CHALLENGES AND OPPORTUNITIES TO COLLABORATIVE DISTANCE LEARNING IN ESP INSTRUCTION

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In post pandemic instruction fueled by digital media and technology, distance learning emerges as a powerful opportunity for higher education collaboration. The Directorate of Students' Learning, Ministry of Education and Culture of Indonesia opens opportunities for universities across Indonesia to have collaborative online learning with those students based on underprivileged regions in Indonesia. This research investigates a case of collaborative online learning project between two universities in East Java and East Nusa Tenggara province with two ESP courses designed collaboratively and implemented with shared classes in online mode. Through this case study, two things are explored during the program: challenges and opportunities in the stage of course development and course implementation. Two course developers, four university instructors, and thirteen selected students from both universities were involved in this study. Data collection combined interviews, virtual observations, and instructional documents. Analysis employed thematic layering and triangulation, revealing challenges in four areas: course development, technology readiness, teaching methods, and student support. However, rooms of improvement are there for more prepared future collaboration. Despite the challenges, collaborative distance learning conducted by both universities can be a lesson to learn for a better online instruction in the future amidst the pluralistic backgrounds of the students and problematic technology support.

Keywords: distance learning; collaborative online learning; underprivileged region; course development; ESP

INTRODUCTION

In the post-pandemic era, online learning has witnessed accelerated adoption across various levels of education worldwide, including Indonesia. Regarding the current trend and forecasted trend (Rukmini et al., 2023; Nasution et al., 2022; Ningsih et al., 2023), online learning thrives and gains an increase of users' demand (James et al., 2022) post pandemic and potentials to be developed in the higher education institutions. In the early days of the pandemic, many universities were forced to switch to online instruction, or at least in hybrid or blended learning mode (Gozali et al., 2022). However, as the pandemic passed, universities have begun to explore more sustainable and effective ways to integrate online learning into their curriculum to optimize learning for all higher education students (Sheridan & Gigliotti, 2023).

To meet the growing demand for online learning in Indonesia, the Ministry of Education, Culture, Research, and Technology (MoECRT) has taken proactive measures, *Sistem Pembelajaran Daring* (SPADA) or Online Learning System Indonesia is one of the leading programs run by the MoECRT even since before the pandemic with the purpose to increase the access of learning equity in higher education. With the years of experience, SPADA Indonesia has been assessed in regards to its high quality assurance evidenced by several empirical studies (Wibawanto, 2019) and government have taken various efforts to improve its quality in regulation, digital infrastructure, human resources, and the quality assurance (Pannen & Riyanti, n.d.) .A program of *Pembelajaran Daring Kolaboratif* (Collaborative Distance Learning) has been run for years to support higher education institutions to initiate and develop distance learning program with the spirit of 'freedom of learning' for the students. One of the key features of the collaborative distance learning program is its emphasis on collaboration. The program encourages universities to collaborate with each other, as well as with other stakeholders, such as businesses, government agencies, and non-profit organizations, to develop and deliver high-quality distance learning programs. This collaboration allows universities to share resources and expertise, and to offer students a wider range of course options and learning experiences. The MoECRT calls for collaborations between qualified universities with universities in underprivileged regions in Indonesia as the assistantship with the principle of equity in learning.

One of the courses prospected to gain potentials in collaborative online learning is either English for Academic Purposes (EAP) or English for Specific Purposes (ESP), one step further needs for the university students instead of general English. General English is for those seeking basic language knowledge, such as casual conversations, daily activities, and travel. There is an increasing demand of ESP teaching approach since the specific demand of English instruction - mainly English for Science and Technology, English for Business, and other vocational purposes - continues to grow globally (Johns & Dudley-Evans, 1991). In the modern ESP context, especially in Indonesia, vocational higher education institutions have been growing as the increasing economic growth demands certain fields such as tourism industries, maritime, and health sectors. The graduates of those sectors are found many to work overseas with not only the specific hard skills but also good communicative skills. This, for sure, will lead to the demand of English skills needed in the workplace, and the existence of ESP is there.

From a sociocultural perspective, the effective integration of technology into digital learning environments aligns with Vygotsky's theory (1979), emphasizing collaborative and interactive learning. He argued that learning occurs when students work together to solve problems, share ideas, and build on each other's knowledge. In the digital age, technology can facilitate these kinds of interactions by providing opportunities for students to collaborate with each other online, share information and resources, and engage in joint problem-solving activities. With the onslaught of information and technology along with its cutting-edge technology tools, ESP teaching seems to be affected enough through the rapid developments (Labetoulle, 2020). It eventually affects the way how the ESP teachers or lecturers adapt the instruction by utilizing or integrating technology through adjustments. Pandemic period has revolutionized the teaching ways and made educators to rethink conventional approaches and adapt new period in post pandemic (Cahapay, 2023).

In post pandemic, ESP has been adapted with technology utilization with still, the goal is matching the students' needs of materials and the targeted language use at work. In vocational schools for example, some course developers have designed the materials into the digital-based ones such as studies by Fadlia et al. (2022). Also, in polytechnic higher

education, the adaptation becomes a necessity just like a study conducted by Surani et al. (2023). However, ESP is not only taught in vocational higher education, those with English language education study program also offers ESP courses to prepare the students for alternative occupations, such as those in tourism, banking, and business. With the aforementioned issues regarding ESP teaching, this case study is trying to uncover the practices conducted by two universities namely STKIP PGRI Bangkalan based in East Java province as the university proposer and Tribuana Kalabahi University based in East Nusa Tenggara province as the university partner within the program of collaborative online learning conducted by The MoECRT.

Reacting to the background, this research seeks to find out how the integration of technology into ESP teaching can be done in the context of collaborative distance learning. While previous studies have investigated more on online or distance learning in post pandemic in ESP instruction, they have not adequately addressed the potentials of collaborative distance learning, particularly above the year 2022 and within Indonesian context. The existing literature mostly covers the discussion of reflection towards what can be learned from pandemic through students' perceptions and teacher facilitation in online group work such as those conducted by Sholikhah & Ningsih (2023) and Kristianto (2023) respectively. To be more specific we would like to find out the obstacles encountered within the collaboration in the ESP course development and course implementation as well as the opportunities for both universities to expand in the future collaboration in distance learning. Addressing challenges and opportunities in collaborative online ESP instruction provides significance in particular to address current limitations and unlock new avenues for effective language education in the post-pandemic landscape. This is likely to lead to the enhanced learning outcome among students participated in the courses. In addition, there is a potential in terms of resource sharing and expertise exchange between universities that will become a reference for other higher education.

METHOD

Case study is employed in this research with the focus of one particular case in a detailed account (Johnson, 2014). In broader context, case study is detailed study of a specific subject, such as a person, group, place, event, organization, or phenomenon. The goal is in order to gain in-depth insights of the individual, group, or situation (Lodico et al., 2006). A program of collaborative distance learning between two universities: STKIP PGRI Bangkalan as the university program proposer and Tribuana Kalabahi University, East Nusa Tenggara is defined as a case in this research. The two universities successfully got the assistantship grant to do the collaborative distance learning started in February to August 2023 from the course development to the implementation of the program. What I bring into a case on this study is a program run by two universities which is in line with what Thomas (2016) defined as a case, that is, the thing may be a person, a group, an institution, a country, an event, in a certain timeframe.

As it merely a single, particular case, the research design of the case study is intrinsic case study as explained by Johnson (2014) that the intrinsic case study is frequently used in exploratory research in which the researcher efforts to understand a little-known phenomenon by studying a sole case in depth. The primary aim is to understand the case as the whole holistic entity and understand the process within, whereas the secondary aim is to understand the process in a more general way with the analysis of the case, of course. To put into the context, the goal of this research is revealing the case particularly the program

of collaborative distance learning between two universities to integrate technology-based ESP instruction as a part of government grant.

Table 1. Research participants in the collaborative distance learning program

Research participants	Affiliation	Roles	Methods
2 University lecturers 4 University lecturers	STKIP PGRI Bangkalan, East Java Tribuana Kalabahi University, East Nusa Tenggara	Course Developer, Course instructor	Interview, observation on synchronous and asynchronous instruction, Document analyses (course syllabus, students' projects)
University students University students	STKIP PGRI Bangkalan, East Java Tribuana Kalabahi University, East Nusa Tenggara	Selected Course Participants	Interview for 13 selected students

The research participants were selected based on the roles in the SPADA grant program comprising course developers, course instructors, and course participants. Two course developers were selected from both universities as the proposer and partnering university who possess capacity in ESP course development, particularly English for tourism and Business English. Similar to the course instructors, both universities represent two instructors who have experiences teaching and researching ESP. Selecting 10 to 15 participants for interviews from 90 requires careful consideration and a clear selection strategy. Three factors were considered during the selection of participants: availability, communication skills since the interview is conducted in English, and willingness to participate which was eventually gained 13 participants.

Three methods were used to collect data for this case study: interviews, observations, document analysis s, and documentation of learning. Interviews were conducted with a total of four lecturers from both universities and a total of thirteen selected students from both universities to learn about their experiences in the course, their learning outcomes, and their perceptions of the course's effectiveness. The interviews were semi-structured, meaning that the interviewer had a list of questions to ask and allowed the students to share their own experiences and perspectives. The questions intended for the university lecturers specifically seeks information regarding how the collaboration works in two course development and course implementation. The challenges and potentials of the collaboration were also figured out. As for the university students from both universities were asked about how their perception of the course was during the teaching and learning process. Observations were conducted in the synchronized, virtual classroom to collect data on the teaching and learning process. The observations will focus on the interactions between the teacher and students, the students' engagement in the learning activities, and the students' use of learning resources. Documentation of learning was collected to track the students' progress and learning outcomes. The interviews provided in-depth understanding of participants' experiences during the course. However, the interview and observation were conducted up to the mid semester or half-way of the entire course meaning that it can be a potential limitation for this research and needs to be addressed in the incoming further research with a more comprehensive coverage of program.

Thematic data analysis is a method for analyzing qualitative data that involves reading through a set of data and looking for patterns in the meaning of the data to find themes. In the context of educational research involves a systematic examination of qualitative data to identify recurring patterns, themes, and meaningful insights. I apply layering themes in the thematic analysis to make it easier to get the simplest idea taken from the most complex ones. 'Layering themes builds on the idea of major and minor themes but organizes the themes into layers from basic elementary themes to more sophisticated ones (Creswell, 2012, p. 251)'. In the specific context of analysing interview results from course developers, course instructors, and course participants, this method seeks to uncover overarching themes that can contribute to a comprehensive understanding of the educational landscape. Through a careful and iterative process, the researchers scrutinized transcripts and identify key concepts or ideas emerging from the interviews. These emergent themes can be categorized to capture commonalities and variations across the perspectives of course developers, instructors, and participants. By categorizing the data into themes, researchers can facilitate a deeper discussion and interpretation of the findings, shedding light on the multifaceted aspects of educational practices. This approach allows for a nuanced exploration of the experiences, challenges, and successes within the educational context, providing valuable insights for improving course development, instruction, and overall educational outcomes. The following are the result of thematic data analysis.

Table 1. the interview data coding

Question	Participant responses	Initial code
Q1 What challenges have been faced by course developers to construct the course for collaborative distance learning?	• Combining background and cultural differences between the two university students to put into the teaching materials is a challenge, but yes, doable despite it is a challenge. Both university students have different culture, religion, regional time, and interests (IQ1.CD1) • Making instructional videos for two courses with a total of 6 videos plus designing learning activities is a big challenge to do in around 4 weeks (IQ1.CD2).	Accommodating students' multicultural background into materials Time allotment for materials and media development, especially videos.
Q2 What challenges have been faced by course instructors to teach the course for collaborative distance learning?	• Going through the LMS can be a daunting task in a heavy traffic hour such in the morning around 8-10 am and in the afternoon around 1-2 pm. I have no problem with internet connection; therefore, I believe the problems lies on the bandwidth of the LMS (IQ2.CI1) • Some students are not really aware for the instruction of the course assignment. Some students misunderstand about the assignment instruction in terms of due date, length of the video (for the projects), format of the files, whether the students are demanded to submit the link of YouTube videos or MP4 files (IQ2.CI2)	Weak LMS endurance in heavy traffic use. Low students' engagement in online learning. Some students' low awareness in course instruction. Disturbed coordination with teaching partner due to poor internet connection.

- Since it is a collaborative teaching with another university in underdeveloped region, it is sometimes hard for me to get in touch with my teaching partner in that university due to internet connection (IQ2.CI3).
- Editing the course content is very challenging in the teaching time because it needs time to complete (IQ2.CI4).

Q3 What challenges have been faced by both university students for collaborative distance learning?	- I face difficulty with the internet access because it is sometimes lagging (IQ3.US1) - My difficulty is the internet network sometimes has problem like overload and terrible, and that is very annoying for online learning (IQ3.US2) - My problem is for having bad networking, so it'll make me hard to submit my assignment. I guess I need better connection of internet. (IQ3.US3) - I think the learning strategy is less interesting and boring sir, this is what makes me difficult in this course. And internet access, especially in the attendance form on LMS, is very ineffective, slow and the duration is not long enough (IQ3.US4) - My difficulty is with the internet network and for attendance form, I am always late (IQ3.US5) - My difficulty is when I'm in the middle of learning, but the application doesn't connect and exits the lesson, sometimes it's also difficult to access the zoom link, and the internet connection is unstable (IQ3.US6) - The obstacle during the lecture was the poor network connection, so I was always late in taking attendance form on the LMS (IQ3.US7) - The problem is that when accessing the LMS and going through the LMS attendance, there are often problems. So, I always fill in attendance late (IQ3.US8) - My difficulty is when I'm accessing the LMS (always error) (IQ3.US9) - The obstacle during lectures is that the network is slow, making my LMS often errors (Q3.US10)	Students' poor and unstable internet access Ineffective online learning strategy Slow access to Learning Management System (LMS) Unstable synchronized learning platform Ineffective learning by only using smartphone.

	• I have problems logging in to the LMS through my phone. Also, I don't have any laptop. So I guess it is not optimal to access LMS and zoom at the same time using phone only (IQ3.US11) • In my opinion, the lesson is a bit boring because it's just assignments and sometimes it's a bit less focused because it's not face to face. The assignments should be reduced (IQ3.US12) • I think the teaching is less effective in delivering material because the zoom audio is not as clear as the audio voice notes on WhatsApp (IQ3.US13).	
Q4 What rooms of improvement that can be done to maximize such distance learning collaboration?	• During synchronous learning, students' engagement on the course should be more increased through interactive activities (IQ4.CD1) • Course developers involved in this project should get a more comprehensive training to get better understanding about materials development (IQ4.CD2) • The server bandwidth of the LMS needs to be upgraded to avoid the heavy workload of students' access and project assignments submitted inside (IQ4.CI.1) • University should support the students' access to stable internet connection for online learning. (IQ4.US.4) • Online learning strategy must be improved to make the activities to be more interesting for students' participation. (IQ4.US.13)	Proper online teaching methods for online teaching mode. Increased capability in materials development through training. Improved LMS bandwidth University support in Wi-Fi connection

In the research design, triangulation is used to ensure the trustworthiness of the findings. Triangulation is the process of validating the results of a study through two or more methods to check its reliability and validity. Triangulation involves comparing and contrasting different sources of data to validate and verify the results (Creswell, 2009). In other words, it can be the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena. The qualitative data were drawn from interviews with course developers, course instructors or lecturers, and course participants or students. These interviews provide rich and in-depth insights into the lecturers' and students' perceptions of the integration of technology in ESP teaching. The qualitative data were analysed through a descriptive narration, which involves systematically organizing and interpreting the interview responses to identify common themes, patterns, and perspectives (Creswell, 2009). In order to complement the interview data, other methods were applied namely virtual learning observation and document analysis primarily needs analysis document and course plan.

After collecting data through interviews, observations, and document analysis, the findings were compared and contrasted. The triangulation involved analyzing data from several sources: interviews, virtual teaching observations, and instructional documents. This multi-step process started with individual analysis of each data source, identifying key themes and patterns. Subsequently, data comparison involves contrasting and finding convergence points among different perspectives. When interviewees highlight the benefits of collaboration, this was checked if observational data and document analysis responses align with these perceptions, and so on. By using this triangulation approach, we can gain a more comprehensive understanding of collaborative online learning. Document analysis becomes the complementary source of data since it deals with the documents of ESP instruction such as teaching journals, course plans, learning management system used by both universities, and students' projects of assignment.

RESULTS AND DISCUSSIONS

Through the interview result and data coding with theme analysis, we as the researchers can identify the obstacles faced by three parties: course developer, course instructor, and course participants. The result of theme analysis eventually can figure out to answer the first research question regarding the challenges in conducting collaborative distance learning in two phases: course development and course implementation. Interview aimed at the three parties has revealed the thread of the answers as pictured on the following chart. All the responses from the interview are extracted from the most basic themes into the most sophisticated ones. Through the layering technique, it has been found at layer three as the detailed themes and layer four as the main themes of the problem faced by all parties. Further elaboration on the findings are presented on the issue of course development, technology preparedness, teaching methods, and student learning support.
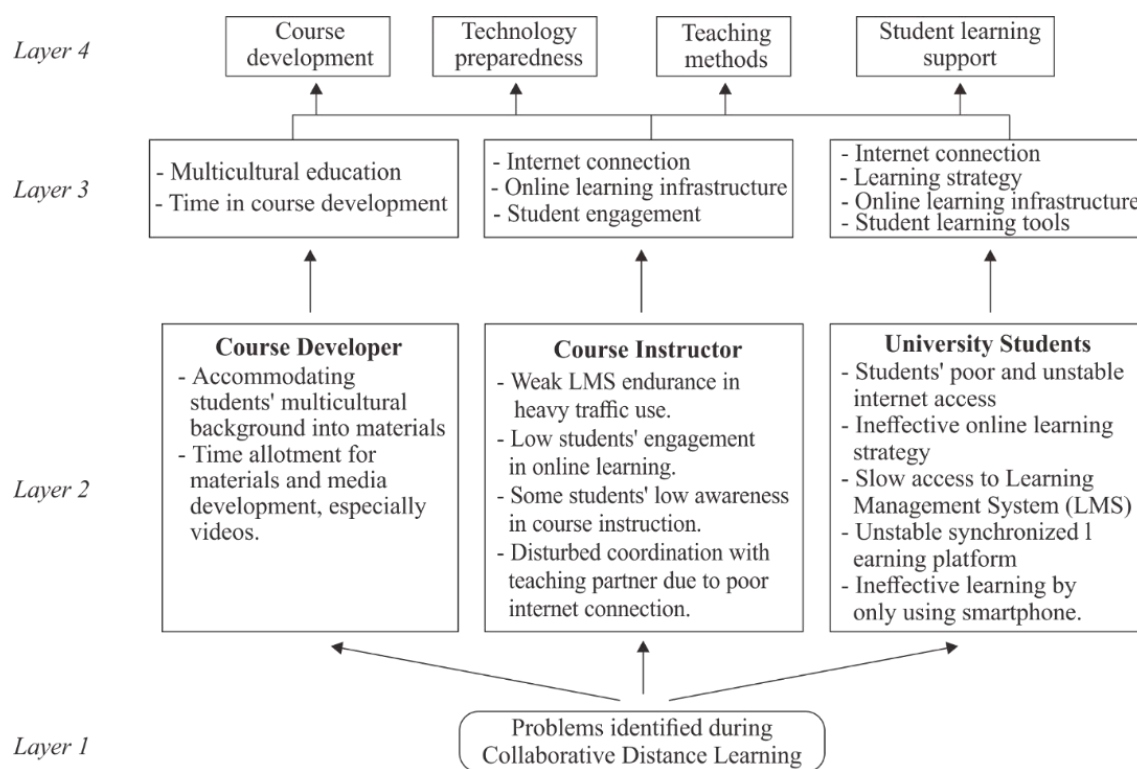

Figure 1. Thematic analysis on problem identification towards

collaborative distance learning Course Development

Two issues have been identified as obstacles in designing the course in the early stage in the beginning of the program namely needs analysis and time allotment in course development. Needs analysis becomes the basis when designing a course of ESP with the idea that the course contents should be aligned with what the students might find in the workplace setting. Conducting needs analysis for the two courses of ESP – English for Hospitality and Tourism and English for Hotel – becomes a quite big challenge due to two factors: the complex needs accommodation in multiculture of the students and the limited time provided by the MoECRT.

Multicultural education has been called to be important to develop students' tolerance to be able to live together in a society which consists of various people. The ministry expected that STKIP PGRI Bangkalan as the university proposer can give sharing assistantship with Tribuana Kalabahi University as the partner university. The university proposer comes from East Java province with better exposure of experiences in conducting digital learning, as for the partner university comes from East Nusa Tenggara province, particularly in Alor regency with the status of underprivileged region. Two university representatives as the course developers were seen to have a challenge to design the course contents with the background and cultural differences.

> *Combining background and cultural differences between the two university students to put into the teaching materials is a challenge, but yes, doable despite it is a challenge. Both university students have different culture, religion, regional time, and interests (IQ1.CD1)*

Based on the interview with the course developer, this situation was a challenge but it is still able to be addressed with communication. Matching the two backgrounds of the students could be addressed though communication intensively and focus group discussion with the university partner. With further follow-up document analysis taken from the two course developers and supported with observation towards the teaching recorded zoom videos in the first and second meeting, the following table provides a comparison of both university students.

Table 2. A part of needs analysis towards materials development

	STKIP PGRI Bangkalan	**Tribuana Kalabahi University**
Students' level of English	Mostly intermediate	Mostly upper intermediate
Students' faith or religion	Islam	Catholic
Regional focus of ESP materials	Madura island	Alor island
The focus of tourism contents	Cultural attraction and religious heritage.	Marine tourism attraction especially scuba diving and beach or coastal area.
Targeted English use for professional work	Hotel services, seafarers, tourism agency, government agencies.	Hotel services, tour guide, tourism agency, government agencies.

Learning preferences	Project-based, direct virtual explanation from the teacher, skills-based.	Project-based, direct virtual explanation from the teacher, skills-based.
Technology literacy for project-based assignments	Mostly in moderate level in video editing and graphic designing	Mostly in basic level in video editing and graphic designing

The second challenge that can be identified after the data through needs analysis is the time allotment to design and develop the courses. One of the most challenging one is the production of instructional videos in which there must be targeted three videos for each course, meaning that six videos in total for both courses. Four weeks was the time allotment targeted by the team to produce six videos with all the requirements.

> *Making instructional videos for two courses with a total of 6 videos plus designing learning activities is a big challenge to do in around 4 weeks (IQ1.CD2).*

Indeed, the production of videos is time-consuming started from the writing of the learning materials followed by the video-taking, and ended with editing. It turns out that the team did not hire any video editor because one of the team members has the capability to do the editing process. Those videos must be quickly prepared with the reason that in August, the course contents must be ready on the LMS with some parts of the materials are in the form of videos.

Technology Preparedness

The technology preparedness of the university plays a crucial role in the success of collaborative online distance learning, as evident from the insights shared by both teachers and students. One significant aspect highlighted by the teacher revolves around the challenges faced during peak hours, particularly in the morning (8-10 am) and afternoon (1-2 pm). Despite having a stable internet connection personally, the teacher attributes the difficulties encountered while navigating the Learning Management System (LMS) to potential bandwidth issues within the university's infrastructure.

> *Going through the LMS can be a daunting task in a heavy traffic hour such in the morning around 8-10 am and in the afternoon around 1-2 pm. I have no problem with internet connection; therefore, I believe the problems lies on the bandwidth of the LMS (IQ2.CI1)*

The teacher's observation underscores the importance of a robust and scalable LMS infrastructure to accommodate the heavy traffic associated with online learning, especially during peak hours. A proactive approach towards enhancing the university's technological infrastructure, particularly the bandwidth allocation for the LMS, could significantly alleviate these challenges and ensure a smoother online learning experience for both educators and students.

On the student front, a collaborative teaching arrangement with a university in an underdeveloped region introduces additional hurdles. The course instructor's utterance below emphasizes the intermittent difficulty in communication with their teaching partner from the partner university, directly attributing it to internet connection issues. This sheds light on the interconnected nature of collaborative online learning, where the success of partnerships depends heavily on the technological preparedness of all involved institutions.

> *Since it is a collaborative teaching with another university in underdeveloped region, it is sometimes hard for me to get in touch with my teaching partner in that university due to internet connection (IQ2.CI3).*

Students' statements below provide insights into individual struggles, pointing out issues with the internet network during online learning sessions. The mention of problems like overload and overall poor quality of the internet connection highlights the vulnerability of the online learning environment to technical disruptions. This not only affects the learning experience but also raises concerns about the reliability of the university's technological infrastructure.

> *I face difficulty with the internet access because it is sometimes lagging (IQ3.US1)*

> *My difficulty is the internet network sometimes has problem like overload and terrible, and that is very annoying for online learning (IQ3.US2)*

> *My difficulty is when I'm in the middle of learning, but the application doesn't connect and exits the lesson, sometimes it's also difficult to access the zoom link, and the internet connection is unstable (IQ3.US6)*

Teaching Methods

The insights provided by the students shed light on the challenges and perceptions surrounding teaching methods in the context of online learning. The students express concern about the potential monotony and lack of focus in lessons, attributing it to the predominant use of assignments. According to the student, the absence of face-to-face interaction amplifies the sense of boredom, implying that a more varied and engaging approach is needed to sustain student interest.

> *In my opinion, the lesson is a bit boring because it's just assignments and sometimes it's a bit less focused because it's not face to face. The assignments should be reduced (IQ3.US12)*

> *I think the teaching is less effective in delivering material because the zoom audio is not as clear as the audio voice notes on WhatsApp (IQ3.US13).*

Those statements underscore the need for a diversified set of teaching methods in online learning. While assignments have their place, incorporating interactive elements, multimedia, and varied instructional strategies could enhance the overall learning experience. Strategies such as live discussions, virtual group activities, and multimedia presentations could contribute to a more dynamic and engaging online classroom environment. On the student's end, there is a distinct concern about the effectiveness of the teaching method employed, specifically in the use of Zoom for delivering lessons. The student suggests that the audio quality on Zoom is not as clear as voice notes on WhatsApp, indicating a potential obstacle to effective communication and understanding. This insight emphasizes the importance of clear and reliable communication channels in online learning environments.

To follow up the finding regarding online teaching methods, it is important to see how the LMS interface and designs of the activities as well. LMS interface is believed to have impact

towards the attractiveness of learning system appearance that made the students to be 'teased' and pleased with the design.
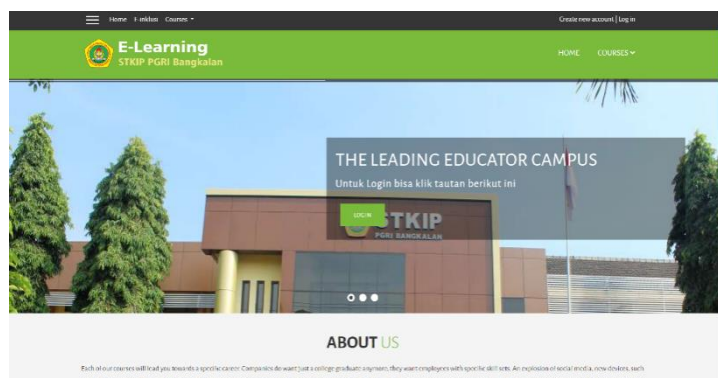

Figure 2. The Interface of the university LMS

It seems like the interface used by both universities requires several improvements to make it more attractive to the students. Online teaching methods are also influenced by how appealing the interface is and how good it can accommodate the online instructional activities. With small bandwidth and server, both students and instructors are struggling to be more engaged in online collaborative learning.

Student Learning Support

By providing learners with access to resources and support services that encourage self-directed learning, online learning support can help learners develop the skills they need to succeed academically. The first student expresses difficulty in submitting assignments due to poor networking, highlighting the critical role of a stable internet connection in the online learning experience. This issue not only impacts the timely submission of assignments but also underscores the broader need for robust technological infrastructure to support seamless participation in online courses.

> *My problem is for having bad networking so it'll make me hard to submit my assignment. I guess I need better connection of internet. (IQ3.US3)*
>
> *I have problems logging in to the LMS through my phone. Also, I don't have any laptop. So I guess it is not optimal to access LMS and zoom at the same time using phone only (IQ3.US11)*

Addressing such challenges requires a multifaceted approach. Universities should prioritize providing resources or assistance to students facing connectivity issues, whether through improving campus-wide internet access or guiding students on how to optimize their personal internet connections. Additionally, creating contingency plans for assignment submissions in case of technical difficulties could help alleviate the stress associated with potential disruptions. Such situation has been common a challenge in Indonesian context where internet coverage becomes a main barrier in implementing either online non-collaborative and collaborative learning such as those studied by Lailiyah & Putra (2022), Prasetyanto et al (2022), and Fitria et al (2022).

The second student highlights challenges related to accessing the Learning Management System (LMS) and Zoom through a mobile phone due to login issues and the absence of a

laptop. This emphasizes the importance of device accessibility and compatibility in facilitating effective participation in online learning. Without proper devices, students may face limitations in engaging with course materials and participating in virtual classes.

Rooms of Improvement and Opportunities for Future Collaboration

After seeing the challenges, there is still a room for improvement for further collaboration in the future. The room of improvement is scrutinized into two big themes namely teacher education and technology support as the following chart.
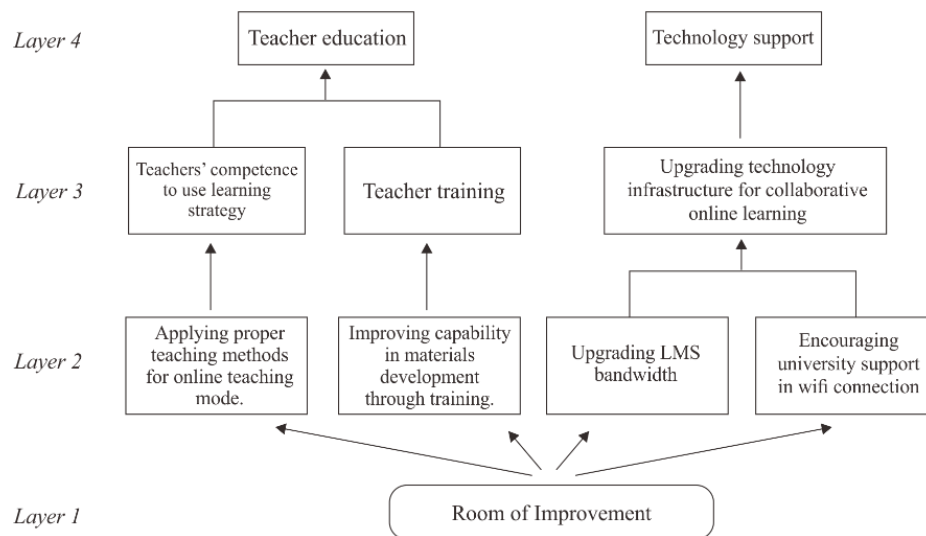

Figure 3. Thematic analysis on room of improvement

After seeing the challenges, there is still a room for improvement for further collaboration in the future. The room of improvement is scrutinized into two big themes namely teacher education and technology supportin figure 3. In the realm of teacher training, the provided feedback calls attention to the pivotal need for instructors to enhance their skills in fostering student engagement during synchronous learning. The recommendation emphasizes the importance of incorporating interactive activities within virtual classrooms, requiring educators to undergo specialized training. This training should delve into the integration of collaborative platforms, interactive quizzes, and other participatory tools, equipping teachers with the pedagogical strategies necessary for creating dynamic and engaging online learning environments. Furthermore, comprehensive training for course developers is highlighted as a critical component in elevating the quality of instructional materials. By focusing on pedagogical principles, effective instructional design, and strategies for online content creation, such training ensures that course materials not only meet educational standards but are also optimized for the unique challenges and opportunities presented by online learning.

On the technology support front, the feedback underscores the importance of upgrading the Learning Management System (LMS) server bandwidth to accommodate the increasing workload during peak student access and project submissions. Technological improvements, including increased bandwidth and optimized server configurations, are essential to ensure the seamless functioning of the LMS. Simultaneously, providing support for students to access stable internet connections is deemed crucial for fostering an inclusive online learning environment. This may involve collaborative efforts with internet service providers, offering

guidance on network optimization, or providing resources to students facing connectivity challenges. The integration of both teacher training and technology support measures is paramount to cultivating an online learning landscape that is not only technically robust but also pedagogically enriched, contributing to an optimal and equitable educational experience for all.

Opportunities for both universities are widely open in at least two things, based on the document of needs analysis. First, both students and university lecturers are benefited with valuable experience in multicultural education. With two differences between East Java culture particularly Madura and East Nusa Tenggara culture particularly Alor, there is likely an exchange of diverse cultural exposure that both sides can take advantage. Those differences provide insightful teachings that students, especially, can appreciate each uniqueness and learn new things each other. Both university lecturers are able to gain new experiences to collaborate and teach in multicultural education which were previously in the same background of the students. Second, students from the underprivileged area can learn from those from non-underprivileged region in many things including the learning strategy.

Further collaboration can strengthen both universities to learn each other and share new insights in English language learning.

Discussion

With the rising trend and increasing popularity of e-learning, especially after the emergence of a global pandemic, collaborative distance learning has emerged as a key paradigm, driven by advancements in technology and the global expansion of online education. The potentials of collaborative online learning in after the pandemic emerge in the forms of technology-supported collaboration to achieve individual and organizational success with the adoption, use and implementation of virtual collaboration in a pandemic and post-pandemic world (Mitchell, 2023). The effectiveness of this mode of learning hinges on the synergy of three critical components: teacher competence, training, and technology infrastructure as the research findings aforementioned have been identified. All three components are the key success for ESP instruction conducted collaboratively in online distance learning.

Teacher competence in online teaching is positively related to perceived online learning outcomes (Liu et al., 2022) and the mediation of how students are engaged in class through communication with peers and instructors (Kordrostami & Seitz, 2022). Reflecting from the times of crisis or pandemic, online instructors must possess not only subject matter expertise but also a deep understanding of the nuances of online pedagogy. Further, teachers must have capacity and capability to make use of online teaching methods integrated with digital technologies and support for online emergency teaching which means that teachers become the agency and their competence, networks and technology infrastructure are critical for online education during crisis (Damşa et al., 2021). Despite it is no longer an crisis time, this idea still applies to today. Competence in this context extends beyond technological proficiency to encompass skills in fostering meaningful online interactions, providing timely feedback, and adapting instructional strategies to the virtual environment. Albrahim (2020) categorized all the skills required by teacher in online learning comprising pedagogical skills, content skills, design skills, technological skills, management and institutional skills, and social and communication skills. Teachers who are proficient in online learning can create engaging and effective virtual classrooms, ultimately enhancing the overall learning experience for students.

Comprehensive university instructors training is essential in preparing educators for the demands of collaborative distance learning. University instructors need to create a virtual space for to learn and exchange ideas with other instructors as a form of continuing professional development (Silvhiany, 2022) to equip them with the necessary skills to navigate the online realm, create engaging content, and foster a sense of community among learners. Ongoing training is vital to keep educators up-to-date of evolving technologies and pedagogical strategies. To do the professional development, university instructors s need to have the sense of acceptance on the complex digital literacy and social presence to make them more engaged in participation (Mailizar et al., 2022). A professional training program, particularly in the context of online learning, is necessary to be conducted. The duration and intensity can be varied depending how good the technology literacy is. The professional development program can be a short online training program as suggested by Vilppu (2019) which can affect participants' interpretations of teaching–learning situations, particularly when the university instructors s are not very knowledgeable in teaching in online mode. With the all complicated things in digital networking and resources, the role of the educators is seen significant for the students in online network learning (Goldie, 2016). It is important to note that teaching through online learning requires technological skills too, asserting that university instructors s need a nuanced understanding of how technology, pedagogy, and content intersect to make informed decisions in the online learning environment. Sofi-Karim et al (2023) suggested that to get beyond restrictions and difficulties in online instruction, education departments and schools should build educational facilities, offer intensive courses for teachers, and introduce information communication technology modules across media platforms and applications. Therefore, a commitment to continuous training is essential to empower educators with the tools and knowledge needed to excel in collaborative distance learning.

The technological infrastructure forms the backbone of collaborative distance learning, shaping the possibilities and limitations of the virtual classroom. Giatman (2020) suggested on her research that to improve the quality of better learning outcomes, it is necessary to improve the quality of network infrastructure like Telkom provider as the biggest provider in Indonesia, to increase the quality of instructional learning by lecturers, and provide credit subsidies for students. An inadequate technology infrastructure can hinder the collaborative learning experience, leading to frustration among both teachers and students. Craig & Schroeder (2023) stress the importance of a user-friendly and accessible technological ecosystem, as it influences the quality and effectiveness of collaborative interactions in the online space. When students have been accommodated this technological ecosystem, it is necessary for them to have self efficacy in interacting during online collaborative learning as suggested by Udin et al. (2022). It refers to a students' belief in their ability to communicate and collaborate effectively with others in a virtual setting. This includes their confidence in their ability to participate actively in online discussions, ask questions, provide feedback, and express themselves clearly in online environments. The integration of LMS with social media, mainly YouTube and others is also necessary to give new experience (Lailiyah & Putra, 2022) for students and to make them comfortable participating in online activities, build strong relationships with their peers and instructors, and benefit from collaborative learning opportunities.

The aforementioned three components namely teacher competence, teacher training, and technology support are the pivotal in conducting online distance learning with ESP course. In the realm of collaborative online learning, the integration of technology has become pivotal in optimizing ESP instruction. The use of various technological tools both social

networking sites and web-based materials (Nugroho et al., 2022) as well as the support of infrastructure, such as virtual classrooms, multimedia resources with the support of excellent internet connection enhances the delivery of ESP content and provides students with authentic learning experiences. Through online platforms, ESP courses can be designed to simulate real-world scenarios, allowing learners to finally assist the students specifically address the needs of students as they relate to their goals for learning English.

CONCLUSION

In conclusion, this research has unveiled challenges and opportunities associated with collaborative distance learning in the context of English for Specific Purposes (ESP) courses. The findings, derived from interviews and thematic analysis, pinpointed obstacles faced by course developers, instructors, and participants. Challenges emerged in the phases of course development and implementation, specifically in the areas of needs analysis, time allotment, technology preparedness, teaching methods, and student learning support. The issues identified during course development, such as multicultural collaboration and time constraints, underscored the complexity of aligning course content with diverse student backgrounds. The time-intensive process of producing instructional videos posed a significant challenge, requiring careful planning and coordination. Additionally, the technology preparedness of both universities played a crucial role, with connectivity issues during peak hours and challenges in communication affecting the collaborative teaching dynamic.

However, amidst these challenges, there are identifiable opportunities for improvement and future collaboration. Thematic analysis revealed two main areas for enhancement: teacher education and technology support. To improve, universities should implement teacher training programs focusing on engagement, interactive elements, and online teaching methods specific to ESP. Additionally, technological upgrades like LMS server bandwidth increase and stable internet connection support are crucial. Finally, continuous collaboration, intercultural understanding, and evaluation are essential for success. By implementing these steps, universities can create a supportive and effective environment for ESP distance learning, enhancing online education quality, promoting equity, and preparing students for successful learning.

Implementing the suggested improvements in collaborative distance learning has the potential to generate significant long-term benefits for both students and instructors. By addressing identified challenges and leveraging recommended strategies, universities can foster a more engaging, supportive, and effective online learning environment for ESP students. For students in two different provinces – East Java and East Nusa Tenggara – there is a principle of learning equity gained in which online learning conducted collaboratively. As for on the university instructors' side, sharing and expertise exchange between universities that will become a reference for other higher education.

To monitor the effectiveness of implemented improvements in collaborative distance learning, a continuous ongoing assessment strategy and survey in the end of the program are essential. Course developers and course instructors must be involved to evaluate the course design to continuously assess the match of students' needs with the materials, the design of activities based on instructors' ongoing assessment, and LMS interface whether it is appealing enough for the students. Students should be involved in evaluating what to be

improved in the LMS, especially the interface through a set of questionnaires. With the limitations of the study representing a single case of collaborative learning program.

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REFERENCES

Albrahim, Fatimah A. 2020. "Online Teaching Skills and Competencies." *The Turkish Online Journal of Educational Technology* 19(1).

Cahapay, Michael B. 2023. "Introduction to Special Issue on Critical and Emergent Issues in Education: 21st-Century Skills." *Journal of Pedagogical Sociology and Psychology* 3. doi: 10.33902/jpsp.20231000.

Craig, Scotty D., and Noah L. Schroeder. 2023. "Improving Online Learning Ecosystems with Science of Learning Best Practices." *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* 21695067231192447. doi: 10.1177/21695067231192447.

Creswell, John W. 2012. *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. 4th ed. Boston: Pearson.

Damşa, Crina, Malcolm Langford, Dan Uehara, and Ronny Scherer. 2021. "Teachers' Agency and Online Education in Times of Crisis." *Computers in Human Behavior* 121:106793. doi: 10.1016/j.chb.2021.106793.

Fadlia, Fadlia, Surya Asra, Evi Zulida, and Made Hery Santosa. 2022. "Developing ESP Based-Digital Learning Materials Support Students' Needs at Indonesian Vocational Schools: Perceived Quality." *Englisia: Journal of Language, Education, and Humanities* 10(1):40. doi: 10.22373/ej.v10i1.12166.

Fitria, Tira Nur, Nurmala Elmin Simbolon, and Ida Bagus Putu Suamba. 2022. "Online Learning Implementation and Challenges during Covid-19 Pandemic: English Lecturers' Perspective in Indonesia." *SOSHUM Jurnal Sosial Dan Humaniora (Journal of Social Sciences and Humanities)* 12(2).

Giatman, Muhammad, Sri Siswati, and Irma Yulia Basri. 2020. "Online Learning Quality Control in the Pandemic Covid-19 Era in Indonesia."

Goldie, John Gerard Scott. 2016. "Connectivism: A Knowledge Learning Theory for the Digital Age?" *Medical Teacher* 38(10):1064–69. doi: 10.3109/0142159X.2016.1173661.

Gozali, Imelda, Faizatul Istiqomah, and Utami Widiati. 2022. "A Systematic Review of Online Elt Research in Indonesia During the Covid-19 Pandemic Through the Community of Inquiry Framework." *Journal of Information Technology Education: Research* 21:501–46. doi: 10.28945/5033.

James, Bridget R., Adrianne A. Leinbach, and Alyssa M. MacDonald. 2022. "Effective Online Teaching: Voices of Experience." *New Directions for Community Colleges* 2022(199):35–48. doi: 10.1002/cc.20522.

Johns, Ann M., and Tony Dudley-Evans. 1991. "English for Specific Purposes: International in Scope, Specific in Purpose." *TESOL Quarterly* 25(2). doi: 10.2307/3587465.

Johnson, Burke. 2014. *Educational Research: Quantitative, Qualitative, and Mixed Approaches*. Fifth edition. Thousand Oaks, Calif: Sage Publications.

Kordrostami, Melika, and Victoria Seitz. 2022. "Faculty Online Competence and Student Affective Engagement in Online Learning." *Marketing Education Review* 32(3):240–54. doi: 10.1080/10528008.2021.1965891.

Kristianto, Ignatius Indra. 2023. "The Students' Perception of the Teacher's Facilitation in Online Group Work." *Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP* 10(1):52. doi: 10.33394/jo-elt.v10i1.7163.

Labetoulle, Aude. 2020. "Salomi Papadima-Sophocleous, Elis Kakoulli Constantinou, Christina Nicole Giannikas (Eds.), ESP Teaching and Teacher Education: Current Theories and Practices: London: Research-Publishing.Net." *ASp* (78):155–60. doi: 10.4000/asp.6457.

Lailiyah, Malikhatul, and Suatmo Pantja Putra. 2022. "Integrating the Use of Social Media for Group Collaboration in ESP Classroom." *English Teaching Journal : A Journal of English Literature, Language and Education* 10(1):60. doi: 10.25273/etj.v10i1.11716.

Liu, Yue, Li Zhao, and Yu-Sheng Su. 2022. "The Impact of Teacher Competence in Online Teaching on Perceived Online Learning Outcomes during the COVID-19 Outbreak: A Moderated-Mediation Model of Teacher Resilience and Age." *International Journal of Environmental Research and Public Health* 19(10):6282. doi: 10.3390/ijerph19106282.

Lodico, Marguerite G., Dean T. Spaulding, and Katherine H. Voegtle. 2006. *Methods in Educational Research : From Theory to Practice*. San Francisco: Jossey-Bass.

Mailizar, Mailizar, Khairul Umam, and Elisa Elisa. 2022. "The Impact of Digital Literacy and Social Presence on Teachers' Acceptance of Online Professional Development." *Contemporary Educational Technology* 14(4):ep384. doi: 10.30935/cedtech/12329.

Mitchell, Alanah. 2023. "Collaboration Technology Affordances from Virtual Collaboration in the Time of COVID-19 and Post-Pandemic Strategies." *Information Technology & People* 36(5):1982–2008. doi: 10.1108/ITP-01-2021-0003.

Nasution, Awal Kurnia Putra, Mustafa Kamal Nasution, Muhammad Hasyimsyah Batubara, and Imam Munandar. 2022. "Learning during COVID-19 Pandemic: A Systematic Literature Review." *International Journal of Evaluation and Research in Education (IJERE)* 11(2):639. doi: 10.11591/ijere.v11i2.21917.

Ningsih, Kurnia, Afandi Afandi, Krisensia Edria Penampe, Dina Nurfitriani, and Erica Ikramunnisa. 2023. "The Increase of Online Learning System in Indonesia during COVID-19 Pandemic: A Systematic Literature Review Using VOSviewer." *AIP Conference Proceedings* 2751(1):040003. doi: 10.1063/5.0143034.

Nugroho, Arif, Yunika Triana, and Dewi Zulaiha. 2022. "Digital Teaching Awareness and Practice: Narratives from Indonesian ESP Teachers." *ELT Echo : The Journal of English Language Teaching in Foreign Language Context* 7(1):1. doi: 10.24235/eltecho.v7i1.9905.

Pannen, Paulina, and Rahayu Dwi Riyanti. n.d. "Indonesia Cyber Education Institute: Assuring Quality of Online Education in Indonesia."

Prasetyanto, Dwi, Muhamad Rizki, and Yos Sunitiyoso. 2022. "Online Learning Participation Intention after COVID-19 Pandemic in Indonesia: Do Students Still Make Trips for Online Class?" *Sustainability* 14(4):1982. doi: 10.3390/su14041982.

Rukmini, Elisabeth, Hanna Angelina, and Viktoria Cosinta Anggreni. 2023. "Indonesia Higher Education's Online Learning during the Pandemic State." *International Journal of Evaluation and Research in Education (IJERE)* 12(4):2286–2301. doi: 10.11591/ijere.v12i4.25103.

Sheridan, Lynn, and Amanda Gigliotti. 2023. "Designing Online Teaching Curriculum to Optimise Learning for All Students in Higher Education." *Curriculum Journal* 34(4):651–73. doi: 10.1002/curj.208.

Sholikhah, Nur, and Fitria Ningsih. 2023. "Students' Perception on Group Work in Online Class: Lessons from Covid 19 Pandemic." 1(2).

Silvhiany, Sary. 2022. "Indonesian Teachers' Professional Development Practices and Needs in Post Pandemic Education." *VELES (Voices of English Language Education Society)* 6(1):215–32. doi: 10.29408/veles.v6i1.5265.

Sofi-Karim, Mahdi, Ahmed Omar Bali, and Kardo Rached. 2023. "Online Education Via Media Platforms and Applications as an Innovative Teaching Method." *Education and Information Technologies* 28(1):507–23. doi: 10.1007/s10639-022-11188-0.

Surani, Dewi, Rini Dwi Septiyani, and Fajrul Islami. 2023. "Integration Technology in English for Specific Purpose (ESP) Course Design for Law Students." Pp. 436–45 in *Proceedings of the 3rd International Conference on Education and Technology (ICETECH 2022)*. Vol. 745, *Advances in Social Science, Education and Humanities Research*, edited by J. Handhika, M. Lukitasari, S. Ricahyono, and D. A. Nugraha. Paris: Atlantis Press SARL.

Thomas, Gary. 2016. "How to Do Your Case Study." *SAGE Publications Ltd.*

Udin, Tamsik, Syibli Maufur, and Onwardono Rit Riyanto. 2022. "Student's Self-Efficacy and Perceptions of Online Learning on the Use Learning Management System." *Journal of Education Technology* 6(1):165–72. doi: 10.23887/jet.v6i1.41884.

Vilppu, Henna, Ilona Södervik, Liisa Postareff, and Mari Murtonen. 2019. "The Effect of Short Online Pedagogical Training on University Teachers' Interpretations of Teaching–Learning Situations." *Instructional Science* 47(6):679–709. doi: 10.1007/s11251-019-09496-z.

Vygotsky, L. S. 1979. "Consciousness as a Problem in the Psychology of Behavior." *Soviet Psychology* 17(4):3–35. doi: 10.2753/RPO1061-040517043.

Wibawanto, Hari. 2019. "E-Learning Quality Evaluation Instrument for SPADA Indonesia." in *Proceedings of the 1st Vocational Education International Conference (VEIC 2019)*. Semarang, Indonesia: Atlantis Press.