An Integrative Review On Blended ESP Teaching In Higher Education

Yang Yi and Roselan Bin Baki

***Abstract* – Blended Learning (BL) has become the new norm in Higher Education teaching and learning around the world. In the areas of English for Specific Purpose (ESP), teachers are under double pressure due to the addition of technology and additional subject content. It has been widely acknowledged that teaching staff plays a key role in any learning approach and teachers are one of the three important stakeholders of BL implementation in the field of ESP teaching. However, teacher readiness has received limited attention in both BL and ESP areas around the globe and, teachers in China's Higher Vocational Education (HVE) received even less attention. To provide some insights to the research and practice of BESP teacher readiness programs, this study applied an integrative approach to review related literature on BL and ESP from various databases, from 1980 to 2021. Conceptually, this review highlighted the major issues of ESP teaching; the special advantages of BL in supporting ESP teaching, the focus and weakness of present BL and Blended Language Learning (BLL) teacher readiness research, and the need for a holistic assessing instrument for BESP teacher readiness. In the end, a framework for BESP teacher readiness assessment which includes four major dimensions: technology, competency, knowledge and affective factors is proposed. This framework and related findings may contribute some insights to the BESP teacher development research and practice.**

***Keywords* – BL, ESP, BESP and teacher readiness assessment**

I. INTRODUCTION

There existed considerable disciplinary differences when implementing BL in teaching and learning (Akaslan & Law, 2011; Baya'a & Daher, 2012; Selwyn 2014; Skhephe et al, 2020). BL has been applied in many disciplines in higher education, for instance, engineering, mathematics, tourism, health education, EFL, etc. (Lin et al, 2017; Bailey & Morais, 2005; de Jong et al, 2014; Miyazoe & Anderson, 2010; Tarnopolsky, 2012; Zhu & Liu, 2014).

Though there were many research on blended learning implementation in second language teaching and learning over the past decades with a focus on teaching English as a Foreign Language (EFL) (Erdem & Kibar, 2014; Liu et al, 2014; Miyazoe & Anderson, 2010; Shahrokni & Talaeizadeh, 2013; Siew-Eng & Muuk, 2015; Tuncay & Uzunboylu, 2012; Yang, Chuang, & Tseng, 2013). Research on BL implementation in ESP teaching and learning is still demanded as it is wrong to generalize conclusions of technology use in English as a Foreign Language (EFL) contexts to the area of ESP teaching (Dudley-Evans, & St. John, 1998; Dashtestani & Stojkovic, 2016; Salmani-Nodoushan, 2020).

One special aspect about ESP in BL lies in the fact that, in the process of applying BL in English for Specific Purpose (BESP), teachers have to face double challenges including difficulties from implementing BL and obstacles from integrating linguistic and subject content (Chostelidou, et al, 2009; Mulyadi et al, 2020; Luo & Garner, 2017). With increasing but limited attention paid to BESP teachers, a review on BL and ESP to have a glimpse of the major affecting factors of BESP teacher readiness is is in need to provide insights for BESP teacher preparing programs in China's Higher Vocational Education (HVE) (Constantinou et al, 2019; Chostelidou et al, 2009; Lin, 2007; Chiu, 2004).

Yang Yi, Graduate School, City University, Malaysia (Email address: 360002558@qq.com).

Roselan Bin Baki, Faculty of Education and Liberal Studies, City University, Malaysia (Email address: dr.roselan@gmail.com).

II. RESEARCH QUESTION

To provide some insights to research and practice of BESP teacher readiness programs, this review tends to review literature relating to ESP, BL, and teacher readiness. The research questions are as follow:

1. What are the major issues revolving around BL and ESP?
2. What are the major affecting domains that should be taken into consideration when assessing teacher readiness for BESP teaching?

III. METHODOLOGY

This study applied an integrative approach to do the literature review. An integrative literature review usually aims to "assess, critique, and synthesize the literature on a research topic in a way that enables new theoretical frameworks and perspectives to emerge" (Torraco, 2005; Snyder, H. 2019 pp335). To achieve this end, Conceptual thinking (MacInnis, 2011) will be applied to do the analysis.

To collect data, the combinations of key terms including blended, hybrid, mixed, teaching/ instruction/ learning/ implementation, ESP, institution, teacher/faculty/staff, and student readiness/preparedness were used to search electronic data from ERIC, IEEEXplore, Web of Science, Science Direct, JSTOR, ProQuest, Google Scholar and some Chinese database like CNKI. Articles ranging from 1980 to 2021 were used to provide data for the research. The first round of data selection was based on article title, keywords, and abstract, which resulted in 852 journal articles, 41 books and 40 doctoral dissertations. The second round of data selection based on introduction and conclusions of those files, 1 book, 11 doctorial papers, 114 articles were considered to have very limited relation with the research question of this study. The last round of check based on content, and in the end, about 330 files were included in the final analysis phase.

The rest thus have been excluded from the data analysis archive. As the first round of data collection step was limited to article titles, abstracts, and keywords, content was not being inspected in that phase, the researcher does not claim that an exhaustive list was acquired.

To be clear, the definitions of key terms in this paper were defined as follows:

BL. Blended learning is most commonly defined as "the mix of traditional methods of teaching, such as face-to-face teaching and online teaching" in higher education context, (Wong, 2009, pp.54). Actually, it is taken as an new pedagogical approach mainly due to its new addition of new technology (internet-based/web-based) into teaching and learning (Claypole, 2005 pp.41; Tomlinson & Whittaker, 2013 pp.11-13).

ESP. There are many definitions referring to ESP by ELT experts, ESP specialists and connoisseurs. The most quoted definitions include those proposed by Mackay and Mountford (1978), Hutchinson and Waters (1987), Strevens (1988), Robinson (1991), Dudley Evans and St. John (1998) and Flowerdew and Peacock (2001) and Nunan (1994). There are also new but similar definitions, for instance, Saber (2016, pp. 2) defined ESP as "a 'variety of English' that can be observed in a given perimeter of society, delineated by professional or disciplinary boundaries". In this research, Saber's (2016, pp. 2) definition is chosen as the operational definition of ESP, for this description is close to the status of ESP teaching in China's higher vocational colleges, thus becomes a proper choice of this research.

Teacher Readiness. Teacher readiness is defined as individual's preparedness to effectively implement BL. (Blayone, 2018; Gunawardena & Duphorne, 2001; Schrum & Hong, 2002).

BLL. Blended Language Learning is defined as: Blended language learning is the integration of Web technologies into the face-to-face (FF) classroom language-learning experience (Gruba & Hinkelman, 2012). This definition can be understood as BL being applied in language teaching.

BESP. In the area of ESP teaching, BL is defined as: 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 et al, 2019 pp. 124). Similar to BLL, BESP (Blended ESP) the author defined BESP as the application of BL in ESP teaching.

IV. FINDINGS

Findings on ESP

ESP has been increasingly researched since 1960s, through decades of development, research areas like need analysis, become long-lasting focus. Meanwhile, some new trends became to emerge and prevail. Practice and research of ESP in China are no exception to this status. However, China's HVE called for more attention due to the necessity and weakness of ESP teaching in China's HVE.

1.Technology application is a major trend in ESP research

The author compared ten literature review articles closely related to ESP which ranged from 2011 and 2020 (Cui & Li, 2019; Cao, 2017; Rahman, 2015 Stojković, 2019; Khalid, 2016; Dashtestani & Stojkovic, 2016; Hu, 2016; Whyte & Sarré, 2017; Suzani et al, 2011; Salmani-Nodoushan, 2020), and identified four major themes (Yang & Baki, In press), which included:

1. genre analysis
2. need analysis
3. discipline/vocation/profession content and,
4. technology application in ESP

The following themes were mentioned at twice in the ten review articles, considering that those are review articles, those trends were still worth mentioning here: Academic writing, Translation, Context, Intercultural competence, Textbook, Motivation, Institution, EMI, Problem-based/content-based/task-based ESP teaching methods, Corpus analysis/based ESP teaching, Authentic teaching materials (Yang & Baki, In press).

2.ESP is the future trend of English teaching in China's HVE

English for Specific Purposes (ESP) began around fifty years ago, its emergence was a result of increasing worldwide demand on occupational and professional language training, critical evolvement in theoretical linguistics, and attention directed to language learners' needs for specific purposes in accordance with their professions or job description. (Robinson, 1991; Rahman, 2015; Salmani-Nodoushan, 2020).

The increasing importance of China's higher vocational colleges. Higher vocational colleges are playing an increasing important role in China's higher education system (Ministry of Education of the People's Republic of China, 2006). This alteration takes place to respond to the government encouragement of cultivating more workforce to meet the social, corporate and personal demands in China. (National medium- and long-term education reform and development plan (2010-2020); China's education modernization 2035, 2019).

Transition of from English for General Purposes (EGP) to English for Specific Purpose (ESP) in higher education in China is imperative. EFL teaching in colleges in China are usually in the form of EGP, but is now undergoing a transition from EGP to ESP (Cao, 2017 pp.90-94), more attention has been paid to ESP than to EGP nowadays. This turn of language teaching resulted from the needs of current political, economic and educational development in China (Wang, 2017; National medium- and long-term education reform and development plan (2010-2020); China's education modernization 2035).

As an important part of China's HE, English teaching in China's HVE also followed the direction of ESP teaching. Considering the educational goals of China's HVE, ESP teaching is of greater significance for China's vocational colleges in terms of cultivating professional workforce for China's economic development (Hu, 2016).

Due to historical reasons, HVE in China has received less support in many ways, including finacial, policy, and research support (Po & Yunbo, 2017; Gao & Yu, 2020).

There is lack of research done for the China's HVE (Nie, 2020).

Findings on BL

BL, as a typical type of technology-enhanced learning, has received tremendous attention for the past two decades, especially after the outbreaks of COVID-19 in 2020. The development of BL research has been facing multiple challenges, amony them, effective implementation has become an outstanding issue that attracted many researchers.

1. BL is one of the five major trends in technology-enhanced learning

The application of digital technology or information and communication technology in education was called technology-enhanced learning. The necessity of applying technology-enhanced learning is widely acknowledged but still more attention was demanded to be turned to its research in higher education (Cook & Ellaway, 2015; Wang & Hannafin, 2005; Lytras et al, 2020). After a comprehensive analysis, Lytras et al (2020) identified BL as one of the five major trends in technology-enhanced learning research. The other four trends included the adoption of TEL, critical evaluation of TEL application, different social media applied in TEL, and podcasting application in TEL.

Since the outbreaks of COVID-19, research on online and BL around the world has increased rapidly (Jande & Ibrahim, 2021; Singh, 2021; Siripongdee et al, 2020; Bordoloi et al, 2021; Ożadowicz, 2020). In China, strict anti-virus regulation made BL a necessity for cities and districts with occasional confirmed cases. Numerous announcements and guidelines on online and BL implementation have been issued by the Ministry of Education of the People's Republic of China (MOE) and subordinate government organizations.

2.Effective implementation is a major focus of BL

Research on BL were still in its early stage, many challenges exists, including issues on its definition, theoretical bases, effective implementation and preparedness of stakeholders. The readiness of stakeholders included teaching staff, students and institutions (Claypole, 2005; Dudeney & Hockly 2007; Tucker, 2013; Masie, 2006; Lotrecchiano et al., 2013; Poon, 2014; Graham, 2006; Boelens et al., 2015; Graham, 2013; Smith and Hill, 2018; Comas-Quinn, 2011; Gurley, 2018; Hiebert et al., 2017; Sayeski et al., 2019 ; Keramati et al, 2011; Wong et al 2014; Mirriahi et al, 2015; Castro, 2019; Xiao & Zhang, 2016; Cao & Zhao, 2016; Zhang & Zhu, 2017; Feng et al, 2018; McGEE & Poojary, 2020; Wong et al, 2014; Bordoloi et al, 2021).

Findings on application of BL in ESP in China's HVE

BL has special advantages in providing task-based, learner-centered, authentic learning, etc., which are what ESP teaching and learning demand. Whereas, as one of the major stakeholders, teachers who endeavored to implement BL in EPS teaching may found themselves under more pressure than teachers who purely implemented BL or taught ESP. Research on BESP teachers' challenges and preparation maybe difficult but worthwhile as it contributes to both fields.

1. BL has special advantage in supporting ESP teaching

BL has special advantage in providing experiential learning (Nayar & Koul, 2020; India; 2019 pp. 1357) and is especially suitable for operating task-based/project-based learning (Xiao & Zhang, 2016; Namyssova et al, 2019 pp. 22-31), that's why BL, as the combination of technology-based instruction and traditional classroom instruction, becomes the representative practice in the application of technology in ESP teaching (Nur'Aini, 2021; Labed, 2021; Rebenko, 2021; Matukhin & Zhitkova, 2015). Considering the special importance and advantage in cultivating professional workforce for China's economic development, BESP teaching is of greater significance in China's vocational colleges (Hu, 2016 pp. 1-4).

2. BESP teachers are under double pressure

Teachers who implement BL in their teaching face challenges in various aspects: the challenge to master technological skills and keep them updated, class management, leadership, course assessment, and time management (Demir & Yurdugül, 2015; Iswati, 2021; Haryanto et al, 2021; Alvi et al, 2021; Bonanno, 2011; Noh's,2020).

As ESP teachers, a big challenge is to equip themselves with 'subject specific knowledge' (Chostelidou, et al 2009 pp. 135) or in other words ESP teachers are challenged to "integrate linguistics with content" (Mulyadi et al, 2020 pp.204; Luo & Garner, 2017).

It should not ignore that apart from technology application trend, context, problem-based/content-based/task-based ESP teaching methods, and authentic teaching materials are listed as second most frequently researched themes in ESP studies, ESP teachers are facing more challenges than other teachers applying BL in terms of subject content preparation (Salmani-Nodoushan, 2020 pp.247-268; Whyte & Sarré, 2017 pp.1-12; Cao, 2017 pp.90-94; Iswati, 2021; Haryanto et al, 2021; Alvi et al, 2021). In a word, for teachers who teach ESP and apply BL in their teaching face doubled challenges, more preparation work is required from them (Mulyadi et al, 2020).

To sum up, with the special requirements on ESP teaching staff, plus the new pressure from applying BL, the lack of research on teaching readiness forces the ESP teachers to face overwhelming challenges without adequate resources to deal with the dilemma (Bonanno, 2011; Noh's,2020; Demir & Yurdugül, 2015; Chostelidou, et al 2009; Mulyadi et al, 2020 pp.204; Luo & Garner, 2017). There is a research gap on ESP blended learning from teacher's perspective to help teachers be better prepared for the challenges they are now and will go on to take in the future.

3.Studies on BESP enrich both BL and ESP research

The application of blended learning in higher education involves many disciplines, like mathematics (Lin et al, 2016),

tourism (Bailey & Morais, 2005), health education (de Jong et al, 2014), EFL (Miyazoe & Anderson, 2010), etc., including ESP (Tarnopolsky, 2012). Research on application of Blended learning in EFL shows positive effects on students' performance (Zhang & Zhu, 2020), later, the application of technology in the field of ESP (English for Specific Purposes) has attracted increasing interest among English as Foreign Language (EFL) researchers and scholars (ARNÓ–MACIÀ,2012; Butler-Pascoe, 2009; Kohnke et al, 2021; Plastina, 2003; 2015),

However, it should be noted that, ESP has established itself as an independent field in the applied linguistics about fifty years ago, its own specificity makes research on application of technology in EFL cannot be simply generalized in the field of ESP research. Dudley-Evans, & St. John (1998) has long pointed out that "it is a fallacy to generalize the findings of the use of technology in EFL contexts to the field of ESP instruction". Also asserted by Dashtestani, R., & Stojkovic, N. (2016, PP.435-456): "research findings on the use of technology in ESP instruction are different from the ones identified in the literature of using technology in EFL instruction", and "it seems necessary to exercise caution when generalizing the results of general EFL research to the specific contexts and demands of ESP instruction" (Salmani-Nodoushan, 2020 pp.451; Selwyn 2014).

In a word, BL application in ESP called for specialized attention, for BESP related research, on the one hand, offers disciplinary context for BL research, and on the other hand, offers technology application information for ESP technology integration research.

Findings on BESP teacher readiness assessment instruments

Traditionally, less attention was paid to teachers even though it has been widely acknowledged that teaching staff are so important to all educational activities. It is the same with research on BL readiness research, and ESP teacher preparation. What's more, for the limited BL and BLL teacher readiness research, there existed a few weaknesses, BESP teacher readiness assessment instruments including not only technology and competency aspects were called for.

1. Focus and weakness of BL teacher readiness assessment research

There is limited research on BL teacher readiness, compared with the amount of research focusing on student readiness and institution readiness (Bokolo Jr et al., 2020; Porter et al., 2014; Porter & Graham, 2016; Martin et al, 2019; Peechapol et al, 2018)

Among the limited amount of research on BL teacher readiness, there emerged some focus and weakness which should be noticed:

Overall, research on BL teacher readiness mainly focuses on technology access, competency, affective factors, and knowledge system of teaching staff. For these four aspects, they were usually investigated separately. Apart from that, the attention on technology-related access and competency taking a leading place, the interest on teacher's affective factors has increased steadily. Meanwhile, Technology, Pedagogy, and Content Knowledge (TPACK) has been frequently applied a framework to assess BL readiness in different contexts and subjects these days (Martin et al, 2019; Eryani & Mulyanti, 2021; Pulham & Graham, 2018; Mirkee & Tzivian, 2021; Mabuan & Ebron, 2018; Watson, 2021; Guerrero, 2010; Alqurashi et al, 2017; Redmond & Peled, 2018; Dalal et al, 2017).

Meanwhile, there are three points relating to the three major trends of BL teacher readiness research that should be noted. Firstly, while institutions are trying hard to equipped teaching staff with the right access to use technology easily, they put much less focus on policy support and atmosphere building which were proved to be important for preparing teachers for applying technology in teaching (Moukali, 2012; Cutri et al, 2020; Cole, 2014).

Secondly, articles that explored self-efficiency and attitude have been increasing for the past decades, while attention on teacher's emotional responses has just started to attract researchers' interest (Cutri & Mena, 2020).

Thirdly, Technological pedagogical content knowledge (TPACK) (Schmidt et al, 2009) was applied by some researchers as a tool to access teachers' knowledge and skill system in technology-integrated teaching, including BL (Dillman, 2007; Ifinedo, et al, 2019; Watson, 2021). But these authors tended to investigated TPACK alone without considering it with the other two aspects: technology and affective factors (Cutri & Mena, 2020). It should be noted that the change of one aspect of TPACK will lead to the change of other aspects. For example, the addition of Technology due to BL, and the emphasis of Content due to ESP would these two aspects take more weightage in TPACK when applying it to assess BESP teacher readiness (Mishra & Koehler, 2006; Inayati, 2013).

To sum up, instruments from BL teacher readiness assessment research themselves have some weakness. Overall, more attention has been put on technology-related aspects, less attention was put on intrinsic factors of teachers. To better assess BL teacher readiness, a holistic assessment tool which includes at least these three aspects is required (Cutri & Mena, 2020; Baran et al., 2011; Goodyear, et al., 2001).

2.Blended Language Learning (BLL) teacher readiness assessment instruments are not proper tools for BESP teacher readiness assessment either

Though it is very tempting to use BLL teacher readiness instruments for BESP, it is not possible due to two facts.

Firstly, ESP teaching has to "master new materials related to English based on specific context-based learners' learning discipline even though their majors are not ESP-related" (Mulyadi et al, 2020 pp. 204-206). This kind of requirement on teachers are different from BLL teachers in that extra content challenge is added to BESP teachers, which makes those BLL teacher readiness assessment instruments not being proper instrument in BESP teacher readiness measurement. Apart from that other cautious researchers have reminded that we should not take it for granted that conclusions on technology integration from English as a Foreign Language (EFL) can be applied in ESP teaching (Dashtestani & Stojkovic 2016).

Secondly and more importantly, BLL itself lacks appropriate teacher readiness assessment instruments. The

limited number of research in this area are restricted in generalization for they focus on a specific type of ICT (Information Communication Technology) or using qualitative case study which cannot be used as survey questionnaire to assess ESP teacher readiness. Research that focuses on a specific type of ICT. Mulyadi (2020) mainly targeted at LMS (Learning Management System) implementation, Van Praag & Sanchez (2015) mainly investigated mobile technology use in English class, like cell phone. Stevens (2018) explored application of a TEKS2 (Technology Enhanced Knowledge Support System) in a middle school's English language learning. Inayati (2013) studied social media use in English as a Second Language class, this research included different ICT tools but mainly aims to find out their effectiveness rather than focus on teacher's readiness.

Research using qualitative case study which cannot be used as survey questionnaire to assess ESP teacher readiness. For example, Constantinou, et al (2019) investigated the needs of ESP Teacher Education through an action research, Dullien (2016) did a Multicase study of Teaching English to speakers of other languages practices.

To sum up, considering the feature of ESP and the status of BLL teacher readiness research, BLL teacher readiness assessment instruments cannot provide proper tools for BESP teacher readiness assessment either.

3. A proposed framework teacher readiness assessment for BESP

Teachers need to be prepared for BL so as to effectively implement BL. For ESP teachers, as they are under double pressure for they are facing the challenges from BL and integrating subject-linguistic content, preparing ESP teachers for BESP teaching requires more solid research (Matukhin & Zhitkova, 2015; Abedeen 2015). One of those preparing steps should include an assessing instrument of ESP teacher readiness for BL. In other words, teacher readiness assessment instruments are needed for ESP practitioners to better prepare them for ESP teaching in a BL environment. Considering the weakness of current measuring instruments for BL and BLL teacher readiness, a holistic and validated BESP teacher readiness assessment instrument is called for.

Based on literature review of this study, BESP teacher readiness assessment instruments should take into consideration of the weakness of existing tools from BL and BLL, and at the same time, attach enough importance to the special features of ESP teaching. These assessing framework should at least include the following four dimensions with an emphasis on the technological and disciplinary aspects:

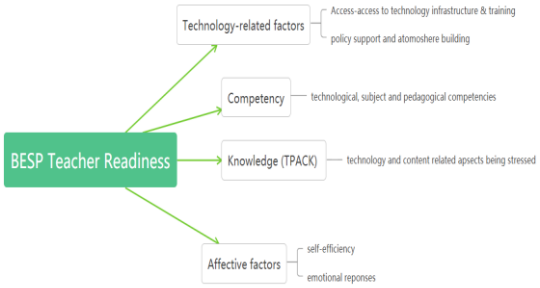

Figure 1. BESP Teacher Readiness Assessment Framework

V. CONCLUSION

Blended learning has become the new norm in higher education (Norberg et al., 2011 pp.207-216). Actually, it has been applied in many different disciplines since its emergence in the 1960s (Bonk & Graham, 2006 foreword pp.24). Meanwhile, ESP teaching has become the future direction of English teaching in China' higher education (Cao, 2017 pp.90-94), it is especially important for higher vocational colleges due to its unique importance in cultivating professional workforce for China's economic development. As the application of technology in ESP teaching has been predicted as one of major trends in ESP future research and practice, it puts extra pressure on ESP teachers who are already forced to make additional preparation in teaching a "language + profession content" courses. Contrasting to the vital role of teaching faculty in effective implementation of ESP blended learning (Pima et al, 2018; Smith; & Hill, 2018; Medina, 2017; Namyssova et al, 2019; Mirriahi et al, 2015; Tshabalaha et al, 2014), it is the surprisingly limited research from teachers' perspective in terms of readiness for implementing BL in ESP teaching, compared with the abundant research from students' and institutional perspectives.

A further review of literature on teacher readiness for BL shows the weakness of present assessment instrument of BL teacher readiness - teacher readiness is measured largely from technology and competency aspects (Eryani & Mulyanti, 2021; Orazalina, et al 2016; Buabeng-Andoh's 2012; Ifinedo et al, 2019; Kihoza et al, 2016, Blayone, 2018; Pulham & Graham, 2018), important factors like affective factors and subject content related aspects were not explored adequately (Chostelidou et al, 2009; Mulyadi et al, 2020; Luo & Garner, 2017; Cutri & Mena, 2020).

Teaching preparation training and support for ESP teachers in BL are mostly informal and inconsistent (Liliana Cuesta Medina & Hurtado, 2017 pp.10; Smith & Hill, 2018). to better prepare teacher for BESP teaching, an BESP teacher readiness instrument is in need to provide insights to teacher preparation and training. Due to the weakness of present assessment tools for BL and BLL, teacher readiness assessment instruments for BL and BLL are not proper tools for teacher readiness assessment for BESP, an appropriate assessment instrument need to be developed.

Both ESP teaching and BL implementation research emphasized the importance of doing research on specialized types of context. As a big part (in the future, a bigger part) in

China's higher education, China's higher vocational college is a less explored in terms of research on teacher readiness for BESP teaching. To better prepare teachers for BESP teaching, a holistic and ESP-focused assessing framework which includes technology, competency, knowledge and affective factors were proposed in the hope of providing some insights for further research on BESP teaching and practcie.

ACKNOWLEDGEMENT

This work was supported by Xu Lei under *Characteristic Innovation Project of Guangdong Higher Education, (Project No.2021WTSCX168)*; and Research *Project of Guangdong Polytechnique of Science and Technology, (Project No.XJMS202105)*

REFERENCES

Abedeen, F. (2015). Exploration of ESP teacher knowledge and practices at tertiary and applied colleges in Kuwait: implications for pre-and in-service ESP teacher training.

Akaslan, D., & Law, E. L. (2011, April). Measuring teachers' readiness for e-learning in higher education institutions associated with the subject of electricity in Turkey. *In 2011 IEEE Global Engineering Education Conference (EDUCON) (pp. 481-490)*. IEEE.

Alqurashi, E., Gokbel, E. N., & Carbonara, D. (2017). Teachers' knowledge in content, pedagogy and technology integration: A comparative analysis between teachers in Saudi Arabia and United States. *British Journal of Educational Technology*, *48*(6), 1414-1426.

Alvi, A. H., Muhammad Bilal, S., & Abdul Rahim Alvi, A. (2021). Technology, Pedagogy & Assessment: Challenges of COVID19-Imposed E-Teaching of ESP to Saudi Female PY Students. *Arab World English Journal (AWEJ) Special Issue on Covid*, *19*.

ARNÓ–MACIÀ, E. L. I. S. A. B. E. T. (2012). The role of technology in teaching languages for specific purposes courses. *The modern language journal*, *96*, 89-104.

Butler-Pascoe, M. E. (2009, March). A Blended E-learning Professional Development Program for K-12 Teachers of English Learners. In *Society for Information Technology & Teacher Education International Conference* (pp. 2463-2467). Association for the Advancement of Computing in Education (AACE).

Bailey, K. D., & Morais, D. B. (2005). Exploring the use of blended learning in tourism education. *Journal of Teaching in Travel & Tourism*, *4*(4), 23-36.

Baran, E., Correia, A. P., & Thompson, A. (2011). Transforming online teaching practice: Critical analysis of the literature on the roles and competencies of online teachers. *Distance Education*, *32*(3), 421–439. https://doi.org/10.1080/01587919.2011.610293

Baya'a, N., & Daher, W. (2012, November). Mathematics teachers' readiness to integrate ICT in the classroom: The case of elementary and middle school Arab teachers in Israel. I*n Proceedings of 2012 International Conference on Interactive Mobile and Computer Aided Learning (IMCL)* (pp. 173-179). IEEE.

Blayone, T. (2018). Reexamining digital-learning readiness in higher education: Positioning digital competencies as key factors and a profile application as a readiness tool. *International Journal on E-Learning*, *17*(4), 425-451.

Boelens, R., Van Laer, S., De Wever, B., & Elen, J. (2015). Blended learning in adult education: towards a definition of blended learning.

Bokolo Jr, A., Kamaludin, A., Romli, A., Mat Raffei, A. F., A/L Eh Phon, D. N., Abdullah, A., ... & Baba, S. (2020). A managerial perspective on institutions' administration readiness to diffuse blended learning in higher education: Concept and evidence. *Journal of Research on Technology in Education*, *52*(1), 37-64.

Bonanno, P. (2011, September). Developing an instrument to assess teachers' readiness for technology-enhanced learning. *In 2011 14th International Conference on Interactive Collaborative Learning* (pp. 438-443). IEEE.

Bonk, C. J., & Graham, C. R., 1942. (2006). The handbook of blended learning: *Global perspectives, local designs (1st ed.)*. San Francisco, Calif;Chichester;: Pfeiffer.

Bordoloi, R., Das, P., & Das, K. (2021). Perception towards online/blended learning at the time of Covid-19 pandemic: an academic analytics in the Indian context. *Asian Association of Open Universities Journal*.

Buabeng-Andoh, C. (2012). Factors influencing teachersâ adoption and integration of information and communication technology into teaching: A review of the literature. *International Journal of Education and Development using ICT*, *8*(1).

Cao, C. D. & Zhao, H. X. (2016). Knowledge Mapping of Research on International Blended Learning During 2005 —2014 — Bibliometric Analysis Based on CiteSpace2005-2014, *Heilongjiang Researches on Higher Educatio(5)* 265, 20-24.

Cao Y. (2017). On Overseas ESP Research. *FOREIGN LANGUAGE RESEARCH (06)*, 90-94. doi:10.16263/j.cnki.23-1071/h.2017.06.016.

Castro, R. (2019). Blended learning in higher education: Trends and capabilities. *Education and Information Technologies*, *24*(4), 2523-2546.

Chen, Z., & Huang, M. (2016). A study of business English (esp) learning anxiety from the perspective of ecology. *Open Journal of Modern Linguistics*, *6*(03), 182.

China. Ministry of Education of the People's Republic of China. (2006). *Guidlines for Coprehensively Promoting Teaching Quality of Higher Vocational Educaiton[2006]16*. http://www.moe.gov.cn/srcsite/A07/s7055/200611/t20061116_79649.html.

China. Ministry of Education of the People's Republic of China. (2010). *National medium- and long-term education reform and development plan (2010-2020).* http://www.gov.cn/jrzg/2010/07/29/content_1667143.htm .

China. Ministry of Education of the People's Republic of China. (2012). *Ten-year Planfor Educational Informatization(2011-2020).* http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/s3342/201203/133322.html,2012-09-05.

China. Ministry of Education of the People's Republic of China. (2019). *China's education modernization 2035 (MOE,2019*).http://www. moe. gov. cn/jyb_xwfb/s6052/moe_838/201902/t20190223_370857. html.

Chiu, C. Y. (2004). *Effectiveness of implementing computer-assisted language learning technology in the English for specific purposes training program*. Lynn University.

Chostelidou, D., Griva, E., & Tsakiridou, E. (2009). A Record of the training needs of ESP Practitioners in Vocational Education. *Selected papers on theoretical and applied linguistics*, 18, 131-143.

Claypole, M. (2005). Integration and Innovation: Incorporating Blended Learning into ELT. Foreign Language *Teaching&Research in Basic Education. 1*(47) pp: 40-45

Cole, G. (2014). Higher education's blend of old and new: How technology can complement traditional teaching methods. *Development and Learning in Organizations: An International Journal*.

Comas-Quinn, A. (2011). Learning to teach online or learning to become an online teacher: An exploration of teachers' experiences in a blended learning course. *ReCALL, 23*(3), 218-232.

Cook, D. A., & Ellaway, R. H. (2015). Evaluating technology-enhanced learning: A comprehensive framework. *Medical teacher, 37*(10), 961-970. doi:10.3109/0142159X.2015.1009024.

Constantinou, E. K., Papadima-Sophocleous, S., & Souleles, N. (2019). 2Finding the way through the ESP maze: designing an ESP teacher education programme. *ESP teaching and teacher education: current theories and practices*, 27.

Cui, X. L. & Li C. (2019). Anaysis of Visualization in the International Research Trend of English for Specific Purposes - An Empirical analysis based on visualization software Citespace. *Journal of Yanbian Uinversity (Social Science),* 111-120+144-145. doi:10.16154/j.cnki.cn22-1025/c.2019.01.015.

Cutri, R. M., Mena, J., & Whiting, E. F. (2020). Faculty readiness for online crisis teaching: transitioning to online teaching during the COVID-19 pandemic. *European Journal of Teacher Education, 43*(4), 523-541

Cutri, R. M., & Mena, J. (2020). A critical reconceptualization of faculty readiness for online teaching. *Distance Education, 41*(3), 361-380.

Dalal, M., Archambault, L., & Shelton, C. (2017). Professional development for international teachers: Examining TPACK and technology integration decision making. *Journal of Research on Technology in Education, 49*(3-4), 117-133.

Dashtestani, R., & Stojkovic, N. (2016). The use of technology in English for Specific Purposes (ESP) instruction: A literature review. *Journal of Teaching English for Specific and Academic Purposes, 3*(3), 435-456.

de Jong, N., Savin-Baden, M., Cunningham, A. M., & Verstegen, D. M. (2014). Blended learning in health education: three case studies. *Perspectives on medical education, 3*(4), 278-288.

Demir, Ö., & Yurdugül, H. (2015). The Exploration of models regarding e-learning readiness: Reference model suggestions. *International Journal of Progressive Education, 11*(1).

Dillman, D. A. (2007). Mail and Internet surveys: *The tailored design method (2nd ed.)*.New York: Wiley.

Dudley-Evans, T., St John, M. J., & Saint John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge university press.

Dudeney, G and Hockly, N (2007) *How to… Teach English with Technology*. Harlow: Pearson Education Limited.

Dullien, S. (2016). *Technology Integration in Higher Education Blended Language Learning: A Multicase Study of Teaching English to Speakers of Other Languages Practices*. Northcentral University.

Erdem, M., & Kibar, P. N. (2014). Students' Opinions on Facebook Supported Blended Learning Environment. *Turkish Online Journal of Educational Technology-TOJET, 13*(1), 199-206.

Eryani, Y., & Mulyanti, B. (2021, March). Technology-based blended learning to accommodate offline and online learning. *In IOP Conference Series: Materials Science and Engineering* (Vol. 1098, No. 3, p. 032010). IOP Publishing.

Feng X.Y., Wang R. X. & Wu Y. J. (2018). A Literature Review on Blended Learning : Based on Analytical Framework of Blended Learning. *JOURNAL OF DISTANCE EDUCATION 36*(3), 13-24.

Flowerdew, J., & Peacock, M. (2001). Research perspectives on English for academic purposes. Ernst Klett Sprachen.

Gao, Z., & Yu, T. (2020, March). Research on the Development of Higher Vocational Education in China in the 21st Century. In 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020), Atlantis Press (pp. 742-745).

Goodyear, P., Salmon, G., Spector, J. M., Steeples, C., & Tickner, S. (2001). Competences for online teaching: A special report. *Educational Technology Research and Development*, 65-72.

Graham, C. R. (2013). Emerging practice and research in blended learning. In M. J. Moore (Ed.), *Handbook of distance education* (pp. 333–350). (3rd ed.). New York, NY: Routledge.

Graham, C. R. (2006). Blended learning system: Definition, current trends, future directions. In C. J. Bonk&C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 3-21). San Francisco, CA:

Gruba, P and Hinkelman, J (2012) *Blended Technologies in Second Language Classrooms.* Basingstoke: Palgrave Macmillan.

Guerrero, S. (2010). Technological pedagogical content knowledge in the mathematics classroom. *Journal of Computing in Teacher Education, 26*(4), 132-139.

Gunawardena, C. N., & Duphorne, P. L. (2001). Which Learner Readiness Factors, Online Features, and CMC Related Learning Approaches Are Associated with Learner Satisfaction in Computer Conferences?.

Gurley, L. E. (2018). Educators' Preparation to Teach, Perceived Teaching Presence, and Perceived Teaching Presence Behaviors in Blended and Online Learning Environments. *Online learning*, *22*(2), 197-220.

Haryanto, H., Puwanto, P., & Giyoto, G. (2021). Learning English for Specific Purposes through Blended Learning at Public Islamic University (A Case Study at Private University Indonesia). *Technium Soc. Sci. J.*, *26*, 351.

Hiebert, J., Berk, D., & Miller, E. (2017). Relationships between mathematics teacher preparation and graduates' analyses of classroom teaching. *The Elementary School Journal*, *117*(4), 687-707.

Hosseini, S. A., & Shokrpour, N. (2022). The Perception of English for Specific Purposes (ESP) Language Learners about Blended Learning in Higher Education. *International Journal of Multicultural and Multireligious Understanding*, *9*(3), 474-488.

Hu B.Y.(2016))A Brief Introduction on ESP Teaching Current Situation and the Countermeasures in Higher Vocational Colleges. *Higher Education of Social Science* Vol. 10, No. 4, pp. 1-4

Hutchinson, T., & Waters, A. (1987). *English for specific purposes*. Cambridge university press.

Ifinedo, E., Saarela, M., & Hämäläinen, T. (2019). Analysing the Nigerian Teacher's Readiness for Technology Integration. *International Journal of Education and Development using Information and Communication Technology*, *15*(3), 34-52.

Inayati, N. (2013). Systemic analysis of TESOL practitioners' use of social media in the higher education sector. *International Journal of Innovation in English Language Teaching and Research*, *2*(2), 193-207.

Iswati, L. (2021). When teaching must go on: ESP teachers' strategies and challenges during COVID-19 Pandemic. *Eralingua: Jurnal Pendidikan Bahasa Asing dan Sastra*, *5*(1), 36-52.

Jande, L. V., & Ibrahim, N. M. (2021). Challenges of Teaching ESP: A Review. *LSP International Journal*, *8*(2), 1-8.

Johns, A. M., & Dudley-Evans, T. (1991). English for specific purposes: International in scope, specific in purpose. *TESOL quarterly*, *25*(2), 297-314.

Keramati, A., Afshari-Mofrad, M., & Kamrani, A. (2011). The role of readiness factors in E-learning outcomes: An empirical study. *Computers & Education*, *57*(3), 1919-1929.

Khalid, A. (2016). Needs assessment in ESP: A review. *Studies in Literature and Language*, *12*(6), 38-46.

Kihoza, P. D., Zlotnikova, I., Bada, J. K., & Kalegele, K. (2016). An assessment of teachers' abilities to support blended learning implementation in Tanzanian secondary schools. *Contemporary Educational Technology*, *7*(1), 60-84.

Kohnke, L., Jarvis, A., & Ting, A. (2021). Digital multimodal composing as authentic assessment in discipline-specific English courses: Insights from ESP learners. *TESOL Journal*, *12*(3), e600.

Labed, Z. (2021). The Effect of Implementing the Blended Teaching Approach in ESP Courses on Students' Achievement and Attitudes Salma Aleb Abdelhamid Ibn Badis University of Mostaganem, Algeria. *International Journal of Education and Development using Information and Communication Technology*, *17*(4), 93-104.

Lin, C., Liu, G., & Wang, T. (2017). Development and Usability Test of an e-Learning Tool for Engineering Graduates to Develop Academic Writing in English: A Case Study. *Journal of Educational Technology & Society*, *20*(4), 148-161. Retrieved March 4, 2021, from http://www.jstor.org/stable/26229213

Lin, C. H. (2007). *English for specific programs (ESP), with and without computer-assisted language learning (CALL), for Taiwanese college students* (pp. 1-193). Lynn University.

Lin, C. J., Hwang, G. J., Fu, Q. K., & Chen, J. F. (2018). A flipped contextual game-based learning approach to enhancing EFL students' English business writing performance and reflective behaviors. *Journal of Educational Technology & Society*, *21*(3), 117-131.

Liu, G., Chiu, W., Lin, C., & Barrett, N. (2014). English for Scientific Purposes (EScP): Technology, Trends, and Future Challenges for Science Education. *Journal of Science Education and Technology*, *23*(6), 827-839. Retrieved March 4, 2021, from http://www.jstor.org/stable/24026317

Lotrecchiano, G.R., McDonald, P.L., Lyons, L., Long, T. and Zajicek-Farber, M. (2013), "Blended learning: strengths, challenges, and lessons learned in an interprofessional training program", *Maternal and Child Health Journal*, Vol. 17 No. 9, pp. 1725-1734.

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.

Lytras, M., Sarirete, A., & Damiani, E. (2020). Technology-enhanced learning research in higher education: A transformative education primer. *Computers in Human Behavior*, 109, 106350.

Mabuan, R. A., & Ebron, G. P. (2018). MOOCs & more: Integrating F2F & virtual classes via blended learning approach. *Senior Editor: Paul Robertson*, 220.

Mackay, R., & Mountford, A. J. (1978). The teaching of English for special purposes: Theory and practice. *English for specific purposes*, 2-20.

MacInnis, D. J. (2011). A framework for conceptual contributions in marketing. *Journal of Marketing*, *75*(4), 136-154.

Martin, F., Wang, C., Jokiaho, A., May, B., & Grübmeyer, S. (2019). Examining faculty readiness to teach online: A comparison of US and German educators. *European Journal of Open, Distance and E-learning*, *22*(1), 53-69.

Masie, E. (2006). The blended learning imperative. *The handbook of blended learning: Global perspectives, local designs*, 22-26.

Matukhin, D., & Zhitkova, E. (2015). Implementing blended learning technology in higher professional education. Procedia-Social and Behavioral Sciences, 206, 183-188.

McGee, P., Valdes, E., & Bullis, D. (2016). Blended/online learner orientations: Recommendations for design. *International Journal on E-Learning, 15*(2), 215-241.

Medina, E. G. L., & Hurtado, C. P. R. (2017). Kahoot! A digital tool for learning vocabulary in a language classroom. *Revista Publicando, 4*(12 (1)), 441-449.

Mirkee, E., & Tzivian, L. (2021, April). Teachers' Readiness for Remote Teaching During COVID-19 Pandemic: The Case of Latvia. *In 2021 IEEE Global Engineering Education Conference (EDUCON)* (pp. 537-542). IEEE.

Mirriahi, N., Alonzo, D., & Fox, B. (2015). blended learning framework for curriculum design and professional development. *Research in Learning Technology, 23*(1), 28451. https://doi.org/10.3402/rlt.v23.28451

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers college record, 108*(6), 1017-1054.

Miyazoe, T., & Anderson, T. (2010). Learning outcomes and students' perceptions of online writing: Simultaneous implementation of a forum, blog, and wiki in an EFL blended learning setting. *System, 38*(2), 185-199.

Moukali, K. H. (2012). *Factors that affect faculty attitudes toward adoption of technology-rich blended learning* (Doctoral dissertation, University of Kansas).

Mulyadi, D., Arifani, Y., Wijayantingsih, T. D., & Budiastuti, R. E. (2020). Blended Learning in English for Specific Purposes (ESP) Instruction: Lecturers' Perspectives. *Computer-Assisted Language Learning Electronic Journal, 21*(2), 204-219.

Mulyadi, D., Wijayatingsih, T., Budiastuti, R., Ifadah, M., & Aimah, S. (2020). Technological pedagogical and content knowledge of ESP teachers in blended learning format. *International Journal of Emerging Technologies in Learning (iJET), 15*(6), 124-139.

Namyssova, G., Tussupbekova, G., Helmer, J., Malone, K., Mir, A., & Jonbekova, D. (2019). Challenges and benefits of blended learning in higher education.

Nayar, B., & Koul, S. (2020). Blended learning in higher education: a transition to experiential classrooms. *International Journal of Educational Management.*

Nie, B.(2020). Discussion on the Difficulties and the Countermeasures of the Blended Learning of MOOC Higher Vocational Course from the Perspective of Students--Taking the Students of Information Engineering College in Jiujiang Vocational University as an Example, *China Computer & Communication. 32*(6),249-250.

Noh, N. M. (2020). *Cultivating blended learning in teaching and learning: teachers' intrinsic and extrinsic readiness in Malaysia*.

Norberg, A., Dziuban, C. D., & Moskal, P. D. (2011). A time-based blended learning model. *On the Horizon, 19*(3), 207–216.

Nunan, D. (1994) *The learner—centred curriculum (7th ed.).* Cambridge. Cambridge University Press

Nur'Aini, I. (2021). ICT IN ESP USING BLENDED LEARNING AND THE STUDENTS'MOTIVATION: A LITERATURE REVIEW. *Jurnal Ilmiah Edukasi & Sosial, 12*(1), 30-34.

Orazalina, Z., Zavalko, N., Yessekeshova, M. D., Tashkenbayeva, Z. M., & Aldabergenova, S. (2016). A Method of Developing Technological Readiness for Using Virtual Educational Environment in the Professional Activity of a College Teacher. *International Journal of Environmental and Science Education, 11*(10), 3477-3486.Montalbán, N. (2022). DEVELOPING A HYBRID DIDACTIC COURSE IN ESP. *Journal of Teaching English for Specific and Academic Purposes*, 675-692.

Ożadowicz, A. (2020). Modified blended learning in engineering higher education during the COVID-19 lockdown—Building automation courses case study. *Education Sciences, 10*(10), 292.

Peechapol, C., Na-Songkhla, J., Sujiva, S., & Luangsodsai, A. (2018). An Exploration of Factors Influencing Self-Efficacy in Online Learning: A Systematic Review. *International Journal of Emerging Technologies in Learning, 13*(9).

Pima, J. M., Odetayo, M., Iqbal, R., & Sedoyeka, E. (2018). A thematic review of blended learning in higher education. *International Journal of Mobile and Blended Learning (IJMBL), 10*(1), 1-11.

Plastina, A. F. (2015). ESP LEARNER SELF-GENERATED FEEDBACK AS A TECHNOLOGY-ENHANCED TASK. *Teaching English with Technology, 15*(2), 54-66.

Plastina, A. F. (2003). CALL-ing EAP skills. *Teaching English with Technology, 3*(3), 16-30.

Po, Y., & Yunbo, L. (2017). Balanced Development for Provincial-Level Coordination and Higher Vocational Education. *Chinese Education & Society, 50*(5-6), 469-498.

Porter, W. W., Graham, C. R., Spring, K. A., & Welch, K. R. (2014). Blended learning in higher education: Institutional adoption and implementation. *Computers & Education, 75*, 185-195.

Porter, W. W., Graham, C. R., Bodily, R. G., & Sandberg, D. S. (2016). A qualitative analysis of institutional drivers and barriers to blended learning adoption in higher education. *The internet and Higher education, 28*, 17-27.

Poon, J. (2014). A cross-country comparison on the use of blended learning in property education. *Property Management, 32*(2), 154-175. doi:10.1108/PM-04-2013-0026

Pulham, E., & Graham, C. R. (2018). Comparing K-12 online and blended teaching competencies: A literature review. *Distance Education, 39*(3), 411-432. DOI: 10.1080/01587919.2018.1476840

Rahman, M. (2015). English for Specific Purposes (ESP): A Holistic Review. *Universal Journal of Educational Research, 3*(1), 24-31.

Rafiq, K. R. M., Hashim, H., & Yunus, M. M. (2021). Sustaining Education with Mobile Learning for English

for Specific Purposes (ESP): A Systematic Review (2012–2021). *Sustainability, 13*(17), 9768.

Rebenko, M. (2021). English proficiency in cybernetics textbook as a reflection of ESP perspectives in Ukrainian high education. *Journal of Teaching English for Specific and Academic Purposes*, 331-336.

Redmond, P., & Peled, Y. (2019). Exploring TPACK among pre-service teachers in Australia and Israel. *British Journal of Educational Technology, 50*(4), 2040-2054.

Robinson, P. (1991). *ESP today: A practitioner's guide.* Prentice Hall.

Saber, A. (2016). *Concepts and Frameworks in English for Specific Purposes.*

Salmani-Nodoushan, M. A. (2020). English for Specific Purposes: Traditions, trends, directions. *Studies in English Language and Education, 7*(1), 247-268.

Sayeski, K. L., Bateman, D. F., & Yell, M. L. (2019). Re-envisioning teacher preparation in an era of Endrew F.: Instruction over access. *Intervention in School and Clinic, 54*(5), 264-271.

Schmidt, D. A., Baran, E., Thompson, A. D., Mishra, P., Koehler, M. J., & Shin, T. S. (2009). Technological pedagogical content knowledge (TPACK) the development and validation of an assessment instrument for preservice teachers. *Journal of research on Technology in Education, 42*(2), 123-149.

Schrum, L., & Hong, S. (2002). Dimensions and strategies for online success: Voices from experienced educators. *Journal of Asynchronous Learning Networks, 6*(1), 57-67.

Selwyn, N. (2014). *Digital technology and the contemporary university: Degrees of digitization*. Routledge.

Shahrokni, S. A., & Talaeizadeh, A. (2013). Learning Processes in Blended Language Learning: A Mixed-Methods Approach. *TESL-EJ, 17*(3), n3.

Siew-Eng, L., & Muuk, M. A. (2015). Blended learning in teaching secondary schools' English: A preparation for tertiary Science education in Malaysia. *Procedia-Social and Behavioral Sciences, 167*, 293-300.

Siripongdee, K., Pimdee, P., & Tuntiwongwanich, S. (2020). A blended learning model with IoT-based technology: effectively used when the COVID-19 pandemic?. *Journal for the Education of Gifted Young Scientists, 8*(2), 905-917.

Singh, H. (2021). Building effective blended learning programs. In *Challenges and Opportunities for the Global Implementation of E-Learning Frameworks* (pp. 15-23). IGI Global.

Skhephe, M., Caga, N. P., & Boadzo, R. M. K. (2020). Accounting teachers' readiness for e-learning in the Fourth Industrial Revolution: A case of high schools in the Eastern Cape, South Africa. *Perspectives in Education, 38*(1), 43-57.

Smith, K., & Hill, J. (2018). Defining the nature of blended learning through its depiction in current research. *Higher Education Research and Development. 38*(2), 383-397 DOI: 10.1080/07294360.2018.1517732

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of business research, 104*, 333-339.

Stevens, M. (2018). *Technology Enhanced Learning For English Language Learners* (Doctoral dissertation, George Mason University).

Strevens, P. (1988). ESP after twenty years: A reappraisal. *ESP: State of the Art.*

Stojković, N. (2019). Current tendencies in ESP didactics: Insights of an ESP journal editor. *Зборник радова Филозофског факултета у Приштини, 49*(3), 81-89.

Suzani, S. M., Yarmohammadi, L., & Yamini, M. (2011). A Critical Review of the Current Situation of Teaching ESP in the Iranian. *The Iranian EFL Journal, 36*(3), 179.

Tarnopolsky, O. (2012). Constructivist blended learning approach. *In Constructivist Blended Learning Approach*. De Gruyter Open Poland.

Tomlinson, B., & Whittaker, C. (2013). *Blended learning in English language teaching*. London: British Council

Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human resource development review, 4*(3), 356-367.

Tshabalala, M., Ndeya-Ndereya, C., & van der Merwe, T. (2014). Implementing Blended Learning at a Developing University: Obstacles in the Way. Electronic Journal of E-learning, 12(1), 101-110.

Tucker, C. R. (2013). *The basics of blended instruction. Educational leadership, 70*(6), 57-60.

Tuncay, N., & Uzunboylu, H. (2012). English language teachers' success in blended and online e-learning. *Procedia-Social and Behavioral Sciences, 47*, 131-137.

Van Praag, B., & Sanchez, H. (2015). Mobile technology in second language classrooms: Insights into its uses, pedagogical implications, and teacher beliefs. *ReCALL,27*(3),288-303. doi:10.1017/S0958344015000075

Wang, F., & Hannafin, M. J. (2005). Design-based research and technology-enhanced learning environments. *Educational technology research and development, 53*(4), 5-23.

Wang, Y. (2017). ESP Teaching Models Under the Background of Educational Internationalization. *JOURNAL OF HEILONGJIANG UNIVERSITY OF TECHNOLOGY (17)*11. 130-132. doi:10.16792/j.cnki.1672-6758.2017.11.026.

Watson, M. (2021). *Blended Learning at an Urban Alternative High School* (Doctoral dissertation, St. Thomas University).

Whyte, S., & Sarré, C. (2017). Introduction to new developments in ESP teaching and learning research. In C. Sarré & S. Whyte (Eds), *New developments in ESP teaching and learning research* (pp. 1-12). Researchpublishing.net. https://doi.org/10.14705/rpnet.2017.cssw2017.742

Wong, L. (2009). E-assessment: Its implementation and impact on learning outcomes. *Journal of Applied Research in Higher Education, 1*(1), 50-61. doi:10.1108/1758118420090000

Wong, L., Tatnall, A., & Burgess, S. (2014). A framework for investigating blended learning effectiveness. *Education & Training (London), 56*(2/3), 233-251. doi:10.1108/ET-04-2013-

0049

Xiao, W. & Zhang, S. Y. (2016). The Frontier, the Focus, and the Trend of Blended Learning Research— A Quantitative Research Using Citespace. e-*Education Research(7)* 279, 27-33.

Yang, Y. T. C., Chuang, Y. C., Li, L. Y., & Tseng, S. S. (2013). A blended learning environment for individualized English listening and speaking integrating critical thinking. *Computers & Education, 63*, 285-305.

Zhang, W., & Zhu, C. (2017). Review on blended learning: Identifying the key themes and categories. *International Journal of Information and Education Technology, 7*(9), 673-678.

Zhu, W., & Liu, D. (2014). Study on the Theoretical Foundation of Business English Curriculum Design Based on ESP and Needs Analysis. *Higher Education Studies, 4*(1), 68-74