

Investigating Experience on Blended Learning Classroom Practices in Tertiary EFL Students

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Abstract—Digital literacy has been increasingly most important in the world that has become more globalized. Therefore, blended learning is deemed necessary to equip students to master the 21st century competences that promotes 4C learning skills (Critical thinking, Creativity, Collaboration, and Communication). The present study aims at investigating (1) how students experienced in developing 4C skills through blended learning application, (2) the extent to which these students are alleviating the emerged barriers throughout the course, and (3) how teachers perceive on blended learning implementation to support 4C skills. The study employs a qualitative approach, involving 50 tertiary EFL students and three lecturers of English at a private university in West Java. The data were collected in an Academic Writing course through questionnaires, individual and group interviews. The findings reveal that positive experiences which promote students' 4C skills has been offered from blended learning though encountered barriers were faced in many aspects from both students and lecturers of its implementation. The results of the study imply that students must be supported to be more self-regulating in engaging blended learning classroom practices, actively communicating problems during its implementation, and seeking a more curious in these problems-solving.

Keywords—*blended learning; 4c skills; digital literacy*

I. INTRODUCTION

In 21st century learning, students, especially higher education students require to equip themselves with demanded skills to compete in globalization era. These among skills are well-known as the 4C: critical thinking, communicative, collaborative, and creative. As cited from Partnership for 21st Century Learning [1] these aforementioned skills should be prepared for students in facing life complexity and world environment. By fulfilling these skills, students are supposed to survive in worldwide competition. In addition to the four prepared skills, they also need to be skilful with information, media, and technology skills hence its utilization frequency in digital era. It means that technological and media are driven abundantly which are marked with rapidness of technology tool changes and huge chances of individual collaboration with unusual than previous period.

Nowadays, technology enhanced for language learning are becoming trend for supplying students' need of learning.

Stepp-Greany [2] claimed that the implementation of multimedia as the part of technology have expanded in United Stated educational setting within twenty years. This statement is surely indicated that all need for educational stuff is closely related to technology starting from teaching preparation, execution and evaluation also its administration. Also, Blake [3] argued that technology is one of the beneficial tools and it cannot be apart from human life which is of course involved in language teaching and learning in now twenty first century. In Indonesia, higher education setting is now expanding the technology system (ICTs) for increasing the quality and its access from cities to remote ones which aim at education equity [4]. Further, the technology is specified the use of term ICTs are believed to provide new chance for teacher and students in executing teaching and learning process. They inserted that the ICT enhance and engage between students and teacher in transforming and or accepting the materials, input and new knowledge from both sides within the process [5]. Recent years, The applications of technology specially for Web 2.0 Technologies also have coloured significantly in Chinese educational setting [6].

Recent surveys indicated that the implementation of blended learning in higher education raise up from year to others. Bonk and Graham [7] revealed that blended learning was getting the frequency increased of implementation in 2000s evenly the number of institution user for teaching and learning process was up to 80-90 % in the year of 2002. Notably, the blended learning faced impressive and significant growth throughout the world within several universities which is brought as the educational agenda, vision, and strategic directions during teaching and learning opportunities [8]. To do so, the literature on blended learning and teaching is growing and being identified more explicitly as its value is recognized.

Despite of its application progress, Indonesian education setting had got different perspectives on the implementation of blended learning. The implementation of it in some several universities in Indonesia are now new though non-Indonesian universities have been used it for last some decades [9]. Dwiyoogo [10] reports on his survey about blended learning to the research participant. He revealed that 89% of the respondents wrote that they seldom or rarely heard blended learning to their pedagogical practice. Furthermore, the need

analysis in classroom practices for higher education highlighted that students feel bored and tired because one-way communication, teacher-centered learning, and ignoring of implementing blended instructions during learning process [11]. Though at vocational school level, the blended learning was never applied at classroom which is completed with high technologies property, government policy of using it, and prerequisite skill engaged on students. In fact, students' intrinsic motivation dramatically decreased for involving teaching and learning process [12]. Withdrawing from several literature about the demand of digital need of learning and the facts faced in present teaching and learning process in Indonesia about blended instructions, the present study eager to investigate the perceptions from several sources not only teachers and students but also program managements for its implementation about problems and challenges viewpoints.

II. LITERATURE REVIEW

A. Blended Learning

In the 21st century, higher education must meet a number of new (and continuing) challenges. Since external pressures such as government demand and global competences have forced institutions to focus strongly on higher education courses at the expense of more scholarly classical studies. Blended instructions or blended learning is assumed to be one of the learning types to meet the students' needs. Staker and Horn [13] define blended learning is one of the formal educations which is offered by institution in which the students learn the course material through online partly and as part of learning, they learn in a specific building or lab to do synchronous meeting. In the application of blended learning instructor or teacher supervises students' control over time, place, path, pace within students' process of accepting instructions and content of the course. Other later definitional discussions of blended learning include the notion of the flexibility offered by blended learning through the use of ICT replacing face-to-face hours on campus [14]. A common theme in each description of blended learning is the integration, or configuration, of global network technologies with technologies commonly used within face-to-face classrooms. A focus on integrating technologies has spurred research and development of blended learning in a variety of disciplines [15]. Further, the cornerstone of frameworks of blended learning for providing open, distance and flexible education, is associated with online and recent pervasive technologies. Advances in networked media technologies drive new forms of blended learning and teaching practices [16].

B. Skills in 21st Century Learning

Learning in 21st century is widespread -known as Education 3.0 [17]. It indicates that the role of technology is crucial to be implemented in teaching and learning process as the tool of transforming and communicating lesson from teacher to students and vice versa. Besides the importance of the technology, some studies explicated some skills should be equipped to face global competition. Firstly, students need to have critical thinking. This way of thinking contributes students' strategies in solving some problems [1,18,19]. More,

communicative skill requires students to interact each other, build networking, and achieve global relationship for getting useful result of working. Then, the collaborative skill demand students to work in team, share ideas, and discuss with mates to enrich the output of work. Finally, creative and innovative skill which encourage students to perform and do outstanding activity in order to get sophisticated findings. Furthermore, National Research Council [18] classified these three skills: cognitive, interpersonal, and intrapersonal skills which have similarly defined to previous skills.

C. Previous Studies

Based on several research findings stated that the application of blended learning has a positive impact in the learning process. First, Bawaneh [20] suggests that blended learning greatly affects the success of students in learning both cognitively, motorically and affectively. Further research was proposed by Mitchell and Forer [21] which states that the use of blended learning for first semester students at universities in the Department of Geography gave a positive response to the use of blended learning rather than lectures fully using face-to-face or otherwise just online learning. In addition, this study was also conducted by R-C. Shih [6], he pointed out that integration of face-to-face meeting (class instruction), Facebook and peer assessment during one of the writing subjects indicates that students' writing ability improved significantly. More, students' enable to collaborate to other students well during the application of blended learning. Larsen [22] which combines online writing and face-to-face learning. The results of the study found that merging the two types of learning is more effective than face-to-face only.

However, due to the nature of comprehensive and large-scale surveys, none of previous studies was specific to students and lecturers' perspectives on implementing blended learning in impacting 21st century skills, and the specific viewpoints perspectives from educational managers are closely important toward the present study due to learning facilities and infrastructure provided to realize blended learning application better at future. This research was guided by the following three questions:

- How do students experience in developing 4C skills through blended learning application?
- To what extent do students alleviate the emerged barriers throughout the course?
- How does teachers perceive on blended learning implementation to support 4C skills?

III. METHODOLOGY

A. Participants

The study was conducted to the fifty EFL students with engaged actively in blended learning: online and F2F interaction. During a semester, it has been used for content and instructions which integrated between face to face interaction and online mode within a course. By giving them an online questionnaire, the study was aiming at finding out the students'

perceptions on application of blended learning: perspectives and barriers.

B. Research Instruments

The questionnaire items were modified using WEBLEI (The Web-based Learning Environment Instrument) [23] and 21st century framework questionnaire [1]. These items are measured using five scales of the lowest (mostly never) and highest scale (mostly always). Descriptive statistics such as mean and standard deviation were calculated. The 4 parts of questionnaire were deliberately classified: critical thinking, collaborative, communicative, and creative skills. After data collected, the questionnaire was validated using Cronbach alpha to determine internal consistency of the reliability coefficient. Cronbach alpha indicates that part 1 (critical thinking) high level of reliability at $\alpha = 0.911$, part 2 (communicative skills) points out level of reliability at $\alpha = 0.867$, part 3 (collaborative skill) shows level of reliability at $\alpha = 0.885$. Last, part 4 (Creative and innovative skill) figures out level of reliability at $\alpha = 0.761$. Likewise, the reliability level for the four parts combined is high at $\alpha = 0.833$. Based on these results, it may be assumed that the questionnaire was reliable to be used.

A follow-up focus group and individual interview was conducted after the survey analysis to gain in-depth information which might not be shown in the survey. The interview was conducted mostly in Indonesian even Sundanese because the participants were more comfortable expressing themselves in their native language. Four students were selected based on their willingness to participate (two students took blended instruction last semester; meanwhile next two other are taking blended instructions). This number of students was considered optimal, as students could have a face-to-face roundtable discussion and build on each other's responses to think of ideas they might not have in individual interviews.

IV. RESULTS AND DISCUSSION

A. Research Question 1: students experience in developing 4C skills through blended learning application

1) *Critical thinking*: A detailed analysis of online questionnaire, forum-group, and individual interview provided the data to answer this question. The quantitative data from the students' questionnaires are presented first. Next, the qualitative data from the interview are. Questions 1 through 17 asked students on their perceptions on blended learning environment toward their development of critical thinking with lowest scale value (almost never) to the highest scale value (almost always); meanwhile questions 18 through 31 asked students about their experience on blended learning environment toward their development of communicative skill during a semester with descriptive response. Likewise, questions 32 through 42 asked students about their experience on blended learning environment toward their development of collaborative skill during a semester. Finally, the last part which dealt from questions from 43 through 50 elicits students about their experience on blended learning environment

toward their development of creative and innovative skill during a semester.

Turning first to items 1 through 17 the mean ratings for each item are generally moderate with some topping out at the highest point of the semantic differential scale, indicating that they strongly agree with the statements in those items. One of these items can be found in the third item, which deals with the students' perceptions on clarity of learning objectives for each meeting on blended learning. More specifically, item 3, The learning objectives are clearly stated in each lesson ($M = 4.18$, $SD = 0.63$), item 2 stated that their boredom within the course from the beginning to the end of semester ($M=2.58$ and $SD=0.86$), and item 5 asked about students' perceptions on the well-planned of course ($M=4.16$ and $SD= 0.84$). Although the item 2 has got mean rated lower than other items, this indicates very high because the statement was conflicting than others. These above three items indicated that students meet their expectation that blended learning provided them rich of content for lesson which is accepted to them. More, they also assumed that blended learning declined their boredoms within the semester and all the exercises, structures of activities to be argued well-planned.

In addition, the students rated the item 1 which asked about students' interests toward blended learning throughout semester ($M=3.14$ $SD=0.81$). Likewise, item 4 and item 6 which highlighted students' perceptions on the course clarity of assignment expectation (output) expectation and the feasibility of blended learning activities within the course ($M= 3.56$ $SD=0.84$ and $M=3.56$ $SD=0.76$ respectively). It seems to be indicated that students agree on provided activities and assignments on blended learning such as group discussion, discovery learning, and project-based learning. On the other hand, based on the students' views, students found unexpected experience of the critical thinking activities provided during the course. Item 13 and 15 asked about students' frequency on drawing their own conclusion based on numbers, facts, and relevant information analysis and their experiences on developing their critical thinking in classroom activities ($M=2.98$ $SD=0.98$ and $M=2.92$ $SD=0.63$) respectively. It seems to be indicated that designed critical thinking activities were untouchable to the students. This previous statement was conflicting to the lecturers' statements which argued that blended learning activities can be improve students' critical thinking. Some provided activities for gaining students' critical thinking are drawing conclusion, analyzing several facts, numbers and relevant information, comparing information, arguing evidence, and solving problem (Individual interview).

2) *Communicative skills*: In addition to the development of learning skills in 21st century, this part concerns on the blended learning implementation toward communicative skill. Turning first to items 18 through 31 the mean ratings for each item are generally moderate with one item topping out at the highest point of the semantic differential scale, indicating that they strongly agree with the statements in those items. One of these items can be found in the third item, which deals with the students' perceptions on their freedom of asking incomprehensible material to their classmates without embarrassed and guilty feeling. Specifically, item 20, I have

freedom to ask my classmates what I do not understand ($M = 4.14$, $SD = 0.83$), item 21 asked students' perceptions on response pace rating from their friends for help ($M=3.50$ and $SD=0.76$), and item 23 elicits detail information about students' interaction during teaching and learning process using blended learning asynchronously ($M=3.44$ and $SD=0.73$). These results indicate that blended learning environment contributes on developing students' communicative skills hence its menu of discussion forum throughout classroom activities. In addition, the students rated the item 18 which asked about students' perceptions on their electronically way for communicating each other in blended learning environment ($M=3.36$ $SD=1.21$). Likewise, item 19 and item 22 which emphasized their perceptions toward the freedom feeling of asking incomprehensible material to the teachers and their classmates and classmate positive attitude support in blended learning environment ($M= 3.34$ $SD=1.06$ and $M=3.56$ $SD=0.76$ respectively). It seems to be indicated that students agree on flexibility of students' asking for material they do not understand throughout course and their classmates were very helpful to be support each other for positive attitude. Although the result of item 19 was moderate, the deviated standard was invalid. Based on the focus group interview, some students argued that they felt embarrassed and hesitate if they had to contact to their teachers, firstly, they will ask their classmates for help. Besides, the lecturers themselves seldom to send the feedback or help from students due their business outside of the classroom. Moreover, item 23 and 24 asked about activities' frequency of structuring data to use in written products or oral presentations (e.g., creating charts, tables or graphs) and conveying students' ideas using media other than a written paper (e.g., posters, video, blogs, etc) ($M=3.16$ $SD=0.84$ and $M=3.68$ $SD=0.84$) respectively. It seems to be indicated that designed communicative activities were well-applied in classroom activities. Likewise, item 25 and 26 seeks students about their frequency on preparing and delivering an oral presentation to the teacher or others also answering questions in front of an audience ($M=3.88$ $SD=0.56$ and $M=3.20$ $SD=0.99$). From these result of survey, designed activities which were provided throughout teaching and learning process may support students' communicative skill. This previous statement was in line to the lecturers' statements which claimed that they created the activities based on lesson plan and expected develop students' communicative skill as much as possible (Individual interview) in blended learning environment.

3) *Discussion*: Not only focusing the practicalities of blended learning discourse, but also its implementation perceptions are nowadays happening to be discussed in tertiary level of education toward the 21st century learning skills. The present study agree with students perceive very well on blended instructions implementation focusing on the university teachers' competence and their own experience on the blended learning environment (3). Indonesian tertiary department has reformed the educational system from purely

traditional learning into e-learning. The present study has contributed small value of transforming afore one step of e-learning which is called blended learning. The educational minister guides us to engage ICTs for classroom activities in tertiary learning with nascent internet, online libraries and globalized knowledge bases.

B. Research Question 2: Students' Experience in Alleviating Emerged Barriers in Blended Learning

This research question focuses seeking to determine how the students experienced in engaging their teachers in face to face and online activities in blended learning environment. A detailed analysis of online questionnaire to the 50 EFL students provided the data to answer the stated question with quantitative data. A 16 item online of students' questionnaire with 5 scales of measurement. These items of questionnaire consisted two parts namely teachers' pedagogically preparedness, classroom activities experience, and technologically preparedness.

Focusing first to pedagogically preparedness dealing with item 1 and 2. More specifically, item 1 asked the teachers' perceptions of the pedagogical aspects of the course with the question "After getting the BL simulation, I felt pedagogically to catch the material throughout the course" ($M = 4.27$, $SD = 0.55$), and item 2, "I received BL support (simulation, facilities, and material) I needed during the course" ($M = 2.32$, $SD = 0.37$), it indicates that student participants felt their comprehensible input are quite good after following the treatment of blended learning. Otherwise, their blended learning support such as facilities (internet connection, laboratory, and ICT facilities) are unfeasibly to be used. To support it, students argued that they often spend their own internet connection from their mobile phones although their campus has already provided them internet connection. They also expressed that the internet connection is not reachable to their classes (Focus group comment).

Moving to the second part of classroom activities throughout blended learning implementation. The research findings point out dramatically high from the highest score of questionnaires. The teachers' questionnaire of item 3, I had enough input on the course and content activities ($M = 4.51$ $SD = 0.29$), suggests that they were almost able to gain their individual courses in a manner they were comfortable with. For item 4, 5 and 6. Student participants were requested to response the question on their experience on blended learning implementation in terms of pedagogical implications. Item 4 asked about "There was a good balance between online and classroom activities" ($M = 4.57$, $SD = 0.41$), item 5 discussed on "The online and classroom activities integrated well" ($M = 4.32$, $SD = 0.76$), and item 6 dealt with "I can integrate classroom and lab activities with each other" ($M = 2.67$, $SD = 0.52$). From the result of item 4 and 5, they emphasized that students' participants agreed they work hard to achieve classroom and online activities so that blended learning run successfully. In contrast, item 6 showed that activities integration between face to face and online learning were perceived to be difficult items. Students argued that they felt so hard in integrating their two modes of learning, they got confused in shifting from pure face to face learning (Focus

group comment). Coming to the item 8, using BL did not make this course more demanding to the teacher ($M = 4.20$, $SD = 0.60$). It was found that blended learning instructions may build their learning style to be self-regulated students. It is also attractive to note that for item 10, My learning style matches well with BL ($M = 5.00$, $SD = 0.00$), the students indicated that their learning styles matched well with BL including approaches, strategies and techniques of learning. Otherwise, for item 11, the online activities worked well ($M = 2.67$, $SD = 0.45$) and item 12 and 13, getting technical support was... and engaging the online activities was... ($M = 2.63$, $SD = 0.52$ and $M = 2.76$, $SD = 0.72$) respectively.

C. Research Question 3: Teachers' Perceptions on the Blended Learning Implementation to Support 4C (s) Skills

This research question focuses seeking to determine how the university teachers experienced in giving and engaging their students in face to face and online activities in blended instructions environment. A detailed analysis of online questionnaire to the three university teachers provided the data to answer the stated question with quantitative data. For questions 13 through 16, the scale included the following levels: (1) difficult, (2) somewhat difficult, (3) not easy or difficult, (4) somewhat easy, and (5) easy. These items of questionnaire consisted two parts namely teachers' pedagogically preparedness, classroom activities experience, and technologically preparedness.

Focusing first to pedagogically preparedness dealing with item 1 and 2. More specifically, item 1 asked the teachers' perceptions of the pedagogical aspects of the course with the question "After getting the BL training I felt pedagogically prepared to teach this course" ($M = 4.27$, $SD = 0.55$), and item 2, "I received the BL pedagogical support I needed during the course" ($M = 4.32$, $SD = 0.37$), it indicates that teacher participants felt their preparedness and pedagogical support are quite good after following the training of blended learning. This means that they are ready for preparation, implementation and assessment on the blended instructions in which they have to integrate between face to face meeting and online class in sequence.

Moving to the second part of classroom activities throughout blended instructions. The research findings point out dramatically high and this was indicated several topping out the highest scale of the questionnaire. The teachers' questionnaire of item 3, I had enough influence on the course content and activities ($M = 5.00$, $SD = 0.00$), suggests that they were all able to teach their individual courses in a manner they were comfortable with. For item 4, 5 and 6. Teachers participants were requested to response the question on their experience on blended instructions implementation in terms of pedagogical implications. Item 4 asked about "There was a good balance between online and classroom activities" ($M = 4.57$, $SD = 0.41$), item 5 discussed on "The online and classroom activities integrated well" ($M = 4.32$, $SD = 0.76$), and item 6 dealt with "I made an effort to integrate classroom and lab activities with each other" ($M = 4.67$, $SD = 0.52$). From these results, it emphasizes that teachers' participants agreed they work hard to achieve classroom and online activities so that blended instructions run successfully. Coming to the item

8, Using BL did not make this course more demanding to teach ($M = 4.20$, $SD = 0.60$), we find that teaching this ESL writing course in a BL environment did not make it more demanding for the teachers. It is also attractive to note that for item 10, My teaching style matches well with BL ($M = 5.00$, $SD = 0.00$), the teachers indicated that their teaching styles matched well with BL including approaches, strategies and techniques of learning. For item 11, the online activities worked well ($M = 4.67$, $SD = 0.45$) and 12, The classroom activities worked well ($M = 4.67$, $SD = 0.52$), also item 14 Managing the online activities was... ($M = 4.67$, $SD = 0.52$). to support these statements, at the same time, item 15 and 16, managing classroom activities was...and integrating the online and classroom activities was ($M = 4.17$, $SD = 0.75$) ($m = 4.00$, $SD = 1.10$) respectively. This underlines that teachers' participant strongly agreed that online activities and classroom activities can be blend very well.

Turning to the technologically preparedness from teachers which specifically observed on the teachers' evaluation of their technical preparation, the technical support they received throughout the semester from institution, and their experience of technically application of various activities, content and instruction in blended learning environment. The items deal with this scope are item 7, 8 and 13. Generally, the rating scores figure out fairly high. the teachers rated the item 7 about their technically preparedness to teach the course throughout blended instructions ($M = 4.23$, $SD = 1.07$). This value indicates that the teachers agree that they prepared their technically needs before and on classroom practices. item 8, I received the technical support I needed during this course ($M = 4.70$, $SD = 0.35$), and item 14, Getting technical support was... ($M = 4.63$, $SD = 0.52$). Attractively, for item 7 the mean value indicates that the teachers all "somewhat agreed" that they felt technically prepared to teach the BL writing course. The ratings for items 8 and 14 indicate that the teachers strongly agreed they got the technical support they needed during the course and that getting this support was easy.

D. Discussion

It is proposed that a transmission of knowledge approach to training tend to acknowledge and properly support the transformation of teachers' identity that results moving from traditional classroom-based teaching to online teaching. The shift goes beyond the acquisition of ICT skills and requires a pedagogical understanding of the affordances of the new medium and an acceptance by the teacher of his or her new role and identity. Technological Pedagogical Content Knowledge is the complete package must be met by teachers in 21st century. This is also related to the previous condition in which teachers not only transform the knowledge to their students but also, they need to upgrade their professional development through training, workshop and conference also joining learning community are recommended ideas for offering rich knowledge to students specifically blended instructions. Blended instructions are not merely about the content of course but teachers must follow the sequence of various activities which integrated both online and classroom meetings. The present study seems to have similar comment with this previous study. Professional development is crucial step for

teachers for gaining new and more understanding the new concept of learning specifically blended instructions (4).

V. CONCLUSION

In summary, student attitude and experience are two key variables that highlight the fact that online materials must be user friendly and easily accessible to students. Student computer literacy is also an important factor that teachers must consider. Various teacher factors also affect the quality of blended language learning environments. Thus, adequate teacher training and support in areas of pedagogy and technology is imperative. It also became clear that instructor behavior can affect students' perceptions of BL environments as well as their learning. Not only does it mean students may be able to learn the same materials faster, it may also have a positive effect on learner autonomy and learner perceptions about a course. Further, teacher training in pedagogy and technology, together with administrative and technical support, play an important role in the success of blended language learning programs.

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