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Tracing Physical Education Teachers' Teaching Difficulties in Online Era using Teaching Skill Indicators

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Abstract

Each level of education has different teaching difficulties so that teachers must be skilled and adaptive in teaching. This study aims to compare the teaching difficulties of elementary and senior high school teachers in implementing Physical Education (PE) learning online. This study used a quantitative approach with a comparative design using teaching skills instruments from Maksum, consisting of 19 skills aspects circulated through Google form involving 45 participants. The results of the descriptive analysis indicated that senior high school teachers are more difficult to open and organize learning. Meanwhile, elementary school teachers find it more difficult to close the lesson. Furthermore, the most difficult teaching skills for senior high school teachers are *teachers implement strategies to optimize student practice*. Otherwise, the most difficult for elementary school teachers is *the teacher breaks down the teaching assignments according to the students' abilities*. Meanwhile, both groups were equally easy to teach on the skill indicator *"The teacher's treatment is fair, not differentiating between male and female students"*. Despite the fact that the discrepancies were not statistically examined, the current study convincingly reflects the obstacles that both elementary and senior high school instructors face in terms of teaching skills. However, the study did not look into PE teaching skills utilizing ICT indicators. As a result, future research may construct learning models and investigate further on PE teaching skills based on student characteristics, as well as the use of reality augmented technology to improve PE lesson quality.

Keywords: Teaching difficulties, online physical education, pandemic physical education, teaching skills, teaching performance.

Introduction

Student learning outcomes are influenced by the teacher's teaching skills (Anisah & Widyantoro, 2019; Sumyadi, Umasih, & Syukur, 2020) so teachers must always strive to update their teaching skills. However, Physical Education (PE) teachers' mastery of teaching skills is only in offline learning. They have not anticipated online learning. There are fundamental differences when teaching online and offline, such as guiding student movement activities. These transitions and surprises create problems for teachers. Entering the online era, many teachers struggle to carry out PE lessons online (Herlina & Suherman, 2020). The role of the teacher begins to shift, which also worsened teachers' interaction and social relations with their students (Abidin, Hudaya, & Anjani, 2020; López–Fernández, Burgueño, & Gil–Espinosa, 2021; Chan et al., 2021; Varea, González–Calvo, & García–Monge, 2022). Physical education teachers are worried about how they teach PE effectively online (Centeio et al., 2021), even they suffer from disappointment and stress during online learning (González–Calvo et al., 2021) due to their low mastery of information technology (Rochman, Indahwati, & Priambodo, 2020; Hung, 2021; da Silva et al., 2021).

Classroom learning becomes monotonous because of the limited preparation of teachers in carrying out PE lessons online. The low level of teacher expertise when organizing classes and maximizing learning strategies, designing interesting learning, and the limited evaluation guidelines for online learning activities (Gustiawati, 2016; Rochman, Indahwati, & Priambodo, 2020; Jeong & So, 2020; Hung, 2021) making PE online learning classes more "sick." The content taught and the use of time is becoming limited. There is less direct interaction and contact, a lack of student interest and motivation, and increased stress (Lu, Barrett, & Lu, 2020; López–Fernández, Burgueño, & Gil–Espinosa, 2021; Chan et al., 2021). On the other hand, teachers have not been able to innovate online learning, teacher control is low in online learning, and giving assignments to students is often problematic (Santoso, Cahyo, & Wiyanto, 2021). Teacher stress is increasing because they are not close to students when monitoring learning material (da Silva et al., 2021) so they cannot maintain their students' attention, motivation, and responsibility. It is a big problem in learning PE online (Centeio et al., 2021).

Amran, Suherman, & Asmuddin (2021) have investigated the effectiveness of PE learning during the pandemic, but they

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did not specifically explore the teaching skills of teachers. The indicators used generally include implementation, time management, learning media management, lesson plans, task relevance, feedback, and classroom climate. Nopiyanto et al. (2020) has also made an inventory of teacher barriers in online learning, such as teacher barriers when giving rewards to students (48%), teacher barriers in overcoming student problems who have difficulty understanding learning materials (59%), and teacher barriers when generating student learning motivation (63%). Meanwhile, recently Chan et al. (2021) reported that the most difficult difficulty teachers felt in online PE learning was the lack of practical skill training (75.5%) followed by difficulty in retaining students' learning motivation/interest (67.9%). In comparison, the other five difficulties are below 7%. The three research reports on the abovementioned teaching difficulties are still "scattered," so they are not oriented to a single skill base that teachers need to carry out their online learning.

Although the online phase surprises teachers with various difficulties and obstacles, teachers must be responsible for updating their competencies by making effective and efficient strategies, methods, and learning models to develop the potential of their students (Blegur, Wasak, & Manu, 2017). For example, updating teacher teaching skills using a guided practice model (Blegur & Lumba, 2019) because teacher competence must be directly proportional to innovative efforts to deal with PE learning problems online (Kamoga & Varea, 2021). Teachers can start by creating needs and the use of large activity spaces, involving students in physical movement and exploration of movement in groups to ensure that PE learning is more accessible and meaningful (Lu, Barrett, & Lu, 2020), while checking the online PE learning guide to support an equitable PE among diverse groups of students (Chan et al., 2021; D'Agostino et al., 2021). Teachers need various preparations to develop online PE teaching skills. Such as changing learning methods and strategies to understand the characteristics of online PE (Jeong & So, 2020; Diciano et al., 2021; Chan et al., 2021) in order to communicate and organize the "values" of PE better.

Observing the research evidence above, the essential problem in online learning is the teacher's teaching skills. However, at the same time, there are no specific and explicit research results that reveal the difficulties of teaching PE teachers based on their teaching skills indicators, both at the elementary and senior high school levels. Whereas the characteristics of students at each level of education are different, it is necessary to focus on improving the teaching skills of teachers at each level of education so that they are coherent with the learning needs of their students. In addition, there has been no research–based on indicators of teaching skills in detecting difficulties and barriers to teaching PE online. Whereas teaching skills are the most concrete and critical area for teachers when organizing learning to develop their students' potential and learning outcomes. As a result, the purpose of this study is to diagnose teacher teaching difficulties based on teaching skills so that they can be used as a basis for developing teaching skills for prospective teachers or PE teachers according to education level (elementary and senior high school) as well as to be the basis for updating PE teaching skills from offline to online.

Method

Research Design

This research used quantitative methods so that the data collection and analysis process was based on numerical numbers to conclude. While the research design used was ex–post facto, where participants were only asked to respond to the teaching experience they had carried out in the online version, and then the two data from the sample group were compared. This design compared numerical data on numerous groups of participants based on their past experiences. This study was designed to compare teachers' difficulties teaching PE online when operationalized at the elementary and senior high school levels. Participants did not receive treatment. They only responded to 19 closed statements about teaching skills indicators based on their teaching experience during the pandemic (ex post facto). Instruments were distributed to participants using google forms by optimizing social media, such as WhatsApp groups, email, Facebook, messenger, and others so that there is no direct physical contact. Many participants actively provide data on their teaching difficulties, but others are the opposite (passive).

Participants

The participants involved in the research were 45 people who were PE teachers with experience teaching PE online. Thirty–four men (75.6%) and 11 women (24.4%) with detailed demographic data are in table 1. Participants were

Table 1: Participant demographics

	Gender		*Age (years)*						
Groups of participants	*Male*	*Female*	*20–24*	*25–29*	*30–34*	*35–39*	*40–44*	*45–49*	*50–54*
Elementary School	17 (77.3%)	5 (22.7%)	1 (4.5%)	5 (22.7%)	7 (31.8%)	1 (4.5%)	2 (9.1%)	1 (4.5%)	3 (13.6%)
Senior High School	17 (93.9%)	6 (26.1%)	2 (8.6%)	7 (30.4%)	5 (21.7%)	5 (1.7%)	3 (13%)	1 (4.3%)	0 (0%)

determined using the accidental sampling technique, where the participants involved in this study were those who voluntarily consented. They responded to research instruments circulated via google forms. Although the technique was accidental, researchers still sorted the relevance of participants to the characteristics and needs of the research objectives, such as the participants involved are PE teachers from the assignment unit at the elementary and senior high school levels.

Data Collection Tools

Data collection used a teaching skills instrument developed by Maksum (2012) which has been tested for validity (>0.304) and reliability (0.971) by Lumba, Blegur, & Bayu (2021). This instrument involves 19 closed statements modified into a five–point Likert scale, from Difficult (1) to Easy (5). Each of the three skill stages is organized for the introductory section (numbers 1–3), including "*Teachers arouse students' attention and motivation*." The core section organizes 12 indicators of teaching skills (numbers 4–15), including "*Teachers apply strategies to optimize students' practice*" and *"Teachers ask questions to stimulate students' thinking*." While the closing/ final section organizes four indicators of teaching skills (numbers 16–19), including *"Teachers provide feedback to students*."

The rationalization of teaching skills instruments is because the difficulties in teaching teachers are closely related to the teaching skills they carry out. If teachers have not mastered certain aspects of teaching skills, it will be difficult for them to carry out their learning activities. For example, it is difficult for teachers to express appreciation for student performance during learning. The teacher does not have teaching skills regarding the indicator "*Teachers like to give appreciation to student performance*" or if the teacher is not skilled at the indicator "*Decoding teaching assignments according to students' abilities*," the teacher will have difficulty parsing teaching assignments according to students' abilities.

Data Analysis

All research data were analyzed using descriptive analysis and the Mann–Whitney test. Descriptive analysis to find the mean and standard deviation of online PE teachers' teaching difficulties for the two different groups of participants. Furthermore, because the number of participants from both groups was smaller than 50 people (group A = 22 people and group B = 23 people), a normality test was conducted using the Shapiro Wilk formula. The results concluded that the data for the two groups of participants were not normally distributed because the sig value was less than 0.05 (group A = 0.006 and group B = 0.044). As a result, we tested the difference in teaching difficulty of the participants using Mann–Whitney (non–parametric statistics). If the Sig value is less than 0.05 (< 0.05), then there is a significant difference in the difficulty of teaching PE online between elementary and senior high school education levels, and vice versa. All tests used the help of the Statistical Package for Society Science (SPSS) version 25.

Findings

Descriptive grouping of data was done to capture the teaching difficulties of the two groups of participants. The data description only focused on the mean and standard deviation of the indicators of teaching difficulty based on teaching skills for elementary and senior high school teachers (see table 1). Overall, the senior high school participants group experienced the most serious difficulties during PE learning in the online era (M = 3.83). Meanwhile, the most adaptable to online PE learning was the elementary school participant group (M = 3.86).

The details of each aspect of the difficulty of online teaching are that, on average senior high school PE teachers are more challenging to open learning than elementary school teachers (3.84 < 3.91). On average senior high school, PE teachers are also more challenging to organize the core learning than elementary school teachers (3.87 < 3.90). Meanwhile, the average elementary school teacher was more complicated than the senior high school teacher (SD = 3.96 < 4.01). The most challenging teaching skill for elementary school teachers to implement is the indicator "*The teacher breaks down the teaching assignments according to the student's abilities*" (M = 3.27; SD = 1.03), and the most challenging teaching skill for senior high school teachers is "*Teachers implement strategies to optimize student practice*" (M = 3.56; SD = 1.37). While the two groups of participants both have online teaching skills, which are easiest on the indicator "*The teacher's treatment is fair, not differentiating between male and female students*."

In addition, the bar chart compares the teaching abilities of elementary school PE teachers to those of senior high school PE teachers (see Figure 1).

If sorted, the ten indicators of teaching skills that are the most difficult for elementary school teachers are: 1) The teacher breaks down teaching tasks according to the students' abilities, 2) The teacher reinforces non–verbal symbols, 3) The teacher applies strategies to optimize students' practice, 4) The teacher arouses attention and student motivation, 5) The teacher invites students to look at the teaching task as a whole, 6) The teacher asks questions to stimulate students' reasoning, 7) The teacher applies a modified approach, 8) The teacher conveys direct corrections, 9) The teacher conveys expressions that encourage students to participate, and 10) The teacher conveys the learning objectives clearly to the students.

Furthermore, the order of 10 indicators of teaching skills that are the most difficult for senior high school teachers to do are: 1) The teacher reinforces non–verbal symbols; 2) The teacher applies strategies to optimize students' practice; 3) The teacher parses teaching assignments according to

Table 2: Descriptive analysis of teacher teaching difficulties

		Elementary School		*Senior High School*	
No	*Teaching Skills Aspects*	*M*	*SD*	*M*	*SD*
1	The teacher clearly communicates learning objectives to students	3.95	0.78	3.78	1.27
2	The teacher arouses students' attention and motivation	3.68	0.99	3.82	1.07
3	The teacher warmed up in a guided manner	4.04	1.17	4.13	1.14
4	The teacher teaches the task of the movement in sequence	4.00	1.06	4.00	1.27
5	The teacher applies a modified approach	3.77	1.02	4.00	1.08
6	The teacher breaks down the teaching assignments according to the students' abilities	3.27	1.03	3.65	1.15
7	Teachers implement strategies to optimize student practice	3.45	1.10	3.56	1.37
8	The teacher conveys phrases that inspire students to participate	3.95	1.17	3.73	1.21
9	The teacher reinforces non–verbal symbols	3.40	1.22	3.26	1.28
10	The teacher delivers direct corrections	3.86	1.12	3.82	1.15
11	The teacher asks questions to stimulate student reasoning	3.72	1.20	4.08	1.12
12	The teacher asks questions to stimulate students' thinking	4.09	1.06	4.08	1.12
13	The attention of the teacher is thorough, not just skilled students	4.00	0.06	4.21	1.08
14	The teacher likes to convey appreciation to student performance	4.09	0.97	3.69	1.32
15	The teacher's treatment is fair, not differentiating between maleand female students	4.27	0.98	4.39	1.11
16	The teacher invites students to look at the overall teaching assignment	3.68	1.12	3.95	1.18
17	The teacher provides feedback to students	4.04	0.99	3.82	1.19
18	The teacher carries out cooling activities	4.00	1.35	4.08	1.08
19	The teacher prepares students for the next lesson	4.13	0.83	4.17	1.02

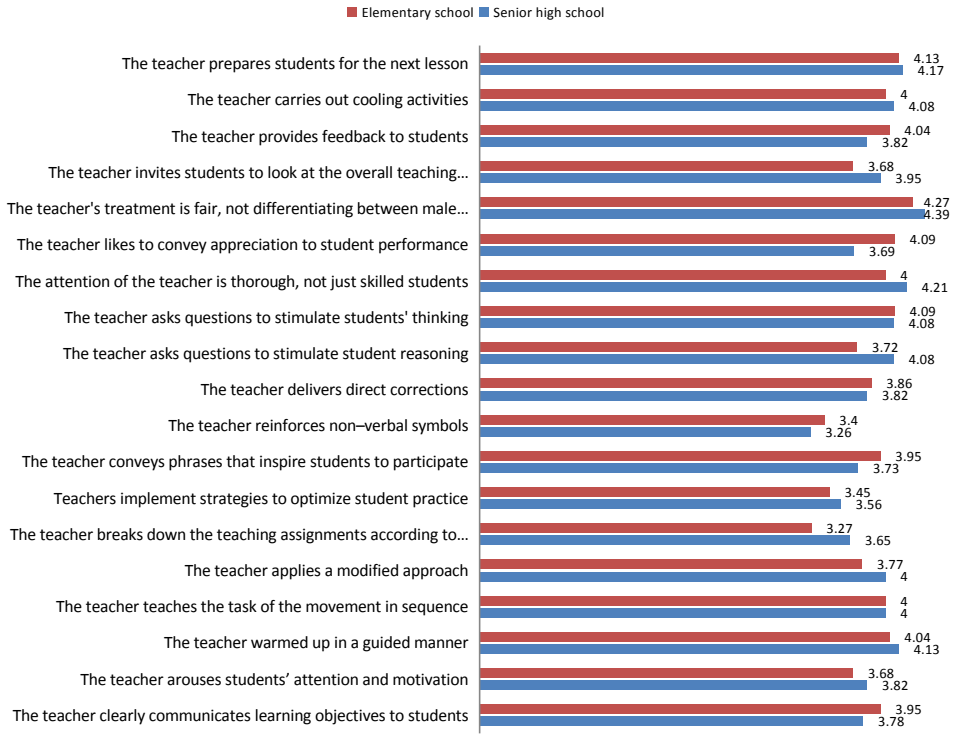

Fig. 1: The comparison of the mean (M) scores of the two sample groups

Table 3: Mann–Whitney test

	Mann–Whitney U	*Wilcoxon W*	*Z*	*Asymp. Sig. (2–tailed)*
Differences in teaching difficulties	234.500	487.500	–0.420	0.674

students' abilities; 4) The teacher likes to convey appreciation to students' performance; 5) The teacher conveys expressions that encourage students to participate; 6) The teacher conveys the clear learning objectives to students; 7) The teacher arouses students' attention and motivation; 8) The teacher conveys direct corrections; 9) The teacher gives feedback to students; 10) The teacher invites students to look at the teaching task as a whole.

Furthermore, the results of the Mann–Whitney test proved that there was no significant difference in the difficulty of teaching PE teachers from the two groups of participants. This conclusion refers to a significance value of 0.674 (>0.05).

Discussion

Research evidence confirms no significant difference in the difficulty of teaching PE online between elementary and senior high school teachers. When explored based on teaching skills or performance indicators, both groups of participants experienced relatively equal teaching difficulties. Both groups of participants responded that they efficiently behaved or treated relatively all students during online PE learning. Both groups of participants found it easy to treat students regardless of gender (male and female). Both gender groups were given the same opportunity to learn and express themselves. Meanwhile, the most challenging teaching skills for elementary school teachers to implement is when they break down teaching tasks according to the students' abilities. Furthermore, senior high school teachers' most challenging teaching skill during online PE learning is implementing strategies to optimize students' practice.

Although there was no proven difference through the Mann–Whitney test, the descriptive analysis ranked the teaching difficulties between the two groups of participants. For this reason, the discussion of research results focuses more on the teaching difficulties of the two groups of participants based on indicators both at the stage of opening learning activities, core or organizing learning, to closing learning so that they can be a reference for teachers in making improvements and strengthening aspects of teaching skills that are difficult in teaching PE online. The reason is that during online learning, the effectiveness of PE learning is only able to reach 50% (Hambali et al., 2021) thus providing evidence that online PE learning is less effective (Widiyanto, Fepriyanto, & Prasetyo, 2021), even the axiological value of PE only included in the low category (Gusdernawati et al., 2021). Following are the results of elaborating the difficulties of teaching PE teachers in the online period using teaching skills indicators.

Starting the Learning

When starting the lesson, the teacher conveys the learning objectives to the students, arouses students' attention and motivation, and carries out a guided warm–up (Maksum, 2012). However, two of the three skill indicators above are among the top ten difficult for teachers to implement, except for a guided warm–up. Indeed, the learning activities that students will carry out needs to be clarified in the delivery of learning objectives. The teacher can convey goals in online learning, but to ensure precise information on learning objectives, the teacher has difficulty because it highlights all domains of learning outcomes, both from the cognitive, affective, and psychomotor aspects. In addition to the problem of limited mastery of information technology (Rochman, Indahwati, & Priambodo, 2020; Pirdaus, Mahendra, & Lubay, 2021; Hung, 2021; da Silva et al., 2021; Surahman et al., 2021; Kim et al., 2021) as well as the lack of access to the internet and the unavailability of technological tools (Belleza, Ompoc, & Vestil, 2021), teachers also find it challenging to carry out practical learning because of the shorter learning time (Petrušič & Štemberger, 2021) to ensure consistent learning objectives. Clearly, on the cognitive, affective, and psychomotor aspects to students, teachers often experience difficulties.

Teachers' difficulties in motivating students can impact their failure to carry out PE learning because motivation is positively correlated with student learning outcomes (Indriani & Ashfaq, 2021). For non–PE teachers, it may be easy to motivate students, but for PE teachers, it is not easy to ensure that students are motivated during online PE learning. The shift to the online version has limited physical contact between teachers and students so that efforts to motivate students cannot be made directly, and at the same time, strategies to motivate students are not limited to verbal reinforcement, but rather to non–verbal efforts and even some physical contact. Motivating students in PE learning requires practical examples that the students can do. At the same time, the teacher provides improvements to student movement so that at that time, the teacher efficiently transmits the task motivational climate to optimize the learning process (Almolda–Tomás et al., 2014). It cannot happen in the online version of learning. It emphasizes that during online learning, interaction and direct contact between students and teachers are lost, resulting in low interest and motivation and even extends to teacher stress levels (Bădău & Bădău, 2020; Lu, Barrett, & Lu, 2020; López–Fernández, Burgueño, & Gil–Espinosa, 2021; Chan et al., 2021).

Learning Focus

At the core of learning, the difficulties that teachers experience start from applying a modified approach. Teachers are already having trouble implementing a modified approach during offline learning, especially now that they are faced with practical learning using application media (ZOOM Cloud Meeting, Google Classroom, and others). Teachers must ensure that they bring students to achieve learning objectives because PE learning must use physical activity. Jeong & So (2020) found

that the difficulty of teachers in applying a modified approach was due to a lack of expertise in operating online PE classes so that they often relied on trial and error methods as well as teacher limitations in innovating online PE learning (Santoso, Cahyo, & Wiyanto, 2021). On the other hand, the lack of teacher innovation is also motivated by an excessive workload, so teachers often ignore an invention useful in their learning (López–Fernández, Burgueño, & Gil–Espinosa, 2021), so it is not surprising that the class becomes monotonous. The PE content becomes inconsistent—well conveyed to students (Jeong & So, 2020). If PE learning conditions are prolonged, PE learning will be increasingly marginalized and unappreciated (Kim et al., 2021).

During online learning, it was found that the teacher still had difficulty breaking down teaching assignments according to the students' abilities. Teachers have not been fast enough to make significant adaptations during the online PE learning period. This transition period makes many teachers unprepared in carrying out learning, such as limited designing learning strategies and poor classroom organization (Gustiawati, 2016; Rochman, Indahwati, & Priambodo, 2020; Jeong & So, 2020; Hung, 2021). The research report of Nopiyanto et al. (2020) proves that 55% of teachers have trouble dealing with the problems of students who have difficulty understanding teaching assignments or learning materials. There is even a mismatch of assignments/quizzes in online PE lessons by 62% (Amran, Suherman, & Asmuddin, 2021). Not only that, during online learning, the teacher does not carry out practical demonstrations while providing theoretical explanations to students (Bădău & Bădău, 2020) so that students are not enthusiastic and students only submit teaching assignments (Yu & Jee, 2021) without any critical and evaluative efforts on the results that students are working. Facing these problems, teachers suffer from disappointment and stress during online learning (González–Calvo et al., 2021) reducing the quality of PE online.

Physical Education learning uses physical media to achieve educational goals so that with the conventional learning model that the teacher applies, it will encounter various difficulties. This study found that teachers have difficulty implementing strategies to optimize students' practice, so teachers have not succeeded in optimizing students' motor activities during online PE learning. We can simplify that teachers have not succeeded in learning PE online because learning PE uses optimizing motor activities to achieve goals. According to a research report by Chan et al. (2021), the previous difficulty is where teachers find it difficult to do practical skill training by 75.5%. The low elementary motor activity in online PE learning makes students' motor skills less (Safruddin et al., 2020). Suppose the teacher does not immediately find a solution, especially in applying the latest learning models (including Project–Based Learning). In that case, various student learning experiences based on motor activities will be difficult for the teacher to control during online learning (Santoso, Cahyo, & Wiyanto, 2021). At least the PjBL learning model will participate in updating the skills of teachers through its learning syntax so that the teacher control model can be facilitated through the project of making motion videos about learning materials. This model helps teachers to apply learning strategies to optimize students' practice.

The PE classroom climate is unstable during online learning (Amran, Suherman, & Asmuddin, 2021). Teachers are starting to find it difficult to maintain the enthusiasm and motivation of students to learn because of the low social presence of students in online learning (Ritonga et al., 2022). If seen from study report of Nopiyanto et al. (2020) or Chan et al. (2021), the fact that teachers find it difficult to arouse student learning motivation, even the two reports confirm that the difficulty number is greater than 60% (63–67.9%). Of course, this figure confirms that the lower levels of teacher expressions that motivate students to make online PE classes more passive (Bădău & Bădău, 2020) will continue to worsen social relations between students and teachers (López–Fernández, Burgueño, & Gil–Espinosa, 2021). Boredom and difficulty will be visible because learning that was previously carried out using motion directly must shift with online assistance requiring a transition period. This shift doesn't necessarily mean a device but a shift in the teacher's focus and skills to ensure that students remain passionate about learning. Expressions that arouse students' motivation are not limited to being listened to, but students need to take a complete picture of how the teacher's expression when motivating himself. Even in offline learning, phrases that motivate students are accompanied by other social cues that can stimulate students to learn.

Students experience various irregularities in the first year of online PE learning. For example, the lack of accurate feedback from teachers on their assignments, lack of teacher demonstrations, lack of interaction, and, most importantly, their varied learning styles (Bădău & Bădău, 2020; Diciano et al., 2021). Giving inaccurate feedback indicates that teachers also have difficulty diagnosing various student successes and failures in online learning. At the same time, there are so many direct interactions that cannot be mediated in online learning. One of them is practical learning; of course, not meeting students leaves various misfortunes. The teacher will think and go the extra mile to ensure his students can learn the motion material correctly. Non–verbal symbols are one medium for teacher–student interaction, but the question is how these symbols are used correctly and appropriately during online classes. Reinforcement through non–verbal symbols is generally done when students go through a series of motion activities or if students do the correct movement procedures. Generally, the teacher gives applause, gives a thumbs up, or it can be by giving other symbols to stimulate

and support student achievement. However, this activity is difficult because the teacher is not directly present when students practice certain movements. The teacher must use audio–visual reinforcement more because it is the easiest for students to do and accept.

Research by Bădău & Bădău (2020) reported that direct correction of the development of learning outcomes or student performance also experienced a drastic decline in movement learning. Students cannot get immediate corrections for some of the movement mistakes. Furthermore, Aguinaldo (2021) also confirms similar data, where teachers find it difficult to correct students' execution as some of the obstacles they face in online classes. The lack of skills and knowledge transfer to students has become the main weakness of conducting online classes. Students who previously needed direct correction from the teacher could not occur in online classes. They at least have to wait a few days, even a few weeks, to get a teacher's correction on their performance. This issue leaves some "homework" for teachers and students alike. Alternatively, even the teacher's correction of errors in using certain movement techniques for students never occurred because the time they used was very limited. At the same time, the teacher had to prepare material for the next week's meeting or even in other classes. This condition confirms that learning occurs only because of "routine" if the teacher does not immediately have a new learning model for this pandemic era.

The teacher also experienced the problem of training students' reasoning. Students' reasoning activities are often neglected in PE learning because students are only faced with various motor "exercises". In fact, along with students' motor activities, teachers can stimulate students' reasoning without waiting for the schedule for formative tests and summative tests. For example, when a student's kick is not on target, the teacher can train students' reasoning with the question, "*Why did our kick result not hit the target?*". Of course, this strategy is difficult to carry out simultaneously in online PE learning because the teacher is not present when students practice their motor activities. One of the reasons that PE teachers also often experience stress during online learning is that their role in stimulating students' reasoning is limited. Teachers can stimulate students' reasoning in online learning, but it is difficult for them to improvise on something they are not doing. In addition, learning becomes non–contextual because students are asked to answer questions that they have never done. Learning that the provision of materials alone will monopolize originally used physical media. Although the provision of material is quite satisfactory (42% of students understand), as reported by Amran, Suherman, & Asmuddin (2021), if this condition continues without teacher innovation, the spirit of PE learning will disappear because physical media are no longer used to achieve the educational goal.

In Nopiyanto et al. (2020) study, the teacher's barriers when rewarding the students were recorded at 48%. At the same time, students need a harmonious and supportive learning climate because they are all in a transition period to actualize themselves through learning activities in various forms (Blegur et al., 2021). Teachers need to award students who complete their assignment of certain moves (both when they succeed and when they do not). Giving awards is not initiated to create a dichotomy between successful students and unsuccessful students but is carried out to actively maintain students' hope and enthusiasm to participate in learning activities. Physical Education offline learning always inserts appreciation for students. For example, the teacher appreciates by stating, *"Antonius, you managed to make the right throw. Keep it up and improve it."* However, during online learning, the teacher has difficulties. Giving rewards that were previously more directed at verbal and non–verbal symbols is difficult for teachers to do. Teachers are even confused about which case to reward students for because rewards are usually given when students have passed a series of motion performances set on certain learning materials. In this case, Bădău & Bădău (2020) were concerned that it would reduce the teacher's sense of empathy for students during online learning because of the reduced intensity and complexity of teachers in giving rewards to their students.

Closing the Learning Process

The indicators of closing learning skills that Maksum (2012) used were the teachers invite students to pay close attention to the teaching task wholly, the teacher giving feedback to students, the teachers do cooling activities, and the teachers prepare students to receive the next lesson. Of the four indicators of closing the lesson, two of the participants experienced difficulties; the teacher invited students to pay close attention to the teaching task, and the teacher gave feedback to students.

Before entering the feedback phase, the teacher first invited students to observe or review the teaching assignment as a whole. Are students able to review the material? or they just carried out learning without critical knowledge of any material or experience they get. Nopiyanto et al. (2020) reported teachers' difficulties in online learning, including the inadequate understanding of students toward learning materials. In addition, the problem of task evaluation was experienced by Centeio et al. (2021), because of the low response of students when the teacher gave work assignments, so teachers were worried about whether students were actively involved in their lessons. Providing opportunities for students to review learning material was often ignored by PE teachers in the online era. Apart from having problems with time efficiency and the complexity of learning activities, reviewing teaching materials or assignments is also explicitly

not regulated in the research instruments used by Amran, Suherman, & Asmuddin (2021), Nopiyanto et al. (2020), or Chan et al. (2021) to track teacher difficulties in online PE. One of the indicators that support students' critical thinking skills is to provide opportunities for students to observe or review the teaching assignments that have been given. Are the teaching assignments coherent with the objectives, and whether the teacher's learning assignments support students' HOTS or vice versa?.

Feedback plays an important role in PE learning, so teachers often use various feedback strategies to make their learning successful (Kangalgil & Özgül, 2018). Research by Amran, Suherman, & Asmuddin (2021) also uses feedback as an evaluation tool for online PE learning effectiveness, even getting a high rating from respondents (66%). However, Amran and his colleagues' feedback focused on the core of learning because it questioned the opportunity to ask students questions and answers from the teacher. In contrast, the feedback in the assessment indicators by Maksum (2021) is in the closing section of learning. Feedback is not limited to providing opportunities to ask and answer questions but is more oriented towards evaluating the results of learning activities that students have carried out. In this section, the teacher gives examples of movement behaviour or even knowledge and attitudes that students have passed through visual experiences. It complements previous studies that visual feedback is better in learning motion than verbal feedback (Zhou, Shao, & Wang, 2021) because students need extensive explanations that must be accompanied by practical demonstrations (Bădău & Bădău, 2020), so that feedback by seeing and even passing through the real motion experience.

Conclusion

The two groups of participants reported that the indicator of teaching skills that was easiest to apply *was "The teacher's treatment is fair, not differentiating between male and female students"*. It is easy for teachers to be fair to students even though they teach PE online. Furthermore, for teaching difficulties, elementary school teachers have the most difficulty implementing the teaching skills indicator *"The teacher breaks down the teaching assignments according to the student's abilities"*. Meanwhile, senior high school teachers have the most difficulty applying the teaching skills indicator *"Teachers implement strategies to optimize student practice"*. Tracking the difficulties of teaching teachers in the online era found various indicators of teaching skills that should be updated by the teacher, both when he opened the lesson, organized the lesson, or closed the lesson. Although statistically there is no difference, descriptive analysis has succeeded in ranking some indicators of teaching skills that PE teachers need to improve in teaching students online. It indicates that in carrying out PE online learning, teaching skills indicators should be the standard for developing and updating so that teachers are ready to carry out learning offline and online versions.

The present study contributes to the body of knowledge by providing the aspects of teaching difficulties based on teaching skill indicators. This suggests that elementary school PE teachers must focus on teaching skill parts based on the students' capacities so that pupils are not overburdened by tasks that are above their abilities. Whereas senior high school PE teachers are highly encouraged to expand their knowledge of learning strategies, because teaching is a possible medium for assisting students in discovering and extending their own capacities. Various teaching and learning strategies can be used to engage and interest students in their learning while also making them enjoy themselves–ultimately contributing to the learning objectives specified for the physical lesson session in the short, medium, and long term. Because of the specific peculiarities of each student and the features of each school level, improving the teacher's teaching skills cannot be "generalized." The study findings are theoretically and practically useful for school teachers and the government in providing training and renewing teacher pedagogic competencies based on teaching skill indicators for elementary schools through senior high schools, with the goal of improving teaching skill aspects based on student development.

Suggestion

Teaching skills should become the standard for teachers and the government to update learning activities to adapt to the various learning needs of students in the future. Teachers are always advised to be active in diagnosing their teaching skills through various communities or similar professional organizations so that the need for updating teaching skills always occurs periodically. For example, teachers should consider implementing various learning models based on students' innovation and improvisation abilities but do not ignore their uniqueness by using physical media to achieve goals. Conventional learning is no longer effective when teaching PE online. The need for developing learning models as an active response to the shift in PE online learning should be considered by teachers and PE academics. For example, the development of Project Based Learning (PjBL) is contextualized with PE learning. The need for PjBL development will involve updating their teaching skills, both in elementary and secondary education units.

Limitation

The study's instrument, i.e., teaching skill indicators, has not yet accommodated specific teaching skills on the use of technology in the PE lesson. As a result, this study has not been able to explicitly report on the ability of teachers to use information technology to support improving learning

outcomes and developing student potential. Apart from entering the online era, information technology is important for PE teachers to make it easier for them to succeed and make learning more effective. For example, the use of devices to help record and evaluate students' physical fitness or students' honesty and critical thinking skills during learning.

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