EFL Students' Soft Skills and Hard Skills Practices in Online Learning During COVID-19 Pandemic
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ABSTRACT
This study aims to seek the students' soft and hard skills practices through online learning activities. It also compares the practices among students residing in the city and rural areas. The online learning methods included group discussions, wall post discussions, video presentations, sharing resources, individual assignments, watching and commenting videos. In this study, a self-evaluation questionnaire on soft skills was distributed to 29 students in class language assessment. The findings revealed that students practiced overall soft skills and hard skills at a high level. Soft skills related to communication, numeracy, and teamwork were practiced at a medium level while students practicing IT, learning skills, and problem-solving were at a high level. None of the skills were practiced at a very high level. Meanwhile, students in the city practiced soft and hard skills significantly higher than those in rural areas. This study implied that full online learning could not give a vast opportunity for students to enhance their 21st century skills, particularly for rural area students.

Keywords: 21st century skills, online learning, TEFL, communication skills, learning design.

1. INTRODUCTION
The Indonesian higher education curriculum required university graduates to be attributed with soft and hard skills. As to this, learning should be designed to engage students with soft and hard skills practices in both conventional and online learning activities (Ristekdikti, 2015). Developing soft and hard skills through online learning among students should be carried out through suitable learning strategies and activities (Hadiyanto, 2019a). Thus, how the teachers manage to learn and how the content is delivered to students in online learning classes can be influential in the skill development. Good learning quality, creative and productive learning can be accomplished if innovative learning activities support the development of the skills.

The use of Students Center Learning (SCL) in conventional and online learning classes has been found to positively impact students' soft skills, hard skills, and academic performance. However, the combination of face-to-face learning and online learning opens vast opportunities for students to learn and develop knowledge, skills, and competencies (Hadiyanto, Failasofah, Armiwati, Abrar, & Thabran, 2021). During the COVID-19 pandemic, the process of teaching and learning is mostly conducted in blended learning, and using this mode, students must be facilitated to practice their soft skills and hard skills via engaging online learning activities. Findings from previous studies found that students in rural areas faced some problems in online learning, such as limited internet connection, low devices specification, and data package quota (Sulisworo, Kusumaningtyas, Anomeisa, Wahyuningsih, & Ahmadhani, 2020; Coman, Țiru, Meseșan-Schmitz, Stanciu, & Bularca, 2020). This study attempted to examine whether the different conditions among students in the city and in the rural areas impacted students' soft and hard skills practices. This initial study aims to get general notions of students' soft skill and hard skills practices in both groups.

2. LITERATURE REVIEW
Online learning is characterized with multimedia-rich content and is accessed by students anywhere and anytime through internet access (Hadiyanto et al., 2021; Ananga & Biney, 2017; Kara, 2016). In a normal situation, online learning activities aim to give students more different modes of content delivery after face-to-face or classroom meetings. It aims to encourage students' interaction, acquire more knowledge, and
practice more skills. However, due to COVID-19 pandemic, learning activities, assignments, and examinations must be conducted in online learning (Hadiyanto et al., 2021). Students report their assignment to an e-learning class as a whole and are encouraged to interact and reflect on what they are learning. Teachers must also ensure clear directions and realistic goals for individual and group assignments in online learning (Hadiyanto, 2019b).

Some previous had found some benefits of using blended learning, such as improving students' motivation, attitude, academic achievement, IT skills, and teamwork skills (Bryan & Volchenkova, 2016; Shand & Farrelly, 2017; Kara, 2016; Hadiyanto et al., 2021). However, online learning without blended with face-to-face might show a different result of learning. Theoretically, students learn most effectively when they are allowed to interact with each other in the classroom and in online learning. Students' activities, discussion and interaction typically lead to soft skills practices and gain hard skills. As stated by Hadiyanto et al. (2021), students are given wide opportunities in the classroom, outdoor, and virtual classes to develop their knowledge, skills, and competencies through online learning activities. Online learning is supposed to be able to develop the students' soft and hard skills. The students' soft and hard skills development is determined by selecting delivery methods and their implementation in online learning activities. A suitable learning method can provide an explicit focus on the development of soft skills, that is providing students with opportunities in online learning to interact, explore, discuss, and work with each other to gain content of learning and hard skills (Hadiyanto et al., 2021; Singh & Singh, 2017).

Online learning activities also allow the students to practice and develop their soft skills that consist of communication, IT, Numeracy, teamwork, problem-solving, and learning skills, and then bridging the students to acquire hard skills that refer to specific knowledge and technical skills toward one's major (Hadiyanto, 2019a; Ristekdikti, 2015). Both soft and Hard skills should be developed through a learning process. It gives students opportunities to communicate, learn, collaborate, incorporate, participate, use, produce, and share information. Online learning offers space for students to practice soft skills, particularly communication, learning, Numeracy, communication, IT skills, and teamwork (Dube, 2020; Shand & Farrelly, 2017). It yields opportunities and flexible time for students to engage. It emphasizes engaging students to communicate, interact, group work and discussion, explore, use IT and supported applications, online presentation via online learning synchronously and asynchronously. Those online learning activities impact the practice of soft and hard skills become more intense after attending face-to-face learning. Online learning as a complement of face-to-face learning has been reported in some literature.

Students practicing soft skills and hard skills via online learning should be supported by standard electronic devices and good internet access capacity. This might become a problem for students who stay in rural areas, where the internet connection often breaks or has low signal, depending on weather conditions whether the students stay at city-centered or the rural area (Sulisworo et al., 2020).

3. METHOD

The study used an online classroom survey aiming to find out students' soft and hard skills practices through full online learning activities throughout the semester. Data were collected from 29 students enrolling in a language assessment course. Self-report questionnaires were used to measure students' practices of soft and hard skills through online learning. It was adapted from Hadiyanto (2019b), and each statement was rated using a 5-point Likert scale from never to very often to measure their practice of soft and hard skills through online learning activities. The questionnaire was reported to have a Cronbach alpha coefficient of 0.812 and corrected item-total correlation at 0.25 and above. The students' responses with 1- 5 were descriptively calculated and interpreted in five levels as shown in Table 1.

Independent sample t-test was also applied to investigate the differences between students in the city and in rural students when practicing 21st century skills. A different test was needed to be conducted for students in rural areas due to the limitations related to connection, electricity, internet quota and devices. The result of the test would not be applied for generalization.

Twenty-nine students (9 male and 20 female students) participated in this study. Eleven students resided in the city of Jambi and 11 of them were in rural areas. According to CPGA, nine of students (31.0%) were within 2.50 to 2.99, ten (34.5%) were 3.00 to 3.49 and ten (34.5%) were 3.50 to 4.00.

### Table 1. Interpretations of mean scores

| Mean Score | The level of Soft and hard skills practices |
|------------|------------------------------------------|
| 1.00 to 1.80 | Very Low |
| 1.81 to 2.60 | Low |
| 2.61 to 3.40 | Medium |
| 3.41 to 4.20 | High |
| 4.21 to 5.00 | Very High |
### Table 2. Overall mean score and level of students soft and hard skills

| Soft Skills Practices in Online Learning | Level of Practice | Mean | SD  | Level |
|----------------------------------------|-------------------|------|-----|-------|
| Communication                          |                   | 3.37 | .278| Medium|
| IT                                     |                   | 3.61 | .393| High  |
| Numeric                                |                   | 3.39 | .219| Medium|
| Learning                               |                   | 4.00 | .370| High  |
| Problem-solving                        |                   | 3.93 | .357| High  |
| Teamwork                               |                   | 3.38 | .288| Medium|
| Overall Soft Skills                    |                   | 3.90 | .189| High  |

### Table 3. Overall mean score and level of students soft and hard skills

| Hard Skills Practices in Online Learning | Level of Practice | Mean | SD  | Level |
|-----------------------------------------|-------------------|------|-----|-------|
| Specific Knowledge                      |                   | 4.12 | .348| High  |
| Specific Skill                          |                   | 4.05 | .250| High  |
| Overall Hard Skills                     |                   | 4.08 | .224| High  |

# 4. RESULTS AND DISCUSSION

## 4.1. RESULTS

Table 2 displays the students' mean score and level of soft skills practices during full online learning. The findings reveal that overall soft skills (3.90) were high. Furthermore, three components of soft skills, communication (3.37), numeric (3.39), and teamwork (3.38) were rated at a medium level of practice, while another three components (IT, learning, and teamwork) were rated at a high level, within 3.40 to 4.20 of the mean score.

### 4.1.1. Hard Skills

The students' mean score and level of hard skills practices during full online learning was (4.09) high level. Both components of specific knowledge (4.12) and skills (4.05) were a high level. It implied that using online learning are able to improve students’ hard skills (see Table 3).

Figure 1 displays the mean score comparison of students with soft skills between city centers and rural areas students. It reveals that city center students showed a higher mean score of overall soft skills and hard skills practices than students in rural areas. Remarkably, students in the city center yielded a higher mean score of communication skills, IT skills, Numeracy, learning, and teamwork than rural area students.

Figure 2 displays the descriptive comparison of students with hard skills between city center and rural areas students. It reveals that city center students show a little bit higher mean score of overall hard skills practices than students in rural areas. Furthermore, students in the city center yielded a little bit higher mean score of specific knowledge and skills than rural area students.

### 4.1.2. Independent t-test

Table 4 presents the independent sample t-test between the city center and rural area students toward overall soft and hard skills. The findings reveal that there was a significant difference between city center and rural area students toward soft skills (X difference t= 2.465, p=.020<.05), however, there is no significant difference of hard skills (X difference t=.664, p=.020<.05) between a group. The findings imply that city center students significantly practice soft skills higher or more frequently than rural areas, while both groups practice hard skills at the same level.
Table 4. Independent t-test between the city center and rural area students' class toward soft and hard skills

| Variables       | Group of Sciences     | Levine's Test for Equality of Variances |   |   |   |
|-----------------|-----------------------|-----------------------------------------|---|---|---|
|                 |                       | Equal Variances assumed or not assumed  | F | Sig. | t  | df | Sig. (2-tailed) |
| Soft Skills     | City Center & Around  | Equal variances assumed                 | .131 | .720 | 2.465 | 27 | .020          |
|                 | Rural Area            | Equal variances assumed                 | 6.032 | .021 | .664 | 27 | .513          |

Table 5. Independent t-test between the city center and rural area students' class toward components of soft skills

| Component of Soft Skills | Based on location | Levine’s Test for Equality of Variances |   |   |   |
|-------------------------|-------------------|-----------------------------------------|---|---|---|
|                         |                   | Equal Variances assumed or not assumed  | F | Sig. | t  | df | Sig. (2-tailed) |
| Communication           | City Center & Around | Equal variances assumed                 | 3.110 | .089 | 2.562 | 27 | .016          |
|                         | City Center & Around | Equal variances assumed                 | 3.608 | .068 | 1.564 | 27 | .129          |
| IT Skills               | City Center & Around | Equal variances not assumed             | .639 | .431 | 2.624 | 27 | .014          |
|                         | City Center & Around | Equal variances not assumed             | .137 | .714 | .677 | 27 | .504          |
| Numeracy                | City Center & Around | Equal variances not assumed             | .120 | .732 | 1.063 | 27 | .297          |
| Learning                | City Center & Around | Equal variances assumed                 | 1.454 | .238 | 2.511 | 27 | .018          |
| Teamwork                | City Center & Around | Equal variances assumed                 | 4.278 | .048 | 1.42  | 13.95 | .177          |
|                         | City Center & Around | Equal variances not assumed             | 1.218 | .279 | 1.55  | 27 | .131          |

4.1.3. Soft Skills

An independent sample t-test was run to investigate the statistical differences between students in the city center and rural areas toward soft and hard skills practices. The findings in Table 5 shows that there was a significant difference between students in the city center and rural area toward communication skills ($t = 2.56, p = .016 < .05$), Numeracy ($t = 2.62, p = .014 < .05$), and teamwork ($t = 0.18, p = .662 < .05$). City center students yielded higher practice than rural area students. However, there were no significant differences of practices between city center and rural area students in IT Skills ($t = 1.56, p = .129 > .05$), learning skills ($t = 0.67, p = .504 > .05$), and problem-solving skills ($t = 1.06, p = .297 > .05$).

Table 6 shows independent sample t-test of hard skills across students' location. Though there was a little bit different in mean score between city center and rural area students toward hard skills and its components, however, result of t-test shows that there was no a significant difference found in Specific knowledge ($t = 1.42, p = .177 < .05$) and specific skills ($t = 0.18, p = .662 < .05$).

Table 6. Independent t-test between the city center and rural area students' class toward components of hard skills

| Component of Soft Skills | Based on location | Levine’s Test for Equality of Variances |   |   |   |
|-------------------------|-------------------|-----------------------------------------|---|---|---|
|                         |                   | Equal Variances assumed or not assumed  | F | Sig. | t  | df | Sig. (2-tailed) |
| Specific Knowledge      | City Center & Around | Equal variances assumed                 | 4.278 | .048 | 1.42 | 13.95 | .177          |
| Specific skills         | City Center & Around | Equal variances not assumed             | 1.218 | .279 | 1.55 | 27 | .131          |
4.2. DISCUSSION

This study searched for students' soft and hard skills practices in online learning of language assessment subject. Overall, the findings revealed that the students' soft and hard skills practices through full online learning activities were high in covid-19 pandemic situations. However, most of the components of soft skills and some indicators of hard skills were practiced at a medium level. To achieve a high-quality learning outcome, the practices soft and hard skills should be very high or at a mean score of 4.20 and above. These findings indicated that full online learning activities were not optimally developing students' soft and hard skills. Students practiced three components of soft skills: communication, numeric, and teamwork at medium level. Interestingly, three components, IT, learning, and teamwork, were practiced at a high level. Further analysis shows that city center students significantly practice soft skills higher or more frequently than rural areas, while both groups practice hard skills at the same level.

Students in the city center also practiced communication skills. Numeracy, and teamwork skills significantly higher than the rural area students. However, there were no significant differences between city center and rural area students in IT Skills, learning skills, and problem-solving skills practices.

The literature review concludes that online learning can assist students in improving quality learning, however fully online learning is not effectively developing students' soft skills and hard skills. Teachers’ creativity in manipulating online learning features and supported applications to enhance students and hard skills are needed (Hadiyanto et al., 2021; Kara, 2016). Furthermore, the faculty and department should play a synergic role in enhancing teachers' online learning skills in developing students' soft and hard skills. Teachers should design online learning activities to develop students' soft and hard skills. Due to internet connection problems such as limited quota, low signal, broken connectivity, blackout electricity, and other problems at rural area students, asynchronous and offline learning activities might be most appropriate and should be applied in bigger portion (Coman et al., 2020; Dube, 2020; Sulisworo et al., 2020). Using video as media to convey learning material and asynchronous presentation could be one of the delivery methods for rural area students if live video learning could not be attended. Using video will be very helpful to improve students' soft skills and hard skills. Assignment on video analysis may encourage students' learning skills and comprehension in a topic of discussion. E-modules and material online, brainstorming, collaborative activities, discussions, giving online quizzes and tests, online assignments, and online assessment for students can be provided in asynchronous mode.

This research was initial research to see the nature of students' practices of soft skills and hard skills. This research was a basis to conduct a bigger scale and comprehensive research to search and explore EFL students’ practices of soft skills and hard skills in online learning across city centers and rural areas. Moreover, a small sample size was applied. The result of this research was not applicable for generalization to all courses and EFL students at the English Education department.

5. CONCLUSION

In conclusion, the students' soft skills and hard skills development were not optimal through online learning in language assessment course. Problems of internet connection mostly affected rural area students. Future research is expected to explore learning strategies and methods in online learning to develop students’ soft and hard skills. The result of the study has shown some potential innovations in online learning strategy and methods to be considered by the faculty of education and specifically the English education department, particularly in developing students' soft and hard skills through online learning.

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