Welcome back to face-to-face: A novel Indonesian issue of students' perceptions towards learning transition

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The Indonesian government will reverse the mandatory option for schools to conduct limited face-to-face learning starting from July 2021, after struggling with a pandemic emergency for about one-half of the year. This policy has the potential to trigger a variety of perceptions, including from students. Therefore, this cross-sectional study addresses three points, which are students' perceptions about previous emergency learning, limited face-to-face transition, and expectations from teachers towards the transition. A total of 850 Indonesian students ranging from elementary to tertiary education levels were involved as participants. An online survey was constructed in two forms, namely a 5-point Likert scale and open-ended questions. The results showed pro and contra during emergency learning implementation. Overall, the students welcomed the transition, which was accompanied by the hope that teachers appropriately prepare pedagogical strategies. Furthermore, it offers possibilities for new explorations from all education stakeholders that will enhance a good learning atmosphere.

Introduction

The Covid-19 pandemic has brought immense changes to the global educational system, with face-to-face activity and direct interaction between teachers and students suspended for a prolonged period. During campus closures, educational institutions could only conduct teaching through the Internet, with students relying on computers to access learning (Wong, 2020). This unprecedented scenario brings some challenges and opportunities for the teachers (Adedoyin & Soykan, 2020). For instance, as a challenge, teachers need to encourage the students to adapt to distance learning. Hence, this pandemic could be an interesting topic to be discussed in particular subject, like teaching mathematical modelling according to the current situation (Bakker & Wagner, 2020).

Three essential components in executing online learning are technology, interaction, and control (Piccoli et al., 2001). The collaboration of these components will facilitate learners' satisfaction. However, inequality from the insufficient integration of the pillars will tend to produce an unsatisfactory perception that hampers students' motivation (Sun et al., 2008) towards successful learning achievement. Consequently, a higher satisfaction should be sought (Chen & Yao, 2016) as a factor in achieving good quality of distance learning.

Several studies showed that regular learning has substantially shifted paradigms into emergency learning designed in the form of online education (Agormedah et al., 2020; Dhawan, 2020; Inciso, 2021; Sari & Nayir, 2020). Online learning during the "new normal" era is undoubtedly different from the "normal" in online learning. Before the outbreak, online learning could be designed in a form that integrates the use of digital technology with face-to-face activity (Lee & Dashew, 2011; Romero-Hall & Vicentini, 2017). As the pandemic hit the world, physical distancing and isolation of students at

home emerged as a significant impact experienced by the education sector. Lee & Dashew (2011) stated that synchronous activity should be included in online learning to maintain an interaction between teachers and students. Some digital platforms became widely used to enable these interactions, such as *Zoom* (Serhan, 2020; Wang et al., 2018), *Google Classroom* (Octaberlina & Muslimin, 2020), LMS *Moodle* (Kerimbayev et al., 2020; Ramadhani et al., 2019), and *Microsoft Teams* (Wong, 2020). Besides, *WhatsApp*, a widely used communication application also became a learning platform (Berewot & Fibra, 2020; Chaka et al., 2020), especially for remote areas where most students did not have compatible device to engage in video conferencing (Apsari et al., 2020). Some findings reported use of various learning platforms such as *Flipgrid* (Lowenthal & Moore, 2020), *Edmodo* (Almoeather, 2020), and even the use of live-chat (Broadbent & Lodge, 2021) as tools for instant, real-time, and convenient help.

Some technical problems have been reported as online learning issue during the pandemic, such as the availability of technological devices (Adedoyin & Soykan, 2020), socio-economics (Ferri et al., 2020; Fishbane & Tomer, 2020), even surroundings' intrusions during video conferences (Manfuso, 2020). These constraints contribute to a distinction between "normal" online learning and the "new normal". Accordingly, the pandemic is undoubtedly a threat to humanity (Poon & Peiris, 2020). Therefore, the term "new normal" online learning can be contextually defined as *pandemic emergency learning* (PEL), since well-planned online learning experiences are significantly different from those delivered remotely in response to an emergency situation (Ferri et al., 2020; Rahiem, 2021). PEL creates inequalities as teachers, students, and parents are not well-prepared for this transition (Rahiem, 2021), associated with technological, pedagogical, and social challenges (Ferri et al., 2020).

In the context of Indonesia, the government considered a mandatory option for educational institutions to perform limited face-to-face learning with a rigorous health protocol. The policy was decided by considering all difficulties during PEL, while at the same time, the pandemic gradually decreased. Therefore, several questions emerged concerning this new policy:

1. What are students' perceptions about PEL as implemented in Indonesia for about 1.5 years?
2. What are students' perceptions regarding school opening and implementation of limited face-to-face learning in Indonesia?
3. What are students' hopes for their teachers during limited face-to-face learning implementation?

Context of the study

According to the official site on 19 March 2021 (https://www.kemdikbud.go.id), the Indonesian Ministry of Education and Culture stated that limited face-to-face learning (LFtFL) would be enforced due to negative social impacts for students in the form of learning loss, school dropouts, and child abuse (Kemendikbud, 2021). The Ministry also noted that this policy was implemented to respond to the community (students, teachers,

parents, education experts, and social observers) who already expected the start of LFtFL. Indonesia became one of four countries in the Asia Pacific region that have not conducted complete face-to-face learning (Kemendikbud, 2021). It should be noted that based on this policy, parents decide whether their children can go to school. The government gives the choice to parents, who know their children's health condition.

Some guidances towards LFtFL are also given by the Ministry to ensure safety when students are ready to go to school. As announced in the live-streaming *YouTube* (https://www.youtube.com/watch?v=i8LfNkdXymY&t=4051s), Mr Nadiem, the Minister of Education depicted some directions towards the school readiness, such as (1) rotation class system; (2) reduction of class participants up to 50%; (3) parent's permission; (4) strict health protocol; and (5) vaccination priority. The policies contained in points (1), (2), and (4) imply the possibility that school closure will be executed again when there is transmission of the disease. Furthermore, the implication of point (5) ensures teachers get priority for vaccines based on the most significant potential learning lack. The first stage will be specified for teachers from kindergarten, elementary, and special education. The second stage will be given to those from the secondary level, and the last stage to lecturers in higher education (H. P. Sari, 2021).

A field study by (Arifa, 2020) found that about 28.6 million students from K-12 education in various provinces have practised the work from home policy. This illustrates the barrier faced during PEL related to the readiness of human resources, the absence of a tangible curriculum, as well as limitations in terms of technology and Internet network support. In Java province, ineffectiveness of PEL implementation occurred at an elementary school in Sidoarjo, East Java (Khusna et al., 2020). Ineffectiveness was also found for tertiary students at a national university in Yogyakarta, Central Java (Arifa, 2020). These examples show similarity as students were less enthusiastic in learning because of teachers' lack of guidance and preparedness in managing PEL. There were also complaints by students at a secondary school in Medan, North Sumatra, showing that students did not interact freely with teachers or classmates due to network constraints, leading to misunderstandings in learning (Sembiring & Oktavianti, 2021). In line with this, most students at a university in South Sumatra preferred classroom learning due to the same constraint (Ningsih, 2020). The unstable network issue was also seen for numerous students at a university in Kendari, Southeast Sulawesi who struggled with PEL. This condition has implications on their motivation because PEL provided their only learning environment.

Regarding these findings, it seems that the Internet network is uneven over Indonesia region (Syah Aji, 2020). In addition, dire economic conditions are hitting educational participants nationally, therefore not all teachers and students have compatible devices for PEL. For the next academic year, 2021/2022, the Indonesian Government has declared a policy requiring schools to open LFtFL options as a response to evaluations of PEL challenges. This new policy certainly raises various feelings and perceptions, but LFtFL provides a mandate for teachers to make adjustments in designs of lesson plans (Nissa & Haryanto, 2020) which could improve their students' impressions of the learning transition. Therefore, the research team expects that students' perceptions found in the present study will be a stepping stone for further investigations.

Literature review

The impact of PEL implementation

The underlying aspect of PEL is its dependency on devices and Internet bandwidth (Adedoyin & Soykan, 2020). The need for devices as learning tools in implementing PEL poses a barrier for students from a financial perspective (Dong et al., 2020). Low quality network connections cannot enable a conducive learning atmosphere (Ferri et al., 2020; Yusuf, 2020). Before the outbreak, students with low financial status relied on their schools for free computer Internet access (Demirbilek, 2014), and therefore when PEL was applied were likely to have difficulties (Adedoyin & Soykan, 2020). Fishbane and Tomer (2020) showed that as socio-economic level decreased in the community, the level of internet access decreased markedly. Therefore, students unable to afford broadband connections were most likmely to fall behind or encounter additional challenges in PEL.

In addition, psychological stress factors were found during PEL. A correlation analysis by Cao et al. (2020) indicated that economic issues, effects on daily life, and delays in academic activities during PEL would potentially lead to psychological stressors associated with anxiety symptoms. Prolonged psychological stressors could lead to boredom, negatively affecting academic performance (Al-Salman & Haider, 2021). Continued use of social networks during PEL may bring negative influences for students. For instance, prolonged use of *WhatsApp* as a learning tool may cause them to become dependent on instant messaging and unable to control the time spent on messaging, lead them to be less disciplined and unsuccessful in the academic process (Yilmazsoy et al., 2020). Another effect is the physical health of children and adolescents as a result of prolonged stress exposure, such as metabolic syndromes and obesity (Mahapatra & Sharma, 2021).

In contrast with many negative issues during PEL, the provision of online learning is labeled as a panacea to balance the academic loss during the pandemic period (Dhawan, 2020; Khalid & Ali, 2021). This outcome is supported by teachers' efforts in optimising PEL to keep it running effectively. For instance, some studies showed the role of teachers in designing learning models through various platforms (Yusuf, 2020) and developing purposeful evaluation in the form of digital portfolios (Alrefaie et al., 2020). Such practices and innovations were carried out to foster student engagement during PEL (Goldberg, 2020). Another advantage of PEL is similar to standard online learning in terms of flexibility and material accessibility, where students get video recordings from teachers, and it can be accessed anytime and repeatedly without worrying about timetables (Mukhtar et al., 2020).

Learners' perception towards PEL implementation

Generally, students' perception can be defined as thoughts and beliefs of what they perceive as meaningful and helpful (Rahman, 2020). Several studies have sought to comprehensively review students' perceptions of PEL as a learning alternative, particularly concerning two PEL aspects, perceived usefulness and perceived ease of use. On perceived usefulness of PEL, some studies showed there is no tendency to disagreement

among the students (Khan et al., 2020; Rahman, 2020), who agree that flexibility to study at PEL was convenient. However, some students believed PEL was beneficial but ineffective (Rahman, 2020). This contradicted some preliminary studies suggesting that online learning is highly beneficial (Mbukusa, 2018; Tan et al., 2010). Some have highlighted Zoom as a digital platform for video conferencing, seen as enjoyable and comfortable platform (Wang et al., 2018), but it received negative perceptions in other studies concerning PEL execution (Serhan, 2020).

On the perceived ease of use of PEL, the majority of students gave positive perceptions about the learning design that teachers have arranged, as some studies emphasised that students could find necessary information and learn at their own pace during PEL (Baczek et al., 2021; Khan et al., 2020). Moreover, students felt that PEL had potential to maintain interaction easily with classmates or teachers (Rahman, 2020). However, it does not mean that the effectiveness of PEL has been well-managed to provide an ideal atmosphere for learning in times of emergency. In some countries, students claimed that PEL with many interactive activities could not replace face-to-face classroom environments (Adnan & Anwar, 2020; Baczek et al., 2021; Kedraka & Kaltsidis, 2020; Serhan, 2020).

Method

Research design and instrument

The research was conducted in Indonesian, with translations into English being made by the authors for international readers.

This study used a cross-sectional survey design because it involved students from various Indonesian islands and educational levels at one particular time during the preparation period for the new learning transition policy. The survey sought to gather data on students' perceptions of PEL experience, LFtFL transition, and expectations for their teachers (Table 1). It also asked the participants demographic questions, for gender, educational levels, and device ownership (Table 2).

Data collection and analysis

All the question types were compiled into one *Microsoft Forms* questionnaire. It was administered by sharing the link to teachers and lecturers to be forwarded to their students. They were allowed to pass on the link to their colleagues who were also teachers.

Since the targets were specifically students, the research team gave a notification that the survey is not allowed to be forwarded to parents. In addition, they were instructed to provide at least 30 minutes for students to fill the survey during lesson/lecture session. The team shared the survey about two weeks after the government's official announcement for the transition planning (19 March 2021), from 6 to 24 April 2021. The participants were students devoted to learning from several regions in Indonesia, including elementary, secondary, and tertiary levels. Through dissemination of the questionnaire

links, 866 students from those levels filled out all questions completely. The results were downloaded into an *Excel* workbook and analysed. The team used descriptive statistics to calculate the Likert-scale items, while the qualitative data from open-ended questions were analysed using a multistage process of descriptive and pattern coding (Saldana, 2016).

Table 1: Survey questions

Aspect and Q no.	Question
PEL-1	I enjoy the PEL atmosphere
PEL-2	I am comfortable with PEL atmosphere
PEL-3	I understand the materials taught during PEL
PEL-4	I could still communicate with teachers during PEL
PEL-5	I could still communicate with peers during PEL
FtF-1	I want to attempt LFtFL
FtF-2	I am ready for LFtFL
FtF-3	LFtFL is better than PEL
Open-ended Q 1	What makes online learning enjoyable?
Open-ended Q 2	What makes online learning uncomfortable?
Open-ended Q 3	Why should LFtFL be implemented immediately?
Open-ended Q 4	What are the challenges in doing LFtFL?
Open-ended Q 4	What are the students' expectations for teachers/lecturers in teaching at LFtFL?
PEL = pandemic emergency learning; FtF = limited face-to-face learning (also LFtFL); Likert scale for PEL and FtF: strongly disagree = 1 to strongly agree = 5	

Participants

The participants' demographics (Table 2) include gender, education level, and ownership of devices to support their PEL.

Table 2: Participants' demographics (N=866)

		N	Percentage
Gender	Male	257	29.7%
	Female	609	70.3%
Education level	Elementary	154	17.8%
	Secondary	359	41.5%
	Tertiary	353	40.7%
Device ownership	Borrow from others	54	6.2%
	Own the devices	812	93.8%

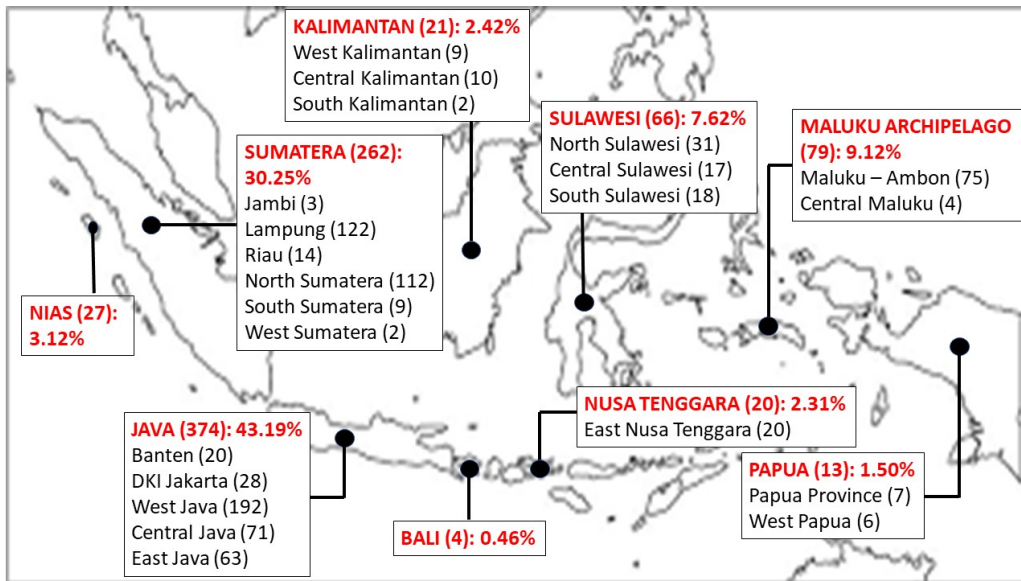Students were distributed across numerous islands and many provinces in the country, as illustrated in Figure 1.

Figure 1: Distribution of participants

At the elementary level, the dominant participants were in grades 4-6 (83.1%, n = 128). The secondary level was divided into junior (27.4%, n = 237 students) and senior high school (14.1%, n = 122). Tertiary participants were spread into freshmen (28.6%, n = 101), sophomores (26.1%, n = 92), juniors (19.3%, n = 68), and seniors (21.53%, n = 76). There were 16 students (4.5%) at the tertiary level who were excluded due to lack of study period, therefore in total this study took 850 students as participants.

During PEL implementation, the students were forced to have a compatible device to support their learning. Based on the "Device ownership" result in Table 2, it is shown that over 90% of students have their devices, while the rest borrowed from others. This depicted the condition in which students realised that devices were mandatory for making PEL well-run.

Findings

PEL perceptions based on Indonesian students' perspective

To effectively organise the results, the research team made categories according to each education level.

Elementary level

Table 3 presents the students' perception from elementary level about their PEL experiences.

Table 3: Students' perceptions of PEL experience from elementary level (n = 154)

	5	4	3	2	1	Mean	SD
	Strongly agree -------------------------------- Strongly disagree					Mean	SD
PEL-1	31 (20.1%)	29 (18.8%)	42 (27.3%)	21 (13.6%)	31 (20.1%)	3.05	1.39
PEL-2	32 (20.8%)	30 (19.5%)	24 (15.6%)	29 (18.8%)	39 (25.3%)	2.92	1.49
PEL-3	31 (20.1%)	60 (39.0%)	14 (9.1%)	22 (14.3%)	27 (17.5%)	3.17	1.38
PEL-4	54 (35.1%)	35 (22.7%)	25 (16.2%)	16 (10.4%)	24 (15.5%)	3.51	1.45
PEL-5	62 (40.3%)	28 (18.2%)	24 (15.6%)	19 (12.3%)	21 (13.6%)	3.59	1.46

In terms of enjoyment and comfort during PEL, elementary students expressed their feelings in two sides, which are positive and negative. As many as 38.9% enjoyed the state of being with PEL experience, while 40.3% were comfortable with it. These Likert results were then reviewed through written responses in open-ended questions, and some themes emerged from those responses. They consistently stated that PEL brought the possibility of exploring new digital software and new ways of building communication. Furthermore, some patterns of their answers showed valuing of time flexibility and independent learning. However, the research team found negative themes concerning their enjoyment and comfort in doing PEL. These related possibilities for laziness and dishonesty in the work of the task. The majority of students responded that most tasks and homework were completed with the help of their parents. These perceptions were supported by several statements which represented sentiments:

- I love this online learning because it makes me more independent. Also, I like it because I can learn a lot of digital software.
- I like it because we get to learn new programs and easily communicate in other ways.
- I learn while playing or eating at the same time.
- Difficult tasks can be done with parents. If I don't understand the lesson today, I ask my parents for help.
- The work can be completed with online editing. I also have plenty of time to play around at home. I don't get tired of getting up early and going to school.

Others gave a less agreeable perception of their comfort in the learning atmosphere during PEL (33.7% and 44.1%, respectively) that has been used for about 1.5 years. Apparently, this kind of learning brings them into discomfort due to the tendency of teachers to provide the learning material to be studied independently by instructing students to utilise online resources. Therefore, it makes teachers prone to not teaching with good clarity. In addition, some themes emerged about the disadvantages of PEL such as obscurity in the delivery of learning material, limited synchronous face-to-face duration, Internet connection issues, and eye health due to exposure to screens continually, as captured by the following statements:

- There's too much material. The teacher has not taught online for a year, just gives assignments and instructs us to submit on time, so I do not understand the lesson.
- I am confused about the answer to a question because there is no learning or less explanation from the teacher.

- My Internet sometimes goes bad and makes it hard to hear people.
- The material is not as clear as if received face-to-face. If I want to ask about a lesson material that is difficult, I struggle to ask the teacher because the duration of synchronous is limited.
- Laptop radiation can make my eyes tired.

Students were also asked about their opinion related to their level of understanding, as well as the ease of communication with teachers or peers. From agree to strongly agree, a total of 59.1% of students gave the perception that they understood the material taught during PEL, while 57.8% were still able to communicate with teachers, and 58.5% with peers during PEL. In general, these positive responses highlighted the presence of several digital platforms that are used to get involved in learning interaction, such as *Zoom, Microsoft Teams*, and *Google Meet*. Students could engage with their teachers or even peers to overcome any difficulties encountered during task working. However, others reported that they are comfortable with the PEL situation but struggled during the process. The frequent responses from these students are about the technical constraints, especially the Internet network, surroundings intrusions (e.g., sounds of humans, animals, vehicles), and device compatibility.

Secondary level

Table 4 presents the students' perception from the secondary level about their PEL experiences, which is displayed in two categories (junior and senior high school).

Table 4: Students' perceptions of PEL experience from secondary level

	5	4	3	2	1	Mean	SD
	Strongly agree ---------------------------- strongly disagree					Mean	SD
Junior High School (n = 237)							
PEL-1	26 (11.0%)	53 (22.4%)	89 (37.6%)	33 (13.9%)	36 (15.2%)	3.00	1.19
PEL-2	33 (13.9%)	43 (18.1%)	75 (31.7%)	44 (18.6%)	42 (17.7%)	2.92	1.28
PEL-3	14 (5.9%)	45 (19.0%)	99 (41.8%)	41 (17.3%)	38 (16.0%)	2.81	1.10
PEL-4	63 (26.6%)	61 (25.7%)	64 (27.0%)	25 (10.6%)	24 (10.1%)	3.48	1.27
PEL-5	94 (39.7%)	68 (28.7%)	41 (17.3%)	13 (5.49%)	21 (8.9%)	3.85	1.25
Senior High School (n = 122)							
PEL-1	13 (10.7%)	24 (19.7%)	40 (32.8%)	17 (13.9%)	28 (23.0%)	2.81	1.29
PEL-2	17 (13.9%)	15 (12.3%)	35 (28.7%)	27 (22.1%)	28 (23.0%)	2.72	1.33
PEL-3	10 (8.2%)	14 (11.5%)	35 (28.7%)	24 (19.7%)	39 (32.0%)	2.44	1.27
PEL-4	21 (17.2%)	35 (28.7%)	30 (24.6%)	18 (14.8%)	18 (14.8%)	3.19	1.30
PEL-5	49 (40.2%)	31 (25.4%)	24 (19.7%)	6 (4.9%)	12 (9.8%)	3.81	1.29

At junior high school, the average for the first and second statements about students' enjoyment and comfort about PEL atmosphere (M = 3.00, SD = 1.19; M = 2.92, SD = 1.28) is little different from elementary students (M = 3.05, SD = 1.39; M = 2.92, SD = 1.49). The total percentage for these two statements shows similar values between students who enjoyed (33.4%) and felt comfortable (32.0%) with those who did not enjoy (29.1%) or felt uncomfortable (36.3%) with PEL experience. The frequent theme that

appeared as students' reports about why they enjoyed PEL was their feeling of being safe at home. Knowing that Covid-19 is rapidly contagious within crowds, students perceived that they would be safe by learning from home, regardless of whether they understood the lesson. Another report found that their preference to do PEL is similar to that found for elementary students. The students felt that they could develop insights about the interesting digital platform for their learning process. On the other hand, students tend to be lazy and ignorant of their learning. Time flexibility emerges as a factor that causes students to postpone tasks and they may fall into playing with gadgets rather than learning a lesson from teachers. The closeness of distance with parents also makes them more liable to seek help instantly when having difficulty with their homework. Some testimonies that students from this level constantly stated:

- I feel more comfortable studying at home during this moment, and more secure from Covid-19.
- Flexible time can be free to study anywhere. We can be more relaxed doing the task given.
- I can study while laying on the bed and can be assisted by my parents if there are difficulties.
- I understand more things to be learned, especially about technology.
- The implementation of learning is not too strict, so I can play with gadgets all day.

Over 30% reported discomfort during PEL, due primarily to inability to understand the content knowledge taught by teachers. This finding is in line with the report from elementary students, who felt that teachers only instructed them to read the material, without clear guidance. In addition, teachers did not open up spaces to establish communication with them. The worst thing was that teachers gave heavy loads to them as compulsory homework. Technical constraints were also encountered by some of them. All of these issues impacted students' lack of understanding of the material (33.3%), and less able to establish effective communication with teachers (20.7%). Therefore, they took advantage to intensely communicating with peers (68.4%):

- The teacher does not explain the material clearly and only tells to read the material.
- Sometimes, I do not understand what material the teacher gives because he only gives materials and questions without explaining them in advance.
- It is hard to focus on lessons, especially if the internet is slow.
- Networks that sometimes like to disappear, must often buy quotas, deadlines that are sometimes too fast, too heavy tasks, and a lot of things to do.
- I do not understand the explanation of the contents of the book. The task given is only to work on one chapter of the book, but there is no explanation.

At the senior high school level, students predominantly showed a feeling of enjoying PEL. Some of the responses are similar to elementary and junior levels, but there is a unique theme that has not existed in the previous levels. This theme was reported by some students consistently, as it allowed them to develop other interests during PEL. When students are at school onsite, they spend most of their time doing the work from the teacher. However, during the pandemic, they can "steal time" to learn new things. This

context certainly provided various responses from them. Some students took advantage of break time by learning content from social media, but some worked on other priorities and the main learning activities. This fact presents challenges for teachers in maintaining students' focus on ongoing learning. Some technical constraints, surroundings intrusions, and teacher proficiency towards digital pedagogy are found in responses that make them uncomfortable (45.1%) and difficult to understand learning content (51.7%).

- Online learning is more flexible and because I have an interest (which is not taught in school), so I can focus more on learning and developing something I am interested in.
- I do not like to learn online because I can be easily disturbed by the atmosphere around me.
- Sometimes I do not understand the learning material given by the teacher, and if I ask the teacher, the explanation given is difficult to understand rather than explain directly. I also couldn't meet up with friends in person.
- The teacher is very brief in explaining the material so it makes me difficult to understand. I was so confused that I often asked Google. This resulted in me easily forgetting about the lesson.
- I feel wasteful in using the Internet quota to learn, so I buy it monthly. In addition, I am also constrained by the internet network.

Referring to interaction during PEL, the struggle between students and teachers is greater than between peers. A total of 29.6% of students were struggling in digital interaction with teachers, while only 14.7% were struggling with peers. There is an urgency for students in this level with the role of teachers in providing guidance and instruction directly. However, teachers in senior high schools have put effort into maintain conducive interactions with students. It is proven that 45.9% of students gave responses agree and strongly agree with communication ability between teachers and peers. Nevertheless, it did not mean that the small percentage that indicated a lack of digital interaction, especially with teachers, was ignored. Some of the patterns are found related to this lack of interaction.

- Communication with friends or teachers does not go well, so learning content becomes difficult to be understood.
- Not being able to communicate with the teacher directly when there is challenging material, so I have to find learning resources independently through various websites.
- Frequent errors in communication resulted in me being lazy and lacking in online learning (PEL).

Tertiary level

Lastly, the research team revealed the perception of students' in higher education, which focused on the undergraduate level. It is known that students in higher education have a nature as independent learners. Table 5 presents the students' perceptions from the tertiary level about their PEL experiences.

Table 5: Undergraduate students' perceptions of PEL experience
from tertiary level (n = 337)

	5	4	3	2	1	Mean	SD
	Strongly agree -------------------------------------- strongly disagree					Mean	SD
PEL-1	21 (6.2%)	155 (46.0%)	94 (27.9%)	45 (13.4%)	22 (6.5%)	4.47	0.95
PEL-2	28 (8.3%)	127 (37.7%)	69 (20.5%)	73 (21.7%)	40 (11.9%)	4.34	1.11
PEL-3	86 (25.5%)	150 (44.5%)	15 (4.5%)	68 (20.2%)	18 (5.3%)	4.64	0.92
PEL-4	94 (27.9%)	143 (42.4%)	66 (19.6%)	28 (8.3%)	6 (1.8%)	3.86	0.98
PEL-5	102 (30.3%)	137 (40.7%)	78 (23.2%)	15 (4.5%)	5 (1.5%)	3.94	0.92

Regarding enjoyment and comfort, it turns out that 52.2% of students enjoyed the PEL and 46.0% felt comfortable. Moreover, 70.0% understood the courses delivered by their lecturers. During PEL's 1.5-year journey, lecturers as educators at a higher level have strived to bring good service in technology-based learning. This shows in some consistent responses that emphasise the lecturers' creativity in making interesting videos. Some patterns showed the benefit of the learning videos that could be accessed anytime or repeated to recall the course, but some others show a tendency to be late in accessing video due to its flexibility.

- Some lecturers give material in the form of interesting videos so that when I do not understand, I can replay the video.
- Learning videos can be repeated, making it easier for me to recall the learning memory.
- I can wake up late because the videos can be accessed at any time/learning recordings can be re-watched if I don't understand.

Over 70% of students in higher education maintained good interaction with both lecturers (70.3%) and peers (71.0%). A small percentage of respondents claimed to have difficulty in communication due to general technical constraints.

LFtFL perceptions based on Indonesian students' perspective

In Indonesia's coverage generally, the presence of PEL provides a hue for the educational aspect. This learning atmosphere brings many positive and negative impacts in terms of technical implementation, mental health, and learning outcomes. As described in the study context, the Indonesian government ran a discourse for schools to open mandatory options for the implementation of LFtFL by considering various perceptions of PEL. Therefore, learning transition becomes news that raises diverse perceptions, especially from the students.

Considering the Likert survey findings on this issue, the research team detected a desire from students in all education levels to study with the LFtFL model, as illustrated in Table 6. Over 60% from all education levels reported their readiness for LFtFL (FtF-2), and more than 70% perceived that LFtFL would be better than PEL (FtF-3). The overall average of three statements showed a score above 4 (FtF-1: M = 4.15, SD = 1.21; FtF-2:

M = 4.10, SD = 1.18; FtF-3: M = 4.19; SD = 1.11). These scores show a need to investigate their perceptions more comprehensively.

Table 6: Students' perceptions of learning transition into LFtFL

	5	4	3	2	1	Mean	SD
	Strongly agree -- strongly disagree						
Elementary level (n = 154)							
FtF-1	87 (56.5%)	21 (13.6%)	19 (12.3%)	11 (7.1%)	16 (10.4%)	3.99	1.39
FtF-2	87 (56.5%)	26 (16.9%)	17 (11.0%)	9 (5.8%)	15 (9.7%)	4.05	1.34
FtF-3	92 (59.7%)	19 (12.3%)	22 (14.3%)	6 (3.9%)	15 (9.7%)	4.08	1.33
Junior High School level (n = 237)							
FtF-1	109 (46.0%)	52 (21.9%)	40 (16.9%)	20 (8.4%)	16 (6.8%)	3.92	1.25
FtF-2	94 (39.7%)	69 (29.1%)	39 (16.5%)	22 (9.3%)	13 (5.5%)	3.88	1.19
FtF-3	108 (45.6%)	64 (27.0%)	41 (17.3%)	9 (3.8%)	15 (6.3%)	4.02	1.16
Senior High School level (n = 122)							
FtF-1	65 (53.3%)	19 (15.6%)	16 (13.1%)	6 (4.9%)	16 (13.1%)	3.91	1.43
FtF-2	63 (51.6%)	22 (18.0%)	19 (15.6%)	2 (4.1%)	13 (10.7%)	3.96	1.34
FtF-3	68 (55.7%)	19 (15.6%)	20 (16.4%)	3 (2.5%)	12 (9.8%)	4.05	1.31
Undergraduate level (n = 337)							
FtF-1	233 (69.1%)	50 (14.8%)	39 (11.6%)	10 (3.0%)	5 (1.5%)	4.47	0.92
FtF-2	200 (59.4%)	73 (21.7%)	44 (13.1%)	13 (3.9%)	7 (2.1%)	4.32	0.98
FtF-3	195 (57.9%)	96 (28.5%)	39 (11.6%)	5 (1.5%)	2 (1.6%)	4.42	0.80

Throughout the investigation, there are themes which were frequently and constantly stated by students. Similarities were found in all sentiments and could be merged without distinguishing the education levels. In general, the pattern for the students' responses could be categorised into several groups. The first theme is about *social relationships*, which focus on their longing to be reunited with friends and teachers and being able to play together while still applying health protocols. Some sentiments related to this theme were captured as follow:

- I want to study and play with my beloved teachers and classmates, and I'm sure it will be amazing.
- Because I want to meet with my friends. I really miss the togetherness with my teachers and friends, but I must remember about the health protocol.
- I am totally bored with online learning (PEL). I want to study directly with my friends, and I promise to obey the health protocol.

The second theme is about *learning activity*, which focuses on teaching-learning processes and sharing with peers directly without Internet network disruption. This helps to understand lessons more easily, as depicted through some sentiments below:

- Perhaps I could comprehend the lesson that I learn, discuss with my peers, and ask directly to my teacher when I get difficulty.
- I can't stand with the super slow Internet in my place. I need to be back to school and listen directly to my teacher.

- We depend on Internet signal during online learning, but it is often gone in our region. We often miss the lesson due to the lack of network.

The third theme is about the *financial factor*, which focuses on saving monthly costs to purchase Internet quota, as described through some sentiments below:

- When I'm stuck with my lesson, I can discuss with my peers in class hours. Face-to-face communication can be easily understood rather than by chat. I also don't need to purchase an Internet quota, because the price is so expensive, and the cost of installing Wi-Fi is not quite affordable too
- I can study freely without being worried about running out of Internet quota.
- During online learning, my spending money became increasingly wasteful because I had to buy Internet quotas.

Based on the results in Table 6, a small percentage of students still want to do PEL. Through the responses given, the majority of students in this group admitted that they are still afraid of exposure to Covid-19, as the level of transmission is still vulnerable. However, students have been accustomed to life habits during PEL. Some themes emerged according to this habit, such as waking up late, no need to take a morning bath, and no need to change uniforms many times. In other words, there are groups where students have already been in their comfort zone, and that has an impact on learning motivation. This is certainly a challenge for teachers when starting LFtFL and encouraging students to enjoy learning.

Students' hope for their teacher during LFtFL implementation

The research team found that almost all students wanted their teachers to give more attention to them. Moreover, another report asks their teacher to repeat some basic and critical concepts from previous lessons that they had not understood during PEL. Referring to the task load issue, several students requested that teachers give a reasonable and not excessive burden of homework:

- Teachers should not put too much homework load. They should kindly repeat the lessons that have been taught during online learning, because not necessarily all students have understood.
- I wish I hadn't been given too many tasks. And for my teacher, I wish he was more attentional, not indifferent when there are students asking things that have been explained previously in online learning.
- I expect the teachers should be clear when talking, so I can understand what the teachers are explaining.

Discussion

Various perceptions of students' perspectives in some educational levels have been obtained by analysing survey questions. The PEL experience that students have felt for about 1.5 years provides an overview of joys and sorrows during learning. Through

question analysis, there is a pattern of answers reported by students at each level, leading to autonomy as one of the basic learning needs (Wong, 2020). The report showed students got the opportunity to use several kinds of learning software or applications to overcome the challenges they encountered. They can use these to seek clues for their homework or discuss with peers. Also, sufficient interaction and communication became a vital element to maintain a good atmosphere in PEL. Some testimonies showed the lack of communication between students and teachers, which tends to make learning unsuccessful. This is in line with several studies that interaction is the key to effectively run online learning (Lowenthal & Moore, 2020; Mejia, 2020).

During a pandemic situation, just like online learning in general, PEL has several benefits, such as flexibility of space and time (Kerimbayev et al., 2020), ease of accessing learning applications, supporting media (Van Alten et al., 2020) and safety from the spread of viruses. These benefits are revealed in students' testimonies at each education level. Meanwhile, some challenges encountered during PEL are that students become less disciplined (Rasheed et al., 2020), tend to be more lazy and playful while studying (Wong, 2020), may lack cleanliness, as well as possibilities for dishonesty in doing their tasks or exams (Adedoyin & Soykan, 2020). In addition, using the Internet causes responses by teachers to be slower than face-to-face (Soesanto & Dirgantoro, 2021), and a loss of one-on-one relationships with teachers (Adnan & Anwar, 2020). All of these arguments showed students' perceptions that online learning has not matched the advantages of face-to-face (Baczek et al., 2021; Kedraka & Kaltsidis, 2020; Serhan, 2020).

Therefore, the government's new policy of opening LFtFL options provides a glimmer of zeal and hope for students as learners. Many students were bored and felt isolated during PEL, and their longing to study with face-to-face interaction shows, which aligns with several studies (Adnan & Anwar, 2020; Kaufmann & Vallade, 2020). The survey found the majority of students were very excited in responding to this news. Indeed, the students' zeal should motivate teachers to fix any mistakes from teaching in the PEL period. From their response of hope for LFtFL, there are some observations that they expect their teachers to improve teaching style, extend discussions, and reduce the burden of homework. This suggests that during PEL, the teachers tended to burden students as autonomous learners by providing many assignments and minimal explanations. They were asked to seek learning resources or seek help from their peers or even parents. This indicated the teacher's unpreparedness to present meaningful online learning. Even though PEL will undergo a face-to-face transition, teachers still need to learn how to present the online atmosphere effectively. The perception of previous experiences during PEL to students' expectations of teaching during LFtFL may be a reflection and evaluation for teachers to offer improved circumstances for learning.

Conclusion

The education world is dynamic, therefore teachers should be ready to enhance pedagogical skills towards many circumstances, especially in emergency periods. In Indonesia, teachers should prepare to deliver teaching and learning transitions in the new academic year. This study provided students' perceptions of their experiences during PEL,

their impressions about starting LFtFL, and expectations for their teachers. The findings are projected to be an "open door" for further studies. This study was conducted to observe students' perceptions in general without identifying specific variables. As for recommendations, it is suggested that other research teams should look specifically at students' perceptions during this new learning policy, based on a particular variable. For instance, how is the perception during LFtFL between students from STEM and social sciences backgrounds? Alternatively, effective teaching methods used in LFtFL can be investigated.

This study is limited to participants from Indonesia. It is therefore suggested to explore students' perceptions in other countries with introducing new policies. Lastly, discussing education is inseparable from the roles of teachers and parents. Hence, the perception of teachers and parents related to LFtFL policy needs to be studied in Indonesia and broadly in other countries.

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