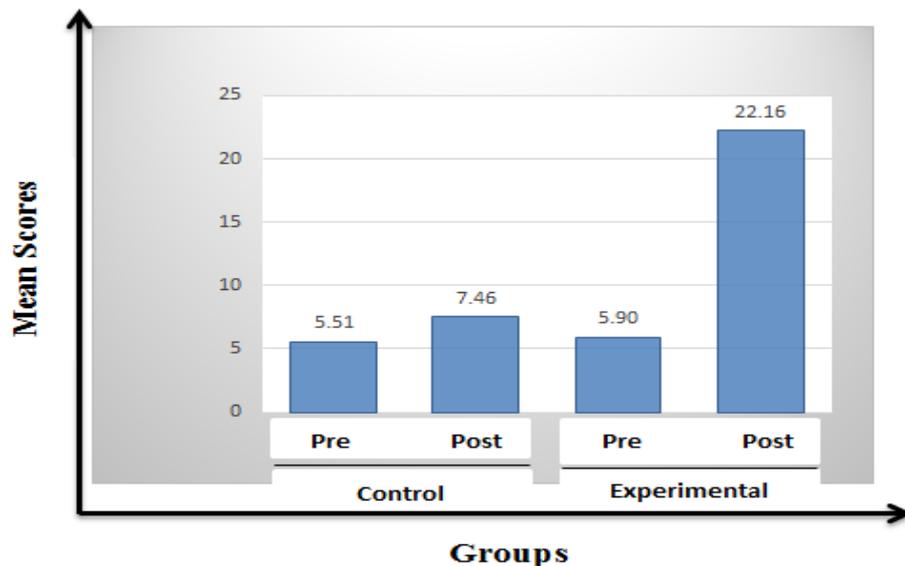


Figure (1): Mean scores for the two groups on the pretest and posttest of EFL grammar

technical and educational assistance on using the different components of the online course via email, forum posts and online chat. In addition , he expended much effort to answer grammar forums, check students' logs and MOODLE -related activities, thank active students to encourage them and urge less active students to participate. The participants could also express their opinions and comments through the comment feature available under each posting which could be viewed by all students of the group.

### Results of the study

The results of the study are presented per its hypotheses. The t-test for independent and paired samples was used and the results are shown in the following tables:

**Table (1): The independent samples t-test for the two groups on the pretest and posttest of EFL grammar**

Groups	Pretest						Posttest					
	N	M	SD	df	t	Sig	N	M	SD	df	t	Sig
Exp.	80	5.90	1.673	158	1.562	No sig.>0.01	80	22.16	2.230	158	45.122	Sig. <0.01
Con.	80	5.51	1.458				80	7.46	1.876			

**Table (2): The paired samples t-test for the two groups on the pretest and posttest of EFL grammar**

Groups	Experimental						Control					
	N	M	SD	df	t	Sig	N	M	SD	df	t	Sig
Pretest	80	5.90	1.673	79	59.923	Sig.< 0.01	80	5.51	1.458	79	7.342	No sig.>0.01
Posttest		22.16	2.230					7.46	1.876			

As shown in Table 1 above, mean scores of the experimental and control groups on the pretest of EFL grammar were 5.90 and 5.51 respectively. The results of the independent t-test ( $t=1.562$ ,  $df=158$ ,  $p>0.01$ ) indicate that there was not statistically significant difference between the two groups and they were equal before the treatment. Thus, the first hypothesis of the study is accepted. Moreover, there was

several exercises and tests which were graded and then returned to them with comments on strengths and weaknesses. Words of encouragement, acknowledgment and appreciation were given to active students, whereas less active students were urged to participate.

### **Out-class instruction using MOODLE platform**

In addition to face-to-face (in-class) instruction, the experimental group students participated in an online section designed on MOODLE platform site of their institute . All the materials, exercises and activities that were uploaded to MOODLE platform were related to the topics that were covered in class. The experimental group students had a variety of ways to access to the online section through the Internet at home or wherever they found convenient. They were given their first tutorial about how to create an account with a username and a password .They then sent a request to join the course. After accepting their requests to join the course, a second tutorial was given in order to introduce MOODLE and its functions and demonstrate how to access the learning materials, exercises and activities. In addition, students were shown how to download the grammar files, do the quizzes, benefit from the recurring immediate feedback and post answers of their homework. All this was done with the help of an information technology expert.

Every week of the treatment, the instructional content was posted on MOODLE platform to supplement face-to-face classroom instruction for the experimental group only. PowerPoint slides , assignments, activities, self-assessment tests, videos, worksheets , quizzes(multiple -choice, true/false, numerical, matching, fill in blanks and correct the mistakes) and document files were adopted , uploaded and posted weekly on the site on the grammatical topics from different sources and websites (hyperlinks) online (i.e., YouTube, English grammar online, english-hilfen.de, perfect English grammar and English instructor) . In addition, a grammar activity on the topic of the week was posted on the Forums component of MOODLE for students to communicate with their lecturer and their fellow students.

Throughout the treatment, the researcher eagerly performed as a facilitator explaining that the materials were supplementary to the in-class grammar instruction . He did his best to answer students' individual needs and requests , answer their questions and provide

The validity of the test was established by submitting it to a number of jurors in the field of TEFL in order to determine if the test measures what it is supposed to measure. The jurors' remarks were considered and taken into consideration to amend the test prior to its administration. The jurors agreed that the test was valid in its final form. The reliability of the test was established using test-retest method . The correlation coefficient between the two administrations of the test amounted to 0.89, which was statistically significant at 0.05 level. The test was piloted during the second semester of the 2020-2021 academic year and some modifications were accomplished in the light of piloting it . It was found that 60 minutes were appropriate for answering the test. The total mark of the test was 30 marks, one mark for each item. Each item of the test was given one mark if the answer was correct and given a zero if it was incorrect.

Both groups were pretested at the same time and under the same conditions to be sure that they were homogeneous and equal before the treatment and they were also posttested after having the treatment at the same time and under the same conditions in an attempt to measure their level in EFL grammar. Both groups received the same face-to-face instruction by the same EFL lecturer, but the experimental group students accessed MOODLE platform as a supplement to face-to-face instruction for 10 weeks, whereas students of the control group received only ordinary class-based instruction that based on face-to-face lectures .

### **In-class instruction**

The two groups were exposed to the same traditional in-class instruction by the same EFL lecturer to ensure that they received the same in-class instruction. Specific grammatical points, based on the objectives of the EFL course formed the content of the treatment. The topics that were covered are: tag questions, comparative and superlative adjectives, active and passive voice, prepositions, linking verbs, adverbs, tenses, articles, pronouns and conditional sentences .Students in both groups received the same grammar materials ,exercises and activities in class. While doing this, EFL lecturer performed the roles of monitoring students' work , providing individual help when necessary and highlighting the errors related to the rules under study. Feedback was provided on the presence and location of errors and answers were discussed in class. As for assessment, students in both groups were given

Kristanto and Suryani (2019) developed a computer-based vocabulary learning medium using MOODLE platform for 100 nursing students at Harapan Bangsa University in order to help them to enhance their vocabulary. The study was conducted during the academic year 2018-2019. There were three main steps: needs analysis, design and development and implementation and evaluation. Data were collected through vocabulary tests, questionnaires and interviews. MOODLE platform proved to be effective.

Zahroh (2019) investigated the effectiveness of MOODLE e-learning media in teaching the descriptive text writing. The sample (N=47) was students at tenth grade of SMK NU Ma'arif 01 Semarang. Students were divided into two groups (experimental and control). The experimental group were taught using MOODLE, whereas the control group received traditional methods. Results indicated the effectiveness of MOODLE in teaching the descriptive text writing as well as it was valid to be implemented in English learning process.

The reviewed literature and related studies mentioned above benefited the researcher and helped him greatly throughout this study in formulating the hypotheses of the study, defining the study terms operationally and preparing and designing the tools of the study.

## **Method**

The study adopted the quasi-experimental design. In this design, there were two groups, experimental and control. 160 undergraduate students, ranging in age from 18 to 20 were selected randomly from EFL first year MIS students at Tanta Higher Institute for Computers, Information and Management Technology during the second semester of the 2020-2021 academic year. The selected students (N=160) were assigned randomly into two groups. The first group represented the treatment (experimental) group (N= 80) and the second represented the non-treatment (control) group (N= 80). An EFL grammar test, prepared by the researcher according to the objectives of students' EFL course, was used as a pre-posttest in order to measure students' level in EFL grammar before and after the treatment. It consisted of 30 items: 10 correct the underlined words, 10 fill in the blanks and 10 multiple choice (see Appendix A).

Qindah (2018) investigated the effect of blended learning on EFL students' usage of grammar in context. The sample consisted of 45 female students in a Palestinian public secondary girls' school in a village near Ramallah. Results revealed that blended learning had positive impacts on EFL students' achievement in EFL grammar as it was effective and beneficial for facilitating the development of grammatical knowledge.

Al Bataineh, Banikalef and Albashtawi (2019) examined the impact of the blended learning approach using MOODLE on Jordanian EFL students' grammar performance as well as investigating their attitudes toward blended learning. The participants consisted of 28 students who were divided into two groups (experimental and control ). The experimental group students (N=13) were taught using MOODLE, whereas the control group students(N=15) were taught using conventional methods. All the students of the experimental group were interviewed. Results indicated that the experimental group students surpassed the students of the control group. In addition, blended learning using MOODLE had positive impact on EFL students' grammar performance and that they were strongly satisfied and motivated to learn EFL.

Fathi and Torabi ( 2019 ) investigated the effect of a MOODLE-supported language course on EFL grammar performance of EFL students . The participants were 46 Iranian EFL students who were the students of two intact classes at a branch of Islamic Azad University , Tehran, Iran. One of the classes (N=25) represented the experimental(MOODLE) group, while other class (N=21) represented the control (traditional) group. For sixteen weeks ,the experimental group students were exposed to blended learning using MOODLE platform in which MOODLE supplemented face-to-face instruction, whereas the control group students were taught traditionally without the aid of MOODLE. An EFL grammar pre-posttest ,prepared by the researcher, was used in order to measure students' performance in grammar before and after the treatment . Results showed that the MOODLE group students surpassed and outperformed the traditional group students in terms of EFL grammar performance.

motivated towards their reading studies, reduce lesson preparation and ensure better delivery and grading of assignments.

Gunduz and Ozcan (2017) examined perceptions on using MOODLE system into EFL classes. The participants consisted of 12 English language teachers and 333 secondary school students studying in English College in North Cyprus. The researchers used a mixed- method approach where quantitative data collection methods were used for collecting and analyzing data about students' perceptions and qualitative data collection methods were used to collect data about teacher opinions on various aspects of the system. Results were positive and in favor of MOODLE system.

Isti'anah (2017) examined the effect of blended learning on students' grammar achievement. The participants were 26 Indonesian university students . Results showed that blended learning had a positive effect on students' grammar achievement as well as assisted them to develop their awareness and interest in learning grammar.

Jeong (2017) investigated university students' learning experiences in using MOODLE as an online LMS. The participants were 22 university students who majored in English education at a university in Korea. The course design based on a blended learning with in-class learning activities and online self-study sessions. The basic aim of this course was to develop EFL four language skills and strategies using the flipped instructional framework and MOODLE. For data collection, a course survey was conducted using questionnaires with Google forms and semi-structured focus group interview. Results revealed that the use of MOODLE and flipped instruction could help students to enhance not only their EFL communicative competence ,but also their interactional and sociocultural competence.

Pumjarean, Muangnakin and Tuntinakhongul (2017) conducted a study in order to examine the effect of blended e-learning on the grammatical knowledge and writing skills of 54 English major freshmen and their perceived satisfaction with MOODLE's LMS. Two instruments, namely a questionnaire and pre-post achievement tests were used for collecting data. Results showed that students' knowledge of English grammar increased and their paragraph writing skills improved . However, their perceived satisfaction levels with MOODLE's LMS were neutral.

other hand, Eskandari and Soleimani attempted to investigate the influence of collaborative discovery learning using MOODLE platform on Iranian EFL students' grammar as well as their attitudes towards virtual learning and MOODLE virtual learning environment. The researchers employed MOODLE site of Al-Mustafa Open University, Iran. Results showed that the experimental group students performed better than the control group students in EFL grammar. Moreover, the experimental group students showed positive attitudes towards MOODLE platform and virtual learning.

Feizabadi, Aliabadi and Ahmadabadi (2016) investigated the impact of MOODLE software in English language learning. They adopted the quasi-experimental design with two groups (experimental and control). The participants were 32 students who were randomly selected from one of the schools in the city of Karaj. For 6 weeks ,the experimental group students were exposed to MOODLE, whereas the control group students received ordinary class-based instruction. Results indicated that MOODLE software had a positive influence on the learning of students in English courses.

Bataineh and Mayyas (2017) investigated the effect of blended learning using MOODLE on Jordanian EFL students' grammar performance and reading comprehension. The participants were 32 students who were enrolled in a language requirement course at a Jordanian State University. They were divided into an experimental group (N=17) and a control group (N=15). In the experimental group, MOODLE was used to supplement the in-class instruction ,while the control group received only in-class instruction. Results revealed that the experimental group students surpassed and outperformed the control group students in both grammar performance and reading comprehension.

Deadman ( 2017 ) evaluated how MOODLE platform could better assist both students and instructors in learning and teaching. Data were collected from one class at Gunma University. A student questionnaire was administered to ascertain students' opinions about the use of CALL in the classroom. It was constructed and developed on MOODLE. MOODLE could help students to comprehend, be interested and

groups in grammar achievement, in favor of the experimental group students. On the other hand, Alshalan explored a blended learning course by integrating MOODLE into a foreign language writing classroom. The participants were 28 Saudi female undergraduate students in the English Department of Imam University in Riyadh, KSA. Results assured that using MOODLE had positive impacts on students' attitudes towards writing in English.

Gildin and Sorlovich ( 2013 ) developed and employed a blended course based on MOODLE platform for advanced English level students of nursing at Tel Aviv University. The course aimed to meet and satisfy university students' language requirements as well as assist them to apply their knowledge and skills in the academic and professional spheres through integrating traditional face-to-face instruction with online learning and teaching. The blended course based on MOODLE platform proved to be effective in meeting and satisfying students' language requirements. Moreover, it significantly promoted their interests, facilitated their active participation in numerous classroom activities (i.e., forums, quizzes and polls), enhanced cooperation between students and instructors and improved their self-instruction skills.

Harb (2013) explored the effectiveness of a blended learning program in developing tenth graders' English writing skills. The researcher used the experimental design with two groups (experimental and control). The participants were randomly selected from Shohadaa Rafah Basic School during the academic year 2012-2013. The instruments and materials used were an achievement test , a retention test , a blended learning program in writing skills and content analysis checklist. For a period of ten weeks , the experimental group students were exposed to blended learning , while the control group students received conventional instruction .Results showed that there was statistically significant difference in mean scores of the two groups , in favor of the experimental group.

In Iran, Aslani and Tabrizi (2015) and Eskandari and Soleimani (2016) investigated the effect of blended learning among Iranian EFL students. Aslani and Tabrizi investigated the effect of blended learning among 87 Iranian EFL students. Results revealed that blended learning had an encouraging effect on students' grammar performance. On the

turn, students cannot communicate effectively and if they try they will only communicate in limited situations (Ellis, 2006; Larsen-Freeman,2009; Mart, 2013 and Richards and Reppen, 2014).

Consequently, learning EFL grammar is very important as it enables students to: establish an effective communication, enhance EFL skills, express themselves, their ideas and their emotions well, organize words and messages and make them meaningful, build better sentences in speaking and writing performances, make sentences clear enough to be understood, discover the nature of language, be aware of the parts of EFL (i.e., verbs, nouns, etc.) and increase their understanding of EFL.

EFL grammar can be taught deductively and inductively. In the deductive (rule-driven) method, the grammar lesson begins with presenting the grammatical rule to students and after that some examples and exercises about it are presented . This method helps students to reach the grammatical points or rules easily as the rules are stated at the beginning, in turn, time is saved . The case is different in the inductive method. In the inductive (discovery) method, students try to find out the rule throughout the provided examples or sentences. In this case, their instructor presents several examples or sentences about the grammatical points or rules and then asks them to deduce the rules from the given examples or sentences. This method gives students the opportunity to discover the grammatical rules by themselves (Crystal, 2003 and Harmer,2007).

Several studies have been conducted by several researchers in various contexts in order to investigate the utilization of blended learning and MOODLE in developing different aspects of foreign/second language learning of students and among them the following :

In KSA, Al-Jarf (2005) and Alshalan (2012) conducted two studies. Al-Jarf investigated the effect of blended learning in improving EFL freshman college students' achievement in grammar and attitudes. The participants were two groups (experimental and control) of EFL students at the College of Languages and Translation, King Saud University in Riyadh, KSA. The experimental group students were taught via blended learning that consisted of face-to-face in-class instruction and an online course, whereas the control group students received traditional face-to-face in-class instruction that depended on the textbook only. Results indicated significant difference between the two

Through studying foreign/second language grammar, students can form a sentence from words and a paragraph from sentences and despite its significance, foreign/second language instructors still teach grammar traditionally, as a set of isolated rules and structures through memorizing and repeating the rules. As a result, their students learn nothing more than a fragmented, unrealistic picture of foreign/second language, in turn, they find it difficult to apply what they have learned in real situations as well as may feel bored of the traditional teaching model. So, foreign/second language instructors should make sure that their students have been able to use grammar effectively (Richards and Renandya, 2002; Dykes ,2007; Larsen-Freeman,2009 and Huang, 2010).

The ability to use grammar accurately, meaningfully and appropriately is needed for foreign/second language students to communicate effectively in both spoken and written ways as what is to speak and write must be based on correct grammar so that the message conveyed can be understood easily. Grammar is language structure that is needed by all foreign/second language students to determine what the targeted meaning of words and sentences. It is one of the crucial and vital components of foreign/second language .These components include: phonology (the sound of language), syntax (arrangements of words into larger units), morphology (structure and form of words), semantics (meanings of language) and pragmatics. All these components are needed in order to assist foreign/second language students to enhance their foreign/second language skills' performance (Yang, 2004 and Larsen-Freeman,2009).

Grammar has been given considerable attention by many ESL/EFL researchers, scholars and practitioners as mastering ESL/EFL grammar is essential for successful learning of that language. It also enables ESL/EFL students not only to be knowledgeable about the structures of ESL/EFL, but also to use it appropriately. It can assist students to speak and write EFL with correct, well-arranged and well-organized structures and students cannot communicate efficiently if they do not master the crucial principles of it. It is like the traffic lights that assist students to decide where to go and how to drive without confusion. So, it is very important to provide students with correct, clear and obvious EFL structures. For this, learning EFL without grammar is considered, to some extent, meaningless, aimless and without a purpose or reason , in

online, easier control over teaching and learning pace, dealing successfully with the increased number of students and providing foreign/ second language lecturers and instructors with effective opportunities to know their students' points of strength and weakness.

Moreover , they confirm and stress the significance of blended learning using MOODLE platform in maximizing students' interest and participation, improving students' learning and outcomes, including content, objectives, materials, procedures and assessment, enhancing students' motivation, engagement and autonomy, accommodating a variety of learning styles, assisting students to develop valuable and necessary twenty-first century learning skills, meeting students' needs when there are some gaps in knowledge, dealing more effectively with students' individual differences, increasing student-student, lecturer-student, student-content and student-outside resources interaction, encouraging dynamic, simultaneous, free, joint and significant learning experiences, integrating assessment and grading techniques for both lecturers and students and saving time of both lecturers and students.

Furthermore, they assure that using MOODLE platform can benefit in: reducing the costs of paper and photocopying, increasing and broadening the spaces of classrooms and reducing the number of overcrowded, managing and controlling the class efficiently, allowing foreign / second language lecturers and instructors to offer more classes at peak demand times of the day, bringing the outside world into the class and incorporating online applications into an existent course program, in turn, deciding the parts of the course content that should be transferred to the online environment, without offering the whole courses online.

### **EFL Grammar**

Grammar has always been one of the most important elements in foreign/second language learning as well as one of the controversial facets in the field of teaching and learning foreign/second language. It occupies a central position, as when students do not understand grammar well, they will face troubles in learning and mastering some foreign/second language skills. It is more important than to be ignored and neglected as foreign/second language development cannot be achieved without a good knowledge of it and one major reason for declining literacy of foreign/second language learners is its absence.

effectiveness, (6) ease of revision, (7) flexibility of providing learning resources and (8) support of learning diversity in terms of learning styles, learning proficiency as well as learning ability. These reasons and rationales might explain why instructors, lecturers, trainers and students choose blended learning over other types of teaching and learning.

The above researchers also maintain that the implementation of blended learning necessitates the principles itemized below:

- a thoughtful integration of face-to-face and fully online instructional components;
- innovative use of technology;
- reconceptualization of the learning paradigm; and
- sustained assessment and evaluation of blended learning.

The role of foreign / second language lecturers and instructors in blended learning using MOODLE platform deserves a special attention as it differs greatly from that of the traditional face-to-face lectures that are based on conveying and transmitting concepts and facts from lecturers and instructors to their students. In blended learning, foreign / second language lecturers and instructors function as facilitators, guides, their students' collaborative partners and advisers in searching for information. These new roles imply determining the type and amount of online resources to be included in each course unit, determining the suitable blending of such resources with traditional in-and out-of-class activities and helping students in orienting and navigating themselves within the web space. This in turn, requires a good level of computer literacy from the side of foreign / second language lecturers and instructors (Garrison and Kanuka, 2004; Carman ,2005;Wall and Ahmed, 2008; Marsh,2012; Pardede ,2012; Tayebinik and Puteh,2012; Harrer et al., 2015 and Albiladi and Alshareef ,2019 ).

The above researchers also show that it provides foreign / second language lecturers and instructors with several effective and beneficial advantages and among them: availability of numerous online resources, uploading new materials and newly developed activities during the course, provision of a simple , clear view of all learning activities and resources for all units of the course, flexibility in assignment submission, task assessment and grading, tracking students' activities to see how much time they allocate to accomplish various tasks and activities

It provides an environment where students can learn regardless of time and place restrictions. In it , the weaknesses and strengths of online environment and face-to-face instruction are integrated. Moreover , students' motivation, satisfaction and engagement can be enhanced when both approaches (face-to-face and online) are combined. Yet, many terms like “blended”, “hybrid”, “mixed” or “integrative” are interchangeably employed to describe the same approach (Rovai and Jordan, 2004; Banados, 2006; Littlejohn and Pegler, 2007 ; Watson ,2008; Wu, Tennyson and Hsia, 2010; Bonk and Graham, 2012; Pardede ,2012 and Albiladi and Alshareef ,2019).

Significantly, blended learning can be used instead of traditional or online learning as it promotes a stronger sense of engagement and community than traditional face-to-face or fully online teaching and learning methods. It allows for more learning opportunities that can motivate students to participate inside and outside of the classroom setting. It allows instructors and lecturers to provide classroom activities in a flexible, scalable and meaningful way of teaching and learning through facilitating accessible, flexible, active, interactive, encouraging and inspiring teaching and learning environment (Pardede ,2012; Rhem,2012;Tayebnik and Puteh, 2012; Senffner and Kepler,2015 and Albiladi and Alshareef ,2019).

Neumeier (2005) provided a framework for designing a blended learning environment for language learning and teaching that consists of six parameters. These parameters are: (1) mode, (2) model of integration, (3) distribution of learning content and objectives, (4) language teaching methods, (5) involvement of learning subjects and (6) location. Each one of these parameters is significant for language instructors and lecturers in order to determine ways of implementing blended learning into their teaching practices.

Osguthorpe and Graham (2003) ; Dziuban, Moskal and Hartman (2005); Graham, Allen and Ure (2005) ; Huang , Zhou and Wang (2006) ;Pardede (2012) and Albiladi and Alshareef (2019) seem to agree upon the following reasons and rationales for designing and using blended learning over other teaching options: (1) pedagogical richness, (2) access to knowledge, (3) social interaction and collaboration among students, (4) support of individualized and self-regulated learning, (5) cost

can be easily customized for institutional and individual needs. Besides, it allows instructors to incorporate a variety of internal and external learning sources in their courses (Rice, 2006; Wu,2008 and Dvorak,2011).

### **Blended learning**

Blending refers to the process of mixing. In education, it is the process of merging effectively different modes of delivery, models of teaching and styles of learning in an effective manner that is exercised in an interactively meaningful learning environment (Kaur, 2013). Garrison and Kanuka (2004) defined it as: A student-centered approach that can be used for creating a learning experience in which students can interact with each other, with their instructor and with content through thoughtful integration of face-to-face and online environments. In addition, Banados (2006) defined it as: A flexible combination of technology and classroom instruction. According to Hodgson (2010), blended learning is the integration of face-to-face instruction with technology-infused environments that are geared towards constructive interactions.

The aim of blended learning is uniting the best features of in- class teaching with the best features of online learning in order to promote active, self-directed learning opportunities for students. It is developed from the strengths of traditional classroom lecture (face-to-face) and distance learning (online learning) in the teaching and learning process. It also shifts from teaching to learning, and from teacher- centered class to student- centered class. It seeks to create a harmonious and coherent balance between online access to knowledge and face-to-face human interaction by taking into account students' and instructors' aptitudes and attitudes (Neumeier ,2005; Garrison and Vaughan,2008 ; Pardede ,2012 and Albiladi and Alshareef ,2019)

It is a form of learning that combines or integrates electronic learning systems with face-to-face or traditional systems in one setting in a way that brings new accommodation to students' learning environment where they are offered both learning flexibility and convenience. It focuses on the integration of different types of resources and activities within a range of learning environments where students can interact and build ideas. It is one of the learning models that can provide space for instructors and their students to develop teaching and learning creativity.

didactic and learning problems and tasks, deliver content and practice activities in interesting and flexible ways in order to increase engagement and ensure understanding by including a variety of questions and quizzes. This, in turn, makes them feel comfortable to use it in their classes (Brandl, 2005).

Furthermore, it combines all strategies of instruction and tools in one space at any time and from anywhere . It can be effective in promoting learner autonomy as well as in supporting collaboration and learner-centered learning environment. Through it, instructors and lecturers can use various technology-focused teaching techniques in order to help their students engage in numerous learning contents such as language, literature or social sciences (Wu,2008 ; Dvorak,2011 and Jeong,2016).

It creates an ideal environment for constructive interaction between instructor and students. In this environment, features such as chat, glossaries, forum and workshops can be added to the course, in turn , their interaction can be strengthened and encouraged and their participation and satisfaction can be increased. It appeals to students' different learning styles as they can select from a variety of activities and resources. It provides introverts students with opportunities to interact virtually through forums and chats that can improve their communicative competence. It increases students' study time of foreign /second language over the week. It increases human sustainability as students acquire skills, attitudes and attributes that benefit themselves and others and last in the long-term future. It addresses differentiation and allows students to work according to their own pace and according to their own preferences. It motivates students and increases their global awareness (Rice, 2006; Wu,2008 and Dvorak,2011 ).

It is equipped with functions and tools for instructional and learning management, information guidance, interaction and assessment that can help instructors and lecturers to accomplish their pedagogical objectives . It contains a wide range of e-learning tools, activities and resources, including, for example , site management, course management, user management, course report, overall activity report, lesson module, resource module, quiz module, assignment module, forum, glossary, wiki, blog, messaging, integration with other systems, etc. These tools

with each other synchronously in chat activities, or engage in asynchronous discussions in Wikis and forums. It is a powerful and eclectic CMS, in which administrators can fully manipulate its functions as they can modify, add, or delete, whereas users only have options to temporarily turn on or off the blocks on both sides (Brandl ,2005; Wu, 2008 and Dvorak ,2011).

### **Rationales for using MOODLE to support teaching and learning foreign / second language**

MOODLE is one of the most well-known LMS which instructors, administrators and students form personalized learning settings can use because of its: a) ease of use and installment, b) lack of licensing fees, c) privacy, d) flexibility, e) security, f) accessibility, g) free content and courses, h) availability in multiple languages, i) self-directness and j) suitability for all learning scales (Moore, Dickenson-Deane and Galyen, 2011).

It enhances traditional instruction through providing opportunities for further learning outside the boundaries of the classroom setting. It is instrumental for foreign / second language teaching and learning as it can help students to develop their foreign / second language skills, pronunciation, grammar and vocabulary. It helps instructors and lecturers to better manage their courses and communicate, both synchronously and asynchronously, with their students. It assists students not only to acquire skills and knowledge, but also to transfer what they learn to other contexts (Wu, 2008; Levy, 2009; Nedeva, Dimova and Dineva, 2010 and Dvorak,2011 ).

It provides students with several opportunities to interact and collaborate with their other students who share the same interests from different backgrounds easily, oversee their learning progress and then they will exert more effort to make improvements, promote meaningful learning, receive comprehensible input , reduce the learning time, reduce the cost of the used materials, receive qualitative and quantitative feedback and learn better at any time and from anywhere . In addition, it enables instructors and lecturers to guide their students through a systematic learning path, extend the time of quizzes and assignments, orchestrate and vary learning activities to be more interesting, settle

course participants who can make interaction through the learning course.

### **Major features of MOODLE**

According to Brandl (2005); Wu (2008) and Dvorak (2011), students' performance is recorded and kept online in logs so that instructors and lecturers can check later what their students have done on the MOODLE platform. The reports of students' performance can be declared in several formats such as outline reports, complete reports or all logs, etc. From such reports, instructors and lecturers can recognize not only when their students have completed or uploaded assignments or activities, but also how much time they took to accomplish them. Besides, instructors and lecturers can fully control the deadline and timeframes for assignments, quizzes, forums, chats, etc. For example, they can set deadlines or timeframes when assignments should be completed, whether students can re-submit their assignments and also restrict access to them once the deadline has passed. So, it is easy for them to offer a new course, hide, copy and modify existing course materials and transfer currently enrolled students to another new class, etc. For each course, instructors and lecturers can upload files to folders and they can easily access those files even if they do not use their own computers.

MOODLE is displayed flexibly in a module-based fashion and new functions can be generated and activated by selecting the module from the 'blocks' pull-down menu and moved to the location determined by users. It has the ability to manage registration, store personal information of students and administrators, expand the system by maximizing the number of users, allow its users to develop systems with different languages, support assessment, courses, training and testing, close supervision while presenting the content to students, test management and suggest the next stage of learning after lessons (Warth-Sondheimer, 2011 and Tang, 2013).

It has useful tools such as chats, workshops, forums and blogs so that instructors and lecturers can apply different formats of social interaction and collaboration to their teaching. It has also a good range of assessment tools that instructors and lecturers can use in order to generate and design several kinds of quizzes and exercises to assess their students' learning outcomes as well as encourage peer assessment among them. In MOODLE, students can be divided into subgroups and interact

**-Blended Learning**

For the present study, it is defined operationally as: The integration of traditional face-to-face lectures and online learning using MOODLE platform in order to develop EFL grammar learning among EFL first year MIS students .

**- EFL Grammar**

For the present study, EFL grammar is operationally defined as: The rules and structures that govern how EFL words and sentences are formed, used, manipulated and arranged by EFL first year MIS students.

**Review of literature****MOODLE****Background**

MOODLE is an online learning platform that provides online learning services. It is the short name for Modular Object- Oriented Dynamic Learning Environment which is a Learning Management System (LMS) through the Internet. It is based on the concepts of social constructivism which tries to offer both educators and students a platform for online interaction and collaboration. It was first created by Martin Dougiamas, a former WebCT administrator at Curtin University of Technology, Perth, Australia, who had postgraduate degrees in education and computer science. He developed and introduced the original or the first version of MOODLE to the public. The first version of MOODLE was released in 2002 . He is still an active contributor and a programmer at MOODLE.org (Brandl, 2005; Wu, 2008; Dvorak,2011;Warth-Sondheimer, 2011 andTang, 2013 ).

In addition, the above researchers demonstrate that Moodle was developed to enable lecturers and instructors to create courses that could be delivered through electronic means in a non-traditional classroom setting or virtually online, focusing on traditional classroom-like interactions and on the collaborative construction of content. Moreover, they emphasize that the users of MOODLE are three levels: administrator, instructor and students . Each of them has different roles in using its features. The administrator is the manager of the platform who manages the whole environment. The instructor is the course designer for generating the learning course. The students are the learning

blended learning in developing students' foreign/second language skills in general and their grammar learning in particular . The significance of the study can be viewed both theoretically and practically.

Theoretically: It is expected that the results will allow a reappraisal of the competing theories regarding teaching and learning grammar of foreign / second language as this issue is one of the most important trends in the realm of foreign / second language teaching and learning, in turn, evoke other researchers worldwide to conduct more studies in this area .

Practically: It is expected that the study may be helpful for syllabus designers, EFL students and EFL lecturers. For syllabus designers, it may help them to organize and improve the quality of grammar courses and programs using materials and activities based on MOODLE platform –based blended learning .For EFL students, it may provide them with an opportunity to gain a deeper learning, generate an interest among them, learn grammar more easily, joyfully and actively and control the pace of their learning. For EFL lecturers, it may assist them in planning more effective lessons, making their grammar instruction more effective and fruitful, moving them away from boring traditional instruction, offering them positive input to experience an innovative way in order to develop their students' grammar, devising more creative learning activities, fostering teaching materials and improving teaching methods, in turn, increase the achievement of EFL grammar of their students.

### **Delimitations of the study**

To make the study more specific, it was delimited to:

- 1- EFL first year MIS students at Tanta Higher Institute for Computers, Information and Management Technology.
- 2- The second semester of the 2020-2021 academic year.

### **Definition of terms**

The study involves a number of terms and they are defined as follows:

#### **- MOODLE**

For the present study, MOODLE is defined operationally as: A web-based LMS utilized as a supplement to traditional face-to-face instruction through offering a variety of tools and facilities in order to develop EFL grammar learning among EFL first year MIS students.

Banikalef and Albashtawi,2019; Kristanto and Suryani ,2019;Radia , 2019; Shehata , 2019; Zahroh,2019 and Wong, Hwang, Choo Goh, and Mohd Arrif ,2020).

Many attempts to motivate and engage EFL students in active EFL grammar learning environment have been futile because of receiving and following only ordinary class-based instruction that is based on explanation, memorization and repetition of grammatical rules . Accordingly, EFL grammar learning has been regarded as a set of rules and structures without any chance for applying them in real life situations. This in turn, resulted in several problems for EFL students (i.e., low achievement in EFL grammar, lack of motivation , weak participation in lectures and more ).

This study adopted MOODLE platform -based blended learning as an attempt to overcome the abovementioned problems regarding EFL grammar learning among first year MIS students. To this end, the following main question was addressed: How can MOODLE platform be used for developing EFL first year MIS students grammar learning?

### **Aim of the study**

This study aimed to investigate whether blended learning using MOODLE platform had any effect on the development of EFL grammar learning among EFL first year MIS students.

### **Hypotheses of the study**

The study attempted to test and verify the following hypotheses:

- 1- No statistically significant difference will be found in mean scores of the experimental group and that of the control group on the pretest of EFL grammar.
- 2- No statistically significant difference will be found in mean scores of the experimental group and that of the control group on the posttest of EFL grammar.
- 3- No statistically significant difference will be found in mean scores of the experimental group on the pretest and posttest of EFL grammar.

### **Significance of the study**

The significance of the study stems from the strong empirical evidence of the positive impacts of utilizing MOODLE platform-based

The above researchers also assert that MOODLE provides students with greater freedom in determining which groups or activities they would like to participate in and how that participation can occur. It provides students with various opportunities to use multimedia tools and applications such as sounds, images and animations, in turn, assists them to practice the four language skills - listening, speaking, reading and writing. Moreover, they consider it as one of the fastest growing software programs that can manage courses, track students' achievement, offer self-evaluation tests, enhance teaching and learning process , develop communication and allow students to study at their own.

### **The problem and its context**

Despite the significance of EFL grammar in EFL learning, it tended to be problematic, boring and even demotivating for first year MIS students at Tanta Higher Institute for Computers, Information and Management Technology. In addition, there was a negative reaction among students against learning it, which in turn , made it difficult for them to understand and use it in real communication. Moreover, they knew a great deal of grammatical rules and structures, but they could not apply them in real life situations.

To document this, the researcher piloted a study to a sample of 30 students who were chosen from first year MIS students at the same institute. In the pilot study, an EFL grammar test, prepared by the researcher, was given to the sample during the second semester of the 2020/2021 academic year . The results showed that students really had a problem in their EFL grammar as their scores were low and so they still need more help and effort.

In addition to the observations and the results of the pilot study, the researcher found a strong empirical evidence that supports such problem (i.e., Al-Jarf,2005 ;Su, 2006; Wu , 2008 ;Yates and Delgado, 2008; Cuadrado-García and Ruiz-Molina , 2009; Hsieh, 2009; Sanprasert ,2010;Liao et al. , 2011; Mynard , 2011; Barrs,2012;Daniels, 2012; Hirschel , 2012; Jia et al. , 2012 ; Adas and Bakir ,2013 ; Liu, 2013 ; Plomteux , 2013; Deadman, 2014; Tsai and Talley ,2014; Lien,2015; Umek et al. , 2015 ;Kosar,2016; Pumjarean, Muangnakin& Tuntinakhongul,2017; Cordova and Dechsubha ,2018; Al Bataineh,

BL varies ways of interacting, sharing, collaborating and asking questions for both students and lecturers either in real-time via synchronous modality; or allowing more time for student reflection via asynchronous technologies support. It offers several opportunities for students' interaction far from any kind of pressure that is due to place or time. It enables students to receive better-considered feedback from tutors and peers . It assures the principle of 24/7/365 which means that students can learn 24 hours a day, 7 days a week and 365 days (Graham,2004; Bonk and Zhang, 2006; Littlejohn and Pegler, 2007;Garrison and Vaughan, 2008;Caner, 2012; Pardede ,2012; Picciano, Dziuban and Graham, 2013; Krasnova and Vanushin, 2016 and Albiladi and Alshareef ,2019).

On the other hand, MOODLE is considered as one of the most widely used open-source packages of Learning Management System ( LMS) on the Internet for all instructors and students without exception of any age group . It is designed based on a mode of learning known as social constructivism which is based on a philosophy that students learn better when they are involved with educational content and communicate with their classmates about content and teaching materials. It can be linked to several online dictionaries where students can find explanations for all terms and phrases from their learning materials (Beaty and Ulasewicz, 2006; Rice, 2006; Wu,2008 ; Ali and Jaafar, 2010; Yaman,2010 and Dvorak,2011).

MOODLE is believed to be the world's most popular LMS for both training and learning in various disciplines. It was first released and developed in 2002 by Martin Dougiamas , an Australian computer scientist and educator at the Curtin University of Technology in Perth, Australia . Although it has been copyrighted, users have been allowed to copy, use and modify . It is programmed in Hypertext Preprocessor (PHP), a programming language that can create web pages based on user input and data-based information. All elements on the MOODLE platform can be modified, repositioned , deleted, moved up or down just with two clicks of the mouse as well as can be presented in a flat view ,in turn, lecturers can easily hide specific sections when required (Dougiamas, 2004;Corich ,2005 ; Kaminski, 2005; Littlejohn and Pegler, 2007; Wu,2008 ; Dvorak,2011 and Bataineh and Mayyas,2017).

learning materials attractively by bringing together elements of audio, video, picture and others.

BL has become a reality in contemporary education and it is assumed that it can help both EFL lecturers and students to reach higher proficiency levels by utilizing technology and developing their learning practices in order to create innovative learning experiences. Thus, many learning management systems have been generated to support the teaching and learning process such as Easy LMS, MOODLE, Open EdX and many others. One of the aspects of the new technologies that have become prevalent in foreign/second language learning contexts is the use of MOODLE –based blended learning that has begun to gain its popularity in all educational settings.

BL is a combination of instructional modalities (i.e., onsite, self-paced learning , etc.), delivery media (i.e., Internet, lectures, PowerPoint presentations, textbooks, etc.), instructional methods (i.e., face-to-face or technology-based sessions, etc.) and web-based technologies (i.e., wikis, chat rooms, etc.). In what way the combination is done depends on certain criteria such as learning goals, course content, teacher experience , teaching styles and learner characteristics. In BL, students display a change from passive receivers of knowledge to active knowledge constructors. It can facilitate student-centered learning and allow students to continue learning outside the school hours (Holmes and Gardner, 2006; Masson and Rennie, 2006; Littlejohn and Pegler, 2007; Bonk and Graham,2012; Goertler, Bollen and Gaff, 2012; Larsen, 2012 ; Pardede ,2012; Buran and Evseeva, 2015 and Albiladi and Alshareef ,2019).

The above researchers also show that BL is considered one of the modern trends based upon employing information technology in designing new learning situations that can maximize active learning and learner-centered strategies. The essence of BL is the combination of the advantages of face-to-face instruction and online learning in order to satisfy and meet students' individual differences. It is not just about using technology because it is available; it is about finding better ways of supporting students in achieving the learning objectives and providing them with the best possible learning and teaching experiences.

## **Introduction**

In the boom era of information technology, expansion of computers and the Internet development, most of the systems nowadays have been affected by this technology and education has been no exception in this concern. The advances of technology and its applications have presented new circumstances for more effective implementation of learning courses and programs. The application of contemporary technologies, especially the Internet , provide useful opportunities to integrate many innovative ways and tools for enhancing the teaching and learning processes through taking the advantages of such technologies. This is because they have interwoven with the educational systems generally and language classrooms specifically in such a way that it is difficult to think about them separately.

Through utilizing technology, education takes a big leap and changes the paradigm, from the classroom learning model that is lecturer-centered to a more open that is student-centered model. This , in turn , resulted in changing the role of the lecturer who is no longer the holder of knowledge in learning. Accordingly, he or she can function the roles of: encouraging students to be able to manage a variety of discourses and practices, stimulating their intellectual capacity to handle available information, giving them a chance to extend their learning outside the classroom whenever they want at home, helping them to become autonomous learners and practicing and repeating activities as much as they want.

Consequently, this has made the traditional notions of education out-dated as well as has given a way to new, more innovative trends in teaching and one popular of them is blended learning (BL) that integrates the best features of face-to-face instruction with the best features of online learning . Through this kind of learning, what students learn online will support and enhance what they learn face-to-face in class and vice versa. In turn, EFL instructors and lecturers should be creative and innovative to explore and develop the use of such technology as a learning media in order to meet their students' needs and expectations, make their students active during the lesson, enhance their motivation towards learning foreign/second language as well as present EFL

## **Utilizing MOODLE Platform-Based Blended Learning in Developing EFL Grammar Learning among University Students**

### **Abstract**

This study investigated the utilization of MOODLE platform-based blended learning in developing EFL grammar learning among EFL first year MIS students at Tanta Higher Institute for Computers, Information and Management Technology . The participants (N=160) were selected randomly during the second semester of the 2020-2021 academic year. They were assigned into an experimental and a control groups. The participants in the experimental group (N =80) were exposed to blended learning using MOODLE platform in which MOODLE platform supplemented face-to-face lectures for 10 weeks, whereas students in the control group (N =80) received class-based instruction ( face-to-face lectures only). The instrument used in the study, prepared by the researcher, was a pre-post EFL grammar test. Testing the two groups was administered before and after the experimentation. T-test for independent and paired samples was applied. Data obtained were logged and analyzed using SPSS, version 22 . Results revealed that students in the experimental group surpassed and outperformed students in the control group and blended learning using MOODLE platform had a positive impact on students' EFL grammar learning . Pedagogical implications, recommendations, insights for further research and conclusions were provided in the light of the study results.

**Keywords:**

- *Modular Object- Oriented Dynamic Learning Environment (MOODLE)*
- *Blended Learning (BL)*
- *EFL Grammar*

## استخدام التعلم المدمج القائم على منصة مودل في تنمية تعلم قواعد اللغة الانجليزية كلغة أجنبية لدى طلاب الجامعة

### الملخص العربي

هدفت هذه الدراسة إلى الاستفادة من التعلم المدمج القائم على منصة مودل في تنمية تعلم قواعد اللغة الانجليزية كلغة أجنبية لدى طلاب و طالبات الفرقة الاولى شعبة نظم المعلومات الادارية بالمعهد العالي للحاسبات و المعلومات و تكنولوجيا الإدارة بطنطا و تكونت عينة الدراسة من (١٦٠) طالب و طالبة تم اختيارهم بطريقة عشوائية خلال الفصل الدراسي الثاني من العام الجامعي ٢٠٢٠/٢٠٢١. و تم تقسيم العينة المختارة (ن=١٦٠) إلى مجموعتين ، أحدهما تجريبية (ن=٨٠) و هي التي تعرضت للمعالجة التجريبية و الاخرى ضابطة (ن=٨٠) و هي التي لم تتعرض للمعالجة التجريبية، ومن أجل جمع البيانات قام الباحث بتصميم اختبارا تحصيليا في قواعد اللغة الانجليزية كلغة أجنبية و لقد استخدم الباحث المنهج شبه التجريبي و تم تطبيق ادوات البحث على المجموعتين قبل التجربة و بعدها و تمت معالجة البيانات إحصائيا باستخدام برنامج SPSS . و لقد خلصت نتائج الدراسة الى وجود فروق دالة إحصائيا بين متوسطى درجات المجموعتين التجريبية والضابطة لصالح المجموعة التجريبية. و في ضوء هذه النتائج تم تقديم التضمنات التربوية و التوصيات و أيضا المقترحات لا جراء بحوث مستقبلية.

الكلمات المفتاحية: التعلم المدمج - منصة مودل - قواعد اللغة الانجليزية كلغة أجنبية





# **Utilizing MOODLE Platform-Based Blended Learning in Developing EFL Grammar Learning among University Students**

By

**Dr. Yasser Ahmed Eldesouky Ahmed**

Assistant professor of English language  
Higher Institute for Computers, Information  
and Management Technology