

E-Teaching in Higher Education: an Innovative Pedagogy to Generate Digitally Competent Students at King Khalid University

Shadma Iffat Rahmatullah

Department of English, College of Science and Art,
King Khalid University, Abha, KSA

Sufia Sultana

Department of English, College of Science and Art,
King Khalid University, Abha, KSA

Ghazala Sultan

Department of English, College of Science and Art,
King Khalid University, Abha, KSA

Abstract

The education system in the Kingdom of Saudi Arabia is on the verge of digital advancement. Primarily, this research paper aims to examine how a digitally competent teacher can help the institution and its learners to achieve high-level competency in digital and academic learning, as well as to develop critical thinking. It also intends to focus on the characteristics of e-teaching and the consequences of learning competency with its implication in female undergraduate colleges of King Khalid University. For the data collection, both the qualitative and quantitative approaches were employed. Several teachers were interviewed on their experiences with the utilization of digital sources, whereas, a large group of students from distinct study areas responded to a questionnaire to provide their feedback on their e-learning experience. The analysis indicates the necessity of appropriate trainings for e-teachers to handle the unexpected situations that occur during the teaching or evaluating process. Despite being a challenging task, they found it very useful to make students engaged with varied activities. The results also demonstrate that the e-teaching experience with digital media enables the teachers to assess their digital competence and teaching efficiency.

Keywords: digital technology, e-teaching, e-learning, higher education, teacher's digital literacy

Cite as: Rahmatullah, S. I., Sultana, S., & Sultan, G. (2020). E-Teaching in Higher Education: an Innovative Pedagogy to Generate Digitally Competent Students at King Khalid University. *Arab World English Journal (AWEJ) Special Issue on CALL (6)*. 248 – 260.
DOI: <https://dx.doi.org/10.24093/awej/call6.16>

Introduction

The dominance of digital technology in the pedagogical discipline seems to take over the traditional educational approach on account of its overgrowing favor and recognition. The students' expectations from their instructors are reasonable if they demand a "consistent quality of learning and teaching" (Steel, 2007, p.947). The prevailing pedagogy with the integration of computers is more conducive to learners than for teachers (Bangs & Cantos, 2004). It enables the learners to make progress at their own pace. The strategic objectives of the university require the appropriate utilization of technology in building a knowledge-based society while balancing the prospects of the institution's output and the job market requirements. In the entire system of education, the responsibilities for developing competent students count on the higher education system to achieve the desired educational goals.

The incorporation of digital technology in many education systems has become an in-demand study for the researchers. This exploration intended to focus on the e-teaching aspects for the delivery of knowledge for the development of students' digital competencies in future generations. This research wants to ascertain the teachers' technical and experiential challenges they come to encounter during the teaching process through a digital environment. In Saudi Arabia, the prospect of online teaching and learning has been into a trend and viewed as the path to the development of higher education system, which is in a progressive direction to be a significant part of flexible learning (Al-Ajlan, 2016). However, it has been quite challenging for the instructors to administer the e-learning method in different scenarios.

The competency of an e-teacher is based on the achievement of students' learning. The students' clear understanding of the subject matter through digital activities and the completion of students' educational, cultural, and professional development is the institution's priority. The ability to handle digital media responsibly also shows the competency of the faculty members, which results in the achievement of students' skills in the digital world. This achievement reflects their diligent performance in the teaching process. The e-teacher is required to understand the digital development and how to assess the students' learning through digital media. There is a need to increase awareness of the digital developments that influence the society globally (Kelentrić et al., 2017), and to make the proper use of digital technology to organize the entire scenario of the e-learning program as well.

Though various cybernetic platforms and the online and blended learning approaches in the education system help create collaborative environments for the students' learning development, these environments are not satisfactory in terms of students' competencies. Several universities are making efforts to enable their faculty and students to be competent with advanced technologies. In many developing countries, the institutions follow the objectivist theory that adheres to the teacher-centered approach, contrary to the constructivist approach. There the digital divide is a prominent issue that affects the learning process through a computer. Many scholars defined the digital divide as a gap between the developed and the developing nation; however, within the developed countries, it is considered as a digital ability and its readiness to integrate the information technology in its education system. It also refers to the cultural, social and economic differences, and the differences between those who have the accessibility to the digital technology and have its use of competency, and those who are devoid of these competencies and availability.

The learning achievement can be attributed to the appropriate use of technology. This notion is supported by Gilly (2005), who ascribed the successful learning to “well-supported and focused human intervention, good learning design or pedagogical input, and the sensitive handling of the process over time by trained online tutors” (p. 203).

Digital Learning: An Essential Educational Provision

Digital education has emerged globally, with a new wave of innovation in the learning process. It has brought multifold changes in distance education. In particular, when we talk about female education in Saudi Arabia, the accessibility is provided to students in remote areas through the distance learning programs, making the students take courses from a university at their convenience (Yamin, 2015; Alahmari, 2017). The development of learning through technology “allows distance education programs to provide specialized courses for students in geographically remote areas with increasing interactivity between students and the teacher” (Al-Fahad, 2009, p.112). Amid the challenges both the teachers and students face during the distance learning process, it is hoped that this digital learning system “opens a world of possibilities for higher educational institutes” (Aljabre, 2012, p.26).

The students’ digital competency depends on the teaching techniques implemented by the teachers to make students more engaged and involved in the critical study themselves with collaboration and transparency during their learning process. On the contrary, teaching in a traditional classroom, students are less active; hence, they prefer to memorize the content without analyzing them critically. They are usually forced to listen to the lectures and read the prescribed textbooks or relying on the handouts provided by the teachers for the sole purpose of passing the exams with good grades. As mentioned earlier, online teaching does not encourage valuable teacher-student interactions and cooperation, which resulted in making the e-learning approach “an individual and isolated” (Hole et al., 2010, p.304). Digital literacy is required for both teachers and learners to understand and practice to successfully navigate the dynamic digital panorama (Eric et al., 2013). It is a matter of consideration when both teachers and students lack digital competency while learning through technology. The incompetency in the teaching arena with the lack of digital understanding may lead to the poor performance of the students.

Digital Pedagogical Approach

Numerous investigations have been executed to identify innovative strategies in higher education using a virtual classroom system. Moreover, there is an increase in the availability of learning materials online. A similar increasing number of students are initiating to take up the online courses, leading to challenges for the intuitions to train the instructors to conduct online classes. With the emergence of advanced digital technology in the higher education system, such as the use of computers, overhead projectors, other hand-held devices, and smartboards, etc., both the e-learning approach and the traditional face-to-face learning environment have to encounter with the significant transformation in pedagogical strategies (Akbar, 2016). The implementation of digital technology in educational pedagogy is a great help to transform the education system, specifically, distance education.

Though the learning resources can be supplied through websites, the interaction between teacher and students is abating. The teachers are using the current advanced software programs

with modern technologies and find difficulties while handling some unexpected situations. They face challenges such as using unique, effective techniques for imparting multiple types of information and the amount of content to the students learning from a distance. The teaching through digital technology needs to design the course curriculum with flexibility, considering the unfolding technological advancement. In many institutions, faculty members and the students prefer the virtual learning environment (VLE) to substitute the traditional way of learning. Gilly (2005) referred to some VLEs as “*flapped* learning—an attempt at transference of existing pedagogy (p.202).” However, in implementing the e-teaching strategy, it overburdens the teachers who are forced to be “content experts and pedagogical and technological personnel” as well (Phan, 2017, p.4).

Though the e-learning or online teaching-learning system has been the favorite topic of the researchers, there have been inadequate research works on e-teaching competence. This study endeavors to find ways to conduct e-teaching with effective teaching strategies resulting in effective e-learning, and how these strategies could be implemented to put them into practice.

After reviewing various studies, it is observed that the e-teaching competency is the fundamental feature to establish a productive learning environment and to generate the fruitful achievement of learning outcomes in all domains. It supports the constructive learning approach, in which knowledge is constructed through various activities (individual and social) by exploring rather than received and transferred by the teachers in a uniform pattern (Biggs, 1996).

Regarding language learning, the digital system of teaching is comparatively more flexible and convenient. Furthermore, it familiarizes the teachers with new pedagogical tools to interact with students in a timely way (Bush, 2008). Hereof, a Computer-assisted Language Learning (CALL) program equips the learners with the awareness of the advanced world, and it would become helpful for their outlook of prospects (Gündüz, 2005). Many Saudi universities are sustaining the developments in digital learning arena, through the implementation of Information Technology in the higher education systems. Several institutions already decided to integrate computer-assisted learning techniques into their courses either in a blended mode of learning or in full e-learning mode replacing the traditional methods of face-to-face learning with more advanced digital technologies. Recently, Catherine (2019), in her study, argued that the digitalization of the teaching procedure works well with the influence of government externally, through funding the institutions for the application of information technology in higher education. In her exploration, she made it evident that the internal and external digitalized process may influence teaching and learning in higher education with innovations in the learning environment (Catherine, 2019). On this ground, what students expect from their teachers is to be proficient in their subject and provide the students with all that need to know.

How are digital technologies used in the teaching-learning process? It is rather challenging to have a good insight into the use of computers in language pedagogy and its effects on higher education with vast development in the digital mechanisms for teaching and learning. The primary reason for the majority of university faculty members’ resistance to bringing changes into their pedagogical approach is because of their lack of clear understanding of how and why Information Technology should be ingrained into their teaching process (Lai, 2011). In his study, he also

discussed the use of digital technologies in the teaching-learning process that supports a shift of cultural practices to fulfill the learners' requirements in the higher education system.

Digital Literacy of E Teachers

Teachers, who lack proficiency in Information technology skills, find it difficult to cope with the teaching process, yet they find it valuable for the future generation. In her study, Karpati et al. (2008) discussed the importance of Information Technology skills as 'building a team spirit.' His research revealed that the group tasks assigned to students would be more productive and engaging as 'computer-based tasks' teaches various management skills. The bottom line is the successful development of a teacher training course in digital technology should focus on a teacher's personality and professional development (Karpati et al., 2008; & Mwalongo, 2011). The teacher is required to make the proper use of digital technology, teaching materials, and digital learning resources to achieve the targeted learning competencies to ensure the students' desired academic progress.

Guri-Rosenblit (2018) in her article, highlights the importance the digital literacy of e-teachers in many universities, says that most of the teaching faculty are inept in guiding students in "developing the digital competencies they need." (p.95) Corresponding with her evidence, it is apparent that the faculty member lacks confidence in utilizing the advanced digital technologies affecting the teaching-learning process in several higher education systems.

The teaching scenario in the virtual environment provides relevant information on how to embed digital technologies as educational tools in typical higher-education teaching situations. Suitable materials are presented through media technology to learn online. The universities in Saudi Arabia made the use of the LMS as mandatory, which make them inevitably "(hyper)textualized" (Al-Mahmood, 2011). The *Blackboard*, as the Learning Management System (LMS), is a virtual learning environment (VLE), a vast repository contains several features that allow the "integration of information systems and authentication protocols" (El-Zwaidy, 2014, p.142). The successful implementation of the virtual learning program revolves around the students' need and their motivation level, the use of innovative teaching methods, clearly described learning outcomes, the format of subject presentation, and the support from the university. The Blackboard learning system integrates practical assessment mechanisms, virtual classrooms, discussion boards, and web conferencing sessions that enable students to view recorded files and other external academic resources at their convenience.

E-Readiness of E-Teachers

The advent of a virtual classroom will remove most of the barriers such as distance, age, cultural and economic barriers. To implement the online teaching approach successfully, it is significant to design effective teaching strategies. For this implementation, the aspect of e-readiness emerged to be the most significant in higher education programs. To a certain extent, managing online courses has been a challenging task for the teachers for their vital role in adopting basic techniques for the teaching-learning process. One of the significant barriers that create challenges for the teachers is their lack of technical and theoretical knowledge of information technology for its implementation into their teaching process (Lee, 2000). These challenges are very crucial as the shift from the traditional face-to-face learning environment to the virtual learning environment

also requires changes in course designing, course delivery, and applying innovative teaching methods.

The result of the study conducted by El-Zwaidy (2014) on the faculty members at Taif University indicated that a significant part of the faculty found a considerable difference in learning while using technology in their teaching process. In contrast, a low number of members needed intensive training to implement digital technology that shows their lack of digital awareness. The anticipated outcome of integrating digital technology into teaching for its quality improvement is related to the learning flexibility for students and tutors. The teachers' *technophobia* (Anas, 2018) hampers the proper utilization of required advanced technology in their pedagogical process.

E-Resources for Contemporary Learning

Our teachers acknowledge the need for new resources for students' enhanced learning in various fields. Any higher education system takes pains to assist students in gaining awareness with a variety of interactive learning sources that can be used by learners to get programmed guidance and feedback (Oliver & Herrington, 2001). Though the e-versions of printed textbooks are available in many subjects, they appear to be less effective than the original form of written works. He emphasized on using different mechanisms, such as digital magazines and video streaming, etc. to apply for various distinct purposes. To increase active participation in the online discussion forums, which is one of the mechanisms for online learning, the teacher needs to encourage students with the relevant topics that suit the students' cultural dimension. These activities provide the learners with sufficient time to think, discuss the facts, and to put them in writing without any error (Hole et al., 2010).

The E-sources (such as e-books, online databases, websites, e-journals, etc.) necessary for e-teaching, need to integrate the required material to comply with the cognitive domain of learning outcome that focuses on the constructive approach. The e-teaching materials require the designing the students' learning activities considering all the domains, specifically, the cognitive domain, for the attainment of the teaching and learning goals (Yachina et al., 2016).

In terms of Blended learning, the online forum helps students understand the concept presented in the traditional classroom environment, and helps the instructors to "readjust the subject matter" (Singer & Stoicescu, 2011, p.1531) which facilitate the learning more conveniently. Using Blackboard Collaborate, a synchronous tool for learning online, the teacher conducts live classes with students where they can have study sessions and informal discussions. The primary function of the LMS is to accumulate the learning content, with an extended interaction between teachers and the students synchronously and asynchronously (Hussain, 2011). Students prefer to be engaged in more outdoor and interactive activities rather than 'indoor' events held in traditional classrooms or in computer labs (June, 2006). The use of Computer-mediated Communication (CMC) in second language acquisition proves to be very influential. It enables the e-teachers to provide sufficient but helpful feedback to the learners. The learners find the digital mode of learning more motivating than traditional face-to-face learning. It also facilitates the prompt responses by instructors and students. The online discussion forums, a tool in the Blackboard system used commonly by learners to share the current information, promote a more reflective communicational mode of learning. It was invented "in a 'generic format' to represent the typical

structure and interface features found in many similar ‘off-the-shelf’ computer-based threaded discussion tools” (Thomas, 2002).

Methodology

The present research appraisal is based on qualitative and quantitative approaches to probe into the various perspectives on teachers’ competency level, examining their attitude towards e-learning while integrating digital technology into their teaching process. The participants of the study consist of faculty members and students from the female colleges of King Khalid University, one of the prominent universities in the Kingdom of Saudi Arabia. A set of open-ended questions were asked through telephonic interview sessions with a number of 20 teaching faculty members, who belonged to different departments. After experiencing the online teaching, they provided their valuable feedback as well as their worthwhile personal responses that depict their level of digital competence and the performance of their teaching efficiency. Their opinions were based on their attitudes for e-learning, their views on e-readiness, Pedagogical skills, lesson planning, and designing the course format, Technology competency, and their willingness to take online teaching.

For the data collection of the quantitative approach, a survey questionnaire was administered online to get students’ valuable and feedback on their e-learning experience and whether their experience with digital teaching was effective or ineffective. The questionnaire consisted of a set of five questions based on five points Likert scale.

Discussion

The first analysis describes the perceptions of the participant teachers, who have been indulged in E-teaching and analyzing students’ formative and summative assessment using Blackboard Collaboration. Their responses were obtained through the interview method, which acknowledges their attitude towards e-learning activities. The majority of them claimed as time-constraint contrary to the usual traditional in-class assessment methods. After reviewing the responses, it is anticipated that this new learning paradigm needs rigorous digital training for the teachers before the course taking to assure the readiness of the faculty.

For using Blackboard tools for the appropriate delivery of the course content, almost 40% of the instructors claimed that they were forced to upload the chunks of the course materials, handouts, and the extracts from the recommended texts. Doing this for the utmost convenience of students’ preparation for exams, they seldom realize its negative impact on students’ motivation level, learning achievement, and their critical ability. On this account, their learning is restricted to limited information. On the contrary, when they are provided with self-analytical assignments or encouraged for using Discussion Forum, blogs, and wikis for the brainstorming sessions, the result might be reverse.

It is figured out that many teachers consider the utilization of some productive tools on the Blackboard, such as the Course Calendar and the tracking facility, as worthless. The majority of them even ignored the most important tools, i.e., communication tools, such as chat and forums. Responding to the question, whether the current e-learning approach is sufficient to meet the required program learning goals of the university, there were mixed and uncertain views. They

claimed to have met with various challenging situations that they perceived to be ineffective for students' long-term learning goals. Almost 25% of those members, taken as the study sample, found incompetent in digital literacy, which is evident with what they claimed to have asked for help from their colleagues at every stage, from conducting a virtual class to assessing the students learning. Three distinct findings emerged from this qualitative study are: (1) The faculty members need proper digital training with the appropriate utilization of digital teaching-learning tools; (2) The teachers seem to take the responsibility to encourage students and motivate them to the utmost; (3) Teaching or learning from home does not mean the relaxation period. Instead, it just eases the teaching-learning process with a variety of convenient and exciting tools, making the teaching more fruitful.

The e-learning program is required to have a structured learning environment specified the use of available digital resources that comply with the subject matter. The faculty of the participant university, teaching in different colleges demonstrated the least awareness regarding the existence of Blackboard toolkits, showing unfamiliarity with these valuable sources. A majority of participant teachers complained of the scarcity in proper training sessions; however, the trainings they received, as they claimed, were conducted online as Webinars that were not efficient and as profitable as anticipated by the institution.

The obtained result reveals that the teaching faculty, specifically, in the language department faced some crucial problems such as heedless writing of the answers by the students without putting attention on the correct usage of punctuations, grammar, or syntax. In writing an assignment, they either fell to plagiarism or lack the clarity of ideas, which is basically due to their least participation in the digital forums available on their LMS. In this regard, the poor performance of the students may be related to the students' low level of learning, as well as to the teachers' ineffective way of teaching, which shows students' inefficiency of using digital sources effectively. The following figure is displayed to analyze the feedback of the faculty members on the specific aspects of digital tools available on the LMS (the Blackboard). It exposes the frequency of effective utilization of these digital resources.

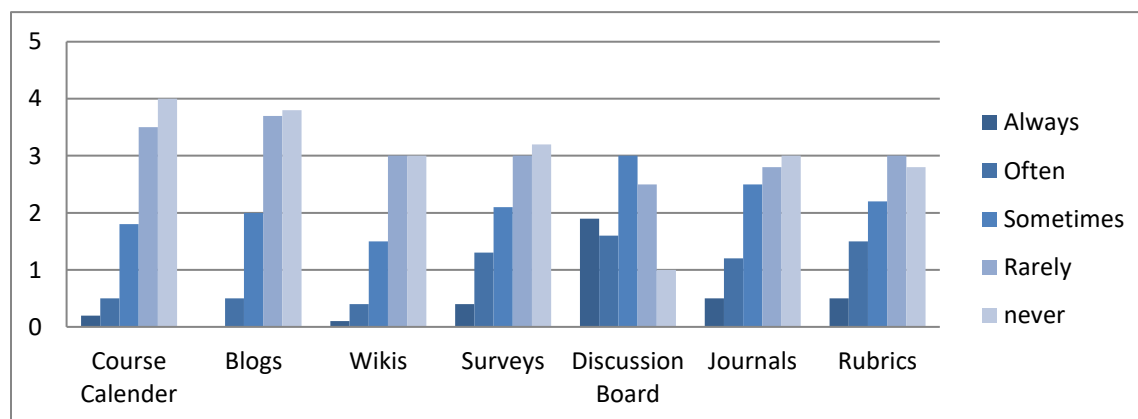


Figure 1: Using Blackboard toolkit (by faculty teachers)

The figure one indicates either the teacher's incompetency in utilizing the various useful sources or being resistant to encourage students to use them. Many teachers disclosed the students'

perspectives regarding the multifold activities that the latter are unwilling to be indulged in extra activities other than their usual restricted methods of learning and assessment.

Are these what e-teachers are expected to be performing? The fundamental role of an e-teacher is to guide their students for their active participation in learning activities using digital resources for the development of students' critical ability and problem-solving skills. Consequently, it is required on the part of a teacher to have an explicit and deep understanding of how digital literacy positively impacts on the academic and professional development. It is essential to develop a particular set of skills and a positive attitude towards the appropriate use of digital media. The results indicate that the online grading system and computer-mediated communication are quite motivating for students. On the other hand, the teachers felt for the same as more time-consuming in comparison with the face-to-face interaction in the classroom.

Concerning the faculty member's attitude towards the e-learning approach, Hussain (2011) researched on some of the prominent universities of Saudi Arabia. His study finds King Saud University on top of six universities, with a higher number of digitally competent faculty. The result of his study also indicates that the faculty members using JUSUR display sufficient knowledge of the E-learning system and how to implement digital technology in the teaching process, which represents a very encouraging sign for the pedagogical progress of faculty members in using LMS.

However, the findings of this investigation reveal that the richness of the teachers' digital performance is missing. The faculty members show reluctance in changing their mindset in terms of using digital pedagogy, without realizing its supposed negative impact on the quality of learning and its consequences on the achievement of learning outcomes.

One of the teachers came with the opinion that *"approximately 25% of students complained of the weak server issues, affecting their performance in online activities. While taking an online quiz, about 15% of students protests for the time duration allotted for the test, preventing them from completing the test, thus, resulting in the re-opening of the quiz or extending the duration"*. Other teachers related the delayed performance of the students to *"the miserable condition of the server, heavy network traffic, and unclear instructions given for the assessment."*

The subsequent analysis (figure-2) is based on the data received from the students through a Likert scale questionnaire (1=Strongly Agree, Agree=2, Neutral=3, Disagree=4, Strongly Disagree=5). The result is displayed in the form of the mean value for each statement. The statements dealt with the students' learning experience during the e-learning process.

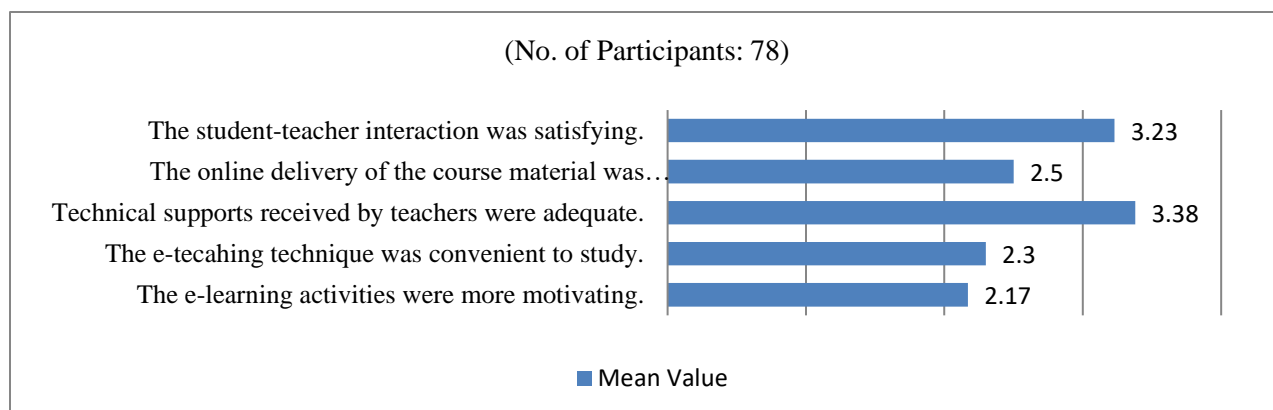


Figure-2: Students' feedback on e-learning experience.

Altogether, a number of 78 students responded to the questionnaire. The mean age of the participants is 22 years. Approximately 41% of participants are from junior levels (1-4), while 59% belonged to senior levels (5-8) of studies. A majority of participants expressed their satisfaction on working at their own pace. Though the result reports the satisfactory response of the students on the delivery of course materials; the result reveals their dissatisfaction on the teacher-student interaction during the e-learning process. However, it seems apparent that the digital way of learning appears to be more convenient for most students ($M=2.3$). Though it can afford more convenience and facilities to the learners; it does not provide an attentive and accommodating interaction between the teachers and the students ($M=3.23$).

Conclusion

It is noticeable, that, blending the digital technology with the teaching-learning process is on acceleration into the higher education system of Saudi Arabia. Considering the digital incompetency of teachers, as the present study indicated, it is requisite for a teacher to enhance their digital awareness with a highly efficient and innovative form of training, to be skilled in her field of study and to contemplate the appropriate use of teaching techniques, to generate digitally competent students. Without a competent e-teacher and programming expertise, no *Virtual* learning environment can prove to be sufficient to produce active learning. The outcome of this study makes it inevitable to review the course curriculum for the new digital technologies such as forums, wikis, and social media, etc. to be incorporated into the teaching practice. Moreover, the concern over the necessity of the faculty members' training in the usage of the LMS is raised, as the new generations of learners adopt more advanced technologies in a more creative approach.

Currently, the e-learning approach has become prevalent; hence, it is anticipated to grow farther. The digitally advanced pedagogies are more engaging with collaborative activities to bring teachers and students together for a more advantageous interactive learning. Accordingly, it is recommended to the imminent researchers to delve deep into the e-teaching aspect to widen the digital awareness in the realm of the education system.

About the Authors

Dr. Shadma Iffat Rahmatullah is an assistant professor of English literature at King Khalid University, Abha, Saudi Arabia. Her Research interests include literature and Language studies, educational technology, educational psychology, and pedagogical development.

ORCID ID: <https://orcid.org/0000-0002-9325-9921>

Sufia Sultana is a lecturer in the Faculty of English language and Translation at King Khalid University, Saudi Arabia. She has M.phil degree from Alagappa University, TN, India. She has been teaching in faculty of language at King Khalid University for the past 11 years.

ORCID ID: <https://orcid.org/0000-0001-8331-810X>

Ghazala Sultan is a lecturer in the Faculty of English language and Translation at King Khalid University, Saudi Arabia. She is postgraduate in English Literature from the University of Balochistan, Pakistan. She has been teaching in faculty of language at King Khalid University for the past 7 years. ORCID ID: <https://orcid.org/0000-0001-5136-9885>

References

- Akbar, M. (2016). Digital Technology Shaping Teaching Practices in Higher Education, *Frontier ICT Digital Education*. DOI: 103389/fict.2016.00001
- Alahmari, A. (2017). The State of Distant Education in Saudi Arabia, *Quarterly Review of Distance Education: Research that Guides Practice*, Michael Simonson & Charles Schlosser (Ed.), 18 (2), 91-99.
- Al-Ajlan, A. (2016). A Comparative Study of E-Learning Systems in Saudi Arabia Universities, *International Journal of Computer Science and Information Security (IJCSIS)*, 14(12).
- Al-Fahad F. N. (2009). Students' Attitudes and Perceptions Towards the Effectiveness of Mobile Learning in King Saud University, Saudi Arabia, *The Turkish Online Journal of Educational Technology – TOJET*, 8(2).
- Al-Mahmood, R. (2011). Affective Encounters and Spatial Engagements: Pedagogies of Desire in E-Learning, in G. Williams, P. Statham, N. Brown & B. Cleland (Eds.), *Changing Demands, Changing Directions. Proceedings ascilite Hobart*, 70-84.
- Anne K. L.; Robert S.; Andres A. A.; Grete O. H. (2008). E-teacher Challenges and Competences in International Comparative Social Work Courses, *Social Work Education*, 27(6), 623-633.
- Anas, I.; Musdariah, A. (2018). Being an E-Teacher: Preparing the ESL Teacher to Teach English with Technology, *JELTL (Journal of English Language Teaching and Linguistics)*, 3(1) DOI: [10.21462/jeltl.v3i1.102](https://doi.org/10.21462/jeltl.v3i1.102)
- Bangs, P.; Cantos, P. (2004). What can Computer Assisted Language Learning Contribute to Foreign Language Pedagogy, *International Journal of English Studies, IJES*, 4 (1), 221-239, DOI:[10.6018/ijes.4.1.48281](https://doi.org/10.6018/ijes.4.1.48281).
- Biggs, J. (1996). Enhancing Teaching through Constructive Alignment, *Higher Education, Springer*, 32, 347-364.
- Burch, V. C.; Lewis J.; Subramaney, U.; Katurura A.; Quinot, G.; Singh, S.; Dhunpath R. (2016). Towards a Conceptual Framework for Interdisciplinary Teaching and Learning Dialogues in Higher Education, *ALTERNATION*, Vol.23, No.1. Pp 233 – 264.
- Bush, M. D. (2008). Computer-Assisted Language Learning: From Vision to Reality? *CALICO Journal*, 25(3), 443-470.

- El-Zawaidy, H. A. (2014). Using Blackboard in Online Learning at Saudi Universities: Faculty Member's Perceptions and Existing Obstacles, *International Interdisciplinary Journal of Education*, 3(7), 141-150, DOI: 10.12816/0006902
- Eric, M. M.; Ingrid E.; & Ruth V. S. (2013). Digital Literacy and Informal Learning Environments: an Introduction, *Learning, Media and Technology*, 38(4), 355-367, <https://doi.org/10.1080/09687760500376439>.
- Gilly, S. (2005). Flying not Flapping: a Strategic Framework for E-learning and Pedagogical Innovation in Higher Education Institutions, *ALT-J*, 13(3), 201-218, DOI: 10.1080/09687760500376439.
- Gündüz, N. (2005). Computer-Assisted Language Learning (CALL), *Journal of Language and Linguistic Studies*, 1(2) 193-214.
- Guri-Rosenblit, S. (2018). E-Teaching in Higher Education: An Essential Prerequisite for E-Learning. *Journal of New Approaches in Educational Research*, 7(2), 93-97. DOI:10.7821/naer.2018.7.298.
- Hussain, H. B. (2011). Attitudes of Saudi Universities Faculty Members Towards Using Learning Management System (JUSUR), *TOJET: The Turkish Online Journal of Educational Technology*, 10(2). 43-53.
- Hole, G. O.; Larsen, A. K.; Hoem, J. (2010). Promoting the Good E-teacher: Didactical Choices When Developing E-pedagogical Competences, *Seminar.net International Journal of media, technology and lifelong learning* 6(3). 296-313.
- Judge, S.; and O'Bannon, B. (2008). Faculty Integration of Technology in Teacher Preparation: Outcomes of a Development Model. *Technology, Pedagogy and Education*, 17(1) 17–28, DOI: 10.1080/14759390701847435.
- June, H. T.; Leong H. (2006). Implications of E-Learning on Learning and Teaching in Higher Education, *Proceedings of the 2nd International CDIO Conference*, 1-8. Linköping University Linköping, Sweden.
- Karpati, A.; Török, B.; Szirmai, A. L. (2008). E-Teaching Readiness of Teachers the Effects of Personality Traits and ICT Skills on Changes in Teaching Style of experienced Educators, *Proceedings of the 7th Research Workshop of EDEN*, 6-8. Paris.
- Kelentrić, M.; Helland, K.; Arstorp, A. (2017) Professional Digital Competence Framework for Teachers, *The Norwegian Centre for ICT in Education*. ISBN 978-82- 93378-51-8.
- Kirschner, P.; and Davis, N. (2003). Pedagogic Benchmarks for Information and Communications Technology in Teacher Education, *Technology, Pedagogy and Education*, 12(1), 125–147. DOI: 10.1080/14759390300200149.
- Lai, K.W. (2011). Digital Technology and the Culture of Teaching and Learning in Higher Education, *Australasian Journal of Educational Technology*, 27(8), 1263- 1275, DOI: 10.14742/ajet.892
- Lee, K. (2000). English Teachers' Barriers to the Use of Computer-assisted Language Learning, *The Internet TESL Journal*, 6(12). Retrieved from <http://iteslj.org/Articles/Lee-CALLbarriers.html>.
- Mwalongo, A. (2011). Teachers' Perceptions about ICTs for Teaching, Professional Development, Administration and Personal Use, *International Journal of Education and Development using ICT*, 7(3), 36-49.

- Oliver, R.; Herrington, J. (2001). Teaching and Learning Online: a Beginner's Guide to E-learning and E-teaching in Higher Education. *Mount Lawley, Australia: Centre for Research in Information Technology and Communications*, Edith Cowan University.
- Phan T. T. N.; Dang L. T. T. (2017). Teacher Readiness for Online Teaching: A Critical Review. *IJODEL*, 3(1), 1-16.
- Rune J. K. (2014). Teacher Educators' Digital Competence, *Scandinavian Journal of Educational Research*, 58(3), 269-280, DOI: 10.1080/00313831.2012.726273.
- Singer, F. M.; Stoicescu, D. (2011). Using Blended Learning as a Tool to Strengthen Teaching Competences, *Procedia Science Direct, Computer Science 3*, 1527–1531, DOI:10.1016/j.procs.2011.01.043
- Steel, C. H. (2007). What do University Students Expect from Teachers Using an LMS?, *Proceedings ascilite Singapore*, 942-950.
- Thomas, M. J. W. (2002). Learning within Incoherent Structures: the Space of Online Discussion Forums, *Journal of Computer Assisted Learning*, 18(3), 351-366, DOI:10.1046/j.0266-4909.2002.03800.x.
- Yachina, N. P.; Valeeva, L. A.; Sirazeeva, A. F. (2016). E-Teaching Materials as the Means to Improve Humanities Teaching Proficiency in the Context of Education Informatization, *International Journal of Environmental & Science Education*, 11(4), 433-442, DOI: 10.12973/ijese.2016.315a
- Yamin, M. (2015). A Socio-Cultural Overview of E-Learning in Saudi Arabia, *International Women Online Journal of Distance Education*, 4(3), 72-77.