ESP Teachers' Sociocultural Challenges in Online Formative Assessment: Voices of Teachers, Learners, and Coordinators

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Abstract

It has been a relatively limited report regarding the implementation of online formative assessment using socio-cultural approaches within the under-represented ESP context. This study explores teachers', students', and program coordinators' perspectives of their ESP teachers' socio-cultural challenges in online formative assessment, future strategies, and prospects of promoting the socio-cultural approaches in online formative assessment. A mixed-methods using four dimensions of socio-cultural assessment questionnaire and semi-structured interviews were employed to draw three different groups of participants involving 118 ESP teachers, 367 students, and 14 program coordinators from 25 universities in the East Java Province, Indonesia. The questionnaires and interviews found that the three study participants reported similar high socio-cultural challenges in underrepresented ESP teachers' online formative assessment in the four dimensions. Different perceptions between ESP teachers and students, future strategies, and prospects of promoting socio-cultural approaches in the online assessment were comprehensively discussed in the study. Since this study did not rely much on the technological platforms applied during the online formative assessment, future researchers' recommendations were made to address the types of technologies and their effectiveness in implementing these socio-cultural approaches within different ESP settings.

Keywords: ESP teachers, socio-cultural challenges, online formative assessment, strategic, technical

Introduction

Formative assessment in EFL/ESL is commonly applied in the classroom as a source of providing ongoing feedback to enhance the quality of EFL/ESL teaching and learning (Chen & Tseng, 2019; Jan-nesar et al., 2020; Kent, 2019). Formative assessment practices are embedded within classroom instructions to monitor learners' language learning and assess their understanding for the sake of improving classroom instructions and informing further learning through ongoing and timely feedback to achieve the

desired level of learning (Black & Wiliam, 2009; Gikandi et al., 2011; Li & Wang, 2018). Historically, the development of formative assessment in EFL/ESL pedagogy has evolved into three main stages. The first stage refers to traditional formative assessment where all assessment activities are implemented under the traditional paper-based quizzes, tests, teachers' feedbacks, and face-to-face forum discussion tasks (Babaii & Adeh, 2019; Chen et al., 2013; Duque Micán & Cuesta Medina, 2017). Secondly, with the rapid development of technology, the aforementioned traditional assessment practices have migrated to blended assessment approaches. The assessment activities are blended into the combinations of traditional and technologically-based assessment platforms such as online quizzes, tests, feedback, e-portfolio, and online discussion forum tasks (Ardid et al., 2015; Arifani et al., 2020; Caruso et al., 2017; Febriani & Abdullah, 2018; Rad, 2021). The third stage refers to online assessment approaches where all assessment activities are implemented using complete online platforms (Arifani et al., 2021; Cancino & Capredoni, 2020; Chen & Tseng, 2019; Gikandi et al., 2011; Krishnan et al., 2021).

Because of the significance of formative assessments in EFL/ESL pedagogy, assessment research within the contexts of traditional, blended, and online platforms has been widely explored involving learners' motivation, engagement, language skills, performance, perceptions, and teaching improvements using different approaches (Chen et al., 2013; Mauludin, 2018; Mohamadi, 2018; Seviour, 2015; Zou et al., 2021). However, it has been relatively sparse regarding online assessment in the field of ESP, which commonly offers a short duration of the program (6 to 8 months) to prepare their students' specific English and content knowledge to meet their academic, professional, or occupational needs within a rigid timetable. The previous implementation of online assessment does not reflect a robust theoretical foundation. Most of them applied tests based on their major assessment activities. To this end, this study provides a comprehensive look at ESP teachers' socio-cultural reflections, practices, and challenges during online assessment in the Indonesian ESP context. This study does not rely on the types of technologies used in the formative assessment but on how the socio-cultural frameworks are applied in online environments.

Literature Review

Assessment from a socio-cultural perspective: Theoretical framework

Stemming from Vygotsky's (1979) social constructivism theory (SCT), sociocultural theories view learning as socially and culturally constructed through a separate community engagement (Tour, 2020; Wenger, 1999; Wilson et al., 2017). From this view, the learning process and outcome cannot be separated from students' interactions with peers, teachers, learning sources, and relevant communities. In the classroom dialogues, three stakeholders are involved. These three stakeholders are the learners, peers, and teachers. These three types of stakeholders interact with each other and play different roles in a classroom learning community. In this case, teachers play crucial roles to identify learners' learning progress and goal (Cagasan et al., 2020; Winstone & Millward, 2012). In the context of English as a foreign or second language (EFL/ESL) teaching and learning practices, the socio-cultural approaches foreground the notion that learning a language is more than a unique construction. However, it is constituted in collectives, such as a particular learning community. Meaning and ideas are socially mediated and reside in a particular community of practice (Wenger, 1999). These approaches are also called situated learning theory, in which learners construct and develop their knowledge from social and cultural situations (Al-Wassia et al., 2015; Ratnam-Lim & Tan, 2015; Wilson et al., 2017). They also suggest that learning involves an ongoing and dynamic process because cultural situations, classrooms, and communities change from time to time (Poedjiastutie et al., 2021; Tour, 2020; Wilson et al., 2017).

Since teaching and learning are often reflected in the socio-cultural approaches, assessment, in this case, formative assessment, has to be equally mirrored to the same approaches. Regarding this view, Cagasan et al. (2020) and Poedjiastutie et al. (2021) suggest that the teacher who has vital roles in teaching and learning should integrate socio-cultural perspectives in his/her classroom assessment practices. A teacher should also view his/her classroom assessment as a social process and product of learning. From this perspective, a teacher has to give careful attention to his/her students' perspectives and experiences during formative assessment. There are several socio-cultural frameworks used in the formative assessments. They are a socio-cultural awareness scale and challenges (Al-Wassia et al., 2015; Wilson et al., 2017), cultural-historical activity theory (Engeström, 2001), and formative assessment protocol (Cagasan et al., 2020). Those three different types of approaches are rooted in Vygotsky's (1979) social constructivism theory. To draw ESP teachers' perspectives, practices, and challenges during the online formative assessment, the author adapts three socio-cultural frameworks (Al-Wassia et al., 2015; Cagasan et al., 2020; Wilson et al., 2017) to provide comprehensive perspectives.

Online assessment in the field of ESP

Online formative assessment in ESL/ESL teaching and learning is characterized by the diversity of focuses, instruments, and approaches that can enhance the learning process and outcomes. The author located 18 studies published from 2011 to 2021 in peer-reviewed journals in the English as a foreign or second language (EFL/ESL) field that examine online formative assessment. Except for the three different assessment studies under the hybrid/blended learning approaches (Arifani et al., 2020; Caruso et al., 2017; Rad, 2021). At a minimum, these studies included quantitative, qualitative, or mixed-method studies. Furthermore, all of the studies were in the EFL setting such as Russia, the US, England, Taiwan, Egypt, Turkey, Iran, China, and India.

Previous assessment studies, which applied synchronous and asynchronous platforms, indicated that technology-based assessment was practical for enhancing learners' language learning and attitude. Of the 15 studies, ten reported that various types of e-assessment could enhance learners' writing abilities and attitudes, 2 reported positive effects on online reading and grammar, 2 reported EFL teachers' assessment practices before and during the Covid-19 pandemic, and one reported learners' attitude of e-portfolio into English class. Of the four studies reporting EFL teachers' online assessment perspectives, 3 reported EFL teachers' assessment practices based on policy, teaching experience, and local context using digital tools, and just 1 study reported EAP teachers' beliefs about assessment literacy. The author could not locate any study scrutinizing ESP teachers' online formative assessment practices using socio-cultural approaches.

In the previous studies, researchers in the EFL/ESL setting have taken the initiative and have suggested an important area of online assessment on EFL/ESL teaching and learning. In writing, for example, various technology-enhanced assessments such as wikis, blogs, Google Docs, mobile apps, e-portfolio, online feedback have been widely applied to assess EFL learners' writing abilities, attitude and engagement. He results found that the uses of technologies in assessment could enhance students' writing abilities, attitude, and engagement (Ebadi & Bashir, 2021; Krishnan et al., 2021; Lv et al., 2021; Mohamadi, 2018; Mohamed, 2016; Namaziandost et al., 2020; Wang, 2014). Similarly, in EFL/ESL online reading instructions, Olesova et al. (2011) found that both EFL and ESL learners' perceptions of audio and text feedback after a five-week intervention showed significant differences. Meanwhile, in grammar class, Chen & Tseng (2019) found that holist scaffolding e-assessment could enhance learners' grammatical hints than the serialist model.

In addition, teachers' online assessment beliefs and practices have also been investigated using different research designs such as case studies (Zhang et al., 2021), multiple case studies (Krishnan et al., 2021; Mahapatra, 2021), and mixed-method (Afshar & Ranjbar, 2021). For example, Zhang et al. (2021) examined six EFL teachers' online assessment practices in Eastern China during the Covid-19 outbreak. They found that the study participants' assessment practices were influenced by university policy, local context, teaching experience, and reflection. In a multiple case study involving three EFL teachers from India, Bangladesh, and Nepal, Mahapatra (2021) found that the teachers could actively engage their students using various online assessment tools. Meanwhile, Afshar & Ranjbar (2021) reported that only a few content and language teachers were assessment literate in the EAP context. Those studies suggest that most online assessment research was conducted within the EFL and ESL settings with no well-defined theoretical approaches used in their studies.

However, the implementation of online assessment in ESP teaching and learning has commonly been evaluated following the well-established tests to justify students' end-products from EFL/ESL context without any adaptation (Douglas, 2001; Giménez, 1996; Tsou & Chen, 2014). Within the short duration of the ESP course (6 to 8 months), ESP teachers have to prepare their students to acquire specific English and content knowledge to meet their academic, professional, or occupational needs within a rigid timetable. No well-defined theoretical framework was applied in the assessment process within the ESP context. To this end, this study provides a comprehensive look at ESP teachers' socio-cultural reflections, practice, and possible mismatch between language and content teachers during formative assessment processes.

This study specifically addresses the following questions:

- 1. What are teachers' and students' perspectives on their ESP teachers' socio-cultural challenges in online formative assessment? Is there a significant difference between teachers' and students' perspectives?
- 2. What are ESP teachers' and students' perspectives on future strategies to promote ESP teachers' socio-cultural approaches in their online formative assessment?
- 3. What are the perspectives of ESP program coordinators on the prospects of promoting socio-cultural approaches in online formative assessment?

Method

Design

This study aimed to draw the ESP teachers' perspectives, practices, and challenges of socio-cultural reflections during online formative assessment. Therefore, a mixed-methods procedure to produce a much more comprehensive data collection, analysis, and interpretation results were employed (Creswell & Creswell, 2017; Richards, 2003). Since the perspectives of individuals are dynamic and complicated, the use of a mixed-methods design could detect participants' comprehensive views and augment research validity (Creswell & Creswell, 2017). The quantitative data were collected using a socio-cultural assessment questionnaire (Liker-item questionnaires). Meanwhile, the qualitative data were obtained from the semi-structured interviews. Finally, data obtained from the two types of instruments were applied for triangulation. For the study, the author applied two types of triangulations, namely instrument and participant triangulation.

Participants

The sample of this study involved 118 ESP teachers, 367 students, and 14 program coordinators from 25 universities in the East Java Province, Indonesia. From the total of 88 universities, only 25 universities enrolled in a one-year ESP program. A language center commonly manages the ESP program in each university. The reason for selecting ESP teachers, students, and program coordinators was that the three groups are involved in ESP teaching, learning, assessment, and program design. The comparison of the three groups could provide readers with more comprehensive information and perspective. All of the selected ESP teachers had either PhD holders (n = 112) or M.Ed. (n = 8). All of the ESP teachers graduated from the English education department and specialized in English language teaching. They had at least five years of teaching experience. The 14 program coordinators or the head of the language center were PhD holders. Two different sampling techniques were applied. Convenience sampling was used to select the surveyed study participants. The study also used a sequential nested sampling procedure proposed by Collins et al. (2007) to find the targeted interviewed participants. The author interviewed 25 ESP teachers, 25 students, and 14 program coordinators based on availability. All the study participants' anonymity and confidentiality responses were assured. The profile of the three groups of study participants is presented below.

Та	ble	e 1

Gender	Female 195 (53.1%)
Male	172 (46.9%)
Average Age	20.5 years old
Province	East Java
Grade	Second semester
Questionnaire participants	367 students
Interview Participants	25 students

Profile of ESP students participating in the research

Table 2

Profile of ESP teachers participating in the research

Gender	Female 64 (54.2%)
Male	54 (45.8%)
Average Age	37.2 years old
Province	East Java
Teaching experience	7.92 years
Questionnaire participants	118 ESP teachers
Interview Participants	25 ESP teachers

Table 3

Profile of ESP program coordinators participating in the research

Gender	Female 5 (35.7%)
Male	9 (64.3%)
Average Age	47.4 years old
Province	East Java
Teaching experience	12.5 years
Questionnaire participants	0
Interview Participants	14 coordinators

Data collection

Questionnaire development

Two survey questionnaires were developed based on previous studies' sociocultural and formative assessment theories in educational and EFL contexts (Al-Wassia et al., 2015; Cagasan et al., 2020; Wilson et al., 2017). The questionnaire questions were reviewed and edited by the author and co-authors several times. The quality of the questionnaires and their content were also validated by three different experts of educational assessment and socio-cultural. The questionnaires were piloted before they were used in the study. The author modifies the content and structure of the questionnaires after a panel with the three experts.

The sections of students' and teachers' questionnaires were designed based on the principles of assessment using socio-cultural approaches. The questionnaires comprised a total of 14 items. The sections of teacher's questionnaires included the ESP teachers' socio-cultural challenges to implementation of online formative assessment in their ESP teaching, namely strategic challenges (6 items), resources challenges (2 items), social challenges (4), and technical/developmental challenges (6 items). Similarly, the sections of students' questionnaires included the ESP students' socio-cultural challenges to implementing online formative assessment in their ESP teachers' questionnaires of socio-cultural challenges had the same four constructs as the teacher's questionnaires with 14 question items. Five-point Likert item intervals were considered for each part of the teacher's questionnaires.

The construct validity and reliability of the questionnaire were established using exploratory factor analysis and Cronbach's Alpha tests. The exploratory factor analysis was applied using the Kaiser-Meyer-Oklin (KMO) to estimate the sampling adequacy, and Bartlett's test of sphericity (0.00) was also considered. The KMO indicated the values of sampling adequacy of the four sections of the questionnaire: Section 1 = 0.76, Section

2 = 0.87, Section 3 = 0.89, and Section 4 = 0.85. Similarly, Bartlett's test (0.00) indicated higher than 0.30. Consequently, all factors of the four questionnaire sections could be accepted. The Cronbach's Alpha coefficients (0.76 - 0.89) also indicated an acceptable reliability level of the questionnaire. As for the research ethics, approvals were obtained from the university research center and program coordinators to collect the data.

Moreover, all the ESP teachers and students who participated in the study were provided with consent forms. Therefore, their involvement in the study was voluntary. The author also ensured confidentiality and anonymity issues from the study participants.

Interview development

The interview protocol was conducted to triangulate the qualitative data and enrich the questionnaires' quantitative data. The interview questions were developed from the questionnaires. Three sets of semi-structured interview questions were developed and administered for the three different participants, including ESP teachers, students, and program coordinators. Content validity and suitability of the interview questions were established using evaluation checklists. The evaluation checklists were submitted to three experts of formative assessment and socio-cultural experts. Their comments and notes were considered to improve the quality of the interview questions and suitability. The interview questions were also piloted to similar groups of ESP teachers and students. The ESP teachers' interview questions dealt with specific themes such as their understanding of socio-cultural approaches, practices, and the challenges of promoting the socio-cultural approaches in their online formative assessment. The students' interview questions focused on their socio-cultural involvement, activities, and challenges in the online formative assessment. Finally, the program coordinators' interview questions dealt with the importance of socio-cultural approaches, the challenges of enhancing socio-cultural approaches, teachers' ability to promote socio-cultural approaches, strategies, and the possibility of promoting the socio-cultural approaches in online formative assessment in the ESP programs.

Data Analysis

To analyze the quantitative data, both descriptive and inferential statistics were administered sequentially. Statistical Package for the Social Sciences (SPSS) software 25 was applied for the quantitative data analysis. The results of the questionnaires were presented in the form of mean and standard deviation. Further, the non-parametric Mann– Whitney U test was also estimated to explain the differences among the assessment perspectives between the ESP teachers and students. The author also ensured the construct validity and reliability of the assessment questionnaires using exploratory factor analysis and Cronbach's Alpha tests. The interview process was not recorded because the program coordinators and authorities did not allow it. The author and co-authors conducted the interviews and transcribed the interview data directly after each interview process was accomplished. It aimed to enhance the accuracy of the transcription. The interview contents were analyzed, and the common emerging themes mentioned by the study research participants were also reported and transcribed carefully. A coding scheme was developed by the author and co-author based on the implementation of socio-cultural frameworks in the formative assessment practices. Finally, the coding results were also interpreted by two people.

Results

Research Question (RQ1): What are teachers' and students' perspectives on their ESP teachers' socio-cultural challenges in online formative assessment? Is there a significant difference between teachers' and students' perspectives?

Table 4 indicates the results of perspectives on ESP teachers' strategic challenges in their online formative assessment in terms of the mean, standard deviation, and differences of perceptions between ESP teachers and students using six indicators. The mean score ranges from 1-2.5, which refers to a high challenge, 2.6-3.5 a medium challenge, and 3.6-5, referring to a minimum challenge.

Table 4

	ESP teachers' an	d students ' p	perspectives on	their ESP teach	ers' strategic challenges
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Category				0	Mann	
(Strategic Challenges)	Participants	Ν	Μ	SD	Whitney U test	р
Online formative assessment is either integrated into the ESP curriculum or structured	Teachers Students	118 367	1.80 1.87	0.83 0.79	1643.5	0.221
ESP course program embeds the concept of online learning assessment in both students and teachers where grades remain the primary goal.	Teachers Students	118 367	4.25 4.30	0.91 1.17	2674.0	0.352
ESP assessment policies and guidelines focus mainly on online summative assessment.	Teachers Students	118 367	4.70 4.55	0.47 0.75	2150.0	0.197
Adequate coordination between ESP content teachers and language teachers during online assessment activities.	Teachers Students	118 367	1.95 1.87	0.76 0.79	1841.0	0.643
ESP standards are endorsed to strengthen the online formative assessment practice through rigorous qualifications and a compulsory professional development approach.	Teachers Students	118 367	2.10 2.11	1.02 1.32	1832.0	0.375
The ESP course program has the autonomy to select its students or define their number.	Teachers Students	118 367	1.80 1.87	0.83 0.79	1643.5	0.221

From the lens of strategic challenge, the ESP teachers and students perceived that their ESP teachers could not optimally apply these categories because they: were not integrated into the ESP curriculum, did not have policy, guidelines, the standard of professional development regarding assessment, did not have the autonomy to define the number of students and assessed cumulative grades from their students without support from content teachers and faculty members (p > 0.05).

Table 5 indicates the results of perspectives on ESP teachers' resource challenges in their online formative assessment in terms of the mean, standard deviation, and differences of perceptions between ESP teachers and students using two indicators. In addition, the results of statistical measures using the same test are presented below.

Table 5

ESP teachers' and students' perspectives on their *ESP* teachers' resource challenges

Category (Resource Challenges)	Participants	Ν	Μ	SD	Mann Whitney U test	р
Lack of time is a significant roadblock for meaningful online formative assessment.	Teachers Students	118 367	4.30 4.55	0.80 0.51	2801.5	0.194
ESP has large class sizes and too much ESP material to cover.	Teachers Students	118 367	4.80 4.90	0.69 0.44	1325.0	0.212

From the category of resource challenges, it was found that both ESP teachers and students perceived their ESP teachers as having challenges with lack of time to implement meaningful online formative assessment, large class size, and materials. Their perceptions did not differ between the two groups toward their ESP teachers' resource challenges(p > 0.05).

Table 6 indicates the results of perspectives on ESP teachers' social challenges in their online formative assessment in terms of the mean, standard deviation, and differences of perceptions between ESP teachers and students using four indicators.

Table 6

ESP teachers' and students' perspectives on their ESP teachers' social challenges

Category (Social Challenges)	Participants	Ν	Μ	SD	Mann Whitney U test	р
The immense distance between ESP teachers, students, and faculty makes online formative assessment is not optimal.	Teachers Students	118 367	3.93 4.10	1.41 1.02	3608.0	0.941
Male/female ESP teachers and faculty influence to ESP learning environment.	Teachers Students	118 367	4.60 3.14	0.69 1.54	1325.0	0.000
ESP online formative assessment involved ESP content teachers, students, and stakeholders/ professionals.	Teachers Students	118 367	1.85 2.61	0.87 1.37	1329.5	0.216
Mixing between male and female ESP students contradicts social/religious rules.	Teachers Students	118 367	2.44 2.05	1.37 0.76	3220.5	0.324

From the category social challenges, it was found that both ESP teachers and students agreed that their ESP teachers as having challenges with three out of four indicators of social challenges, namely the enormous distance between ESP teachers, students, and faculty members, low involvement from faculty members and stakeholders (p>0.05). Conversely, the two groups of participants had different perceptions regarding ESP teachers and gender. The students perceived that ESP teachers and gender were essential, but their teachers did not (p<0.05).

Table 7 indicates the results of perspectives on ESP teachers' technical/developmental challenges in their online formative assessment in terms of the mean, standard deviation, and differences of perceptions between ESP teachers and students using six indicators.

Table 7

ESP teachers' and students' perspectives on their ESP teachers' technical challenges

Category (Technical/Developmental Challenges)	Participants	Ν	Μ	SD	Mann Whitney U test	р
Faculty possess more content knowledge than the pedagogical content knowledge in online formative assessment	Teachers Students	118 367	4.30 4.60	1.17 0.69	2676.0	0.375
Online formative assessment was best done using tests. The implementation of a learner-	Teachers Students	118 367	4.70 4.48	0.47 0.56	1703.0	0.695
centred approach in ESP courses is challenging because of the large number of students.	Teachers Students	118 367	4.21 4.25	1.22 0.91	2350.5	0.324
ESP online classroom assessment is relevant to real life	Teachers Students	118 367	2.30 2.70	0.92 0.85	3064.0	0.221
ESP students are allowed to self-or peer-assess	Teachers Students	118 367	2.75 2.65	1.45 1.22	3147.0	0.158
Faculty assigns standard of competence to the students	Teachers Students	118 367	1.85 2.61	0.87 1.37	1329.5	0.216

From the category of technical/developmental challenges, it was found that both ESP teachers and students perceived their ESP teachers as having challenges with pedagogical knowledge, non-test-based online formative assessment, relevancy of formative assessment with learners' content knowledge, peer assessment, relevancy, and no assigned standard of formative assessment. However, there were no perceptions between the two groups of participants toward their ESP teachers' technical/developmental challenges (p > 0.05).

Research Question (RQ2): What are ESP teachers' and students' perspectives on future strategies to be taken to promote ESP teachers' socio-cultural approaches in their online formative assessment?

ESP teachers' perspectives on future strategies

In the interviews, most of the teachers asserted that formative assessment should: be integrated into the university policy, curriculum, and professional development (n=25), reconsider class size and materials to cover (n=25), minimize the distance between language teachers, content teachers, and students and involve stakeholders and

professionals (n=24), determine the standard of competence and assessment relevance to real life, involve peers assessment, and design non-test-based assessment (n=24).

I think the ESP teachers should permanently teach in a single ESP course major, which is relevant to teachers' expertise. In addition, regular workshops on teaching and assessment for ESP teachers are required to foster their professionalism (Teacher 19).

I know that the department did not agree to the ESP course program because it wasted students just learning English. Therefore, mutual collaboration among department, content teachers and language (ESP) teachers should be built to convince the importance of ESP courses (Teacher 9).

I think the students should learn from the language teacher, but they also need to be connected to peers, content teachers, stakeholders, and professionals to support their specific English and content needs (Teacher 25).

ESP program should have its curriculum, standard competence, and assessment (Teacher 7).

ESP students' perspectives on future strategies

In the interviews, many of the students mentioned that formative assessment should involve grades and other relevant activities (n=25), and course materials should be lessened. In addition, teachers should create meaningful formative assessment activities (n=25), content teachers, stakeholders, and professionals should be involved in formative assessment with ESP teachers, and female teachers should teach their ESP course (n=22); the students also suggested to relate between formative assessment and their real-life experiences in their field involving peers (n=24).

In my major's first and second semesters, I had 24 credits, and I also had 16 credits for the ESP course. I think that is too overwhelming for me. Instead, ESP teachers should design concise course material relevant to my primary and practical formative assessment (Student 7).

I did not perform very well in my final test. Therefore, my English scores were not optimal because the percentage of the final test was 40%. My classroom participation and discussion activities were not meaningful because they were low (Student 24). Formative assessment should not rely on tests.

I got depressed with the tests. They relied a lot on the language test. My major was Nursing, but I did not know how to communicate with patients, families, colleagues, and doctors during my course. The teacher should relate us to real situations and contexts during the ESP course to support our course major (Student 18). I liked how the female ESP teachers' project asked me to interview the nearest shop manager in my area and upload it into the YouTube channel. Other teachers should follow this friendly activity (Student 9).

Research Question (RQ3): What are ESP program coordinators' perspectives on the prospects of promoting socio-cultural approaches in online formative assessment?

Generally, it appeared that not all the ESP program coordinators were aware of the challenges of promoting socio-cultural approaches in online assessment. For example, while four program coordinators believed assessment policies, curriculum, and the department could be negotiated to enhance teaching and learning quality, the other seven program coordinators asserted that it is too hard to harmonize the situations because ESP was established as a medium for supporting the English graduate teaching experiences. In addition, three directors claim that the ESP program was independent of the department. Therefore, the department did not interfere with the existence of the ESP program as they were already demanding their teaching tasks, research, and other administrative tasks from their department. In addition, all the program coordinators asserted similar ideas to address these issues regarding the prospect of another socio-cultural issue involving peers, connecting peers to content teachers, stakeholders, ESP teacher professional development, and meaningful formative assessment activities. Therefore, all the coordinators agreed to implement this category of socio-cultural approaches in the ESP course program.

I think it is tough to regularly involve content teachers as part of the formative assessment activities because of most of their rush schedule, but once a year, we usually involve them during ESP program evaluation, we also receive similar suggestions, but it is tough to make it accurate (Coordinator 5).

The ESP at this university is managed under a language center, and the initial mission is to support the English graduate with teaching experiences. Therefore, we need university policy to integrate this ESP program (Coordinator 14).

I agree that all ESP teachers integrate socio-cultural approaches in their online formative assessment involving peers, stakeholders who had MoU with our university, and content teachers (Coordinator 10).

ESP teachers are regularly involved in program evaluation, conferences, and workshops, covering general teaching issues. During ESP book writing, language teachers and content teachers write the textbook collaboratively, but it is limited to reading text selection and suitability with the content knowledge but all tasks and activities are designed by the ESP teachers (Coordinator 11).

Discussion

While most published works dealt with assessment for EFL pedagogy with no welldesigned theoretical framework, this research strove to explain the current perceived challenges of implementing socio-cultural approaches within online formative assessment in the ESP setting. Based on the findings, no significant differences between the teachers' and students' regarding their ESP teachers' perspectives of challenges were identified in the four categories of questionnaires. However, both teachers and students claimed that their ESP teachers had significant challenges implementing socio-cultural approaches within their online assessment. More specifically, except for the gender roles of ESP teachers. The result of interviews and questionnaires revealed that students' perspectives of the gender of ESP teachers influenced their learning environment.

Further, they opined that female ESP teachers were more contributive towards their ESP learning than males. This finding corresponds with the findings of previous research on the role of gender in ESP teachers' creativity and ESP learners' learning involvement (Arifani & Suryanti, 2019). This previous study reported that female ESP teachers are more creative than male teachers. ESP students reported that they were more engaged when taught by female ESP teachers because of their teaching creativity. Other studies beyond ESP contexts reported similar results (Forisha, 2015; Karwowski et al., 2015; Kemmelmeier & Walton, 2016). If previous studies found gender had essential roles in EFL teaching and learning, including ESP content, this study adds that gender was essential in implementing assessment using socio-cultural approaches.

The second findings of the study indicated that the ESP teachers had high challenges in their formative assessment regarding the implementation of the strategic challenge category. These results also indicated the low level of socio-cultural reflection during formative assessment because of fewer university strategic challenges. Both ESP teachers and students reported similar obstacles in the questionnaire and interviews. The triangulation of the questionnaire and interview data suggested that ESP teachers lack university policy support regarding the integration of formative assessment in the ESP curriculum. These results were similar to previous studies (Afshar & Ranjbar, 2021; Al-Wassia et al., 2015; Li & Wang, 2018; Poedjiastutie et al., 2021). The implementation of ESP under the well-represented universities such as Saudi Arabia (Al-Wassia et al., 2015) and China (Li & Wang, 2018) with a well-designed curriculum, policy, and experiences ESP teachers also reported inadequate socio-cultural reflection and implementation in their formative assessment. The findings of this study reported different conditions from the well-represented ESP from those two different countries. Under-represented ESP situations like in Indonesia, where the curriculum, policy, and less-experienced teachers, the strategic challenges become more complicated since there is no mutual collaboration between ESP program, department, and university. The complexities of strategic challenges are caused by different linearities between English teachers' teaching background and their ESP teaching, restricted collaboration between English teachers and content teachers, and limited access to wider ESP communities. To address these issues, the University, department and ESP program should work collaboratively to optimize their networking potential to involve ESP teachers and students to various cultural events from university's external partnership institutions. If it is not implemented, ESP learning will be more challenging. Consequently, the sociocultural framework of formative assessment will be only a story in underrepresented contexts like in Indonesia. These findings are different from previous implementations of socio-cultural frameworks in ESP formative assessment from well-represented universities (Afshar & Ranjbar, 2021; Al-Wassia et al., 2015; Li & Wang, 2018). Those three previous studies did not have complex socio-cultural problems because most of the teachers and students came from different cultures. Therefore, they could easily interact with one another from various cultural situations. The theoretical contribution of this research reported that the implementation of online ESP formative assessment under the socio-cultural frameworks should not rely on students' English language production because ESP consists of English and content knowledge. Involving ESP learners' to wider ESP environments and activities using online platforms could be worth contributing to enhancing students' content knowledge and specific English at the same time. Further, the ESP teachers who have limited experience in ESP teaching could also learn from the students' formative collections to boost their ESP knowledge.

The third discussion dealt with ESP teachers' rush teaching schedules and large class size as the significant barricade to implement meaningful online formative assessment under the socio-cultural approaches. Both teachers and students reported similar perspectives in the questionnaire and interview. Similar results from different research contexts reported that big class sizes, different ESP programs, and too many online tasks became boomerang for the EFL teachers to respond to the tasks timely and the students get frustrated with this situation (Arifani et al., 2020). In an Indonesian ESP context, most of the ESP teachers are supported, teachers and non-permanent teachers. The supported teachers are mainly from the English education department as their home base, and teaching ESP becomes extra credits for them beyond their twelve compulsory credits from their department.

Meanwhile, the non-permanent teachers who work as ESP teachers are mostly stepping stones from the EFL graduate to enlarge their teaching experience before they get their permanent job. These situations are very different ESP situations from wellrepresented contexts, as reported by other studies (Al-Wassia et al., 2015; Cagasan et al., 2020; Chen et al., 2013; Li & Wang, 2018). Regarding the mismatch linearity between ESP teachers' ESP teachers' ESP teaching course and their expertise, most program coordinators suggest setting up a permanent ESP teaching schedule in one specific major. Previous studies did not report this situation because they were well-represented in terms of ESP teachers' linearity and their specific ESP course major (Al-Wassia et al., 2015; Chen et al., 2013; Li & Wang, 2018). Regarding the mismatches between English teachers and their ESP teaching, ESP program coordinators can implement collaborative teaching involving both English teachers and content teachers in one ESP class. This collaboration model can strengthen the learning since English and specific content knowledge are delivered simultaneously. In addition, ESP program coordinators should schedule an ESP teacher to teach interrelated ESP classes under the same major. This will benefit the ESP teachers to learn specific English and content from their teaching journeys.

The subsequent discussion dealt with the development challenges of implementing socio-cultural approaches into the formative assessment. Both teachers and students reported similar ESP teachers' formative assessment development challenges and peers' and stakeholders' involvement in the questionnaire and interviews. Some parts of these findings reported similar social development challenges during formative assessment (Al-Wassia et al., 2015; Hutchings, 2011). Within the context of Saudi Arabia, the ESP course program, policy, accreditation standard, and ESP teachers' professional development are well-facilitated (Zhang et al., 2021). They also involved good practices of integration between ESP students and their related communities. Meanwhile, the integration of content teachers, language teachers, and peers was not reported from previous studies as they are okay with these variables. Although most program coordinators perceived the

integration between ESP curriculum, policy, and faculty members as an impossible mission, they suggested optimizing social interaction between peers, content teachers, and stakeholders can be optimized.

Conclusion and Recommendations

Formative assessment within under-represented ESP contexts is challenging due to complex ESP teachers' English proficiency, content knowledge mastery, teaching loads, status, and institutional issues. To harmonize the two variables of socio-cultural approaches and formative assessment require openness from all parties to scale up the quality of the ESP course program, including integrated formative assessment into the ESP curriculum, the mutual collaboration between language and content teachers, and involving peers in more comprehensive networking with professionals and stakeholders in the field of ESP. University external partnerships should be involved in ESP teaching and assessment programs to enrich ESP teachers' and students' specific English and content knowledge. Formative assessment in ESP context should rely not only on knowledge-based (English and specific content knowledge) but also rely on learners' engagement to various ESP situations. Those variables are very essential in fostering ESP learners' future skills. Without these efforts, the quality of ESP under these environments would be only a never-ending story. However, this study dealt with some potential limitations. The first one was the length of ESP teachers' teaching experience, and their teaching status as permanent or non-permanent teachers was not classified during the data analysis. Meanwhile, teachers' teaching experience indicated a positive correlation towards the implementation of formative assessment. Further research can address the two essential variables through more depth-qualitative analysis to uncover the success of socio-cultural implementation during formative assessment.

The findings also reported thrilling challenges of socio-cultural implementation in formative assessment. These may be due to teachers' shared understanding of socio-cultural conceptions in their teaching practices. Further studies addressing ESP teachers' understanding of socio-cultural frameworks need to be investigated. In addition, a model of effective socio-cultural practice needs to be explored to enhance their meaningful formative assessment practices.

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