

Blended Learning in English for Specific Purposes (ESP) Instruction: Lecturers' Perspectives

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Abstract

Blended learning in English for Specific Purposes (ESP) instruction encounters some challenges from the methods, learning materials, and lecturers' readiness. Therefore, this study was conducted to determine the perspective of ESP lecturers on the best teaching practices, effective aspects, challenges, and suggestions to implement blended learning in ESP instructions. A survey research design was employed through the administration of questionnaires and the use of a semi-structured interview. The questionnaire involved modifying an online survey to have four questions dealing with demographic data and four open-ended questions related to ESP lecturers' perspectives in implementing blended learning (b-learning). Meanwhile, the direct semi-structured interview focused on information on ESP lecturers' ideas and reflections. The participants were 70 ESP lecturers from 35 Universities in Indonesia. The results showed the additional technological supports to improve b-learning in ESP, its affective aspects, challenges, and suggestions for better implementation were accentuated. This research, therefore, contributes some empirical insights into the utilization of the overarching b-learning model by ESP lecturers in English instruction.

Keywords: ESP, blended learning, perspectives, instruction, lecturer readiness

Introduction

English for Specific Purposes (ESP) lecturers are required to master interdisciplinary knowledge to meet specific learner needs and this is observed in the need to integrate linguistics with content (Luo & Garner, 2017). These lecturers face different kinds of burdens in Indonesia where English is taught as a foreign language. This is evident in their need to master new materials related to English based on specific context-based learners' learning discipline even though their majors are not ESP-related. Most of them graduated from the English Education Department with expectations to become

English teachers at both junior and senior high schools. This means both the learners and teachers are learning together to achieve certain goals which are ensuring general English communication, applying ESP in a different context, and preparing for ESP tests. Therefore, it is necessary to conduct English Instruction in ESP contexts not only to prepare for standardized tests but also to enhance students' English ability in real-world communication (Widodo, 2017).

The influence of globalization and the ASEAN Economic Community (AEC) make ESP in health care professionals and nursing programs an essential part of English as a Foreign Language (EFL) instruction in Indonesia (Gunawan & Aunguroch, 2015; Poedjiastutie, 2017). An example of this is the English for Nursing Purposes (ENP) which is a learning discipline to expedite student nurses' ability to master English communication skills relevant to their discipline and career to establish appropriate nurse-patient relationships and improve nursing care for foreign patients (Lu, 2018). Ali & Watson (2018) found insufficient ability to communicate effectively with patients has impeded the ability of nurses to understand and appropriately assess their queries and complaints. Therefore, ESP instruction is expected to be formulated into active learning of nursing programs with innovative and interactive tasks to ensure active use of the English language.

B-learning is an innovative teaching method in ESP instruction fostering independent English learning skills using interactive tasks integrated through a virtual classroom atmosphere to enhance students' learning engagement and exchange of information (Chen, Liu, Lin, & Wang, 2019). It is currently considered as ESP instruction transformation which helps learners to become active and autonomous in mastering English skills.

The implementation of b-learning in teaching ESP has been found to be enabling non-English major learners to improve their attitude and motivation in mastering English as a foreign language (Chirimbu, 2014; Mulyadi, Hersulastuti, & Purnama, 2019) and also influences students' English proficiency more than online or conventional learning methods (Kurucova, Medová, & Tirpakova, 2018; Lalima & Dangwal, 2017; Martin & Notari, 2014). It has also been reported to have the ability to overcome online learning problems such as harnessing students' participation (Iveson, 2015) and teaching lower-level students with limited English proficiency (Arslanyilmaz, 2012). According to Vijayakumar & Viswanathan (2018), this method significantly outperformed online learning in ensuring students' task achievement.

The implementation of b-learning in ESP classrooms, however, requires that lecturers acclimatize the feasibility of advancing learning technology to facilitate EFL instruction (Metruk, 2018) but their readiness is one of the issues affecting the successful utilization of this method (Hew & Cheung, 2014). Unfortunately, some language lecturers are not confident to integrate b-learning, especially the technologies, in language instruction (Tai, Pan, & Lee, 2015).

Previous studies on b-learning have only focused on learners' readiness (Birbal, Ramdass, & Harripaul, 2018; Li, 2013; M^a Pinto-Llorente, Cruz Sanchez-Gomez, Jose García-Penalvo, & Casillas-Martín, 2016; Monteiro & Morrison, 2014; Naaj, Nachouki, & Ankit, 2012; Ocepek, Bosnić, Nančovska Šerbec, & Rugelj, 2013) with little on teachers' readiness (Noh, Abdullah, Teck, & Hamzah, 2019; Napier, Dekhane, Smith, & College, 2006). Meanwhile, studying the lecturers' readiness based on their perspectives can contribute useful insights to ensure the design of ESP materials and instruction are

more pertinent to the learners' discipline-related needs (Arnó-Macià & Mancho-Barés, 2015). This study was, therefore, aimed to investigate ESP lecturers' perspectives on important factors needed to improve b-learning in ESP as well as their effective aspects, challenges, and suggestions for better implementation.

Literature Review

Blended learning in ESP

The proliferation of technology advancement in learning is popular in higher education due to its integration in students' daily lives as observed with most of them accessing the internet to gain knowledge and participate in educational sources effectively and efficiently (Mulyadi et al., 2019). This has, therefore, led to several educational scholars to research the integration of technology via online in face-to-face learning through the concept of Blended Learning (b-learning) or hybrid online learning (Meydanlioglu & Arikan, 2014). The utilization of technology in English b-learning is considered a practical way of conducting pedagogical assessment and grading of English language mastery and to provide individualized feedback for the students (Chirimbu, 2014; Grgurović, 2014).

B-learning which is characterized by the rapid development of internet and technology in learning (Aeni, Prihatin, & Utanto, 2017) has been considered an ideal learning approach due to its accommodation of the strengths for both face-to-face interaction and technology-based instruction or a fully online course (Garrison & Vaughan, 2008; Lalima & Dangwal, 2017). It is also considered effective based on its ability to augment learning engagement for learners, underpin their collaboration and creativity, and prepare them with the skills required to work and live in a progressively technological world (McGuinness & Fulton, 2019; Meydanlioglu & Arikan, 2014). Moreover, Keogh, Gowthorp, & McLean (2017) argued that b-learning emphasizes learning autonomy in mastering instructional materials at adaptable time and spot.

In the context of ESP, b-learning usually combines face-to-face instructions with technology using both online and offline activities and materials (Whittaker, 2013). Its implementation has been described to be more effective than the classical face-to-face or purely online learning instruction (Arifani, Khaja, Suryanti, & Wardhono, 2019; Kurucova et al., 2018) especially due to its ability to provide authentic learning activities and empower students to take charge of the learning process (Tsai, 2012). B-learning allows students to expedite the process of mastering language skills using different online sources (Meydanlioglu & Arikan, 2014) and has also been argued by Kurucova et al (2018) to have significantly influenced ESP learners' English mastery including their reading, speaking, listening, and vocabulary (Kurucova et al., 2018). Previous research also found its positive contribution in promoting independent and collaborative ESP learners towards mastering language skills (García-Sánchez, 2016). Its use has also been reported to help English language lecturers tailor and incorporate innovative learning activities and media (Wichadee, 2017).

The studies reviewed showed b-learning has positively influenced the quality of language learning but the readiness of teachers within the context has not been comprehensively explored. This, therefore, means there is a need to investigate the ESP

teachers' perception in dealing with readiness based on important factors, effective aspects of b-learning, challenges, and suggestions to prepare quality b-learning instruction. This present study particularly focused on addressing the following research questions:

1. What are the important factors to enhance b-learning in ESP instruction?
2. What are the effective aspects of b-learning in ESP instruction?
3. What are the challenges of b-learning implementation in ESP instruction?
4. What are the suggestions of ESP lecturers towards the successful implementation of b-learning in ESP instruction?

Method

Participants

The study made use of 70 English lecturers comprising of 29 males and 41 females from 35 different higher institutions in Indonesia. In terms of age, 5 were between 21-30 years, 47 between 31-40 years, 16 between 40-50 years, and 2 were 51 years and above. They were all observed to have experience teaching ESP in the nursing program of their respective institutions with the majority represented by 34% recorded to have 3-5 years' experience, 20% are relatively new with 0-2 years, 17% have 6-8 years, 6% for 12-15 years while only 5% had more than 16 years of teaching experience.

Study design and instruments

A mixed-method approach was used and this involved employing an explanatory design through the sequential collection of data using qualitative and quantitative methods to answer research problems (Creswell, 2009). The quantitative data were, however, prioritized while qualitative ones were administered to refine the results obtained using the quantitative method based on a debriefing process with participants. This research was conducted from May to July 2019.

The research was conducted using a survey research design by administering a questionnaire and a semi-structured interview. The questionnaire consisted was in two parts and these include the demographic survey and open-ended questions on ESP lecturers' perspectives on blended learning instruction. The demographic survey questions were designed with four items related to the institution, gender, age, and the years of teaching ESP while the second section had four open-ended questions developed based on Napier et al.'s (2006) study about the ESP lecturers' responses pertaining to additional technical support to improve b-learning in ESP, the affective aspects of BL, challenges of its implementation in ESP classes, and the lecturers' suggestions for better implementation.

More data were collected using a semi-structured interview to elicit information regarding ESP lecturers' ideas and reflections on the implementation of b-learning in English for Nursing. The interview was, however, designed and validated by two experts before it was applied to the participants.

One of these experts is a lecturer with a language education background and 26 years of experience in ESP instruction while the second has a nursing education background and extensive clinical experience at the *Ibnu Sina* State Hospital Kuwait with 12 years' experience teaching ESP.

The interview questions included four questions which were applied on 10 participants consisting of 5 from five universities in Java Island, and 2 from a university in Sumatra Island, 2 from two universities in Sulawesi Island, and 1 from a university in Lombok.

Procedure

The questionnaire draft was piloted using 12 ESP lecturers at Universitas Muhammadiyah Semarang to assess its validity and reliability. The expert validity was conducted to scrutinize its content and face concerning linguistic use, ESP materials, and trends in ESP instruction. The content validity was conducted by two senior ESP lecturers through the assessment of all categories and indicators of blended learning practices after which its reliability was also tested and found to be within the ranges of .84 to .96. This, therefore, means the questionnaire is valid and reliable.

The questionnaires were distributed to all participants and they were ensured that all the data filled are confidential and would be particularly used only for the present research purpose. The questionnaires were designed online using Google Form with 15 to 20 minutes of completion time and the participants were given two weeks to have adequate time to fill the survey thoughtfully.

The semi-structured interview was conducted as a follow-up to the results of the questionnaire to understand the challenges or problems affecting the ways teaching materials and activities are designed and implemented. It was intended to probe the extent and nature of their opinion based on contextual teaching experience in implementing b-learning in ESP instruction. The interview was audio-recorded and subsequently transcribed verbatim for analysis.

Data Analysis

The data gathered from the demographic survey questions were tabulated and analyzed descriptively to determine the participants' age, gender, and teaching experience while open-ended question results were analyzed qualitatively to identify similarities in the participants' responses. Subsequently, the data were tabulated and classified in particular categories to present them in charts and diagrams. Meanwhile, the results of the interview were analyzed qualitatively through descriptive interpretation after which all the qualitative data from both open-ended and structured interviews were analyzed using mixed deductive and inductive analysis (Fereday & MuirCochrane, 2008). The responses were coded deductively to determine the thematic analysis of the blended learning implementation and coded inductively to explore the detail of the emerging themes. Thematic analysis was conducted at least twice while transcript coding was compared through the discussion of the first, second, and third authors of this study to arrive at the final themes to ensure coding reliability (Boyatzis, 1998).

Results and Discussion

Important factors to enhance b-learning in ESP

In the first open-ended question, the participants were requested to provide their pedagogical point of view on several factors related to additional support, technologies, and software, or training with the ability to contribute positively to successful b-learning in ESP instruction and results are presented in Figure 1.

Figure 1

Important factors to enhance b-learning in ESP instruction

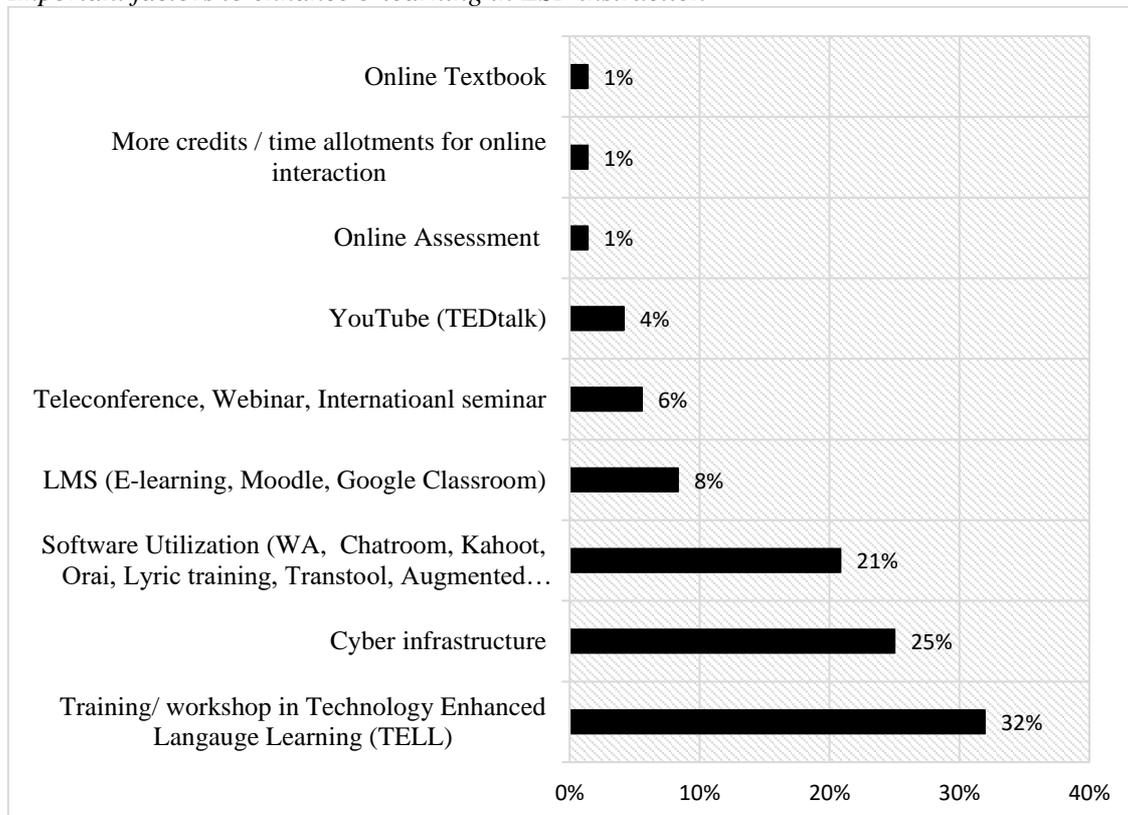


Figure 1 shows most of the ESP lecturers represented by 32% posited training or workshops in Technology Enhanced Language Learning (TELL) to have a significant contribution to the successful implementation of b-learning in ESP classes. This is supported by the findings of a previous study that some workshops were established by lecturers to improve their skills in using technology towards effective b-learning usage (Napier et al., 2006).

One-quarter of the lecturers believed the integration of technical aspects of ICT (Information and Communication Technologies) into ESP instruction is the main issue to be considered, especially due to its close relation to their ability to create online discussion sessions, willingness to promote student engagements, the capability to encourage distance collaborative learning, and design website courses or develop a Learning Management System (Hew & Cheung, 2014).

The lecturers' profound understanding of how to effectively integrate technology into their pedagogical practice is essential to ESP b-learning. This is corroborated by the results of the interview shown in the following excerpts with E referring to the excerpt from the interview and L to the Lecturer.

- (E1) *“Any training related to the use of various technologies, I think, would be beneficial for ESP facilitator. If any, the use of simple technology with effective results.” (L 3)*
- (E2) *“More possible technologies in forms of modified LMS, speech engine, trans-tool, and others will be developed by IT engineers in collaboration with English lecturers utilizing technologies in their teaching practices.” (L 2)*

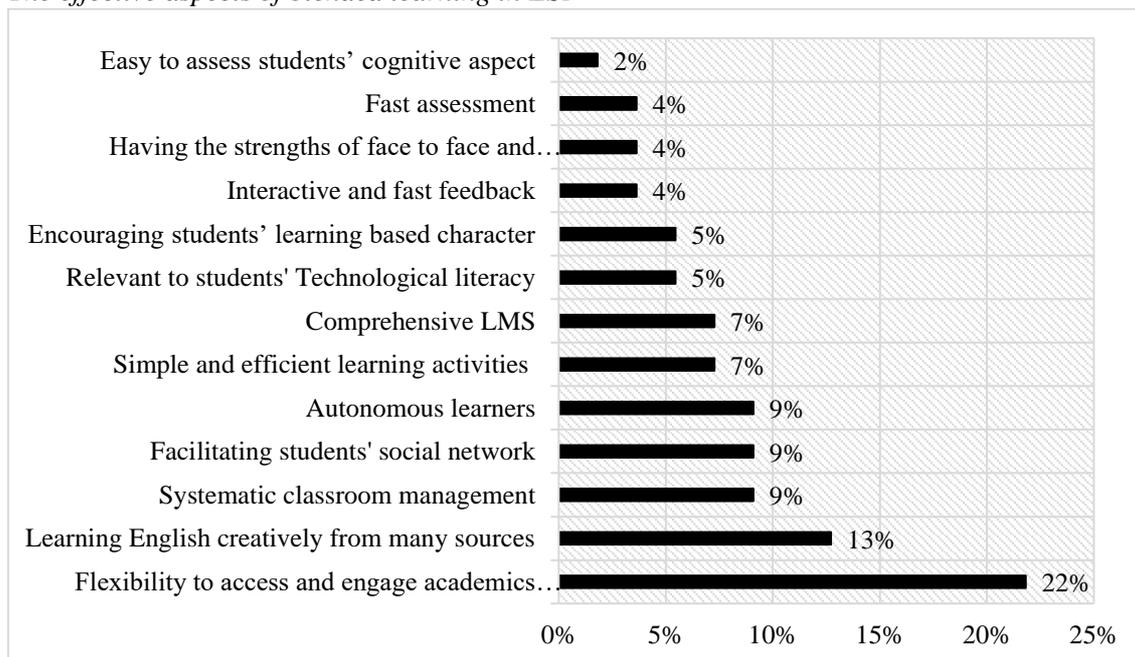
Software and applications including WhatsApp, Chat, Kahoot, Sway, Production Studio, Clarity, Orai, Lyric training, Canvas, Trans-tool, Augmented Reality, and ASR were reported by 15 out of the 70 ESP lecturers to be providing technical support to b-learning. Moreover, Learning Management Systems (LMS) or Course Management Systems (CMS) such as E-learning, Moodle, and Google classroom were found to be a pivotal digital learning platform for successful administration of b-learning in ESP instruction and followed by Teleconference, Webinar, and International seminar in Technology Enhanced Language Learning (TELL). Meanwhile, TED-Talk videos from YouTube, certain online assessments, and time allotments for online instruction were postulated by a lesser percentage of the lecturers.

The effective aspects of b-learning

The second open-ended question was related to the effective aspects of b-learning in teaching ESP and the results are presented in Figure 2.

Figure 2

The effective aspects of blended learning in ESP



The majority of the ESP lecturers represented by 22% perceived the effective aspects of b-learning in teaching ESP to be learners' flexibility to access and engage in academic tasks as observed in the opportunity to engage the materials at their own pace as shown in Figure 2. Moreover, 13% believed applying b-learning aids creative learning activities through easy and fast access to several online sources such as audio, video, and reading materials. These findings were also supported by the following excerpts from the interview:

- (E3) *“Students can access materials and tasks whenever and wherever they are.”*
(L 3)
- (E4) *“Technology can help the students to learn English easier and from many sources.”* (L 4)

These results are in agreement with the findings of previous studies which showed b-learning to be a flexible method of accommodating online learning media into the learning process while the important aspects of face-to-face interaction are also not neglected (Tuomainen, 2016). Moreover, Birbal et al. (2018) asserted that learning flexibility and technology are pivotal features of the learning approach. The flexibility and ubiquity of online learning, which is a part of the blended method, allow the learners and teachers to easily enroll and access the teaching and learning processes through their mobile devices as long as internet connections are available. They also ensure access to multifarious resources during lessons at any time and anywhere (Pérez-Paredes, Ordoñana Guillamón, & Aguado Jiménez (2018).

Social interaction is regularly energized through face-to-face classroom interaction while personalization and observation of students' learning progress are commonly organized through online courses. Furthermore, 6 participants found autonomous learning, familiarity in classroom interaction or social media, and systematic classroom management to be the three effective aspects. Relevant previous studies have also shown the positive influence of b-learning on learners' learning attitudes as observed with independent understanding and practicing of English skills (Zibin & Altakhaineh, 2019) as well as the development of English mastery through interactive activities and interaction with classmates (García-Sánchez, 2016).

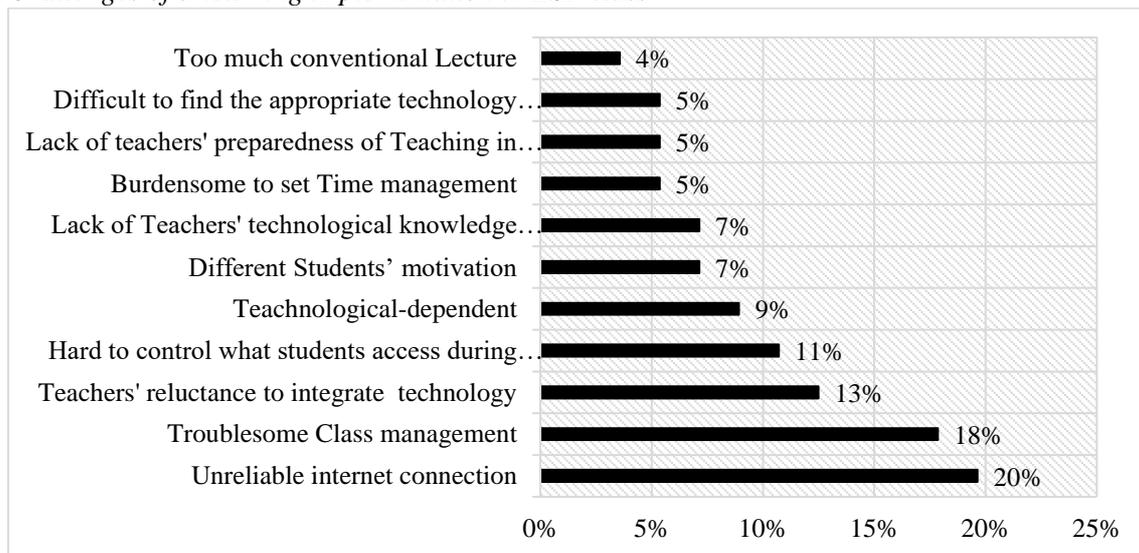
A small percentage of the participants reported the importance of students' cognitive aspects in ensuring easy and fast assessment of the b-learning classroom. ESP learners are also strengthened with the use of face-to-face and online instructions as well as interactive and fast feedback. Therefore, the implementation of this approach is believed to necessitate lecturers' thoughtful considerations on theoretical base, learner background, and potential diversity in creating learning tasks which are relevant to both online and face-to-face classrooms (Garrison & Vaughan, 2008).

Challenges of b-learning implementation in ESP Class

Some of the challenges encountered by lecturers in implementing b-learning in the ESP context are depicted in Figure 3.

Figure 3

Challenges of b-learning implementation in ESP class



The responses of the lecturers concerning challenges were classified into four main categories which are technical problems, class management, student, and lecturer. In line with the technical problems, Figure 3 shows internet connection with 20% and technology-dependence with 9% play significant roles in implementing b-learning in the ESP context. This means most of the students rely on internet access from campus Wi-Fi networks and this was regarded as the main challenge encountered by ESP lecturers as indicated by the response of 29%. This finding is congruent with a study by Asnawi Muslem, Qismullah Yusuf, & Juliana (2018) which reported poor internet connection to be an obstacle for Indonesian lecturers in Banda Aceh. It also corroborates the idea that the readiness of institutions to provide sufficient internet bandwidth for fast internet connection is essential to successfully implement b-learning in ESP instruction (Birbal et al., 2018). This means there is a need to enhance the quality of internet connection before orchestrating b-learning in classes.

The challenges relating to class management were reported by 37% to be solved when applying b-learning in teaching English to student nurses. This includes the difficulty in controlling students' activities in front of computers or gadgets in the classroom as observed by 13 out of the 70 lecturers, managing students' activities outside the classroom as indicated by 9, time management for online classroom activities as reported by 4, and too many traditional face-to-face lectures as stated by 3. These challenges were also supported by the excerpt from the interview that *"unfortunately, we cannot simply control the students' access to smart gadgets. Do they make use of it for academic reasons only or use it to update their social media?"* (T 3). Previous reports have also shown the part played by ESP lecturers in administering and observing students' learning activities, controlling the lesson plan, and empowering students' interaction in the classroom (Tsai, 2012). Furthermore, online materials and tasks need to be well-designed and set up before teaching (Napier et al., 2006) while the information obtained and frequency are expected to be effectively presented to the learners (Malicka, Gilbert Guerrero, & Norris, 2019). This means ESP lecturers, as learning designers, need to select

the appropriate LMS to integrate effective tasks towards motivating the learners to be active and motivated to participate in the b-learning process.

The lack of student motivation was perceived by the lecturers to be another challenge in b-learning. Most of the Indonesian students perceived online activities without face-to-face monitoring to be burdensome activities for them as indicated by 7% of the participants.

- (E5) *“Most people believe online learning causes a lack of togetherness and mutual motivational relation between lecturer and students, therefore, face to face should be introduced to ensure balance.”* (L 2)
- (E6) *“I will say that independent learning is the least effective due to the need to force some Indonesian students to do exercises on digital platforms.”* (L 5)

Lecturers are, therefore, required to provide b-learning tasks and materials in line with the level of learning needed by the learners (Napier et al., 2006). The challenges related to lecturer factors were indicated by 27% of the participants with 9 of them indicating the reluctance to integrate technology in teaching while 5 showed the lack of technological knowledge in teaching. Moreover, a small number of ESP lecturers showed the selection of appropriate technologies to match students' backgrounds while designing online courses portend some difficulties.

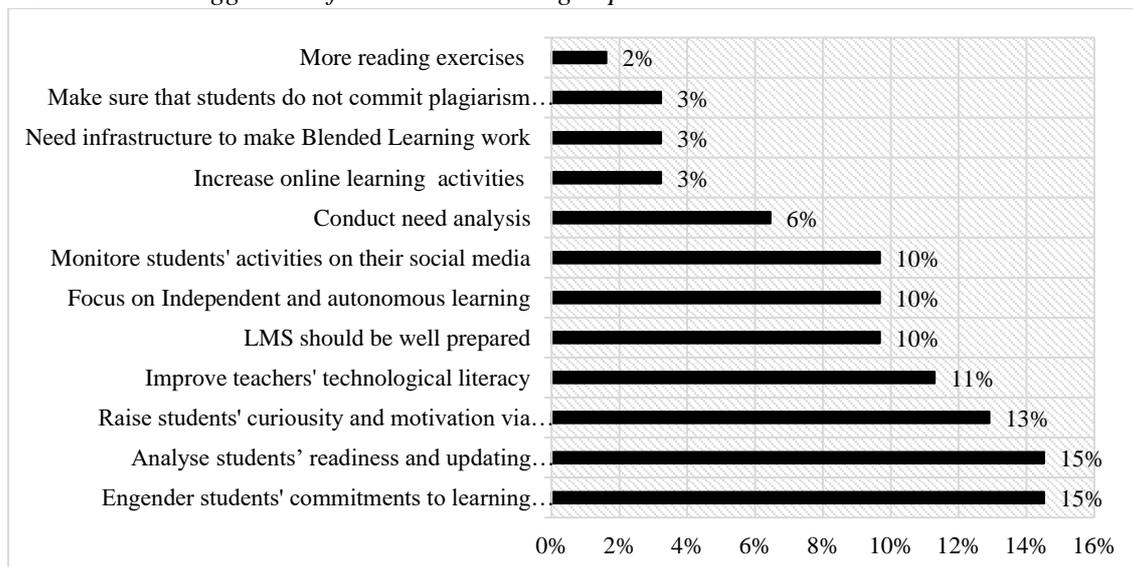
The biggest challenges experienced by the lecturers are those related to class management followed by technical problems and teachers' factors while the student aspect was considered to have the lowest percentage in implementing b-learning instruction.

ESP lecturers' suggestions for better b-learning implementation

The suggestions made by ESP lecturers for the successful application of b-learning in teaching English for Student Nurses are presented in Figure 4.

Figure 4

ESP lecturers' suggestions for better b-learning implementation



The top two suggestions as indicated by Figure 4 include the need to engender students to be committed to independent learning outside the classroom as reported by 11 out of the 70 lecturers and investigating students' readiness to use technology-enhanced learning as indicated by another 11. Both aspects were also found in the interview results.

- (E7) *“They should manage their time well and try to focus more when faced with tasks or assignments. This is important due to the complaint of difficulties in staying focus on a task while having their mobile phones connected to an online connection.”* (L 3)

Another suggestion made as stated by 9 lecturers includes the encouragement of students' curiosity and learning motivation in b-learning. This was further corroborated with the result of the interview that

- (E8) *“Learners should be well motivated and controlled by lecturers while conducting autonomous learning in their respective houses.”* (L 7)

These findings are supported by the results of Mahdum's (2015) study that lecturers play a key role in managing the learning process through the exploration of appropriate methods to transfer their knowledge successfully to the learners. There is also the need to augment the competence and technological literacy of the lecturers in teaching English using the b-learning format as reported by 11% of the participants. This is in line with the findings of Nguyen's & Bower's (2018) that lecturers are expected to have the requisite technical knowledge to design learning materials. In the context of ESP, language lecturers need to enhance their ability to select appropriate learning sources to improve students' linguistic competence (Mulyadi, Wijayatiningsih, Budiastuti, Ifadah, & Aimah, 2020). Moreover, the effectiveness of the lessons integrated into technologies has been reported to be largely dependent on lecturers' ability to utilize them in ways to benefit students' learning achievement (Zainal, 2012).

The LMS or CMS for online learning activities was suggested by Seven ESP lecturers to be well prepared and this means achieving the successful implementation of blended learning in ESP requires the collaboration between lecturers and online learning experts (Papanikolaou, Makri, & Roussos, 2017). Moreover, the creation of online learning activities to encourage autonomous learning in mastering English as well as monitoring of learners' activities on social media were also suggested. This is in agreement with the findings of a previous study where Thai EFL learners generally required extrinsic learning motivation driven by their lecturers (Tananuraksakul, 2016).

Only a few ESP lecturers perceived increasing online learning meetings without face-to-face interactions, technological infrastructure for b-learning as well as controlling students' plagiarism and cheating to be important in a b-learning context. This means there is a need to balance online and conventional classes to minimize the complications of cognitive, meta-cognitive, and social learning such as discussion activities (Tuomainen, 2016).

Conclusion

The present study explored lecturers' perspectives on important factors to enhance b-learning in ESP instruction, understanding the effective aspects of b-learning, the challenges of its implementation, and suggestions to ensure successful application in ESP instruction. This study found some practical and pedagogical implications with training/workshops in TELL, cyberinfrastructure, and software utilization to be the most important factors to improve ESP lecturers' teaching practices. Flexibility to access and engage in academics tasks which allow learners to use the material at their own pace and learning English creatively from several sources were also perceived to be the most effective aspects of b-learning. Moreover, analyzing students' readiness to learn using technology, foster independent learning, raise their curiosity and learning motivation, and improve lecturers' technological literacy were suggested by lecturers to implement the learning approach. Meanwhile, some of the challenges observed include unreliable internet connection, inefficient class management, lecturers' reluctance to use technology, and difficulty to control students' access during the e-learning process.

This research was conducted using information from lecturers from multifarious institutions in Indonesia but it is impossible to generalize the results for all the ESP lecturers due to the relatively small number of the samples used. The limitation observed in this study is related to the domination of the participants interviewed with individuals from universities in Java and the difference in the institutional facilities used for technology integration. Therefore, further studies are expected to focus on participants from different universities from all areas in Indonesia to obtain generalizable data.

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References

- Aeni, N., Prihatin, T., & Utanto, Y. (2017). Pengembangan Model Blended Learning Berbasis Masalah pada Mata Pelajaran Sistem Komputer [Development of Problem Based Blended Learning Models in Computer System Subjects]. *Innovative Journal of Curriculum and Educational Technology*, 6(2), 84–97. <https://doi.org/10.15294/ijcet.v6i2.15642>
- Ali, P. A., & Watson, R. (2018). Language Barriers and Their Impact of Provision of Care to Patients with Limited English Proficiency: Nurses Perspective. *Journal of Clinical Nursing*, 27, 5–6. <https://doi.org/10.1111/jocn.14204>
- Arifani, Y., Khaja, F. N. M., Suryanti, S., & Wardhono, A. (2019). The Influence of Blended In-service Teacher Professional Training on EFL Teacher Creativity and Teaching Effectiveness. *3L: Southeast Asian Journal of English Language Studies*, 25(3). <http://doi.org/10.17576/3L-2019-2503-10>
- Arnó-Macià, E., & Mancho-Barés, G. (2015). The Role of Content and Language in Content and Language Integrated Learning (CLIL) at University: Challenges and

- Implications for ESP. *English for Specific Purposes*, 37(1), 63–73. <https://doi.org/10.1016/j.esp.2014.06.007>
- Arslanyilmaz, A. (2012). An Online Task-Based Language Learning Environment: Is It Better for Advanced-or Intermediate-Level Second Language Learners? *Turkish Online Journal of Educational Technology*, 11(1), 20–35.
- Asnawi Muslem, by, Qismullah Yusuf, Y., & Juliana, R. (2018). Perceptions and Barriers to ICT Use Among English Teachers in Indonesia. *Teaching English with Technology*, 18(1), 3–23.
- Birbal, R., Ramdass, M., & Harripaul, C. (2018). Student Teachers' Attitudes towards Blended Learning. *Journal of Education and Human Development*, 7(2), 9–26. <https://doi.org/10.15640/jehd.v7n2a2>
- Boyatzis, R. E. (1998). Transforming qualitative information: Thematic analysis and code development. London: Sage.
- Chen, Y. W., Liu, G. Z., Lin, V., & Wang, H. Y. (2019). Needs Analysis for an ESP Case Study Developed for the Context-Aware Ubiquitous Learning Environment. *Digital Scholarship in the Humanities*, 34(1), 124–145. <https://doi.org/10.1093/lc/fqy019>
- Chirimbu, S. (2014). Blended Learning : Bridging the Motivational Gap in ESP Courses. *The 10 Th International Scientific Conference e-Learning and Software for Education*, (4). Bucharest: ResearchGate.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). Thousand Oaks, California: SAGE Publications, Inc.
- Fereday, J. & Muir-Cochrane, E. (2008). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80–92.
- García-Sánchez, S. (2016). Ubiquitous Interaction for ESP Distance and Blended Learners. *Journal of Applied Research in Higher Education*, 8(4), 489–503. <https://doi.org/10.1108/JARHE-04-2014-0052>
- Garrison, D. R., & Vaughan, N. D. (2008). *Blended Learning in Higher Education*. San Francisco, CA: JohnWiley & Sons, Inc.
- Grgurović, M. (2014). Innovation in Language Learning and Teaching an Application of the Diffusion of Innovations Theory to the Investigation of Blended Language Learning. *Innovation in Language Learning and Teaching*, 8(2), 155–170. <https://doi.org/10.1080/17501229.2013.789031>
- Gunawan, J., & Aunguroch, Y. (2015). Indonesia Health Care System and the Asean Economic Community. *International Journal of Research in Medical Sciences*, 3(7), 1571–1577. <https://doi.org/10.18203/2320-6012.ijrms20150231>
- Hew, K. F., & Cheung, W. S. (2014). *Using Blended Learning: Evidence-Based Practices*. New York: Springer.
- Iveson, J. (2015). Challenges of Task-Based Language Teaching in Online and Blended Learning Contexts. *CSEDU 2015 - 7th International Conference on Computer Supported Education, Proceedings*, 2, 277–282. <https://doi.org/10.5220/0005474802770282>
- Keogh, J. W. L., Gowthorp, L., & McLean, M. (2017). Perceptions of Sport Science Students on The Potential Applications and Limitations of Blended Learning in Their Education: A Qualitative Study. *Sports Biomechanics*, 16(3), 297–312. <https://doi.org/10.1080/14763141.2017.1305439>
- Kurucova, Z., Medová, J., & Tirpakova, A. (2018). The Effect of Different Online

- Education Modes on the English Language Learning of Media Studies Students. *Cogent Education*, 5(1), 1–13. <https://doi.org/10.1080/2331186X.2018.1523514>
- Lalima, D., & Dangwal, K. L. (2017). Blended Learning: An Innovative Approach. *Universal Journal of Educational Research*, 5(1), 129–136. <https://doi.org/10.13189/ujer.2017.050116>
- Li, K. C. (2013). Encountering Pedagogical Challenges: a Case of Three Pilot Blended Learning Courses. *International Journal of Innovation and Learning*, 13(2), 153. <https://doi.org/10.1504/IJIL.2013.052285>
- Lu, Y. L. (2018). What Do Nurses Say about Their English Language Needs for Patient Care and Their ESP Coursework: The Case of Taiwanese Nurses. *English for Specific Purposes*, 50, 116–129. <https://doi.org/10.1016/j.esp.2017.12.004>
- Luo, J., & Garner, M. (2017). The Challenges and Opportunities for English Teachers in Teaching ESP in China. *Journal of Language Teaching and Research*, 8(1), 81. <https://doi.org/10.17507/jltr.0801.10>
- M^a Pinto-Llorente, A., Cruz Sanchez-Gomez, M., Jose García-Penalvo, F., & Casillas-Martín, S. (2016). Students' Perceptions and Attitudes towards Asynchronous Technological Tools in Blended-Learning Training to Improve Grammatical Competence in English as a Second Language. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2016.05.071>
- Mahdum, M. (2015). Technological Pedagogical and Content Knowledge (TPACK) of English Teachers in Pekanbaru, Riau, Indonesia. *Mediterranean Journal of Social Sciences*, 6(5), 168–176. <https://doi.org/10.5901/mjss.2015.v6n5s1p168>
- Malicka, A., Gilabert Guerrero, R., & Norris, J. M. (2019). From Needs Analysis to Task Design: Insights from an English for Specific Purposes Context. *Language Teaching Research*, 23(1), 78–106. <https://doi.org/10.1177/1362168817714278>
- Martin, S., & Notari, M. (2014). Affordances, Approaches, And Challenges for Blended, Technology-Enhanced Learning: Present and Future Development. *Educational Research and Evaluation*, 20, 513–515. <https://doi.org/10.1080/13803611.2014.997466>
- McGuinness, C., & Fulton, C. (2019). Digital Literacy in Higher Education: a Case Study of Student Engagement with E-Tutorials Using Blended Learning. *Journal of Information Technology Education: Innovations in Practice*, 18, 1–28. <https://doi.org/10.28945/4190>
- Metruk, R. (2018). Extensive Listening Practice of EFL Learners with Authentic English Videos. *Teaching English with Technology*, 18(4), 3–19.
- Meydanlioglu, A., & Arikan, F. (2014). Hybrid Learning in Higher Education. *International Journal of Information and Communication Engine Ering*, 8(5), 1292–1295.
- Monteiro, E., & Morrison, K. (2014). Challenges for Collaborative Blended Learning in Undergraduate Students. *Educational Research and Evaluation*, 20(January 2015), 564–591. <https://doi.org/10.1080/13803611.2014.997126>
- Mulyadi, D., Hersulastuti, & Purnama, Y. (2019). Students' Perceptions of Blended Learning in Mastering English for Specific Purposes. *Journal of Physics: Conference Series*, 1339(1). <https://doi.org/10.1088/1742-6596/1339/1/012116>
- Mulyadi, D., Wijayatiningsih, T. D., Budiastuti, R. E., Ifadah, M., & Aimah, S. (2020). Technological Pedagogical and Content Knowledge of ESP Teachers in Blended Learning Format. *International Journal of Emerging Technologies in Learning*,

- 15(6), 124–139. <https://doi.org/https://doi.org/10.3991/ijet.v15i06.11490>
- Naaj, M. A., Nachouki, M., & Ankit, A. (2012). Evaluating Student Satisfaction with Blended Learning in a Gender-Segregated Environment. *Journal of Information Technology Education: Research*, 11(1), 185–200.
- Napier, N. P., Dekhane, S., Smith, S., & College, G. G. (2006). Transitioning to Blended Learning: Understanding Student and Faculty Perceptions. *Journal of Asynchronous Learning Networks*, 15(1), 20–32.
- Nguyen, G. N. H., & Bower, M. (2018). Novice Teacher Technology-Enhanced Learning Design Practices: The Case of the Silent Pedagogy. *British Journal of Educational Technology*, 49(6), 1027–1043. <https://doi.org/10.1111/bjet.12681>
- Noh, N. M., Abdullah, N., Teck, W. K., & Hamzah, M. (2019). Cultivating Blended Learning in Teaching and Learning: Teachers' Intrinsic and Extrinsic Readiness in Malaysia. *International Journal of Academic Research in Progressive Education and Development*, 8(2), 257–265. <https://doi.org/10.6007/IJARPED/v8-i2/5778>
- Ocepek, U., Bosnić, Z., Nančovska Šerbec, I., & Rugelj, J. (2013). Exploring the Relation between Learning Style Models and Preferred Multimedia Types. *Computers and Education*, 69, 343–355. <https://doi.org/10.1016/j.compedu.2013.07.029>
- Papanikolaou, K., Makri, K., & Roussos, P. (2017). Learning Design as a Vehicle for Developing TPACK in Blended Teacher Training on Technology Enhanced Learning. *International Journal of Educational Technology in Higher Education*, 14(1). <https://doi.org/10.1186/s41239-017-0072-z>
- Pérez-Paredes, P., Ordoñana Guillamón, C., & Aguado Jiménez, P. (2018). Language Teachers Perceptions on the Use of OER Language Processing Technologies in MALL. *Computer Assisted Language Learning*, 31(5–6), 522–545. <https://doi.org/10.1080/09588221.2017.1418754>
- Poedjiastutie, D. (2017). The Pedagogical Challenges of English for Specific Purposes (ESP) Teaching at the University of Muhammadiyah Malang, Indonesia. *Educational Research and Reviews*, 12(6), 338–349.
- Tai, H. C., Pan, M. Y., & Lee, B. O. (2015). Applying Technological Pedagogical and Content Knowledge (TPACK) Model to Develop an Online English Writing Course for Nursing Students. *Nurse Education Today*, 35(6), 782–788. <https://doi.org/10.1016/j.nedt.2015.02.016>
- Tananuraksakul, N. (2016). Blended E-Learning as a Requirement for Teaching EFL in a Thai Academic Context. *Teaching English with Technology*, 16(4), 48–55. [https://doi.org/10.1016/S0021-9797\(02\)00170-4](https://doi.org/10.1016/S0021-9797(02)00170-4)
- Tsai, S. (2012). Integration of Multimedia Courseware into ESP Instruction for Technological Purposes in Higher Technical Education. *Educational Technology & Society*, 15(2), 50–61.
- Tuomainen, S. (2016). A Blended Learning Approach to Academic Writing and Presentation Skills. *LLCE*, 3(2), 2453–7101. <https://doi.org/10.1515/llce-2016-0009>
- Vijayakumar, S., & Viswanathan, R. (2018). Performance Analysis in Blended and Online Classrooms: an Experimental Study. *CALL-EJ*, 19(2), 100–124.
- Whittaker, C. (2013). Introduction to Blended Learning. In *Blended Learning in English Language Teaching: Course Design and Implementation*. London: British Council.
- Wichadee, S. (2017). A Development of the Blended Learning Model Using Edmodo for Maximizing Students' Oral Proficiency and Motivation. *International Journal of Emerging Technologies in Learning*, 12(2), 137–154. <https://doi.org/10.3991/>

ijet.v12i02.6324

- Widodo, H. P. (2017). Constructing and Negotiating Agency and Identity of English Language Learners: Lecturer-Learner Driven ESP Materials Development in the Indonesian Secondary School Context. *Electronic Journal of Foreign Language Teaching*, 14(2), 233–249.
- Zainal, A. (2012). ESL Teachers' Use of ICT in Teaching English Literature: an Analysis of Teachers' TPCK. *Procedia - Social and Behavioral Sciences*, 34, 234–237. <https://doi.org/10.1016/j.sbspro.2012.02.047>
- Zibin, A., & Altakhaineh, A. R. M. (2019). The Effect of Blended Learning on the Development of Clause Combining as an Aspect of the Acquisition of Written Discourse by Jordanian Learners of English as a Foreign Language. *Journal of Computer Assisted Learning*, 35(2), 256–267. <https://doi.org/10.1111/jcal.12327>