3L: The Southeast Asian Journal of English Language Studies – Vol 26(3): 124 – 138
http://doi.org/10.17576/3L-2020-2603-10

EFL Teacher Blended Professional Training: A Review of Learners' Online and Traditional Learning Interactions Quality

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ABSTRACT

An increasing number of researchers have adopted blended learning approaches for the purpose of EFL teachers' professional development. Current empirical study has been sparse regarding the investigation of interaction quality. This study attempts to address those weaknesses, with the objectives of systematically identifying the quality of interactions in both blended and traditional contexts. A sample of 1000 EFL students from various secondary schools at a provincial level was randomly assigned to rate 120 EFL teachers who attend a year blended professional training program using an online (OLIQ) and traditional (TLIQ) learning interaction quality scales to draw the perceived interaction qualities. After distributing the questionnaires, the data were analysed by applying structural equation modelling (SEM). The findings indicated that the one-year blended teacher professional development program showed a significant influence on their traditional and online teaching interaction qualities. Student-Content (SC) dimension became the highest marker of interaction quality in online instruction settings, while Emotional Support (ES) became the highest marker of interaction quality in the traditional face-to-face instruction settings. Some practical recommendations in light of the findings are offered, such as in terms of online material development and online feedback and assessment.

Keywords: EFL teachers; blended training; online learning; traditional learning; interaction quality

INTRODUCTION

The development of blended learning has changed the ways EFL teachers develop their professional development. Currently, teachers are demanded not only to understand pedagogical theories and teaching subjects but they are also required to be proficient in applying online teaching (Philipsen, Tondeur, Pareja, & Silke, 2019; Salmon, 2011). This situation also requires EFL teachers to be proficient in both traditional and online teaching approaches. Maintaining the harmony of those two teaching proficiencies (proficient in the traditional and online teaching) becomes pertinent in today's digital era. Due to the growing demands of EFL teachers on these two competencies, many institutions that prepare English language teachers are competing to organize EFL teachers' training models using a blended approach for two main reasons (Arifani, Khaja, Suryanti, & Wardhono, 2019; Belland, Burdo,

& Gu, 2015; Wong, 2019). First, technological development demands EFL teachers to be able to teach English using media to anticipate the shift of learning models from the traditional to online the learning model. Second, the benefits of the results of various studies on the implementation of the EFL teacher professional development model applying a blended-learning approach have been widely adopted by several institutions to systematically develop their EFL teachers' professionalism. Therefore, many seminal studies have examined the implementation of blended professional development from different angles such as creativity and effectiveness (Arifani et al., 2019), knowledge integration and innovative activities (Berger, Eylon, & Bagno, 2008), psychological learning needs (Wong, 2019), teacher readiness (Hung, Chou, Chen, & Own, 2010), flipped blended learning (Montgomery, Mousavi, Carbonaro, Hayward, & Dunn, 2019), systematic meta-aggregative review (Philipsen et al., 2019), pedagogical content knowledge (Van Driel & Berry, 2012; Philip et al., 2019), scaffolding (Belland et al., 2015), and technological pedagogical content knowledge (Alayyar, Fisser, & Voogt, 2012).

Because of the aforementioned benefits, the Indonesian Government seeks to participate in the implementation of blended teacher professional development program. This program aims to equip and enhance the EFL teachers' competencies in teaching with technologies. This program also aims to determine whether EFL teachers can be professional or not and subsequently will be given professional allowance after attending a one-year blended professional development training program (Arifani et al., 2019). This unique phenomenon has not been extensively studied, especially the impact of this long-term programme which has been implemented for around three consecutive years.

However, the volume of research targeting blended professional training for EFL teachers in higher education is still relatively limited. This study aims to draw EFL learners' perceptions of their online and traditional classroom learning interaction quality enhancement as an impact of their EFL teachers who have finished attending a one-year blended EFL teachers' professional training program. Four main concerns underlie this research. First, although the merits of blended learning have been found, there are still relatively few studies scrutinizing the effect of blended learning on both online and traditional classroom interaction qualities comprehensively. Second, many studies have examined single learning interaction qualities either under traditional learning or online learning paradigm (Jang, Cho, & Wiens, 2019; Pianta, Mashburn, Downer, Hamre, & Justice, 2008). Third, research also shows that teacher qualifications, background knowledge and training have an important correlation with classroom interaction qualities (Burchinal et al., 2002; Early et al., 2007). Fourth, two different instruments measuring learners' online learning and traditional classroom learning interaction qualities have been well-developed by some scholars (Hung et al., 2010; Pianta et al., 2008), but no research has applied and examined those two instruments in a blended teacher professional context.

LITERATURE REVIEW

ONLINE AND CLASSROOM-BASED INTERACTION QUALITIES

One of the indicators of successful teaching activity is determined by two essential factors, namely process-based and product-based outcomes (Arifani, 2019; Howes et al., 2008; Mashburn et al., 2008). From those two vital indicators, some EFL teachers neglected the important roles of process-based learning because they considered that successful teaching is measured by the scores or students' achievement (Arifani, 2019). Interaction quality as part of process-based learning holds a crucial role in determining the learning success. The more

positive interactions between students-students, students-teachers, and students-content courses, the more successful the teaching and learning will be (Howes et al., 2008; Mashburn et al., 2008). Moreover, recent literature has also suggested that the quality of learning process and daily classroom interactions provide more powerful predictors of students' learning outcomes than other learning components such as class size and students' characteristics (Burchinal et al., 2002; Howes et al., 2008; Mashburn et al., 2008; Mehall, 2020; Wu, Hsiao, & Nian, 2020). The changes of instructional models from a traditional classroom teaching approach to an online classroom teaching also influence the quality of teaching and learning as well as the quality of interactions itself. In a traditional classroom teaching and learning, positive interactions could be easier to assess and to control using gestures, eye contact, physical, and emotional characteristics which symbolize positive interaction qualities. Meanwhile, through online learning media, positive interactions could be more challenging to assess especially from the students' physical and emotional characteristics. Therefore, it needs a comprehensive instrument to assess those two differences which involve not only physical and emotional aspects of interaction qualities but also interactions among students, teachers, and course content.

Several scholars have developed numerous instruments to assess interaction qualities for both traditional classroom and online learning (Johnson, Aragon, Shaik, & Palma-Rivas, 2000; Marks, Sibley, & Arbaugh, 2005; Musa, Hussin, & Ho, 2019; Nandi, Hamilton, & Harland, 2012; Omar, Amir, & Mohamad, 2018; Pakarinen et al., 2010; Pianta et al., 2008; Sher, 2009). Johnson et al. (2000), for example, classified perception of interaction into five different domains, namely student interactions, student instructor, course structure, instructor support, and departmental support. Next, Sher (2009) classified online learning interactions into two different constructs, namely student-instructor interaction variables and student-instructor variables. In implementing the two constructs, he adopted ten online learning interaction qualities from Johnson, et al. (2000). In this case, he further initiated five indicators of online interaction qualities from each interaction constructs. Marks et al. (2005) proposed predictors for effective online learning. They constructed a valid and reliable instrument of effective online learning indicators which covered performance and satisfaction with the online learning experience, instructor-student interactions in online learning, student-student interaction in online learning, student-content interactions, personal characteristics, and student-online learning satisfaction. Those scholars commonly assess the online learning interaction qualities from different sides, involving many factors that refer to the same category and construct such as instructor support. In addition, course structure can actually be mixed into student-instructor and student-content course. This study tries to blend those two different constructs into one construct. Therefore, three essential constructs such as student-student, student-teacher, and student-course are considered as the most relevant constructs used to assess the quality of the online learning interactions.

Reversely, for the traditional face-to-face classroom interaction qualities, an instrument initiated by Pianta et al. (2008) was applied as this instrument was still considered relevant to assess the quality of traditional face-to-face classroom interactions. A famous study conducted by Pakarinen et al. (2010), for example, develop and validate a classroom assessment scoring system which is popularly called as CLASS. As this scale is applied to EFL teaching and learning context, the contents of the instrument comprehensively represent the quality of classroom interaction. This instrument consists of ten main constructs such as positive climate, negative climate, teacher sensitivity, regard of student perspectives, behaviour management, productivity, learning formats, concept enhancement, quality of feedback and language modelling.

Professional development is an integral part of a teaching career. Teachers are expected to adapt to the dynamic nature of knowledge as well as other aspects surrounding the development in knowledge and society, all of this through the process of professional development programs. As such, many teachers have sought for various opportunities to develop in addition to the ones officially provided by educational institutions, as such various forms of grassroots, professional development movements were formed (Carpenter & Krutka, 2016; Trust & Horrocks, 2017; Xue, Hu, Chi, & Zhang, 2019). These initiatives mostly used online platforms such as Twitter (Carpenter & Krutka, 2016), WeChat (Xue et al., 2019), and the Discovery Education Network (DEN) (Trust & Horrocks, 2017) for both online and face-to-face professional development in their community of teaching practices. However, although online and blended forms of professional development are gaining momentum among teachers on a global scale, studies on the effectiveness of such programs remain largely questionable.

Current literature commonly only arrives at the suggestion on the models to increase the effectiveness of a blended design for teacher development programs, such as that of Philipsen et al. (2019). Conducting a systematic review on studies containing empirical research reports on the area of teacher professional development (TPD) for online and blended learning (OBL) designs, they came up with a comprehensive component for TPD that targets OBL. There were six important components that they suggested; the design and development of supportive TPD programs and environment for OBL, the determination of overall goals and relevance of TPD for OBL, the acknowledgment of existing contexts pertaining to OBL, the acknowledgment of TPD strategies relevant to teacher transition to OBL, the addressing of teacher change associated with the transition to OBL, and the dissemination of knowledge, skills, and attitudes towards OBL as well as the evaluation of the TPD. In a similar vein, Yeigh et al. (2020) also suggested several aspects to be taken into account to increase the success rate of a blended instruction initiative: consistent leadership involvement, specific teacher training that addresses teacher confidence in technology for teaching use, development of means for directing and repurposing key elements in teaching and learning, and the ability to evaluate the alignment between the blended learning and overall learning improvement.

While many studies on blended instructional design in the area of English Language teaching and learning can be found in the literature, the study related to the use of blended teaching and learning for teacher professional development programs has been scarce. Arifani et al., (2019) analysed how English teachers' creativity and effectiveness were influenced by blended teaching professional training. Involving 120 secondary school teachers in a survey study, they found that a positive influence was noted, with a notable increase in the teaching creativity and effectiveness especially in the aspects of teachers' knowledge of the subject matter, independent learning, and the learning environment and materials. This inquiry is a follow-up research to the study conducted by Arifani et al. (2019) which examined the effectiveness of the blended approach compared to traditional approaches as part of EFL teachers training programs. Therefore, this study poses the following research questions:

1. Is there any significant influence of blended EFL teacher professional development on learners' online learning interaction qualities?
2. Is there any significant influence of blended EFL teacher professional development on learners' classroom interaction qualities?

THE STUDY

Research participants of this study involved 1000 EFL students from various senior high schools in East Java province. Their age ranged from 16 to 18 years old. The survey was conducted to draw 100 EFL teachers who attended a one-year blended teacher professional training project under the Ministry of Education project. This project was part of a government grant to prepare and promote the EFL teacher professional development program (certification) in terms of pedagogical, professional, social, and personal competences to face teaching in the 4.0 industrial revolution era. It was also aimed to equip all EFL teachers with blended teaching ability such as designing an innovative online lesson plan, online teaching materials and media, online discussion forums, quizzes, and tests so that they would be confident in applying both traditional and e-learning models. This project was follow-up research from the previous study by Arifani et al. (2019). Similarly, the project was also implemented at four English education departments which had an excellent accreditation from the Indonesian Board of National Accreditation and fulfilled the requirements as in-service teacher training hosts nominated by the Ministry of Education. The departments were required to have three associate professors and adequate e-learning facilities.

The blended training was designed for two different stages. In the first stage, EFL teachers conducted a one-semester of traditional training for approximately 8 hours per day from Monday to Friday or 728 hours within the whole meetings. It was designed to prepare innovative classroom teaching activities. In this session, the teachers also learned current issues in EFL teaching, learners learning characteristics, English content knowledge, and EFL/ESL assessment theories, problem-solving, peer teaching practices and real teaching practices in the teachers' school which were monitored and assessed by several senior EFL university lecturers. This stage was accomplished within the one-semester programme. In the second stage, the online training session was done for the same semester programme. Hence, the teachers participated in one-semester long-distance learning with the senior English lecturers for approximately 312 hours within the whole online learning sessions. One EFL lecturer facilitated 25 EFL teachers through the e-learning system. During the online training using an e-learning system, all EFL teachers were trained to design an online teaching plan, materials, media, online discussion forums, online quizzes, tests, online teaching practice with peers and real online teaching practice with their students using e-learning system. Both online and traditional quizzes and tests were also implemented during a semester-long blended training.

At the end of each stage, the students were assigned to complete two different questionnaires to ascertain whether their English teachers' ability in promoting learners' traditional learning interaction qualities and online learning interaction qualities had been enhanced after attending a one-year blended professional development approach.

INSTRUMENTS

As this research aimed to draw EFL learners' responses of traditional and online learning interaction qualities towards groups of EFL teachers who had attended a one-year of blended professional development training programme, two different instruments were separately applied; a Traditional Learning Interaction Qualities (TLIQ) and an Online Learning Interaction Qualities (OLIQS). To assess to what degree blended EFL teachers' training programme promoted their traditional learning interaction qualities, a TLIQ questionnaire model initiated by Pianta et al. (2008) was employed. This is a standardized, valid, and reliable scale to capture EFL teachers' ability to create a positive classroom climate, and deliver high-quality feedback and instruction by assessing the quality of classroom interaction between teachers and learners from the dimensions of emotional support, classroom management, and

instructional support. Specifically, the emotional domain consists of three indicators, namely positive climate, negative climate, and teacher sensitivity; classroom management domain covers behaviour management, productivity, and instructional learning formats; and instructional support comprises concept development, quality of feedback and language modelling. The coefficient alpha of this TLIQ was 0.86.

In addition, the second instrument used a questionnaire with 16 questions dealing with learners' online interaction qualities (OLIQS), which consists of three different categories, namely student-to-teacher interaction, student-to-student interaction, and student-to-course interaction using online learning. The first category was measured using a 5-item scale adapted from Johnson et al. (2000) and Sher (2009). The obtained coefficient alpha of this measure was 0.86. The second category was adapted from the same sources using the same scale as well. The coefficient alpha of this measure was 0.84. The third category of student-course interaction was also measured using a 5-item scale adapted from Marks et al. (2005) and Nandi et al. (2012). The coefficient alpha of this third category was 0.86. Learner-course interaction refers to the method used by the students to obtain information from the course content such as text, audio, video, computer program, or online communication. Learner-instructor interaction is in the form of delivering information, course content, encouraging the learner, providing feedback, asking questions, or communicating with the teacher regarding online course activities. Meanwhile, learner-learner interaction occurs during the exchange of information and ideas among students, group discussions, or online chat forums.

PROCEDURES

Two different types of questionnaires, Traditional Learning Interaction Qualities (TLIQ) and Online Learning Interaction Qualities (OLIQS), were completed by the learners to respond to their EFL teachers' abilities in promoting both traditional and online interaction qualities after they finished attending a one-year blended professional training program. The first questionnaire, called a Traditional Learning Interaction Quality (TLIQ), was distributed to the EFL learners at the end of the first semester after their teachers finished attending the traditional professional training program. At the end of this traditional professional training program, all the EFL teachers had to conduct a traditional teaching practice at their schools as part of the traditional training program. After the traditional teaching practice session, a TLIQ questionnaire was directly distributed to the EFL students to assess the quality of the traditional learning interactions. During this traditional teaching practice, the teachers were monitored and assessed by EFL senior lecturers from the host universities to evaluate their traditional teaching progress.

Meanwhile, the second questionnaire, the Online Learning Interaction Quality (OLIQS), was also completed by the same EFL learners to respond to their teachers' ability in promoting online interaction qualities after they finished attending the online professional training program in the second semester. Then, the OLIQS was distributed to the EFL learners after their teachers finished conducting an online teaching practice at their schools as part of the online training program. During this online teaching practice, the teachers were also monitored and assessed by the same EFL senior lecturers from the same host universities to evaluate their online teaching progresses as well. After the data had been collected, Structural Equation Modelling (SEM) was applied to analyse the quantitative correlation.

RESULTS

a. *The influence of blended EFL teacher professional development on learners' online learning interaction qualities*

Research Question (RQ 1): Is there any significant influence of blended EFL teacher professional development on learners' online learning interaction qualities (OLIQ)?

To determine the significant influence of blended professional development on EFL learners' online learning interaction qualities, an SEM analysis of OLIQ was applied to produce a valid correlational model as shown in the following figure.

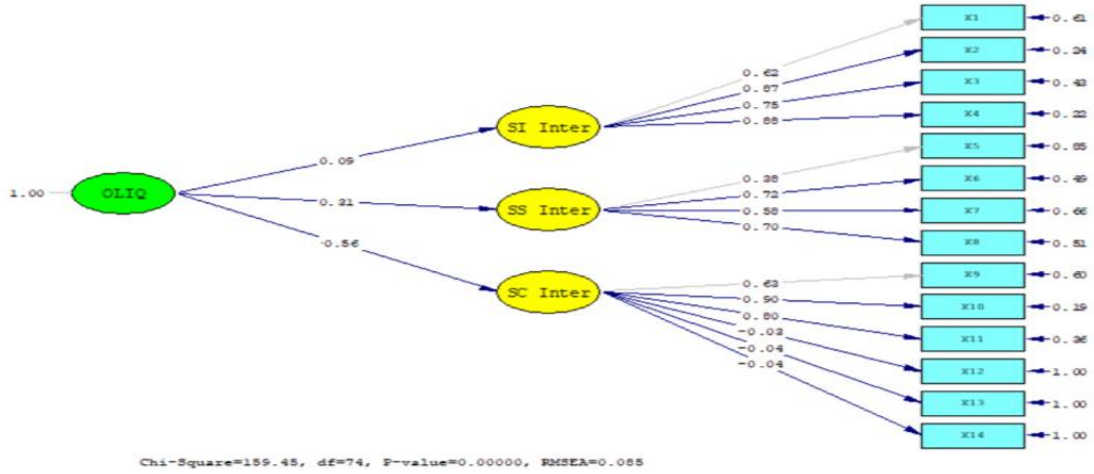

FIGURE 1. OLIQ Measurement

Before interpreting the results of the SEM analysis of the above figure, it was deemed necessary to consider whether the proposed model was valid or not. To know the validity of the OLIQ proposed model, a Goodness of Fit (GOF) analysis was then implemented. The GOF analysis results are presented below.

TABLE 1. OLIQ Goodness of fit criteria

Goodness of Fit	Cut of value
Normed Fit Index (NFI) = 0.91	> 0.9
Non-Normed Fit Index (NNFI) = 0.96	> 0.9
Parsimony Normed Fit Index (PNFI) = 0.065	0.06- 0.09
Comparative Fit Index (CFI) = 0.98	> 0.9
Incremental Fit Index (IFI) = 0.91	> 0.9

Table 1 indicates that the model fulfilled the criteria of goodness of fit (GOF). All five criteria, the normed fit index (NFI=0.91), non-normed fit index (NNFI=0.96), comparative fit index (CFI=0.98), incremental fit index (IFI=0.91), and relative fit index (RFI=0.91), were above the cut of value. Also, the parsimony normed fit index (PNFI=0.065) was also located between the cut of value. Therefore, the OLIQ overall model of GOF was relatively valid.

Figure 1 indicates that there were positive influences of blended teacher professional development on learners' online learning interaction qualities (OLIQ) from all OLIQ's dimensions namely: a) student-instructor interaction qualities (SI=0.09), b) student-student interaction qualities (SS=0.31), and c) student-content interaction qualities (SC=0.56). From the above data, it is also implied that the highest influential dimension of OLIQ rests on student-content interaction qualities. The medium influential dimension rests on student-student

interaction qualities, and the lowest influence rested on the student-instructor dimension. Similarly, the students perceived that their EFL teachers, who attended online teacher professional development, could create good quality of online learning contents/materials that increased their interactions with the content, which was perceived better than the two other dimensions of OLIQ. Conversely, the interaction between student-instructor (SI) showed the lowest score. It means that the students perceived their EFL teachers who attended online professional development did not show better interaction qualities in terms of SI indicator. It also implies that SI interaction qualities were not interactively applied by their EFL teachers in applying online learning.

More specifically, from each OLIQ's dimension and indicator, the dimension of SI interaction qualities with the four indicators, two indicators that had the lowest and highest score was drawn in this study. The lowest indicator of SI was X1= 0.42 (the instructor encouraged the students to become actively involved in the online course discussion). Meanwhile, the highest indicator of SI was X4= 0.88 (the instructor informed me about my learning progress periodically). It implied that the students perceived the interactions between student and instructor (SI) were not good as they felt that their EFL teachers always asked them to be active in the online discussions. Meanwhile, the SI interaction qualities were very low that they liked to be periodically assessed and informed about their learning progress.

Next, from the dimension of student-student (SS) interaction qualities with the four indicators, two indicators that had the highest and the lowest scores were described in this finding. The indicator of SS interaction qualities which had the lowest score was X5= 0.28 (I was able to share learning experiences with other students). Meanwhile, the highest indicator was X6= 0.72 (I was able to communicate with other students in the course). It implied that the students perceived their EFL teachers who attended blended professional development could not satisfy them with sharing experiences among students, but they could positively communicate with their friends through online learning.

The last dimension was student-content (SC) interaction qualities, which had four indicators. From the four indicators, two indicators that had the lowest and the highest score were illustrated. The lowest and highest scores of SC interaction qualities were X13= 0.04 (I developed the ability to communicate clearly about the subject), X14= 0.04 (I improved my ability to integrate facts and develop generalizations from the course material) and X10= 0.90 (I learned a great deal of factual material in the online course).

b. The influence of blended teacher professional development on learners' classroom interaction qualities

Research Question (RQ 2): Is there any significant influence of blended teacher professional development on learners' classroom interaction qualities (TLIQ)?

To examine the significant influence of blended professional development on EFL learners' traditional learning interaction qualities, the SEM analysis of the TLIQ scale was applied to produce a valid correlational model as shown in the following figure.

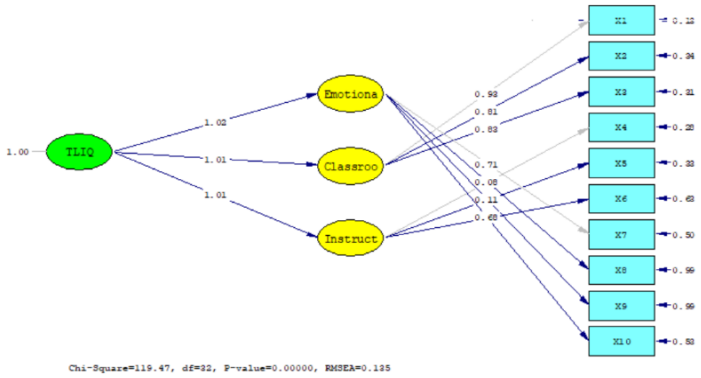

FIGURE 2. TLIQ measurement

Before interpreting the results of the SEM analysis of the above figure, it is necessary to consider whether the TLIQ proposed model was valid or not. To measure the validity of the proposed model, a Goodness of Fit (GOF) analysis was then implemented. The GOF analysis results are presented below.

TABLE 2. OLIQ Goodness of fit criteria

Goodness of Fit	Cut of value
Normed Fit Index (NFI) = 0.92	> 0.9
Non-Normed Fit Index (NNFI) = 0.91	> 0.9
Parsimony Normed Fit Index (PNFI) = 0.065	0.06- 0.09
Comparative Fit Index (CFI) = 0.93	> 0.9
Incremental Fit Index (IFI) = 0.93	> 0.9
Relative Fit Index (RFI) = 0.91	> 0.9

Table 2 indicates that the model fulfilled the criteria of goodness of fit (GOF). From all the five criteria, the normed fit index (NFI=0.92), non-normed fit index (NNFI=0.91), comparative fit index (CFI=0.93), incremental fit index (IFI=0.93), and relative fit index (RFI=0.91), were above the cut of value. Also, the parsimony normed fit index (PNFI=0.06) was also located between the cut of value. Therefore, the overall TLIQ model of GOF was relatively valid.

Figure 2 indicates that there were positive influences between blended teacher professional developments on learners' traditional learning interaction qualities (TLIQ). The TLIQ also had three dimensions, namely emotional support (ES), classroom organization (CO), and instructional support (IS). Specifically, from the three dimensions of ES, CO, and IS, the scores were 1.02, 1.01, and 1.01 respectively.

From the above data, it is also implied that the highest influential dimension of TLIQ rested on emotional support (ES), and the lowest influence rested on both classroom organization (CO) and Instructional support (IS) interaction qualities. Similarly, the students perceived that their EFL teachers who attended blended professional development could create good quality of emotional support during the traditional classroom teaching, but the dimensions of classroom management and instructional support were not optimum during the traditional teaching practices.

More specifically, from each TLIQ's dimension and indicator, the dimension of ES classroom interaction qualities had four indicators, but only two indicators that had the lowest and highest scores were discussed in the study. The lowest indicator of ES was X8= 0.08 (Reflects the overall level of expressed negativity in the classroom). Meanwhile, the highest indicator of ES was X7= 0.88 (Reflects the overall emotional tone of the classroom and the

connection between the teacher and students). It implies that the students perceived the ES interaction qualities of their EFL teachers were better in terms of emotional tone between students and teachers than reflecting the negativity in the traditional face-to-face classroom teaching.

Next, from the dimension of CO interaction qualities, two out of three indicators which had the lowest and the highest scores were elaborated from the study. Those two indicators were X2 = 0.81 (Reflects how well the teacher manages instructional time and routines so that students have an opportunity to learn) and X1= 0.93 (Reflects the teacher's ability to use effective methods to prevent and redirect misbehaviour). It implies that the students perceived their EFL teachers who attended blended professional development could not satisfy them with instructional time and routines so that they have the opportunity to learn, but they could positively accept the effective methods to prevent misbehaviour.

The last dimension was that IS traditional interaction qualities were measured using three indicators but only two indicators that had the lowest and highest scores were presented. The lowest and highest scores of IS classroom interaction quality indicators were X4=0.08 (Reflects the teacher's use of instructional discussions and activities to promote students' higher-order thinking skills and cognition) and X6=0.68 (Reflects the quality and amount of the teacher's use of language stimulation and facilitation techniques during individual, small-group, and large-group interactions with children).

DISCUSSION

The aims of this study were to address the two main research questions. First, it aimed to find out whether there was a significant influence of blended teacher professional development on EFL learners' traditional classroom interaction qualities (TLIQ). Second, it aimed to elaborate whether there was a significant influence of EFL teachers blended professional development on EFL learners' online learning interaction qualities (OLIQ).

The results of the first research question showed that there was a significant influence of EFL teacher professional development on EFL learners' online learning interaction qualities measured using the Online Learning Interaction Qualities (OLIQ) scale. Further, two out of the three OLIQ's dimensions, the dimension of student-content (SC) interaction qualities acquired the highest score but the dimension of student-instructor (SI) interaction qualities showed the lowest score. Specifically, under the dimension of SC interaction qualities, the students felt that their interaction qualities with the online factual content course/materials were higher than the indicator of making generalizations from the course content. Meanwhile, under the dimension of SI, the indicator of periodical online assessment was higher than the indicator of being actively involved in the online discussion.

The results of the second research objective illustrated that there was also a significant influence of EFL teachers' professional development on EFL learners' traditional classroom learning interaction qualities measured using the Traditional Learning Interaction Qualities (TLIQ) scale. Further, from the TLIQ's dimensions, the dimension with the highest score was emotional support (ES), and the lowest influences were both classroom organization (CO), and instructional support (IS) interaction qualities. Specifically, under the dimension of ES interaction qualities, students felt that emotional interaction qualities in the traditional classroom teaching were better in terms of maintaining emotional tone between students and teachers than of reflecting overall expressed negativity in the classroom. Then, under the dimension of CO interaction qualities, the students perceived that the ability to use effective traditional teaching methods was higher than the indicator of reflecting the instructional time and routines for the students to learn. Meanwhile, under the dimension of IS, the students

perceived the indicator of quality and amount of language stimulation, facilitation techniques, and group discussion was higher than teacher's use of instructional discussions and activities to promote students' higher-order thinking skills and cognition.

The implementation of online learning (as part of blended teaching practices implemented by EFL teachers who have attended a one-year blended professional training program) has proved that student-online content interaction qualities are more important than the interaction qualities of students-instructor. Online learning practices, where teachers and students physically do not meet each other in a classroom context force them to dominantly rely on the online course content. Therefore, course content/learning material becomes one of the very urgent variables of online learning (Lee, Srinivasan, Trail, Lewis, & Lopez, 2011). Therefore, the role of EFL teachers in designing an interesting and a 'digestible' online course content is required. The findings also showed that online factual content courses had higher perception than making generalizations of course content. It also indicates that designing material is not just a matter of presenting factual information from the course content into the online version, but it should be followed by a set of meaningful learning activities from the course so that EFL learners can develop their higher-order thinking skill such as making inferences and generalization. The implication is that if the course content just relies on factual online learning materials, it is very hard to sharpen learners' critical thinking skills. Further, this will threaten the quality of the online learning itself which aims to promote learners' learning autonomy.

Regarding the low interaction qualities between student-instructor in an online learning setting, it is possible to occur because EFL learners are accustomed to directly listen to their classroom teachers. They are physically and emotionally bound. That is why in the traditional learning interaction qualities, emotional interaction support between learner-teacher has a higher score than other indicators. Consequently, in an online setting, student-instructor interaction qualities were low because learners felt that they lose both the emotional and physical attributes of their teachers in the online learning context and this point becomes an interesting novelty of this study. Regarding this point, Arifani et al. (2019) echoed that EFL teachers' personal and physical attributes such as humour, warmth, and neatness that can motivate them in the traditional classroom learning disappear within the online learning context. In this case, the course content was the only one for them to rely on and that is why student-content interaction qualities had a higher score than the other dimensions.

Another interesting point is that the scores of periodical online assessments were higher than that of being actively involved in online discussions. This indicates that periodical online assessment was deemed necessary for them. As one of the purposes of the periodical online assessment is to provide them with online learning progress and rapport so that they become enthusiastic during periodical online assessment practices. Therefore, the indicator of online discussion was lower than online assessment because, in the online discussion, there is no rapport/scores/progress information shared during the online learning implementations.

Meanwhile, different from the online interaction qualities results, the traditional interaction qualities measured using the TLIQ scale indicated that the dimension of emotional support dominated the higher score than the other two dimensions. This indicated that the students felt satisfied with their EFL teachers in promoting emotional harmony between students and learners during traditional classroom teaching. They like their EFL teachers to have a closer look and to provide appropriate responses at students' emotional dimensions such as mood, enthusiasm, boredom, and other emotional signs. Regarding this, emotional support such as warmth, calm voice, kindness, and sensitivity to the social and emotional needs of students are considered as the key success of classroom teaching (Merritt et al., 2012; Pianta et al., 2008). Although the indicators of emotional support under the umbrella TLIQ dimension is not comprehensive as asserted by other previous studies, but again this study echoed similar

vital roles of emotional support in the traditional classroom teaching. However, a low score under the same dimension was also echoed from the study as the students did not like their teachers' negative comments and feedback from the classroom teaching. Regarding the effect of negative feedbacks, controversies still occur between pros and cons groups. The pros group asserted that negative feedback from EFL teachers delivered to their students could be beneficial to L2 learners' language development under the assumption that after getting it, the students would be more careful in their language production (Long, Inagaki, & Canada, 1994; Mcdonough, 2005). This kind of paradigm was called as the positive benefit of implicit negative feedback. Meanwhile, the cons group asserted that negative feedback from the teachers was considered as a negative predictor of students' academic performance and social behaviour (Wentzel, 2002). This study echoed similar result from the pros group asserting that negative feedback should be avoided during classroom teaching practices when the emotional aspect of the students (as echoed from the study) are very sensitive or when they perceived emotional interactions support between teacher and students are very high. Within this context, EFL teacher should put their role as a motivator for their students.

The last findings from the dimension of instructional support showed that most of the students like to have small group work and group discussions. Although it has been echoed that collaborative learning becomes one of the effective alternatives on enhancing EFL students learning motivation and outcomes (Doppenberg, Brok, & Bakx, 2012; Mäkitalo-Siegl, Kohnle, & Fischer, 2011), there is a strong prediction that student liked to work collaboratively because they have low learning autonomy. So far, no previous studies asserted a similar finding to this point. Another evidence of this occurs during the implementation of online learning where most of the students perceived interaction between teacher and students was lowest because they were accustomed to listening to their teacher explanation within the traditional learning context.

CONCLUSION AND RECOMMENDATION

The current study has revealed a significant influence of a one-year blended teacher professional development program for EFL teachers towards both their traditional and online teaching interaction qualities. For the online instruction, the Student-Content (SC) dimension was regarded by the students to be the highest marker of interaction quality, while the student-instructor (SI) dimension was the lowest. As for the traditional face-to-face instruction, the Emotional Support (ES) dimension was regarded as the highest marker that defined interaction quality, while the lowest markers were both Classroom Organization (CO) and Instructional Support (IS).

Referring to the research gaps stated in the introduction section, this study gives a new insight of positive correlations of blended professional development programme towards online and traditional learning interaction qualities from the perspective of learners since the previous studies only scrutinize single variables either traditional or online learning interaction. The results of this study fill those lacunas.

In light of the findings of the study, some recommendations are proposed. First, the findings indicated that the student-content dimension received the highest regard in online instruction, this implies that online instruction material or content development requires clear and specific presentation steps, are interesting and engaging, and address students' higher-order thinking skills. Another aspect that calls for attention is the assessment in online instruction, the findings of the current study has shown that students expect evaluation and assessment in online teaching and learning setting to be done in a way that could present their progress in learning and that negative feedback should be avoided. This is also related to another finding

which indicated that online learning may diminish the emotional and physical bond between students and teachers/ instructors as students may not be able to directly see and feel the teachers' warmth and calmness. As such, explicit negative feedback has the potential to demotivate students due to the low emotional support in online instruction setting that extra care is required to maintain the harmony of the traditional classroom atmosphere and online learning. Finally, there was also an indication of low autonomy among students as they like to work collaboratively (e.g. discussion) which becomes a challenge in an online instructional design where direct face-to-face interaction does not happen. Therefore, optimizing student positive interaction with the course contents and peers is essential to be created and maintained in online course settings.

However, it is important to note that although the current study has found a relatively low autonomy among students since it is not part of the studied variable, further research on the area is encouraged to understand more about learner autonomy in the online instruction and its influence towards the quality of both online and traditional teaching and learning of EFL.

ACKNOWLEDGEMENTS

This research project was funded by the Directorate of Research and Community Service (DRPM), Deputy of Research and Development of the National Innovation and Research Board (Grant No. 105/SP2H/PPM/DRPM/2020). Sincere thanks goes to EFL teachers and students at the senior high schools, who participated in the study. Finally, the authors are grateful to the two anonymous reviewers and the editors for their insightful comments and suggestions to improve this article.

REFERENCES

Alayyar, G. M., Fisser, P., & Voogt, J. (2012). Developing technological pedagogical content knowledge in pre-service science teachers : Support from blended learning. *Australasian Journal of Educational Technology*, *28*(8), 1298–1316.

Arifani, Y. (2019). The Application of Small WhatsApp Groups and the Individual Flipped Instruction Model to Boost EFL Learners ' Mastery of Collocation Research Question. *CALL-EJ*, *20*(1), 52–73.

Arifani, Y., Khaja, F., Suryanti, S., & Wardhono, A. (2019). The Influence of Blended In-service Teacher Professional Training on EFL Teacher Creativity and Teaching Effectiveness The Influence of Blended In-service Teacher Professional Training on EFL Teacher Creativity and Teaching Effectiveness The existence of. *The Southeast Asian Journal of English Language Studies*, *25*(3), 126–136. https://doi.org/10.17576/3L-2019-2503-10

Belland, B. R., Burdo, R., & Gu, J. (2015). A Blended Professional Development Program to Help a Teacher Learn to Provide One-to-One Scaffolding. *Journal of Science Teacher Education*, *26*(3), 263–289. https://doi.org/10.1007/s10972-015-9419-2

Berger, H., Eylon, B., & Bagno, E. (2008). Professional Development of Physics Teachers in an Evidence-Based Blended Learning Program. *Journal of Science Education and Technology*, *17*(4), 399–409. https://doi.org/10.1007/s10956-008-9109-3

Burchinal, M. R., Cryer, D., Clifford, R. M., Howes, C., Burchinal, M. R., Cryer, D., & Clifford, R. M. (2002). Caregiver Training and Classroom Quality in Child Care Centers Caregiver Training and Classroom Quality in Child Care Centers. *Applied Developmental Science*, *6*(1), 2–11. https://doi.org/10.1207/S1532480XADS0601

Carpenter, J. P., & Krutka, D. G. (2016). Professional Development in Education Engagement through microblogging : educator professional development via Twitter. *Teaching and Teacher Education*, *57*, 97–108. https://doi.org/10.1080/19415257.2014.939294

Doppenberg, J. J., Brok, P. J. Den, & Bakx, A. W. E. A. (2012). Collaborative teacher learning across foci of collaboration : Perceived activities and outcomes. *Teaching and Teacher Education*, *28*(6), 899–910. https://doi.org/10.1016/j.tate.2012.04.007

Early, D. M., Maxwell, K. L., Burchinal, M., Alva, S., Bender, R. H., Bryant, D., … Zill, N. (2007). Teachers ' Education, Classroom Quality, and Young Children ' s Academic Skills : Results From Seven Studies of Preschool Programs, *78*(2), 558–580.

Howes, C., Burchinal, M., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008). Ready to learn ? Children ' s pre-academic achievement in pre-kindergarten programs ☪. *Early Childhood Research Quarterly*, *23*(1), 27–50. https://doi.org/10.1016/j.ecresq.2007.05.002

Hung, M., Chou, C., Chen, C., & Own, Z. (2010). Computers & Education Learner readiness for online learning : Scale development and student perceptions. *Computers & Education*, *55*(3), 1080–1090. https://doi.org/10.1016/j.compedu.2010.05.004

Jang, B. G., Cho, H., & Wiens, P. (2019). Self-efficacy and quality of classroom interactions of EFL teachers in Niger. *International Education Journal: Comparative Perspectives*, *18*(3), 57–73.

Johnson, S. D., Aragon, S. R., Shaik, N., & Palma-Rivas, N. (2000). Comparative Analysis of Learner Satisfaction and Learning Outcomes in Online and Face-to-Face Learning Environments. *Journal of Interactive Learning Research*, *11*(1), 29–49.

Lee, S. J., Srinivasan, S., Trail, T., Lewis, D., & Lopez, S. (2011). Internet and Higher Education Examining the relationship among student perception of support, course satisfaction, and learning outcomes in online learning. *The Internet and Higher Education*, *14*(3), 158–163. https://doi.org/10.1016/j.iheduc.2011.04.001

Long, M. H., Inagaki, S., & Canada, H. A. G. (1994). The Role of Implicit Negative Feedback in SLA : Models and Recasts in Japanese and Spanish. *Modern Language Journal*, *82*, 357–371.

Mäkitalo-Siegl, K., Kohnle, C., & Fischer, F. (2011). Computer-supported collaborative inquiry learning and classroom scripts : Effects on help-seeking processes and learning outcomes. *Learning and Instruction*, *21*(2), 257–266. https://doi.org/10.1016/j.learninstruc.2010.07.001

Marks, R. B., Sibley, S. D., & Arbaugh, J. B. (2005). *A structural equation model of predictors for effective online learning Journal of Management Education*, *29*(1), 531-563. https://doi.org/10.1177/1052562904271199

Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O. A., Bryant, D., … Early, D. M. (2008). Measures of Classroom Quality in Prekindergarten and Children ' s Development of Academic, Language, and Social Skills. *Child Development*, *79*(3), 732–749.

Mcdonough, K. (2005). Identifying the impact of negative feedback and learners ' responses on esl question development. *Studies in Second Language Acquisition*, *27*(1), 79–103.

Mehall, S. (2020). Purposeful Interpersonal Interaction in Online Learning: What Is It and How Is It Measured? *Online Learning*, *24*(1), 182-204.

Merritt, E. G., Wanless, S. B., Rimm-Kaufman, S. E., Peugh, J. L., Merritt, E. G., Wanless, S. B., … Peugh, J. L. (2012). The Contribution of Teachers ' Emotional Support to Children ' s Social Behaviors and Self-Regulatory Skills in First Grade The Contribution of Teachers ' Emotional Support to Children ' s Social Behaviors and Self-Regulatory Skills in First Grade. *School Psychology Review*, *41*(2), 141–159.

Montgomery, A. P., Mousavi, A., Carbonaro, M., Hayward, D. V, & Dunn, W. (2019). Using learning analytics to explore self-regulated learning in flipped blended learning music teacher education. *British Journal of Educational Technology*, *50*(1), 114–127. https://doi.org/10.1111/bjet.12590

Musa, A., Hussin, S., & Ho, I. A. (2019). Interaction in Academic L2 writing: An analysis of Interactional Metadiscourse Strategies in Applied Linguistics Research Articles. *3L: Southeast Asian Journal of English Language Studies*, *25*(3), 16-32. http://doi.org/10.17576/3L-2019-2503-02

Nandi, D., Hamilton, M., & Harland, J. (2012). Evaluating the quality of interaction in asynchronous discussion forums in fully online courses. *Distance Education*, *33*(1), 5–30. https://doi.org/10.1080/01587919.2012.667957

Omar, A., Amir, Z., & Mohamad, M. (2018). Facilitating Online Learning: Students' Online Discussion Strategies for a Project Work at a Technical University in Malaysia. *3L: Southeast Asian Journal of English Language Studies*, *24*(4), 102-114. http://doi.org/10.17576/3L-2018-2404-08

Pakarinen, E., Lerkkanen, M., Poikkeus, A.-M., Kiuru, N., Siekkinen, M., Rasku-Puttonen, H., & Nurmi, J.-E. (2010). Early Education & Development A Validation of the Classroom Assessment Scoring System in Finnish Kindergartens. *Early Education and Development*, *21*(1), 95–124. https://doi.org/10.1080/10409280902858764

Philip, B., Tan, K.H. and Jandar, W., 2019. Exploring Teacher Cognition in Malaysian ESL Classrooms. 3L: Language, Linguistics, Literature®, 25(4),156-178. http://doi.org/10.17576/3L-2019-2504-10

Philipsen, B., Tondeur, J., Pareja, N., & Silke, R. (2019). Improving teacher professional development for online and blended learning : a systematic meta - an aggregative review. *Educational Technology Research and Development*, *67*(5), 1145–1174. https://doi.org/10.1007/s11423-019-09645-8

Pianta, R. C., Mashburn, A. J., Downer, J. T., Hamre, B. K., & Justice, L. (2008). Effects of web-mediated professional development resources on teacher-child interactions in pre-kindergarten classrooms. *Early Childhood Research Quarterly*, *23*(4), 431–451. https://doi.org/10.1016/j.ecresq.2008.02.001

Salmon, G. (2011). *E-moderating: The Key to Teaching and Learning Online, Second Edition*. New York: Routledge.

Sher, A. (2009). Assessing the relationship of student-instructor and student-student interaction to student learning and satisfaction in Web-based Online Learning Environment. *Journal of Interactive Online Learning*, *8*(2), 102–120.

Trust, T., & Horrocks, B. (2017). Professional Development in Education ‘ I never feel alone in my classroom ’: teacher professional growth within a blended community of practice. *Professional Development in Education*, *43*(4), 645–665. https://doi.org/10.1080/19415257.2016.1233507

Van Driel, J. H., & Berry, A. (2012). Policy Forum. *Educational Researcher*, *41*(1), 26–28. https://doi.org/10.3102/0013189X11431010

Wentzel, K. R. (2002). Are Effective Teachers Like Good Parents ? Teaching Styles and Student Adjustment in Early Adolescence. *Child Development*, *73*(1), 287–301.

Wong, R. (2019). Basis psychological needs of students in blended learning Basis psychological needs of students in blended learning. *Interactive Learning Environments*, *28*(1), 1–15. https://doi.org/10.1080/10494820.2019.1703010

Wu, J. Y., Hsiao, Y. C., & Nian, M. W. (2020). Using supervised machine learning on large-scale online forums to classify course-related Facebook messages in predicting learning achievement within the personal learning environment. *Interactive Learning Environments*, *28*(1), 65-80.

Xue, S., Hu, X., Chi, X., & Zhang, J. (2019). Building an online community of practice through WeChat for teacher professional learning. *Professional Development in Education*, *45*(1), 1–25. https://doi.org/10.1080/19415257.2019.1647273

Yeigh, T., Lynch, D., Sell, K., Lawless, E., Turner, D., Fradale, P., & Willis, R. (2020). Using blended learning to support whole-of-school improvement : The need for contextualization. *Education and Information Technologies*, *25*, 3329-3355. https://doi.org/10.1007/s10639-020-10114-6