Integrating Literature with Technology and Use of Digital Tools: Impact on Learning Outcomes

Sabina Yasmin Alfaruque[1], Sufia Sultana[1], Richa Rastogi[1], & Zakira Jabeen[1]

[1] Department of English, King Khalid University, KSA

Correspondence: Sabina Yasmin Alfaruque, Department of English, King Khalid University, KSA.

Received: November 19, 2022 Accepted: December 19, 2022 Online Published: December 21, 2022

doi:10.5430/wjel.v13n1p278 URL: https://doi.org/10.5430/wjel.v13n1p278

Abstract

The teaching of literature involves understanding of emotions and feelings of the characters, plot constructions, setting, themes and drawing picturesque images. The aesthetics of teaching literature though lies in reading and understanding the text in its natural way; however, with the advent of technology and compulsive transition to online teaching, integration of technology and digital tools with teaching of literature has become a necessity. This study aimed at examining how to incorporate technology and digital tools in literature classrooms, to ensure attainment of learning outcomes. Digital tools currently adopted to teach literary texts include visualizations, digital editions of classics, storytelling through videos, graphic novels, interactive hypertexts and distant reading of the texts. Visualization tools, for example, can explain word patterns and sentence structure in a story, build digital artifacts, create digital maps of a novel's setting, and convert themes into images. This study utilized a questionnaire survey with two learner groups, control and experimental, identified through purposive sampling, and in-depth interviews with six instructors who taught literature courses in a leading Saudi university. The focus of this mixed method research study was to see whether technology had done justice with the literary texts and helped achieve the intended learning outcomes. The study found out that with the help of technology students learned literary texts from multiple dimensions; however, the primary concern while integrating technology with teaching of literature should be to help students achieve learning outcomes. The study reiterated that whatever the media or the means to teach literature, if the learning objectives are achieved, combining technology with literature teaching will rather be a paradigm shift.

Keywords: literary texts, aesthetics, learning outcomes, technology, digital tools

1. Introduction

The teaching of literature through online and multimedia methods involves greater interaction of students and more accessibility to sources of information. Students make use of strategies like collaborative learning to interpret literary texts, which develops their interdisciplinary thinking and cross-curricular approach, required for literature teaching. Technology assists both the teacher and the students to search references and other cultural content in relation to the literary text, which eventually makes a positive impact on the attainment of the learning outcomes (Ali, Ahmad, & Sewani, 2022). The computer and the internet are rich sources of information, open discussions and understanding the motifs and themes more effectively than face to face teaching. Technology can transform literary texts into literal hypertexts and embed them with study notes helping students in learning about the main ideas, themes, and relationships and also in completing their assignments. These materials are very effective and offer solutions that stimulate thought and encourage cooperation.

Reading literary texts in a traditional EFL classrooms often left students bored and passive, mainly because teachers used the same reading strategies in the classroom; particularly to read a literary text, a poem or a short story for example (Cheung, & Hennebry-Leung, 2020; Boruszko, 2013). Students fail to enjoy the aesthetics of the literary text through such traditional teaching strategies nor are they able to interpret the semantics and pragmatics of a literary text. The challenges in teaching a literary text through teacher centered methods, which demotivates students and leaves them disinterested and eventually failing in comprehending the text. The COVID-19 provides the opportunity of online learning and the traditional face to face teaching methods were replaced by technology assisted teaching practices in all literature teaching classrooms.

A major benefit of using technology to teach literature is that it acts as an instructional tool that scales both visual and auditory skills of learners (Shyamlee & Phil, 2012). Gilakjani (2017) found technology useful in classroom teaching and learning as it helps in communication, design teaching material and exercises, and assisting in learning outcomes. In a technology assisted program, besides teaching and learning material and exercises designed by the faculty, other benefits include students' involvement in online discussions, assignments, and reading a hypertext directly from the URL of the program (Kajs, 1985). They can also connect with other learners across the globe through collaborative platforms and social media. A few creative platforms that are popular among online communities and used in literature teaching includes My Storybook (https://www.mystorybook.com/), for storybook illustrations. Teachers create classroom edublogs where students can post their stories, paragraphs, poetry, etc. as well as their projects and assignments. A novel method is also to turn classroom discussion into a podcast where brainstorming sessions can take place.

Technology assisted teaching tools provide a unique platform to both teachers and students to interact and thus simplify the teaching and learning process. Electronic media such as edublogs and social networks are customized to the curricular needs of teachers and students. Inspired by the inclusion of technology in academia, in general and literature teaching, in particular, several online courses on storytelling, creative writing, drama and poetry have been designed. These courses use multimedia, a technology that brings hardware and software together, often known as digital fusion or melting of digital technologies. This fusion has developed multimedia resources, hypertexts and e-books, revolutionizing teaching in the field of literature by making available classic texts to end users. Prominent examples are the Gutenberg Project, founded in 1971 by Michael Hart, who converted thousands of printed books into e-books; and Pérez Galdos's Publishing Project, which drew the attention of authors, researchers, and academicians to design packages in electronic format. This trend was carried forward by Google, Amazon, Barne and Noble, and Apple who also produced digital literature. A special mention can be made of Amazon's e-reader "Kindle" that has transformed people's habit of reading, who now prefer digital books instead of printed ones.

Technology-enhanced literature classrooms help students develop a number of new literacy skills such as decoding colors, rating icons, and interpreting images (Grisham and Wolsey, 2006; Scharber, 2009; Zhang, 2022). The students can also experiment with hyperlinks, digital documents, and audio- video recordings (Larson & Sanderson, 2005; Scharber, 2009), which makes a positive impact on their communication and learning outcomes. Norton-Meier (2004) notices that students in chat rooms or such other asynchronous computer-mediated discussions learn several skills which introduce them to new methods of language learning. Likewise, Moreillon, Hunt, and Ewing (2009) supported wikis; and Scharber, (2009) recommended the use of digital platforms and integration of Information Communication Technologies (ICTs) to foster classroom communication and improvement in learning outcomes.

Demirö z (2019) states that by incorporating and combining technology with literature into language teaching, enhances creativity as students can identify the literary texts with their own life. Likewise, Bereczki & K árp áti, (2021) assess that such technology-enhanced creativity reassures experts and teachers to believe in digital technology-integration. Tang et al, (2022) recommend that the use of digital technology tools improves students' creativity. Ahmadi & Reza (2018) opine that the use of technology in language and literature learning develops students' critical thinking abilities. According to Young (1996), since short stories and most of the literature content are entertaining, they reduce students' anxiety, and reduce their apprehensions, particularly in the EFL scenario. Hence, with the introduction of computational processes and transition to educational technology, students find the literature learning both entertaining and free of stress (Acevedo-Borrega et al., 2022; Zhang, 2022).

Students are also highly motivated by such kinds of integration of technology and online teaching due to its innovative format, visualization, availability of digital editions of classics, storytelling through videos, and interactive hypertexts (Koskimaa, 2000). Such use of multimedia supports not only constructive learning but also helps students build thinking patterns to comprehend the cultural aspects behind the texts. The current study examines how to incorporate technology and digital tools in literature classrooms, to ensure attainment of learning outcomes. Digital tools currently adopted to teach literary texts include visualizations, digital editions of classics, storytelling through videos, graphic novels, interactive hypertexts, and distant reading of the texts. The study focuses upon four major dimensions namely Visualizations, Digital Versions of Literary Texts, Interactive Hypertexts and Learning Outcomes. Hence the underlying research question in this study can be stated thus: How do various dimensions of technology like Visualizations, Digital Versions of Literary Texts and Interactive Hypertexts assist in attainment of learning outcomes, when the teaching is exclusively through online methods?

2. Research Methodology

- *Research design*

There are four key domain areas of this study: Visualizations, Digital Versions of Literary Texts, Interactive Hypertexts and Learning Outcomes. Visualizations are determined by the number of graphics and visual images utilized; digital versions of literary texts can be checked by their accessibility to students; the variable of interactive hypertexts is judged by the creativity involved; and learning outcomes are measured by learners' ability to have developed critical thinking, motivation level autonomy in interpreting the text. This study examined these four dimensions and their role as predictors of the success of technology and online learning methods in teaching literature with the help of a questionnaire prepared based on Technology accepted model.

At the end of the academic semester of 16 weeks, the questionnaire was administered to collect the attitude and perception of participants about online teaching methods in the subject of literature teaching. A pretest and a posttest were also applied on both control and experimental groups. Such a research design is recommended to investigate causal effects by comparing one or more groups (Creswell, 2012). Moreover, this research design was in accordance with the objectives of the study, where the aim was to find out the impact which technology made on learning literary texts.

The research data was presented through descriptive statistics in the form of mean, standard deviation, and independent sample t-test results. This study also conducted semi-structured interviews with 06 teachers teaching literature courses in the female campus of the English Department of this university. Thus, this study employed a mixed method research design, utilizing a quasi-experimental research method (Creswell, 2012).

- *Research Sample*

All third and fourth -year level literature students of Department of Intensive English Program, College of Arts and Science, King Khalid university, (female campus) enrolled during the academic year 2021-22 formed the population of the study. The research was carried out

with a total of 60 students sampled for this study, divided into two groups, control and experimental. The purposive sampling method was adopted as it suited the requirements of the study and it ensured the administering of the research instrument only to sampled students (Rai & Thapa, 2015; Staller, 2021). The sampling criteria included students' way of thinking, how they analyzed and interpreted a text after reading, and their motivation to know more about a literary piece. All participants of the study were females, in their undergraduate years, and had opted for literature elective courses for the study. The reason for selecting students from elective courses was because their motivation level to study literature subjects was supposed to be high as compared to students who did not go beyond the core literature subjects. For the pretest and the posttest, a total of 20 respondents were chosen, 10 from each group: experimental and control.

- *Data Collection Instruments and Procedures*

In this mixed research design of this study, a questionnaire was used in the quantitative phase and a semi-open interview instrument was designed for the qualitative phase (Creswell, 2012). The questionnaire used a 5 (five) point Likert scale with 'Strongly Disagree' having a score of 1, 'Disagree' having a score of 2, 'Neutral' having a score of 3, 'Agree' having a score of 4 and 'Strongly Agree' having a score of 5. There were 24 questionnaire statements which tested students' perception towards the use of technology to study literature courses. The questionnaire was developed with the elements recommended in the Technology Acceptance Model (TAM), with the objective of examining the students' ability to learn literary texts through online and digital teaching methods. Questionnaire items focused on four dimensions: visualizations, digital versions of literary texts, interactive hypertexts and learning outcomes. Each dimension contained 6 items that represented the perceived usefulness and perceived ease of use, Behavioral and Attitude of participants of the study. The objective was to check whether technology and digital tools could be used to teach literature. It was also important to measure the transferability and replicability of these tests if administrated to another group of students in the same level. The Cronbach alpha reliability coefficient of 0.846 was obtained for all items, which was above the accepted value of 0.5. The procedure for collecting data (Creswell (2012) is presented in Figure 1:

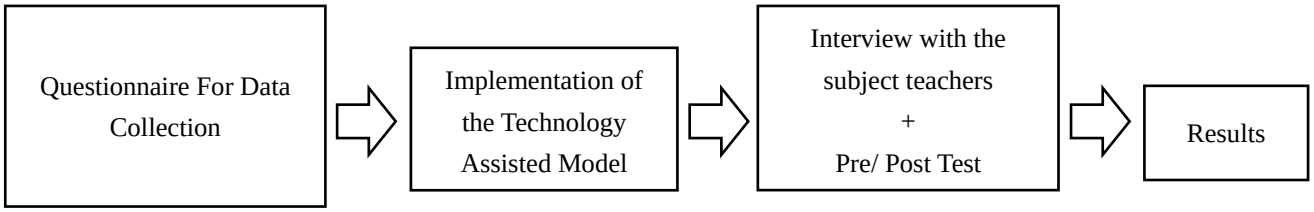

Figure 1. Research Procedure (Creswell (2012)

In addition, there was a pretest and a posttest with 10 students each from both the groups. The pretest was taken at the beginning of the procedure. The first group, the control group, was taught literature courses through the traditional method by reading the text in the classroom, with the teacher making optimum use of her personal skills to explain the text, its literary images and meaning. The second group, experimental group, was asked to download apps of the e-books and kindle book editions of the stories, poems and one act play prescribed in the curriculum. The objective was to use technology tools like applications and Tablets and smart phones to read and take access to the literary texts in a different form instead of having an actual textbook physically. These digital tools were available to both instructors and students to make this a collaborative learning process.

The results of pre- and post-tests helped in triangulating the findings of the questionnaire and the conclusions drawn by the subject teachers in the semi structured interviews. The triangulation helped to assess whether the two findings were coherent with each other. The objective of having a pretest and a post test was also to compare later the change that is measured in the students' learning through visualizations, digital versions of literary texts, interactive hypertexts and eventually achieve learning outcomes. The variation in the results of the two tests helped the researcher to evaluate students' performance and improvement before and after the experiment. The posttests also included evaluation of students' ability to analyze a literary text and problems encountered in text interpretation to determine a remedial course of action.

The qualitative phase of the study employed a semi structured interview with 6 instructors to strengthen the results of quantitative data. These interview informants taught literature courses in the university; and were familiar with the comprehension and motivation levels of each student. The four dimensions of the study viz., visualizations, digital versions of literary texts, interactive hypertexts and learning outcomes, were the focus of the interview.

- *Data Analysis*

The frequency distribution, mean, standard deviation, and t-test for all dimensions were used to analyze the research data (Creswell, 2012). An independent sample t-test was conducted to examine the effect of technology on all the dimensions of the study. All data obtained from questionnaires in both control and experimental groups were collected and calculated with the SPSS Ver. 25 application.

3. Results

- *Validity and Reliability*

To test the validity of the questionnaire items, the prerequisite condition was of the loading score to meet the 0.6 level, considered partially significant (Liang et al., 2014). Table 1 exhibits the value of average variance extracted (AVE) of all the four dimensions at the time

of outer loading showing a high significant value (>0.8). Likewise, the composite reliability value and Cronbach's alpha real test value were also measured with high significance value (>0.8). Based on these measurements, it was observed that all dimensions fulfilled the measurement criteria for the validity and reliability test. The higher the score, the greater the degree to which each dimension shows fitness for a research framework.((Liang et al., 2014;)

Table 1. Validity, Reliability and Cronbach's alpha value

Dimensions	AVE	Composite Reliability	Cronbach's Alpha
Visualization	0.846	0.842	0 931
Digital Versions Of Literary Texts	0.841	0.875	0.867
Interactive Hypertexts	0806	0.884	0.835
Learning Outcomes	0.884	0.889	0.836
	Total	0.872	0.846

To cross examine the reliability and triangulate the results, Pearson Correlation Coefficient was also calculated for the questionnaire based on the Technology Assisted Model, by adjusting the length of the test and using the Spearman Coefficient (Liang et al., 2014).

Table 2. The reliability coefficient values of the study instrument item

Instrument	Items	Pearson Coefficient	Cronbach Alpha Coefficient
Technology assisted Model Questionnaire	24	0.880	0.846

Table 2 clarifies that the reliability coefficient value for the study instrument has a high degree of reliability (0.880), which makes it suitable for its application to the study sample and confidence in its results.

Table 3. Means and standard deviation for participants' responses on the four dimensions of the current study

S.	Dimension	N	Mean	Standard Deviation	Response Degree	Result
1	Visualizations	60	4.15	0.61	Very High	Accepted
2	Digital Versions Of Literary Texts	60	4.74	0.74	Very High	Accepted
3	Interactive Hypertexts	60	4.56	0.72	High	Accepted
4	Learning Outcomes	60	4.35	0.69	High	Accepted
			4.45	**0.69**		

Source: Data were extracted and statistically analyzed by calculating mean and standard deviation.

Table 3 demonstrates how technology assisted teaching was rated by the participants. The total mean is (4.45) with a standard deviation of (0.69) showing that participants' attitudes toward technology assisted teaching is positive. The standard deviations for all dimensions ranged from (0.61-0.74). The dimension of Digital Versions of Literary Texts, ranked first with (4.74) mean and a standard deviation (0.74) with a very high response degree. It was followed by the Interactive Hypertexts dimension with a mean of (4.56), a standard deviation of (0.72) and also with a very high response degree. The dimension of Learning Outcomes ranked next with (4.35) mean and a standard deviation (0.69) with a high response degree. The last to rank was the Visualizations dimension with a mean of (4.15), a standard deviation of (0.61) and with a high response degree. This suggests there is a lot of scope to develop EFL students' visualizations skills, through digital versions of literary texts and interactive hypertexts readings, in order to achieve high learning outcomes.

A total of 10 students from each of the two groups were sampled for the pretest and posttest. When we compared the average level of performance of the respondents in pretest and posttest, the impact of technology was clearly visible in the experimental group in the post test, after the treatment (Table 4)

Table 4. Students' performance in Pretest for technology assisted teaching

	Experimental Group		Control Group	
SCORES	**f**	**%**	**f**	**%**
12 – 15	4	40 %	4	40 %
16 – 18	3	30 %	4	40 %
19 – 22	3	30 %	2	20%
23 – 24	0	0 %	0	0 %
TOTAL	**10**	**100 %**	**10**	**100 %**
	Mean = 16.73	SD = 3.39	Mean = 15.76	SD = 3.20

Table 4 shows that the mean score of the experimental group (16.73) is slightly higher than the mean score of the control group (15.76). Likewise, the control group's standard deviation (3.20) is lower than the experimental group's standard deviation (3.39). Although the experimental group outperformed the control group on the pretest, the experimental group's scores are only slightly better than the control group. Table (4) shows that there are no statistically significant differences in the academic levels of the respondents in both the groups, which can be attributed to similar socio-economic and academic amenities provided to them and belonging to a similar university environment.

Table 5. Students' performance in Posttest for technology assisted teaching

	Experimental Group (with aid of technology)		**Control Group (with traditional face to face method)**	
SCORES	**f**	**%**	**f**	**%**
12 – 15	1	10%	3	30%
16 – 18	1	10%	3	30%
19 – 22	4	40%	2	20%
23 – 24	4	40%	2	20%
TOTAL	**10**	**100 %**	10	100%
	Mean = 27.92	SD = 4.12	Mean = 22.11	SD = 4.65

Table 5 presents the post test scores of both the groups. Having taught with the aid of technology, the experimental group's mean score (27.92) is significantly higher than the control group's mean score (22.11). Furthermore, the experimental group's standard deviation (4.12) is lower than the control group's standard deviation (4.65). This simply means that the experimental group outperformed the control group on average.

Table (6) presents the descriptive statistics for all four dimensions in the pre-and post-tests of both the groups. The results clearly confirm the quantitative results of the questionnaire as reported above. It is clearly evident that technology assisted teaching results in a significant difference in the understanding of various dimensions of the subject and attainment of the learning outcomes.

Table 6. Descriptive Statistics for all four dimensions (pre-post-tests) of control and experimental groups

Test	**Dimension**	**Groups**	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Scores on Pre-test	Visualizations	Experimental	10	17.30	2.400	.535
		Control	10	16.20	2.677	.565
	Digital Versions Of Literary Texts	Experimental	10	21.20	3.450	.655
		Control	10	19.47	3.567	.585
	Interactive Hypertexts	Experimental	10	20.41	3.266	.566
		Control	10	18.34	3.508	-677
	Learning Outcomes	Experimental	10	18.41	3.125	.945
		Control	10	17.70	3.455	.756
Scores on post-test	Visualizations	Experimental	10	23.40	2.560	.513
		Control	10	17.30	2.680	.545
	Digital Versions Of Literary Texts	Experimental	10	28.80	3.250	.566
		Control	10	23.57	3.512	.555
	Interactive Hypertexts	Experimental	10	26.91	3.135	.515
		Control	10	21.54	3.444	.543
	Learning Outcomes	Experimental	10	22.61	3.245	.455
		Control	10	19.90	3.490	.568

Table 6 shows mean scores of all four dimensions of both the groups. The mean score in pretest and posttest for Visualization dimension of the experimental group is 17.30 and 23.40 respectively resulting in an increase of 6.10 points in the posttest. Similarly, the mean score of Digital Versions of Literary Texts dimension in both pretest and posttest of the experimental group are 21.20 and 28.80 respectively resulting in an increase of 7.60 points in the posttest. The mean score of Interactive Hypertexts dimension in both pretest and posttest of the experimental group are 20.41 and 26.91 respectively resulting in an increase of 6.50 points in the post test. Finally, the mean score of Learning Outcomes dimension in both pretest and posttest of the experimental group are 18.41 and 22.61 respectively resulting in an increase of 4.20 points in the post test. These figures show that the participants who were exposed to technology enhanced teaching techniques performed far better on posttest as compared to the conservative method of teaching literary texts as evident in the scores of control group.

The results of the (T-Test) are presented in Table 7, which is further evidence of the significant differences between the pretest and posttest of the two study groups (control and experimental).

Table 7. Paired t test results of students' scores in pre-and post-tests

Item	**Mean score**	**Standard deviation**	**t**	**p-value**
Control group				
Pre-test	5.64	1.33	12.45	< 0.001*
Post-test	6.62	1.12		
Experimental group				
Pre-test	5.76	1.43	18.45	< 0.001*
Post-test	12.86	1.22		

*p<0.05. Data are presented as mean (standard deviation).

There was a significant improvement in the mean score and the t-value of the experimental group before and after the workshop ($p < 0.001$), as shown in Table 7.

During the qualitative phase, six teachers in the Department of Intensive English Program, College of Arts and Science, King Khalid university, (female campus), were interviewed using a semi structured instrument. The primary and secondary questions were related to the four dimensions of the study viz., Visualizations, Digital Versions of Literary Texts, Interactive Hypertexts, and Learning Outcomes. All the six informants interviewed held the opinion that they faced problems in teaching literary texts in the traditional mode and transition to online and technology assisted teaching was an effective step towards achievement of students' learning outcomes. All six informants unanimously agreed that teaching a literary text through technology assisted tools assisted in visualization of the action; graphics and animation with the help of software are more expressive and helpful in understanding the meaning of symbolism and imagery in the story. The character description in novels and drama were also easier with the help of picturesque images, YouTube videos and small film clippings. Overall, the informants believed that technology helped decipher the main ideas in a literary text and also made easier the literary appreciation.

Owing to the visual impact that the learning made, the students were also able to analyze the literary text and record their appreciation and judgment with the sequence of events. During the sessions, it was also realized that students volunteered to read literary texts and became more participative in discussions. A huge difference was noticed in their motivation level as well as their critical thinking skills. They got more regulated and autonomous in reading literary texts. In a few cases, however, there was a general lack of interest in understanding literary text mainly because of linguistic complexity and difficult words. This resulted in their failure to read independently or to interpret the deeper meaning of the text. The informants recommended choosing easier and shorter literary texts for online teaching,

4. Discussion

The findings of the study prove that the respondents have favorable attitudes toward the use of technology in the teaching of literature subjects. The impact of technology enhanced teaching is seen so significant that students viewed the technical issues like network failure or incompatible gadgets not important. For them, communicating with one another and sharing material on the online platform in the literature classes was both exciting and useful for their learning.

The findings are consistent with similar research on learners' perception for educational technology like Zaharias and Poylymenakou (2009) discovered that technology acceptance in education is a common factor that should be taken into consideration in integrating technology in the educational setting. On the other hand, Wu, Hiltz, & Bieber (2010) discovered that educational technology system's content and quality increase learners' developmental objectives to use the system. Technology usage information was also observed to have a significant impact on website usability (Bringula & Basa, 2011). The currency of the content of the technology used in education was also revealed to have a substantial effect on the success of using technology as an aid in teaching (Price & Kirkwood, 2014).

Table 4 indicates that the two groups performed almost identically in the pretest, as it was found out that no significant differences exist between the pretest of the experimental and control groups. Because the mean scores of the two groups were lower than the average, both groups performed poorly on the pretest. This was due to the fact that the literature courses were yet to be discussed in both the traditional and technology assisted classrooms. However, after the posttest, Table 5 and Table 6 reveal that the experimental group showed a better performance, which can be attributed to the interventions administered through technology enhanced teaching methods. This suggests that the faculty shroud try to incorporate technology in their teaching style. This also implies that when technology is incorporated in the teaching strategies, the students attained the required competencies as well as achieved the learning outcomes.

These findings are however not in line with the studies like Baepler et al. (2014) which found out that when technology was incorporated in teaching, the experimental group performed better due to a few bright individuals in the group who were prompt in imbibing technology in their learning. Likewise, the attainment of learning outcomes, in other studies like Boateng et al., (2016) is not attributed to the technology but to the knowledge acquisition resulted out of the procedure.

5. Conclusion and Recommendations

This research study showed positive results about the use of technology in teaching literature. It became quite obvious that technology enhanced teaching improved students' comprehension level and critical thinking skills. This is reflected in their performance in the four dimensions of the study viz. creating visualizations of the texts, showing compatibility with the digital versions of literary texts, being comfortable with interactive hypertexts and eventually achieving higher learning outcomes. The digital versions of texts and the hyper texts interactivity allowed the participants to study literary texts comprising poetry, short stories and one act plays electronically on their tablets and smart phones. There was no need for them to possess any physical copy or a textbook.

The online teaching enhanced through technology also made assessment easy and smooth. The participants found assessment questions for each text familiar, such as asking about the main conflict in the story, the traits of the protagonist and the antagonist, or questions about plot and setting, symbolism, and like, as they had collaborated with the text. The study faced a few limitations such as it was confined only to one campus, i.e., female campus of the Department of Intensive English Program, College of Arts and Science, King Khalid university. Hence, future studies should examine the academic compatibility of students on other campuses and other universities with technology. Secondly, this study was confined only to the sample in the second semester of the academic year 2021-22 and it is difficult to generalize its results because the academic level of students in each year varies.

The study recommends making efforts to improve the academic compatibility of the students prior to administering technology enhanced teaching interventions. By creating a friendly and compatible academic atmosphere at a university, it will be much easier to implement such intervention strategies like online teaching with the assistance of technology.

Funding: This research received no specific financial support.

Competing Interests: The authors declare that there are no conflicts of interests regarding the publication of this paper. All authors contributed equally to the preparation of this research paper

Acknowledgement: Acknowledgement to the Deanship of Scientific Research at King Khalid University for funding this work through Small Groups Project under grant number RGP.1/375/43/ Academic Year 1443-1444.

References

Acevedo-Borrega, J., Valverde-Berrocoso, J., & Garrido-Arroyo, M. D. C. (2022). Computational Thinking and Educational Technology: A Scoping Review of the Literature. *Education Sciences, 12*(1), 39. https://doi.org/10.3390/educsci12010039

Ahmadi, D., & Reza, M. (2018). The use of technology in English language learning: A literature review. *International Journal of Research in English Education*, *3*(2), 115-125. https://doi.org/10.29252/ijree.3.2.115

Ali, Z., Ahmad, N., & Sewani, R. (2022). Examining Elementary School Teachers' Professional Proficiencies With Technology Integration And Their Impact On Students' Achievement. *Journal of Positive School Psychology*, *6*(7), 2950-2968.

Baepler, P., Walker, J. D., & Driessen, M. (2014). It's not about seat time: Blending, flipping, and efficiency in active learning classrooms. *Computers & Education*, *78*, 227-236. https://doi.org/10.1016/j.compedu.2014.06.006

Bereczki, E. O., & Kárpáti, A. (2021). Technology-enhanced creativity: A multiple case study of digital technology-integration expert teachers' beliefs and practices. *Thinking Skills and Creativity*, *39*, 100791. https://doi.org/10.1016/j.tsc.2021.100791

Boateng, R., Mbrokoh, A. S., Boateng, L., Senyo, P. K., & Ansong, E. (2016). Determinants of e-learning adoption among students of developing countries. *The International Journal of Information and Learning Technology*. https://doi.org/10.1108/IJILT-02-2016-0008

Boruszko, G. (2013). New Technologies and Teaching Comparative Literature. *CLCWeb: Comparative Literature and Culture*, *15*(6), Article Number 3. https://doi.org/10.7771/1481-4374.2355

Bringula, R. P., & Basa, R. S. (2011). Factors affecting faculty web portal usability. *Journal of educational technology & society*, *14*(4), 253-265.

Cheung, A., & Hennebry-Leung, M. (2020). Exploring an ESL teachers' beliefs and practices of teaching literary texts: A case study in Hong Kong. *Language Teaching Research*, 1362168820933447. https://doi.org/10.1177/1362168820933447

Creswell, J. W. (1999). Mixed-method research: Introduction and application. In *Handbook of educational policy* (pp. 455-472). Academic press. https://doi.org/10.1016/B978-012174698-8/50045-X

Demiröz, H. (2019). Incorporating and Combining Technology and Literature into Language Teaching to Enhance Creativity. *Ana Dili Eğitimi Dergisi*, *7*(1), 65-78. https://doi.org/10.16916/aded.448839

Gilakjani, P. (2017). A review of the literature on the integration of technology into the learning and teaching of English language skills. *International Journal of English Linguistics*, *7*(5), 95-106. https://doi.org/10.5539/ijel.v7n5p95

Grisham, D. L., & Wolsey, T. D. (2006). Recentering the middle school classroom as a vibrant learning community: Students, literacy, and technology intersect. *Journal of Adolescent & Adult Literacy*, *49*(8), 648-660. https://doi.org/10.1598/JAAL.49.8.2

Kajs, S. (1985). The Role of Literature in a World of Technology. *Vital Speeches of the Day, 51*(22), 694-97.

Koskimaa, R. (2000). *Digital Literature-From Text to Hypertext and Beyond.* Retrieved from http://users.jyu.fi/~koskimaa/thesis/thesis.shtml

Larson, R. R., & Sanderson, R. (2005, June). Grid-based digital libraries: Cheshire3 and distributed retrieval. In *Proceedings of the 5th ACM/IEEE-CS joint conference on Digital libraries* (pp. 112-113). https://doi.org/10.1145/1065385.1065409

Liang, Y., Lau, P. W., Huang, W. Y., Maddison, R., & Baranowski, T. (2014). Validity and reliability of questionnaires measuring physical activity self-efficacy, enjoyment, social support among Hong Kong Chinese children. *Preventive medicine reports*, *1*, 48-52. https://doi.org/10.1016/j.pmedr.2014.09.005

Moreillon, J., Hunt, J., & Ewing, S. (2009). Learning and teaching in WANDA wiki wonderland: Literature circles in the digital commons. *Teacher Librarian*, *37*(2), 23-29.

Norton-Meier, L. A. (2004). A technology user's bill of rights: Lessons learned in chat rooms. *Journal of Adolescent & Adult Literacy*, *47*(7), 606-608. https://doi.org/10.1598/JAAL.48.7.6

Price, L., & Kirkwood, A. (2014). Using technology for teaching and learning in higher education: A critical review of the role of evidence in informing practice. *Higher Education Research & Development*, *33*(3), 549-564. https://doi.org/10.1080/07294360.2013.841643

Rai, N., & Thapa, B. (2015). A study on purposive sampling method in research. *Kathmandu: Kathmandu School of Law*, *5*.

Scharber, C. (2009). Online book clubs: Bridges between old and new literacies practices. *Journal of adolescent & adult literacy*, *52*(5), 433-437. https://doi.org/10.1598/JAAL.52.5.7

Shyamlee, S. D., & Phil, M. (2012, March). Use of technology in English language teaching and learning: An analysis. In *International Conference on Language, Medias and Culture* (Vol. 33, No. 1, pp. 150-156).

Staller, K. M. (2021). Big enough? Sampling in qualitative inquiry. *Qualitative Social Work*, *20*(4), 897-904. https://doi.org/10.1177/14733250211024516

Tang, C., Mao, S., Xing, Z., & Naumann, S. (2022). Improving student creativity through digital technology products: A literature review. *Thinking Skills and Creativity*, 101032. https://doi.org/10.1016/j.tsc.2022.101032

Wu, D., Hiltz, S. R., & Bieber, M. (2010). Acceptance of educational technology: Field studies of asynchronous participatory examinations. *Communications of the Association for Information Systems*, *26*(1), 21. https://doi.org/10.17705/1CAIS.02621

Young, A. (1996). Introducing critical thinking at the college level with children's stories. *College Teaching*, *44*(3), 90-93. https://doi.org/10.1080/87567555.1996.9925558

Zaharias, P., & Poylymenakou, A. (2009). Developing a usability evaluation method for e-learning applications: Beyond functional usability. *Intl. Journal of Human–Computer Interaction*, *25*(1), 75-98. https://doi.org/10.1080/10447310802546716

Zhang, W. (2022). The Role of Technology-Based Education and Teacher Professional Development in English as a Foreign Language Classes. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.910315