Journal of English for Specific Purposes Praxis

ISSN: 3092-7854

https://www.jespp.ir

Vol. 2, No. 1; 2025, July

Article Citation:

Mardaneh, F., Mokhtari, A. Moradzadeh Fard, Sh., & Esmaeili, T. (2025). On the influence of using a blended learning strategy on law students' achievement in learning ESP and teachers' attitudes towards it. *Journal of English for Specific Purposes Praxis, 2*(1), 76–94. https://doi.org/10.22034/jespp.2025.514691.1006

Paradise Negar Pub.

JESPP

On the Influence of Using a Blended Learning Strategy on Law Students' Achievement in Learning ESP and Teachers' Attitudes towards it

Farhad Mardaneh [1,*], Abolfazl Mokhtari [2], Shadi Moradzadeh Fard [3], Touraj Esmaeili [4]

[1,*] Corresponding author, Department of English Language and Literature, Faculty of Humanities, University of Zanjan, Zanjan, Iran; mardaneh@znu.ac.ir

[2] Department of English Language, CT.C., Islamic Azad University, Tehran, Iran; abolfazl.mokhtari8929@iau.ir

[3] Department of English Language, CT.C., Islamic Azad University, Tehran, Iran; shadi.moradzadehfard@iau.ac.ir

[4] Department of English Language, Faculty of Foreign Languages, South Tehran Branch, Islamic Azad University, Tehran, Iran; tourajes72@gmail.com

Original Research Article | Date of Submission: 4 November 2025 | Date of Acceptance: 30 January 2025

Abstract

Abstract: This study was an attempt to investigate the influence of using a blended learning strategy on law students' achievement in learning ESP and teachers' attitudes towards it. To do so, 150 law ESP students were asked to respond to the students' achievement questionnaire in learning ESP via a blended learning strategy. It consisted of 30 items, and students' attitude questionnaire towards the blended learning strategy comprising 10 items. In addition, five ESP instructors answered the teachers' attitude questionnaire towards using the blended learning strategy in teaching ESP and their class achievement was measured through having some observations based on 'Brown's Class Observation Strategy' during the whole semester. One-sample t-test (t = 14.61, p = 0.000) indicated that using a blended learning strategy improves law students' achievement in learning ESP. Also, a One-sample t-test (t = 13.64, p = 0.000) showed that the students have a positive attitude towards utilizing a blended learning strategy in learning ESP. Similarly, t-test (t = 9.43, p = 0.001) revealed that using blended learning strategy enhances law teachers' attitude in teaching ESP. Findings can be helpful for ESP students, teachers, educators, material developers, and course designers.

Keywords: achievement in learning ESP, attitudes, blended learning strategy, law students

1. Introduction

The recent years have seen an increasing development of technology-enhanced approaches within ESP for law students, mostly through the deployment of blended learning models that effectively merge the face-to-face classroom with digital technologies through AI-driven platforms and virtual simulations. For example, innovations within AI have personalized the learning of legal English, allowing students to handle terminologies and situations that are complex and close enough to reality (Xatamova & Ashurov, 2024). Similarly, in Colombian legal educational contexts, technology-enhanced methods like interactive online modules and videoconferencing have demonstrated

impressive improvements in language proficiency and the acquisition of legal communicative skills, based on increased student autonomy and engagement (Bendeck Soto, 2024). These elements have thus helped alleviate traditional problems often associated with ESP, such as low vocabulary gain, by utilizing multimedia to create an engaging learning environment that is as close as possible to real professional situations.

Recent studies have also underlined very positive changes in attitudes toward blended learning by both law students and educators and point to its role in training globally competent professionals. A 2024 investigation into mediation activities within the ESP classroom showed that the integration of attorney-client interactions through the use of role play enhances not only linguistic mediation skills but also fosters critical self-reflection, which contributes to a more profound understanding of legal discourse. Also worth mentioning is the Mitchell Hamline School of Law, which pioneered blended legal education for more than a decade and released a report in 2024 demonstrating that such models enhance access and flexibility; its latest 2025 initiatives were focused on AI use in the practice and study of law. These findings emphasize the evolving acceptance of blended strategies as mitigating limitations set by traditional approaches while fostering motivation and retaining skills in legal ESP.

Technological advances since the 1990s have led to an increase in the "integration of Web-based and Web-enhanced resources into instructional practices" Rodriguez et al., (2005) represented by how they can provide a better and interactive educational environment. This revolution has changed the format of teaching materials due to an increasing demand for learning a new language in better conditions than the old ones. The advancement of information technology and telecommunications gives online courses some features of Face-to-Face instruction through the use of the internet, audio, and video in the learning environment.

As far as the traditional method "Using books" has a limited effect on students and cannot be enhanced for future use, many types of technologies, such as Films, DvDs, and Computers have been considered as replacements for traditional classroom tools. Therefore, the blended learning course is one of the important applications of using information and communication technology in the educational process. A blended learning course is a way which combines face-to-face and online learning.

Blended Learning is the combination of Face-to-Face instruction and distance education delivery systems. It is the use of an electronic learning tool, such as Virtual Learning Environments (VLEs), to supplement Face-to-Face learning. It has been described as a pedagogical approach that combines the effectiveness and socialization opportunities of the classroom with the technologically enhanced active learning possibilities of the online environment. Moreover, it is a flexible approach that combines face-to-face learning activities with online learning practices.

As a matter of fact, the importance of blended learning has increased in recent years due to its advantages. The American Society for Education and Development defined blended learning as one of the top ten trends in the knowledge delivery industry (Rooney, 2003; as cited in Graham, 2006). Young (2002) stated that the blended learning model has been executed in higher education, will increase in a way to cover 80-90% of all courses.

There is an acceptance of the notion that using the Internet in general and the virtual learning environment (VLE), particularly in combination with Face-to-Face learning, shows a benefit. But searching through available research reports shows that very few studies and scientific research have

been done to support the idea of using technology in teaching environments in general and among Law students in particular, compared with studies done on other sciences. Moreover, blended learning is not used in universities as an integral part of the planned teaching curriculum, and the students still depend on traditional methods.

The main problem facing teachers in teaching ESP to Law students, similar to that of foreign language teachers in teaching a second language (L2), is that they have limited vocabulary. It would be an advantage if WebCT, with its different types of media and communication tools, could help them to learn the required technical vocabulary.

This study intended to provide insight into the benefits of the Blended Learning Strategy and set out to show that by using the additional support of WebCT, students can acquire comprehension of the new technical terms and grammar easily and effectively.

2. Literature Review

2.1. English for Specific Purposes (ESP)

From the early 1960s, English for Specific Purposes (ESP) has grown to become one of the most prominent areas of EFL teaching today. With the globalization of trade and economy and the continuing increase of international communication in various fields, the demand for English for Specific Purposes is expanding, especially in countries where English is taught as a Foreign Language (Hutchinson & Waters, 1987). The ESP movement is a young and developing branch of EFL. ESP has shown a slow but definite growth over the past few years. Its development is reflected in the increasing number of universities offering BA and MA in ESP (e.g. Hanoi University) and in the number of ESP courses offered to overseas students in English-speaking countries. ESP courses have become popular recently, and many institutions and universities offer ESP courses for senior students. Such an approach fundamentally ignores the learners' personal interests. This often leads to low motivation in their English studies and, in turn, poor performance later when they use English in their future profession.

In response to these problems, it is important that university English faculties need to design or adapt ESP courses in the way that students' needs are paid attention to. This means that ESP course objectives should be congruent with learners' needs and therefore best prepare learners for future professional communication (Hutchinson & Waters, 1987). However, to do this, it requires a complete understanding of what students' needs and ESP course objectives. How can teachers develop a new course whose objectives are congruent with learners' needs? Where should they start? What are the best ways that best find out students' needs? What are the objectives that are best congruent with students' needs? What should be included in an ESP course? These are some of the questions that ESP course designers or ESP instructors should answer, and they help to improve the quality of the ESP courses.

2.2. Empirical Studies on Blended Learning in ESP for Law Students

Empirical research across the period of 2020-2025 has consistently reflected that blended learning has a favorable effect on ESP achievement, with noticeable proficiency gains in vocabulary, reading, and speaking (Cao, 2023). However, results are more pronounced in controlled situations. A quasi-experimental study on ESP for students of hospital administration in Indonesia reported

statistically significant improvements in achievement, pre-test M = 63.95 and post-test M = 75.14, p < 0.05, which they attributed to the flexibility provided by online modules coupled with face-to-face sessions (Mafruudloh et al., 2022). In ESP computer science classes in Algeria, blended approaches produce higher post-test scores than the traditional method of teaching: experimental group (M = 7.40) versus control group (M = 5.46), p=0.000 (Abdelhamid & Labed, 2021). This allows learners to have an enhanced understanding of technical terminology through multimedia and discussions. A meta-analysis conducted across disciplines on language learning confirmed moderate effects on achievement, d = 0.30, 95% CI = 0.21–0.40, p < 0.01, with blended models excelling in fostering skills like critical thinking in ESP contexts (Cao, 2023).

In ESP, and particularly in legal ESP, studies outline customized benefits, such as enhanced proficiency in legal writing and oral skills through simulation-enhanced blended approaches. For example, one 2023 investigation of the impacts of simulation-based activities on law students' performance reported a significant difference, 2-tailed, <0.05, between the treatment and control groups; blended elements, such as virtual simulations, improve motivation and skill development (Nhac, 2023). In another investigation of AI-enhanced, blended learning for legal English, outcomes were improved in terms of vocabulary and communicative ability; chi-square analyses confirmed perceptual differences, p<0.05, among 500 law students (Xatamova & Ashurov, 2024). Lastly, mixed-methods research in Uzbekistan underlined a blended approach that combined online tools and mock trials; the impacts of this approach were measurable through pre- to post-assessment gains in legal proficiency (Toshtemirova & Akhmedova, 2025). However, there are many methodological criticisms: as with much of ESP research, including non-legal ESP, many studies are based on small samples, n <50, and relatively short in length, so may be subject to inflated effects, and few control for variables such as prior proficiency or institutional support (Garant, 2023). The contradictory findings that arise in resource-constrained contexts, where technical issues nullify benefits, support context-sensitive adaptation within legal ESP.

2.3. Attitudes towards Blended Learning in ESP

In general, students and teachers hold positive attitudes toward blended learning in ESP; perceived flexibility and engagement are the major drivers of adoption, while some barriers are technical in nature (Abdelhamid & Labed, 2021). Systematic reviews of ESP studies indicate that over 80% of university students report benefits such as autonomy and collaboration, particularly in hybrid models that allow anytime access to legal resources (Garant, 2023). In legal contexts, law students express high satisfaction (mean ≥ 3.40 on Likert scales) with simulation-blended approaches, viewing them as efficient for developing critical thinking and soft skills (Nhac, 2023). A meta-analysis revealed strong attitude effects (d = 0.59, 95% CI = 0.37–0.80, p < 0.01), with ESP learners appreciating personalized feedback from AI tools in blended settings (Cao, 2023).

Teachers' attitudes align with ESP instructors, noting improved preparedness and interaction, yet highlighting workload increases and training needs (Garant, 2023). In legal ESP, positive dispositions emerge through blended approaches that embed experiential tools, though concerns over ethical AI use and privacy temper the enthusiasm (Xatamova & Ashurov, 2024). Critically, attitude research often relies on quantitative surveying, which misses qualitative nuance; for instance, though there are correlations with achievement (at r≈0.45), negative attitudes in under-resourced contexts result in higher dropout rates (Mafruudloh et al., 2022). Gender and experience also act as moderators

for attitude, with females reporting greater satisfaction in collaborative online components (Abdelhamid & Labed, 2021).

2.4. Research Gaps and Future Directions

Despite progress, gaps in blended learning research for legal ESP include a limited focus on longitudinal effects, cultural diversity, and technology equity (Garant, 2023). Reviews point out that only a small number of ESP studies focus on legal domains, and even in those, the general proficiency components dominate over the specialized ones, such as legal argumentation (Toshtemirova & Akhmedova, 2025). Methodological limitations include a reliance on quasi-experiments without randomization, which is a serious constraint to generalizability, especially in Global South contexts where digital divides are deepening inequalities (Mafruudloh et al., 2022). Innovative AI integrations, while promising, have limited long-term retention or ethics evaluations for personalized legal ESP (Xatamova & Ashurov, 2024).

Future directions should prioritize mixed-methods, longitudinal designs comparing blended models across legal traditions, and interventions addressing gaps in teacher training and material design (Nhac, 2023). Exploring mobile and VR-enhanced blended learning could further enrich legal ESP, fostering globally competent professionals while mitigating biases in AI applications (Xatamova & Ashurov, 2024).

3. Research Questions

This study investigates the influence of using a blended learning strategy on law students' achievement in learning ESP and teachers' attitudes towards it, addressing the following research questions:

1. What is the effect of using a blended learning strategy on law students' achievement in learning ESP?
2. What is the effect of using a blended learning strategy on Law students' attitudes in teaching ESP?
3. What is the effect of using a blended learning strategy on Law teachers' attitudes in teaching ESP?

4. Method

4.1. Design of the study

The study adopted a quantitative design with a descriptive nature and attempted to present the data from the perspective of the participants and observed materials, so that the cultural and intellectual biases of the researcher did not distort the collection, interpretation, or presentation of the data.

4.2. Participants

The researcher chose 150 Law students from the Islamic Azad University- South Tehran Branch through convenience sampling. They were both male and female students with a 20 to 50-year age range. Also, five ESP course instructors participated in this study.

4.3. Instrumentations

4.3.1. Attitude Scale Questionnaire

The Attitude Scale Questionnaire was administered to assess the instructors' and students' opinions and perceptions of blended learning strategies. For students, a 10-item Likert-scale questionnaire (ranging from 1 = Strongly Disagree to 5 = Strongly Agree) was adapted from the Blended Learning Attitude Scale developed by Alnasraween et al. (2023). This original scale consists of 32 items and has demonstrated strong psychometric properties, including high internal consistency reliability (Cronbach's $\alpha = 0.81$ for the total scale) and validity through exploratory factor analysis, which confirmed its unidimensional structure (explaining 36.91% of variance, with a KMO value of 0.89 and significant Bartlett's test, $p < 0.001$). Content validity was established via expert review by educational psychology faculty.

For instructors, a separate 10-item Likert-scale questionnaire was adapted from the Attitude Scale towards Online Teaching and Learning developed by Sangwan et al. (2020). The original 30-item scale exhibits excellent reliability (Cronbach's $\alpha = 0.88$ overall; split-half correlation = 0.82) and construct validity via principal component analysis with varimax rotation, identifying four factors (e.g., Appreciation for online teaching, Proficiency in handling online teaching) that account for 45.17% of the total variance (KMO = 0.897, Bartlett's test $p < 0.001$). Content validity was verified through expert vetting for clarity and relevance. Both adapted versions maintained the core attitudinal dimensions while being shortened for contextual fit in the ESP law student setting.

4.3.2. Observation of ESP Classes

Observations of a few ESP classes were conducted based on Brown's Class Observation Strategy (from H. Douglas Brown, Principles of Language Learning and Teaching, 4th ed., 2000), which provides a structured checklist for evaluating classroom dynamics, including preparation, presentation, execution/methods, teacher-student interaction, and personal characteristics.

4.4. Procedure

Both students' and the instructors' opinions and perceptions of blended learning were quantitatively assessed by distributing the questionnaire to 150 Law students, both male and female, with 20 to 50 years of age range, and also to 5 ESP courses instructors during their classes. The data from the questionnaire were collected and tested for integrity and clarity. And the results were analyzed for the final findings and conclusion.

The class's achievement was measured through having some observations based on 'Brown's Class Observation Strategy' during the whole semester, and the results were collected for further studies.

4.5. Data Analysis

Both descriptive and inferential statistics were used to analyze the data. Regarding descriptive statistics, frequency, percentage, and mean were used to describe the data. In terms of inferential statistics, a one-sample t-test, as a parametric test, was adopted to determine if the sample mean is statistically different from the midpoint ("Undecided") choice of the questionnaire scale.

5. Results

5.1. Assumptions

Four assumptions (i.e., interval data, independence of subjects, normality and homogeneity of variances) were met we were justified to use a parametric One-sample t-test in this study (Field, 2009). The first assumption was met as we applied an interval scale. In fact, we gave "0" points to the choice of "Strongly disagree" and "4" points to the "Strongly agree" choice of the questionnaires. The assumption of independence of subjects was not violated as well when "the performance of any given individual was independent of the performance of other individuals" (Bachman, 2005, p. 236). Further, we tested the assumption of normality using a one-sample Kolmogorov-Smirnov test (Table 1). Table 1 shows that the three sets of students' achievement scores (p = 0.07, p > 0.05), students' attitude scores (p = 0.58, p > 0.05), and teachers' attitude scores (p = 0.95, p > 0.05) enjoy the normality assumption. Hence, we were legitimized to perform a One-sample t-test, which is a parametric statistical test, instead of using the Wilcoxon Signed Rank Test as a non-parametric statistical test.

Table 1

One-Sample Kolmogorov-Smirnov Test of Normality for Writing Scores (Pre-test)

Group	N	Kolmogorov-Smirnov Z	Sig. (2-tailed)
Students' Achievement	15	0.586	0.072
Students' Attitude	15	0.776	0.584
Teachers' Attitude	15	0.616	0.842

5.2. Observation Results

The researcher of the current study observed the classes of five law teachers who are currently teaching English to students of law at Islamic Azad University, South Tehran Branch, to find the main problem and attempt to solve it. The results of this observation task are manifested in Table 2 below.

Table 2

Observation of Teachers in Law Classrooms

Average = 2	Unsatisfactory		Average		Excellent		M
	f	%	f	%	f	%	
PREPARATION	M = 2.67						
1. The teacher was well-prepared and well-organized in class.	0	0%	1	20%	4	80%	3.40
2. The lesson reviewed material and looked ahead to new material.	2	40%	2	40%	1	20%	1.80
3. The prepared goals/objectives were apparent.	0	0%	3	60%	2	40%	2.80
PRESENTATION			M = 2.38				
4. The class material was explained in an understandable way.	0	0%	1	20%	4	80%	3.40
5. The lesson was smooth, sequenced, and logical.	3	60%	2	40%	0	0%	1.40
6. The lesson was well-paced.	1	20%	1	20%	3	60%	2.40
7. Directions were clear and concise and students were able to carry them out.	1	20%	2	40%	2	40%	2.00
8. Material was presented at the students' level of comprehension.	0	0%	4	80%	1	20%	2.20
9. An appropriate percentage of the class was student	3	60%	0	0%	2	40%	1.80

production of the language.							
10. The teacher answered questions carefully and satisfactorily.	1	20%	1	20%	3	60%	3.00
11. The methods were appropriate to the age and ability of students.	3	60%	2	40%	0	0%	1.00
12. The teacher knew when the students were having trouble understanding.	0	0%	0	0%	5	100%	3.60
13. The teacher showed an interest in, and enthusiasm for, the subject taught.	1	20%	0	0%	4	80%	3.00
EXECUTION/METHODS				M = 3.40			
14. There were balance and variety in activities during the lesson.	1	20%	3	60%	1	20%	2.00
15. The teacher was able to adapt to unanticipated situations.	1	20%	0	00%	4	80%	2.60
16. The material was reinforced.	2	40%	3	60%	0	0%	1.20
17. The teacher moved around the class and made eye contact with students.	1	20%	0	0%	4	80%	3.00
18. The teacher knew students' names.	3	60%	2	40%	0	0%	1.40
19. The teacher positively reinforced the students.	0	0%	2	40%	3	60%	2.60
20. Students' responses were effectively elicited (i.e., the order in which the students were called on).	1	20%	2	40%	2	40%	2.00
21. Examples and illustrations were used effectively.	3	60%	1	20%	1	20%	1.20
22. Instructional aids or resource material was used effectively.	4	80%	1	20%	0	0%	.40
23. Drills were used and presented effectively.	2	40%	0	00%	3	60%	2.40
24. Structures were taken out of artificial drill contexts and applied to the real contexts of the students' culture and personal experiences.	0	0%	1	20%	4	80%	3.40
25. Error perception.	0	0%	0	00%	5	100%	3.00
26. Appropriate error correction.	0	0%	1	20%	4	80%	3.40
PERSONAL CHARACTERISTICS				M = 1.60			
27. Patience in eliciting responses.	0	00%	0	00%	5	100%	4.00
28. Clarity, tone, and audibility of voice.	2	40%	1	20%	2	40%	2.20
29. Personal appearance.	0	0%	0	0%	5	100%	4.00
30. Initiative, resourcefulness, and creativity.	0	0%	2	40%	3	60%	2.60
31. Pronunciation, intonation, fluency, and appropriate and acceptable use of language.	3	60%	1	20%	1	20%	1.60
TEACHER/STUDENT INTERACTION				M = 3.80			
32. Teacher encouraged and assured full student participation in class.	1	20%	1	20%	3	60%	2.60
33. The class felt free to ask questions, to disagree, or to express their own ideas.	0	0%	0	0%	5	100%	4.00
34. The teacher was able to control and direct the class.	1	20%	1	20%	3	60%	2.60
35. The students were attentive and involved.	0	0%	5	100%	0	0%	2.00
36. The students were comfortable and relaxed, even during intense intellectual activity.	0	0%	0	0%	5	100%	4.00
37. The students were treated fairly, impartially, and with respect.	0	0%	0	0%	5	100%	3.80
38. The students were encouraged to do their best.	1	20%	2	40%	2	40%	2.60
39. The teacher was relaxed and matter-of-fact in voice and manner.	0	0%	0	0%	5	100%	3.80
40. The teacher was aware of individual and group needs.	0	0%	1	20%	4	80%	3.00
41. Digressions were used positively and not overused.	0	0%	0	0%	5	100%	3.80

5.3. Addressing the First Research Question

The first research question explored the helpfulness of using a blended learning strategy on law students' achievement in learning ESP. To do so, the responses of 150 law students to the items of the student questionnaire about the achievement in learning ESP were computed and represented in Table 3 below.

As seen in Table 2 above, the mean score of the all the sub categories of the observation form is more than "2" (Average): Preparation (*M* = 2.67), Presentation (*M* = 2.38), Execution/Methods (M = 3.40), Teacher/Student Interaction (*M* = 3.80), except for Personal Characteristics (*M* = 1.60) which is below "2" (Average) showing that the teachers' personal characteristics are not satisfactory.

Also, Table 2 above indicates that three items were the most satisfactory ones of all: "Item 27": Patience in eliciting responses (Excellent = 100%, (*M* = 4.00), "Item 33": The class felt free to ask questions, to disagree, or to express their own ideas (Excellent = 100%, (*M* = 4.00), and "Item 36": The students were comfortable and relaxed, even during intense intellectual activity (Excellent = 100%, (*M* = 4.00).

However, based on Table 2 above, the results of observation reflects that four items were the least satisfactory ones of all: "Item 22": "Instructional aids or resource material was used effectively" (Not applicable = 80%, *M* = 0.40), "Item 11": "The methods were appropriate to the age and ability of students" (Not applicable = 60%, *M* = 1.00), "Item 21": "Examples and illustrations were used effectively" (Not applicable = 60%, *M* = 1.20), and then "Item 16": "The material was reinforced" (Not applicable = 40%, *M* = 1.20). As you see, the lack of instructional aids and resource material and the weakness of applying them in the ESP classes made the researcher conduct research implementing the blended learning strategy accompanied by technology in ESP classes and investigating its effect on law students' achievement, and students' and teachers' attitudes towards it. To do so, as presented in Section one of this chapter, three research questions were stated and investigated in the following sections.

As seen in Table 3 above, the majority of the law students agreed that using a blended learning strategy can affect their achievement in learning ESP. Based on the results, the most important item (Agree: 84.0%, *M* = 3.39) about the achievement of the students was "Item 15": "Now, using educational aids, I speak English fluently." The second most important item (Agree: 81.3%, *M* = 3.17) was "Item 18": "Learning English with the help of technology has helped me connect with people from English-speaking countries and other countries in my legal practice." What's more, Table 3 above reflects that the item that attracted the third largest agreement (Agree: 78.7%, *M* = 3.11) of the students was "Item 13": "Studying English online helped me a lot in communicating with people in English-speaking countries and understanding their culture."

Moreover, according to Table 3 above, One-sample t-test was significant for all items ($p < 0.05$) of the students' achievement questionnaire except for "Item 27" ($p = 0.95$, $p > 0.05$) and Item 30 ($p = 0.74$, $p > 0.05$). In other words, most of the students reflected that applying blended learning strategy help them achieve their academic goals in learning ESP.

Table 3

Frequencies and Percentages of Law Students' Responses to the Students' Achievement Questionnaire in Learning ESP via Blended Learning Strategy

Item	Disagree		Undecided		Agree		M	t	Sig.
	f	٪	f	%	f	%			
11. When using the computer, it was easy for me to understand some English words.	19	12.6	37	24.7	94	62.7	2.71	7.53	0.000
12. I felt insecure in the distance learning English class.	80	53.3	30	20	40	26.7	1.61	-3.72	0.000
13. Studying English online helped me a lot in communicating with people in English-speaking countries and understanding their culture.	13	8.6	19	12.7	118	78.7	3.11	12.44	0.000
14. My self-confidence decreased in blended learning English classes.	71	47.3	29	19.3	50	33.4	1.77	-2.08	0.040
15. Now, using educational aids, I speak English fluently.	10	6.7	14	9.3	126	84	3.39	18.28	0.000
16. Familiarity with blended learning methods of teaching English has enabled me to fully understand the problems of the world around me.	28	18.6	50	33.3	72	48	2.43	4.38	0.000
17. Blended learning has made writing in English easier for me.	17	11.4	20	13.3	113	75.3	2.99	11.52	0.000
18. Learning English with the help of technology has helped me connect with people from English-speaking countries and other countries in my legal practice.	9	6	19	12.7	122	81.3	3.17	15.25	0.000
19. Blended learning class time has not had a significant impact on my education.	36	24	45	30	69	46	2.34	3.22	0.002
20. My self-confidence has increased in distance learning classes.	42	28	37	24.7	71	47.4	2.33	3.03	0.003
21. Using technology has led to my anxiety.	78	52	30	20	42	28	1.62	-3.46	0.001
22. Reading English books online has been a waste of my time.	101	67.4	26	17.3	23	15.3	1.21	-7.71	0.000
23. I have participated in technology training courses and have been successful in reading English journals and materials related to my field of study.	22	14.7	23	15.3	105	70	2.85	8.47	0.000
24. It was easy for me to learn English grammar using the Internet.	39	26	40	26.7	71	47.3	2.35	3.18	0.002
25. I used English blended learning practically to complete my university education.	45	30	36	24	69	46	2.28	2.58	0.011

26. The use of technology in learning English in all disciplines has increased students' scientific knowledge.	32	21.3	29	19.3	89	59.3	2.61	5.90	0.000
27. During the course, I made every effort to improve my English level, along with using technology.	63	42	26	17.3	61	40.7	1.99	-.06	0.953
28. All students made an effort to learn English in a blended learning method.	21	14	13	8.7	116	77.3	2.99	10.33	0.000
29. Learning English through distance learning has improved my judgment.	30	20	32	21.3	88	58.7	2.6	5.81	0.000
30. I feel like I haven't been successful in using technology to learn English.	68	45.3	18	12	64	42.7	2.04	.33	0.740

Further, a One-sample t-test was conducted on the total achievement scores gained on the total 20 items of the students' achievement questionnaire. The related descriptive statistics were computed (Table 4) before explaining the result of the t-test. As observable from Table 4, the mean score for the students' attitude towards utilizing blended learning strategy in learning ESP (M = 2.79, SD = 0.59) is above the midpoint "2" ("Undecided" choice of the questionnaire). That is to say, generally, most of the students showed their positive attitude towards the blended learning strategy to be used in learning ESP.

Table 4

Descriptive Statistics for the Law Students' Achievement in Learning ESP via Blended Strategy

N	Mean	SD	Std. Error Mean
150	2.798	.595	.048

The results of the One-sample t-test that was used to examine whether using a blended learning strategy can develop their achievement in learning ESP or not are manifested in Table 5. The results of the One-sample t-test, as shown in Table 5, indicated that the One-sample t-test was significant (t = 14.61, p = 0.000, p < 0.05) for the law students' achievement in employing a blended learning strategy in learning ESP. Also, the t-observed exceeded the t-critical of 1.96. Subsequently, we can declare that using a blended learning strategy improves law students' achievement in learning ESP.

Table 5

One-sample t-test for the law Students' Achievement in Learning ESP via Blended Strategy (Test Value = 2)

t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
16.419	149	0.000	0.798	.702	16.419

5.4. Addressing the Second Research Question

The purpose of the second research question of this study was to investigate the helpfulness of using a blended learning strategy on law students' attitudes in learning ESP. To answer this research question, the 150 law students' responses to the items of the attitude questionnaire were computed and represented in Table 6 below.

Table 6 shows that the majority of the law students agreed that they like to use blended learning strategy in teaching ESP. The item that received the most agreement (Agree: 82.7%, M = 3.33) of the students was "Item 9": "I will encourage my children to use computers to learn English in the future."

The second most important item (Agree: 80.0%, *M* = 3.14) was "Item 4": "Distance learning English is a good way to better understand international law issues." Furthermore, as can be seen in Table 6, the item that attracted the third largest agreement (Agree: 82.7%, *M* = 3.46) of the students was "Item 8": "I hope that the use of educational tools will be eliminated from the study system."

In addition, Table 6 above indicates that One-sample t-test was significant for all items (p = 0.000, $p < 0.05$) of the students' attitude questionnaire except item 7 (p = 0.66, $p > 0.05$). That means most of the students expressed their positive attitude towards utilizing blended learning strategy in learning ESP.

Table 6

Frequencies and Percentages of Law Students' Responses to the Items of the Students' Attitude Questionnaire towards Blended Learning Strategy (Means out of 5)

Item	Disagree		Undecided		Agree		M	t	Sig.
	f	٪	f	%	f	%			
1. Using technology in learning English is one of my favorite topics.	15	10	32	21.3	103	68.7	2.85	9.72	0.000
2. I am satisfied that the use of educational tools is mandatory for all law students.	30	20	21	14	99	66	2.53	5.72	0.000
3. Blended learning has allowed me to search the Internet easily.	18	12	25	16.7	107	71.3	2.93	10.10	0.000
4. Distance learning English is a good way to better understand international law issues.	10	6.7	20	13.3	120	80	3.14	13.73	0.000
5. I learn English through the computer because it helps me get a degree in law and judging.	26	17.4	33	22	91	60.7	2.67	6.29	0.000
6. Learning English in an integrated way is important to me because I will be able to freely participate in most jurisprudential and legal conferences.	25	16.7	54	36	71	47.3	2.53	5.43	0.000
7. I have low confidence in using technology to learn English.	53	35.4	50	33.3	47	31.3	1.95	-.43	0.669
8. I hope that the use of educational tools will be eliminated from the study system.	84	56	27	18	39	26	1.54	-4.00	0.000
9. I will encourage my children to use computers to learn English in the future.	8	5.3	18	12	124	82.7	3.33	16.36	0.000

10. Using technology in learning English plays an important role in the development of my personality.	34	22.7	16	10.7	100	66.7	2.64	6.25	0.000

Besides, we performed a One-sample t-test on the total attitude scores obtained on the total 10 items of the questionnaire. Before discussing the result of this analysis, the related descriptive statistics were calculated (Table 7)

Table 7

Descriptive Statistics for the Law Students' Attitude towards Blended Learning Strategy

N	Mean	SD	Std. Error Mean
150	2.711	0.638	0.052

Table 7 shows that the mean score for the students' attitude towards using blended learning strategy (M = 2.71, SD = 0.63) is greater than the midpoint "2" ("Undecided" choice of the questionnaire). That means, in general, the most of the learners agreed with the application of blended learning strategy to enhance their attitude in learning ESP.

Table 8 displays the results of a One-sample t-test that was used to test whether using a blended learning strategy affects law students' attitude in learning ESP or not. The results of the One-sample t-test, as shown in Table 8, indicated that the One-sample t-test was significant (t = 13.64, p = 0.000, $p < 0.05$) for the law students' attitude towards using a blended learning strategy in learning ESP. In addition, the t-value (13.64) was greater than the t-critical (1.96). Consequently, it can be asserted that law students possess a positive attitude toward applying a blended learning strategy in learning ESP.

Table 8

One-sample t-test for the Law Students' Attitude in Learning ESP

t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
13.648	149	0.000	0.711	0.608	0.814

5.5. Addressing the Third Research Question

The third research question of the present study aimed at investigating the effect of using a blended learning strategy on law teachers' attitudes in learning ESP. To explore this research question, we calculated the responses of five teachers to the teacher attitude questionnaire (Table 9). Table 9 manifests that all five law teachers accepted the idea that they prefer to apply a blended learning strategy in teaching ESP. In fact, the most important item (Agree: 100.0%, M = 3.80) about the attitude of the teachers towards apply blended learning strategy in teaching ESP was "Item "10": "Using technology makes me more prepared for instruction", and the least most important item (Agree: 60.0%, M = 3.00) was "Item 1": "Using technology gives me more time interact with my students".

Besides, Table 9 above indicates that the One-sample t-test was significant for all items ($p < 0.05$) of the teachers' attitude questionnaire, except for Item 1" Using technology gives me more time

to interact with my students" (M = 3.0, p = 0.08, p > 0.05). In fact, almost all the teachers reflected their positive attitude towards using the blended learning strategy in learning ESP.

Table 9

Frequencies and Percentages of Law Teachers' Responses to 10 Items of Teachers' Attitude Questionnaire towards Using Blended Learning Strategy in Teaching ESP

Item	Disagree		Undecided		Agree		M	t	Sig.
	f	%	f	%	f	%			
1. Using technology gives me more time interact with my students.	0	0%	2	40%	3	60%	3.00	2.236	0.089
2. Using technology increases the students' abilities in the classroom.	0	0%	0	0%	5	100%	3.60	6.532	0.003
3. Using technology helps me to manage instructional time effectively.	0	0%	1	20%	4	80%	3.20	3.207	0.033
4. The way I give instruction has been changed since I began to use technology.	0	0%	1	20%	4	80%	3.00	3.162	0.034
5. Using technology facilitates the classroom management for me.	0	0%	0	0%	5	100%	3.60	6.532	0.003
6. Blending helps me to use the computer more effectively than before.	0	0%	0	0%	5	100%	3.40	5.715	0.005
7. Using technology provides advantages to me to make course content more visual.	0	0%	1	20%	4	80%	3.20	3.207	0.033
8. Using technology facilitates discussion on the content.	0	0%	1	20%	4	80%	3.60	4.000	0.016
9. Using technology has benefit for general language acquisition.	0	0%	0	0%	5	100%	3.40	5.715	0.005
10. Using technology makes me more prepared for instruction.	0	0%	0	0%	5	100%	3.80	9.000	0.001

Furthermore, we run a One-sample t-test on the total attitude scores acquired on the total 10 items of the teachers' attitude questionnaire. We presented related descriptive statistics (Table 10) before discussing the results of the One-sample t-test. A glance at Table 10 reveals that the mean score for the teachers' attitude towards using blended learning strategy in learning ESP (M = 3.38, SD = 0.32) is much greater than the midpoint "2" ("Undecided" choice of the questionnaire). Specifically, almost all of the teachers revealed their positive attitude towards the blended learning strategy to be used in learning ESP.

Table 10

Descriptive Statistics for the Law Teachers' Attitude towards Using the Blended Learning Strategy in Teaching ESP

N	Mean	SD	Std. Error Mean
5	3.380	0.327	0.146

Table 11 displays the results of a One-sample t-test that was performed to investigate whether law teachers have a positive attitude towards utilizing a blended learning strategy in learning ESP or

not. Table 11 indicates that the One-sample t-test was significant (t = 9.43, p = 0.001, $p < 0.05$) for the law teachers' attitude toward employing a blended learning strategy in learning ESP. In addition, the t-observed was more than the t-critical (1.96). As a result, it was discovered that using a blended learning strategy enhances law teachers' attitudes in teaching ESP.

Table 11

One-sample t-test for the Law Teachers' Attitude towards Applying Blended Learning Strategy in Teaching ESP

t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper
9.433	4	0.001	1.380	.973	1.786

6. Discussion

The results of this research into the effectiveness of blended learning strategies in ESP for law students indicate a significantly positive effect on student achievement, as revealed by the one-sample t-test result (t = 14.61, p = 0.000). This corroborates previous empirical research such as Mafruudloh et al. (2022), in which significant ESP gains were found in Indonesian students using blended learning, with post-test means significantly improving from 63.95 to 75.14 ($p < 0.05$). Likewise, Abdelhamid and Labed (2021) reported higher post-test scores in Algerian ESP computer science classes using blended approaches, with M = 7.40 (experimental group) versus 5.46 (control group), p = 0.000, and stressed increased understanding of technical terms through multimedia. In the legal ESP domain, Nhac (2023) observed significant improvements in legal writing and oral skills through simulation-enhanced blended learning ($p < 0.05$), which resonates with our participants' reported fluency in English speaking, aided by educational tools. Furthermore, a recent study by Toshtemirova and Akhmedova (2025) on enhancing legal English proficiency among law students highlighted vocabulary acquisition improvements from 35% to 75% using task-based and blended methods, including virtual simulations, underscoring the role of technology in bridging theoretical and practical legal language skills. However, our study's lack of a control group and reliance on self-reported data may overestimate effects, a common critique in Garant's (2023) systematic review of blended ESP instruction, which noted inflated outcomes in non-randomized, small-sample studies ($n < 50$).

Expanding on student attitudes, the positive disposition towards blended learning (t = 13.64, p = 0.000) in our research, with high agreement on items like encouraging future use of technology for English learning (M = 3.33), mirrors broader trends in ESP education. Cao's (2023) meta-analysis across disciplines reported moderate to strong attitude effects (d = 0.59, 95% CI = 0.37–0.80, $p < 0.01$), particularly in blended settings that incorporate AI tools for personalized feedback, akin to our students' appreciation for online cultural and international law connections. In legal contexts, Xatamova and Ashurov (2024) found perceptual differences in vocabulary and communicative ability among 500 law students using AI-enhanced blended learning (chi-square $p < 0.05$), with high satisfaction linked to flexibility and engagement. A 2025 study on blended learning reform in English viewing, listening, and speaking courses further supports this, showing significant gains in self-assessed skills (M = 7.22–7.40) and competencies like critical thinking (M = 7.3), with strong student engagement across dimensions—behavioral, cognitive, and emotional. Although not exclusively ESP-

focused, its emphasis on integrating skills with real-world applications parallels our findings, where law students valued blended strategies for professional relevance. Critically, potential biases in questionnaire responses, such as social desirability, as noted in Cao (2023), warrant caution, especially given our diverse age range (20-50 years), which may introduce unexamined moderators like prior technology experience or gender, as suggested by Abdelhamid and Labed (2021).

Regarding teachers' attitudes, the enhancement observed (t = 9.43, p = 0.001), particularly in preparedness for instruction (M = 3.80), is consistent with Garant's (2023) review, where ESP instructors reported improved interaction through blended models, albeit with concerns over workload. Our observational data, based on Brown's strategy, revealed deficiencies in personal characteristics (M = 1.60) and instructional aids (e.g., Item 22, M = 0.40), highlighting the need for training, which aligns with Xatamova and Ashurov's (2024) discussions on ethical AI use in legal English. A recent study on technology-enhanced methods for English instruction to Colombian law students highlighted virtual simulation and blended curriculum approaches, purporting that such methods enhance instructor effectiveness when dealing with complex legal terminologies, though it requires a better integration of some elements to avoid workload issues. In the same line, Toshtemirova and Akhmedova (2025) encourage a blend between theoretical training and practical means, noting the increase in oral confidence in law students (from 25% to 65%), which indirectly benefits teachers as such interaction promotes a more interactive classroom environment. However, our small sample size of teachers limits generalizability, echoing Means et al.'s meta-analysis of blended learning outcomes (+0.35 effect size), which highlighted institutional support as one of the key variables that needed consideration.

Despite these positives, this study finds several limitations tempering the conclusions and pointing to broader challenges of blended learning implementation. The use of convenience sampling within one Iranian university alone limits the external validity, particularly for cultural diversities, as Mafruudloh et al. (2022) have critiqued for resource-constrained settings where technical problems potentially outweigh benefits. Moreover, longitudinal data on long-term retention was omitted-a gap identified in both Garant (2023) and Toshtemirova & Akhmedova (2025)-when long-term follow-up studies are suggested for the examination of sustained proficiency. A systematic review by Education Sciences has implicated some of the major barriers in the application of BL learning through north-south divides, such as passive learning, limitation of design, and lack of training, which are considered especially relevant in language contexts like ESP, in which active learning is key. We note that in our case, observational weaknesses in methods such as reinforcement of materials, for example, Item 16, M = 1.20, indicate possible design flaws which could further exacerbate passive learning, should there be uneven access to technology. Although this study met the assumptions underlying parametric t-tests, the reliance on quantitative measures leaves out qualitative nuances, such as ethics in AI integration as suggested in Xatamova and Ashurov (2024), or risks of dropouts in under-resourced areas suggested by Mafruudloh et al. (2022).

These gaps point to several future directions that, methodologically, should be more robust, including but not limited to the use of randomized controlled trials and mixed-methods designs to increase generalizability for legal ESP. Other studies could also take a cue from Nhac 2023 by embracing mobile and VR-enhanced blended learning to further enhance curriculum development and global competence while minimizing biases. Based on Toshtemirova and Akhmedova's results, policy implications would establish compulsory teacher training and equal technology provisions to make

sure that the use of a blended approach indeed prepares law students to practice internationally. This research contributes to the evolving discourse on technology in ESP but calls for context-sensitive adaptations to overcome persistent barriers.

7. Conclusion and Implications

This study set out to empirically investigate the impact of a blended learning strategy on law students' achievement in ESP and the attitudes of both students and instructors towards its implementation. The findings resulted from a multi-faceted methodological approach involving questionnaires and classroom observations. They provided robust evidence supporting the integration of blended learning in legal ESP contexts.

The analysis conclusively shows that the use of a blended learning strategy significantly enhances law students' achievement in learning ESP. Statistical results from the one-sample t-test (t = 14.61, p = 0.000) confirm that the mean achievement score was significantly above the scale midpoint. Student responses further illuminated this finding, highlighting key areas of improvement such as increased fluency in speaking English through educational aids, enhanced ability to connect with international legal professionals, and a greater understanding of global cultures—all critical competencies for modern legal practitioners.

Furthermore, the study reveals overwhelmingly positive attitudes towards this pedagogical approach from both key stakeholders. Law students reported a promising disposition towards blended learning (t = 13.64, p = 0.000), valuing its role in facilitating research, understanding international law issues, and developing their professional persona. Critically, they indicated a strong desire to continue and even advocate for this method in the future. Similarly, ESP instructors exhibited a significantly positive attitude (t = 9.43, p = 0.001), upholding that blended learning aids in classroom management, enriches instructional delivery by making content more visual, and enhances their overall preparedness for teaching.

The findings advocate for the formal adoption of blended learning models in law ESP curricula. Teachers can leverage technology to create more dynamic, visually supported, and interactive learning environments that extend beyond the traditional classroom, ultimately fostering greater student engagement and achievement.

Also, there is a clear need to design ESP materials and syllabi that seamlessly integrate online and face-to-face components. These resources should specifically target the development of legal English skills through technology-mediated tasks, such as online research, virtual collaboration, and digital communication exercises.

In conclusion, this research provides compelling evidence that blended learning is not merely a supplementary tool but a potent strategy for enriching legal ESP education. By positively influencing student achievement and receiving strong endorsement from both students and teachers, it establishes a firm foundation for the continued evolution and integration of technology-enhanced learning in the training of globally competent legal professionals.

Acknowledgment

We all thank the participants for their time, energy, and cooperation.

Authors' Contributions

All authors have conducted the study, collected data, analyzed and interpreted the data, and written up the manuscript.

Funding

The study did not receive any funding.

Competing Interests

The authors declare that there is no conflict of interest.

References

Abdelhamid, S. A., & Labed, Z. (2021). The effect of implementing the blended teaching approach in ESP courses on students' achievement and attitudes. *International Journal of Education and Development Using Information and Communication Technology*, 17(4), 93–104. https://doi.org/10.23962/ijedict.v17i4.5567

Alnasraween, M. S., Alshorman, R. M., & Aljarrah, A. H. (2023). The psychometric properties of the blended learning attitude scale. *Journal of Educational and Social Research, 13*(1), 223–234. https://doi.org/10.36941/jesr-2023-0019

Bachman, L. F. (2005). *Statistical analysis for language assessment (2nd ed.)*. Cambridge University Press.

Bendeck Soto, J. H. (2024). Technology-enhanced approaches for teaching English to law students: Innovations and best practices. *Ciencia Latina Revista Científica Multidisciplinar, 8*(5), 4567–4592. https://doi.org/10.37811/cl_rcm.v8i5.13914

Brown, H. D. (2000). *Principles of language learning and teaching (4th ed.).* Longman.

Cao, W. (2023). A meta-analysis of effects of blended learning on performance, attitude, achievement, and engagement across different countries. *Frontiers in Psychology, 14*, Article 1212056. https://doi.org/10.3389/fpsyg.2023.1212056

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). SAGE.

Garant, M. (2023). Blended learning in English for specific purposes instruction: A systematic review. *Digital Education Review, 44*, 114–124. https://doi.org/10.1344/der.2023.44.114-124

Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 3–21). Pfeiffer.

Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centered approach.* Cambridge University Press.

Mafruudloh, N., Sholikhah, N. M., & Fitriati, R. (2022). Blended learning effectiveness: A quasi-experimental study on students' ESP achievement. *Edulangue, 5*(2), 216–231. https://doi.org/10.20414/edulangue.v5i2.5981

Means, B., Toyama, Y., Murphy, R., & Baki, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. *Teachers College Record, 1*15(3), 1–47. https://doi.org/10.1177/016146811311500307

Mitchell Hamline School of Law. (2024). *Transforming legal education for the future of law.* https://mitchellhamline.edu/alumni/on-demand-cles/

Nhac, T. H. (2023). Enhancing legal English skills for law students through simulation-based activities. *International Journal of Learning, Teaching and Educational Research*, 22(9), 177–196. https://doi.org/10.26803/ijlter.22.9.10

Rodriguez, M. C., Ooms, A., Montanez, M., & Yan, L. (2005). Perceptions of online learning quality given by facilitators and students in K–12 online learning environments. *Journal of Asynchronous Learning Networks, 9*(3), 65–89. https://doi.org/10.24059/olj.v9i3.1656

Rooney, J. E. (2003). Blending learning opportunities to enhance educational programming and meetings. *Association Management, 55*(5), 26–32.

Sangwan, K., Prakash, J., & Duhan, M. (2020). Attitude scale towards online teaching and learning (ASOTL): Development and validation. *Indian Journal of Social Research, 61*(2), 157-168.

Toshtemirova, N. A., & Akhmedova, M. A. (2025). Enhancing legal English proficiency among law students: An ESP approach. *Zhurnal Akademicheskikh Issledovaniy Novogo Uzbekistana, 2*(3), 105–110.

Xatamova, N., & Ashurov, J. (2024). The future of legal English learning: Integrating AI into ESP education. *SPAST Reports, 1*(7). https://doi.org/10.69848/sreports.v1i7.5081

Young, J. R. (2002, March 22). 'Hybrid' teaching seeks to end the divide between traditional and online instruction. *The Chronicle of Higher Education, A33*.