

# **Reflections of Six Student Teachers Enrolled in an Online Practicum- Case Study**

E. S. Alhabeeb

Curriculum and Instruction Department, Faculty of Education, University of Jeddah, Jeddah City, Saudi Arabia

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Abstract: The current qualitative research explores six student teachers' reflections on the online practicum after shifting from in-school to online delivery due to the COVID-19 quarantine. This research was undertaken with the application of quasi-structured interviews with six student teachers. The thematic analysis uncovered the student teachers' perceptions regarding the online practicum and highlighted opportunities afforded by an online practicum, including time and effort efficiency; accurate performance and rapid completion, significant development of planning skills, ability to understand students and deal with different teaching situations, stimulation of innovation and creativity in teaching; and promotion of self-learning. The findings also underlined potential difficulties, including weak or interrupted internet signal, distractions in the online learning environment; the lack of a quiet place designated for meetings; the lack of trainees' technical skills, and the absence of in-school experience. Several implications and suggestions have emerged in light of these findings.

Keywords: Distance training, teacher education, preservice teachers, virtual community of practice VCoP.

## **1** Introduction

Practicum courses in teacher education programs often provide the first practical teaching experience for student teachers, connecting theory with a real-world education environment. Research suggests that teacher education practicum provide the most significant learning experience for students during their education journey [1], [2]. In fact, providing student teachers with powerful field experiences that drive them toward teacher professionalism is "not negotiable". "Just as we would never want unqualified surgeons operating on our children, we do not want our young people to be taught by unqualified teachers" [3].

From this standpoint, practical training courses seek to develop the teaching skills of student teachers and bring them to the required educational competence in all respects. One of the most important aspects is to be competent with online interaction and the effective use of technology. This allows teachers to share their passion and knowledge when communicating using virtual media to advance their own learning and that of others. Learning and practice within virtual communities goes beyond the development of knowledge and technical skills, to also encompasses social and cognitive features that may enhance the overall learning experience [4].

In online practicum, much the same as in a traditional in-school practicum, learning takes place in a community of practice (CoP). The difference in the online learning environment is that this CoP is virtual rather than physical and is hence referred to as a Virtual Community of Practice (VCoP). A student's engagement with a CoP, virtual or otherwise, is a collaborative, social process with culturally contextual thinking [5, 6].

Wenger [7] and Lave and Wenger [8] define a CoP as a group of people who share an interest and profession that provide a social context for participatory learning. A CoP is an environment where "people can share a concern, a set of problems, or a passion about a topic and can deepen their knowledge and expertise in this area by interacting on an ongoing basis" [9]. As groups interact, they establish a social identity wherein shared ideas, skills, resources, languages, and other social instruments become collectively owned by and produced by the community's members [10, 11].

There are several varieties of CoP, and the VCoP is one such framework of the theory that may span or blend multiple of these types. A VCoP has the same qualities as a CoP, but its members mostly engage in a virtual setting utilizing online communication technology [12]. Under this theory, practicum could be adaptive and individualized to meet the needs of pre-service teachers, especially in the era of emerging technology, artificial intelligence, and the internet of things [13]. Thus, many educational organizations worldwide have adopted standards and implementation for digital teaching competencies required for alignment with the digital era in which we live.

Ally [13] refers to some organizations that concentrate on digital competencies in teacher preparation programs: a U.S. Department of Education report highlights the importance of understanding the implication of online learning for educational productivity [14]; the International Society for Technology in Education (ISTE) launched standards for educators to empower their students in digital learning [15]; the Interstate New Teacher Assessment and Support Consortium updated standards for licensing new teachers to assure that programs included digital competencies for all teacher-students [16]; the UNESCO ICT Competency Framework for Teachers developed a guide for training pre-service teachers on the use of Information and Communication Technologies (ICTs) in teaching [17].

The Fourth Industrial Revolution had a significant impact on all aspects of contemporary life. During this trend toward technology, in 2020, we encountered an unexpected and unprecedented global crisis in the COVID-19 pandemic, which forced an accelerated digital transformation for a range of sectors including education. Accordingly, practicum courses were forced to shift from in-school models to online delivery in an attempt to continue practical training within the boundaries of social distancing regulations, on one hand; and align with a continued emphasis on digital professional competencies needed for the educator of the 21st century, on the other.

By tracking the recent research, we have noticed that much international research has explored online training for preservice and in-service teachers. Research in this area has become more focused and directed on the specifics of virtual teacher learning models during and after the crisis of COVID-19.

Ally [13] highlighted that many forces are shaping the future of education in general and teacher education. He asserted that instead of focusing on the number of graduates, future educational systems will be evaluated on how effectively they equip students to operate in the Fourth Industrial Revolution and the 21st century. Ally [13] has called for the importance of training and orienting future digital teachers during the preservice teachers' preparation programs. For example, Kim [4] found that online teaching allowed preservice teachers to communicate with students while also encouraging contemplation on how to best enhance young children's development and learning using online communication tools. Taqatqa, Hasasneh, and Atmizi [18] showed the importance of having a follow-up website for field training. Al-Zahrani [19], emphasized the effectiveness of simultaneous network training in the development of activating first-grade teachers of the continuous evaluation of their multiple variables and their effective use within the classrooms.

Also, Al-Raghbi [20] asserted that there are positive impacts on learning outcomes through the use of open-source electronic courses in the professional development of teachers and their satisfaction regarding the use of the online model in their professional development. Keefe [21] found that virtual practice enhanced teacher candidates' confidence, the development of new digital abilities, and the teacher educator's and the candidates' perceptions of practice improvement. Also, videos in the practicum proved highly effective in teaching practices and practicum course outcomes. Voytecki, Tripp, Wilhite, and Warren [22] suggested that applying Video Grand Rounds in preservice teacher preparation programs significantly did improve teacher candidates' observation skills with less time and effort; the overall tone of the comments was positive; and the final examination showed a positive impact. For this, and from the supervision side, Ardley, and Johnson [23] confirmed that the video-annotated technology-based supervision method is achievable and effective if combined with practical training and technical support. Furthermore, in general, regarding online practicum, Keefe [21] claimed that Virtual Coaching for preservice teachers is a powerful element that provides the opportunity to revise, assess, enhance, and further develop pedagogical proficiency. In addition, online practicum seems to be the best tool to reduce teacher shortage [24].

As for the readiness and acceptance of student teachers for the idea of transformation and distance training in general, studies such as Saleh [25] declared that teachers are aware of the value of electronic training in developing knowledge and improving trainees' skills and abilities, also, Al-Raghbi [20] had shown teachers' satisfaction with using an electronic training platform in their professional development. Cirillo, Larochelle, Arbaugh, and Bieda [26] found that the option for student teachers to continue their field experience in an online model, albeit in a more constrained format, was valued by the student teachers, and this is confirmed as they were highly respected by both the course instructor and the students. Kidd and Murray [27] discovered that when the practicum courses shifted to online, the established methods shifted swiftly, and educators demonstrated 'pedagogic agility.' Despite the move to newly constructed online venues, many ideas and 'intentions' of practice remained constant, as did the teacher educators' orienting ideals. Overall, there was a sense of both sameness and uniqueness in some of the new pedagogies created at the (g)local level.

However, Taqatqa, Hasasneh, and Atmizi [18] addressed the obstacles and problems faced by training institutions when applying field supervision via an electronic training system, which includes the lack of commitment of some of the trainees to attend; the absence of the university's role in the follow-up; and a delay in the training process for the student.

The majority of the aforementioned studies were conducted during peak periods of social distancing restrictions caused by the COVID-19 pandemic, when online practicum was the only choice for universities still offering practical education. As a result, the findings of these studies may be more credible and trustworthy because they were applied to actual circumstances rather than those selected or created for specific research purposes.

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Furthermore, studies exploring topics related to online practicum in the Middle East region are limited; including only, Saleh [25], Al-Raghbi [20], and Taqatqa, Hasasneh, and Atmizi [18], and none of these were conducted during the peak of the COVID-19 crisis. This study will reflect on the aftermath of the crisis by focusing on online practicum in the Middle East during the quarantine period of COVID-19, and specifically in Saudi Arabia.

While the targeted population from researched practicum are often student teachers, this study focuses on them as the only source of data; such as in studies carried out by Saleh [25], Taqatqa, Hasasneh, and Atmizi [18], Cirillo, Larochelle, Arbaugh, and Bieda [26], Keefe [21], Kim [4] and Voytecki, Tripp, Wilhite, and Warren [22]. In the author's opinion, this gives the study direct and precise data about the issue rather than relying on second party data such as input from supervisors as taken into account by Ardley and Johnson [23], and Taqatqa, Hasasneh, and Atmizi [18]; feedback provided by educational experts in the work of Bullock [2], and Kidd and Murray [27]; or content analysis like that presented by Kangai, and Bukaliya [24] in their study. The absence of the student teachers' voice is considered one of the limitations in these projects which we seek to highlight through the current research.

The evolution of the practicum model from a school-based methodology to a distance, virtual implementation calls for reflection from those who have experienced its effect in diverse circumstances. This case study paper will explore the experience of six student teachers enrolled in a practicum course that shifted from in-school to online delivery models during COVID-19 restrictions. To reach a deep understanding, we will answer the following research questions:

- What are the perceptions of student teachers about an online practicum?
- What opportunities do an online practicum provide for student teachers?
- What challenges and defects do student teachers encounter in an online practicum?

# 2 Method

The current research applies a qualitative research design. "The key idea behind qualitative research is to learn about the problem or issue from participants and engage in the best practices to obtain that information" [28]. This qualitative research seeks to carry out an in-depth investigation of the perceptions, opportunities, and challenges associated with an online practicum in comparison to traditional in-school practicum through the lens of six student teachers. The study is bounded by the practicum students and was developed during the announcement of the COVID-19 pandemic in the 2020 winter semester.

## 2.1. Participants

The study was carried out with seven female student teachers who enrolled in the Islamic Education practicum course (641 CURE) in the 2020 winter semester. The practicum course was one of the bachelor's degree requirements from the Girls Education College at Jeddah University. Each of the seven student teachers agreed to participate in the case study and signed the consent form. Following this point, one participant withdrew from the study.

#### 2.2. Data Collection and Analysis

A month into the beginning of the second semester, the COVID-19 quarantine caused all university systems and classes to be shifted to an online model. However, the efficacy of practicum courses in an online environment was questioned by university leaders. After one week of delay, the decision was issued to continue the practicum online, consistent with other courses. This novel occurrence provided an opportunity for qualitative research via student reflection, as the student body impacted had already received in-school practicum training for one month at the point of transition to an online model. This meant that the studied students had experience in face-to-face and virtual training systems within one course. No significant changes were made to the course content, and all meetings were scheduled and offered through the blackboard platform with university student access.

To ensure the goals of the study did not impact the data received from research participants, research questions were not divulged until students completed the practicum course. A quasi-structured interview protocol was designed and reviewed by experts to ensure construct validity. The interview consisted of three primary questions (mentioned earlier) designed to produce the desired data.

Each question has sub-questions that suit the course of the discussion and are likely to produce more data to answer the main question (see Table 1).

Due to the restrictions imposed by the COVID-19 quarantine, interviews were carried out via phone call interview with the students after the final grade was posted to avoid potential conflicts of interest. Due to ethical considerations, all participants in this paper are anonymous and presented pseudonymously.

This research uses thematic analysis (objective analysis) to explore the data. Thematic analysis is a method for identifying



themes in qualitative data and is suitable for analyzing data derived from interviews and focus groups. Langridge [29] showed that:

In thematic analysis, the researcher or coder usually applies three levels of codes. Often, coders start coding under basic and straightforward descriptive codes, then narrow them and move precisely in a systematic manner at an interpretative level [30].

This study applies two levels of coding: the pre-coding first within the three main themes (perceptions, opportunities, challenges), and then the post-coding technique under each of these three topics.

To assure reliability, data was analyzed twice with one month of time difference between each analysis [28]. A reliability coefficient was then calculated using Chone Capa and found to be accepted at 0.8. The remaining data was analyzed multiple times until a saturated stage was reached where the raw data did not derive any more information to answer the research questions or provide understanding of the phenomenon studied.

Primary Interview Questions		Sub-Questions
First question	What are student teachers'	What was your impression upon receiving the news of the
	perceptions of the online	practicum moving to an online mode?
	practicum?	What is your impression of the quality of the online practicum
		compared to the in-school program?
		Describe your feelings and fears, if any.
		In your opinion, if we decide to provide a practicum course with
		a dual design that includes training at the school supported by
		an online practicum or vice versa, how can we make it a
		successful experience?
Second	What opportunities does the	What teaching skills did online practicum contribute to
question	online practicum provide for	developing for student teachers, if any?
	student teachers?	what is the possibility for online practicum to be an alternative
		course for field practicum?
		When comparing live classroom observation, which is better for
		acquiring knowledge with teaching skills? justify your answer?
Third question	What challenges and defects do	What would it be if you had the opportunity to change one thing
	student teachers encounter with	about the online practicum?
	the online practicum?	What problems did you encounter during the online practicum,
		if any?

#### **Table 1:** Primary Interview Questions and Related Sub-Questions

# **3** Results and Discussions

## The First Question: What Are Student Teachers' Perceptions of the Online Practicum?

The data shows that student teachers' perceptions before starting the shifted course were varied. Three participants did not have any doubts or insights about the effectiveness of the online practicum but were receptive to the idea, while three of the students questioned the feasibility of an online practicum and its efficiency as an alternative to in-school field training. One of the participants clarified these fears by saying: "I was afraid in terms of assessment and grades, and I supposed that the nature of field training would turn into a lecture with a final test as there were no practice in the field." Another participant indicated, "I felt that it was impossible for online training to replace field training; as there will still be a lack of experience."

This indicates that levels of concern among some of the participants regarding the ability of online training to provide them with the required experience was high. However, these fears were mostly relieved by simply engaging in the course, as the trainees' attitude towards the online delivery became more positive after doing so.

The data also revealed that after completion of the course, participants reported a preference for online training rather than the previous field training model. Since the student teachers were in a unique position as they had the opportunity to attend schools in-person for two weeks before the shift to a virtual classroom, Hana clarified these opportunities and said:

At school, we were responsible for looking for and obtaining information, and we did not know whether it was right or wrong. However, in the online practicum, you [the supervisor] were a reliable source for us.

Suzan agreed with both Shaden and Abeer that the potential for gaining all teaching experiences is greater in online training than in-field training, which makes online training desirable in the foundation stage for pre-teachers. Suzan stated:

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In online training, the skills to be acquired are scheduled by the course instructor, thus ensuring that all the required teaching experiences are passed, while in field training, the student searches for information and may have the opportunity to gain some teaching experiences while others are absent.

In conclusion, the data shows that there is a discrepancy between the student teachers' impressions before and after the shift to an online course. Five of the six student teachers preferred online training over field training after completing the course. The reason given for this preference was due to the unique learning opportunities offered to them by online training, which will be explored further in answering the second question.

In contrast however, Noor preferred field training over the online training, as she pointed out:

Although online training is very useful in acquiring basic skills in teaching, the experience of standing in the class and meeting the students... this is impossible to be gained after ... because teaching skills, like planning and others, I can learn in a regular course, or self-learning, but not the field experience. it is difficult.

Suzan looked at the issue from another angle and mentioned that online training is better for teachers during their inservice development courses because they already have field experience, which is the most prominent shortcoming in online training. She stated: "If I am a teacher and have students, online training will be better because I would be able to practice the new skills with them, for sure."

The participants were asked their opinion on the potential for a dual practical education course that included both in-field and online training, and how it could be turned into a successful experience. In response, the student teachers' points of view differed. Noor believed that the dual course may be a good idea, only if the online section does not coincide with the field component; she said: "The dual course may distract the students."

Regarding the question of which component would be better to precede the other, the answers were also split. Some of the participants recommended structuring online training ahead of the field training, as Sarah commented, "Yes... I support the idea. For the circumstances that I underwent, I would have preferred that the training be online at first, after that I could practice the skills that I was trained for, in reality." Conversely, Suzan pointed out:

I think that what happened to us is better. We started with the field experience and then enhanced it online. Because we had already learned teaching skills in some courses, so the real experience was important to apply what we learned, then the online discussion, criticism, and so on enriched our simple grounded experience.

Initially, it was clear that some students held fears and doubts about the merit of the online training. After the experience, the data showed almost total support for online training, for the aforementioned reasons. Considering the lack of online education options prior to this time at the participants' college, it is unsurprising that they would hold concerns, due to their lack of experience with online education, which requires advanced applied skills. In addition, the trainees met with a lack of teaching experience in content and tools.

An outcome that supports the student teachers' positive attitude toward online training after completing the online practicum was their preference for distance learning if allowed to engage in it again in their future career. This result can be attributed to two key factors that participants referred to: the reliability of the sources of information, and the certainty they would cover all fundamental teaching skills and experiences as indicated in answers to the second sub-question. It could be argued that these concerns (reliability of the source of information and ensuring comprehensive coverage of teaching skills and experiences) are not associated solely with the mode of the training, but rather also dependent on the quality of supervision provided by both the school and university.

The proposed dual training course was supported by the students, with differences in their perceptions about the ideal order in which to structure the two components. However, there was no support for providing the training in two different ways simultaneously. Here, we note that the lack of teaching experience has greatly affected their perceptions, as the justifications were closely related to their experience in the course. This finding meets the finding of Saleh [25] in his study that revealed the desire of student teachers to have a combination of natural training with electronic training. However, the two studies have different findings on the mechanism of combining the two types of training; this difference is often due to the disparity between in-field experiences in the two study samples.

Overall, the results of the first question support the finding of Ally's [13] study in calling for training and orienting the digital teacher of the future. This aligns with the student teachers' point of view that online training is better for teachers in service than pre-service teachers, which also corroborates the result of Voytecki, Tripp, Wilhite, Warren [22] that teacher candidates have positive comments on using video Grand Rounds in teacher training, as well as Al-Raghbi's [20] study that found trainees had a positive impression of open-source electronic courses in their career development. Additionally, this result meets the finding of Ardley and Johnson [23] who found that a technology-based annotated video supervision method was sufficient and effective only if combined with effective training and technical support. In conclusion, the participants' responses to the first question revealed a generally positive attitude of student teachers toward



#### The Second Question: What Opportunities Does the Online Practicum Provide for Student Teachers?

Data analysis uncovered the student teachers' experience and point of view regarding the most important advantages of online training compared to field training, which can be summed up in the following points:

#### First: Saving Time and Effort

The students' experiences revealed important aspects of how online training reduces wasted time and effort. Sarah noted that time wasted for transportation and waiting between classes was minimized leaving more time to be invested in the online practicum, as she explained:

I leave home too early, looking for transportation, wasting time between schools, giving my brothers a ride to school, and then I can go to school. With online training, all of this has vanished. Furthermore, online training did not allow for long gaps between classes.

Abeer pointed out another way in which the online practicum saved their time as she explained:

We saved much time by answering my questions directly on the discussion board and forums. We were in the field at the same time, so we had to wait to meet with the supervisor or physically stop by the supervisor's office during office hours to get answers to our questions.

Shaden pointed out that the obligation to attend other student teachers' classes for observation wasted a lot of time. She said: "For me, not having [in the online practicum] to stick to other people's school schedule to attend observation in their sessions saved a lot of time. Unlike when it was at school, that was a stress for me." The stress described by Shaden here will be explored in more detail in the next section.

#### Second: Accurate Performance and Rapid Completion

Data from the students showed that online training helped provide excellent work in a short time for reasons they agreed upon, including that the online practicum allowed the student to receive feedback and replay the scenario. Group criticism was also a benefit of the online practicum, as it allowed everyone to watch and comment on the same situation, unlike training in the field, where conflicts of class timings and sometimes the small size of the class did not allow everyone to see the same educational situation. Noor said:

When comparing class observation and videos. For me, when I watch the video and analyze the situation, then we discuss it with you, doctor, and we criticize it as a group. It is preferable to observation class because we cannot enter the same class at the same time or discuss it together due to our different schedules. This is important because it is possible that I overlooked a situation, and my classmate comments on it, so she brought my attention to it.

Additionally, the student teachers reported that the online practicum helped them in mastering their learning because there was always a second chance for improvement. Shaden noted:

There was a huge difference between the first and second tasks. I think this happened to everyone. This resulted from continuous peer critique and the instructor's feedback in the online training. The difference was that I could hand over the preparation for the lesson, upload it to the blackboard, and it could be criticized and evaluated, then I reuploaded it again. This happened in the online practicum but was not possible in the in-field practicum, there is no chance to back away or improve the lesson before it is presented.

Data also showed that completing the performance assignments on time and in an optimal manner was more achievable online than through the in-field practicum, which contributes to providing student teachers with the required teaching skills, Suzan mentioned:

There has always been time flexibility for designing and preparing a new lesson in the online practicum, which may be a reason for my satisfaction with the assignment I submitted. While during in-field training I was restricted to the morning school hours, which were often crowded with other duties, so I attended the class in a hurry and did the minimum of the lesson requirement.

#### Third: Significant Development of Planning Skills

All student teachers reported that the online practicum helped them gain lesson planning skills better than the in-field practicum. Sarah stated:

Knowing what is important to include in the lesson plan, how to design the lesson plan table, what to put in each column and row, for me it added a lot of knowledge and applied skills. However, during the field practicum not one of the main class teachers ever asked us about the lesson plan, so sometimes I attended the classes without planning the session in a



#### Fourth: Ability to Understand Students and Deal with Different Teaching Situations

Student teachers found that the online practicum enriched their classroom management skills despite the absence of positions. As Abeer explained, "We gained the skill of understanding students and dealing with different situations."

#### Fifth: Stimulates Innovation and Creativity in Teaching

Most of the student teachers reported that a distinguishing feature of the online practicum was its ability to stimulate innovation and creativity. They provided reasons for that effect, the details of which varied according to the lens of each trainee. For example, Safa and Shaden found the time flexibility of the online practicum contributed to the flow of ideas during lesson preparation. Shaden mentioned:

A student has enough room in their school day's schedule during the online practicum to prepare for a lesson, while she was forced to work on a specific day or time during the in-field practicum. This gave me the more freedom to think and plan the lesson. I see that as motivating.

Also, Safa looked at the topic from another angle, which was the openness from all thought restrictions during the training. She said:

As for teaching in the school, my thinking is limited because I know the nature of the students I deal with, which was not applicable in the online practicum. I can innovate in a way that is not restricted by the abilities and intelligence of the students, and I am not restricted by the number of students in each class.

This is in line with what she mentioned about the feeling of freedom and lack of fear of error, which motivated her to think creatively, as she stated:

For example, I know the topic of the lesson, so I am trying to devise a way to implement it. For classes on traditional methods, I mean, it is impossible to create something new because I will be afraid of the classroom's main teacher's reaction. Also, to some extent, the students' reaction to me.

Lastly, Shaden added that the level of safety and the reduction of fear of making mistakes, which they found in the online practicum, helped them to think outside the box.

#### Sixth: Promotion of Self-Learning

Four of the trainees believed that online education developed a passion for self-learning and a sense of responsibility. Shaden explained, while talking about the experience of online training: "I found that the one who wants to learn will have everything in their hands; behind the screen." Also, Hana rationalized: "When we watched the videos, we found ourselves eager for more than what the course required, and rather, I found myself analyzing and criticizing other aspects."

In summary, findings of the second question revealed six core opportunities experienced by the student teachers from their engagement with the online practicum: Saving time and effort; accurate performance and rapid completion; significant development of planning skills; ability to understand students and deal with different teaching situations; stimulation of innovation and creativity in teaching; and promotion of self-learning. These results corroborate other research results such as Kangai, and Bukaliya's [24] study that found distance education programs save time and effort, thus, helping to reduce teacher shortages. Additionally, these results agree with Kidd and Murray's [27] findings that while moving from an in-class to online practicum promotes "pedagogical agility," many principles and intentionality of learning and practice are unchanged. The findings also align with the outcomes of Voytecki, Tripp, Wilhite, and Warren's [22] research that showed an online practicum improved observation skills in a shorter time and with less effort than inclass observation.

The finding in this study that an online practicum can stimulate innovation and creativity in teaching agrees with Keefe's [21] finding that virtual practice develops new digital teaching skills and increases the confidence of the teachers' trainees. It also aligns with Kidd and Murray's [27] findings (mentioned previously) of the promotion of pedagogical agility; Al-Zahrani's [19] revelation that online training helped teachers in activating continuous evaluation for students; Saleh's [25] finding that electronic training increased knowledge and upgraded the skills and abilities of the trainees either in teaching practice or in observation; and the findings of Voytecki, Tripp, Wilhite, and Warren [22]. These agreements on the advantages of online training are not unexpected in the context of the rapid technological change being encountered globally, specifically as part of the fourth industrial revolution.

#### The Third Question: What Challenges and Defects Do Student Teachers Encounter with the Online Practicum?

To identify defects, participants were asked about the most challenging problems they encountered the online practicum.



Although some of these issues were mentioned by most of the trainees, some participants considered them core obstacles, while others only saw them as secondary problems. It's notable that most of these defects were not related to the online practicum, but rather to online education in general. These difficulties are limited to the following:

## First: Network Problems (Weak or Interrupted Internet)

All trainees reported the lack of a high-quality internet signal on a continual basis at their locations as an obstacle in the online training. Suzan stated, "Sometimes I find it difficult to download assignments or play videos. Also, the clarity of the sound during the virtual class is sometimes affected by the weak internet."

## Second: Large Number of Distractions and Lack of a Quiet Place Designated for Meetings

Hana, Sarah, and Noor reported that having a large number of external influences in the house at the time of training was a significant distraction and an obstacle to focus during the online practicum. Hana stated, "One of the problems that I personally faced was the lack of a quiet place at home to attend online practicum sessions." Sarah added, "In addition to the internet problem, the time of the lecture overlapped with a time when the whole family are around, and my brother takes online classes simultaneously." Noor noted, "Frankly, I have children at home, so I hear part of it, and the other part I lose it with my children's annoyance, and no matter how much I try to focus on the lesson, I can't."

#### Third: Trainees' Lack of Technical Skills

Both Hana and Sarah indicated that the difficulty in using technology and the lack of applied experience with it partially constituted an obstacle during the online training. Hana referred to some situations in which she faced technical difficulty, "I was able to use all blackboard features easily, except uploading the assignment. It took me a long time and many tries." She also mentioned, "I discovered after a while that there are icons on the blackboard that I am supposed to open and watch the content, but it was not visible to me." Sarah said, "at first, we were tired, we didn't know how to learn through it; They did not provide us with intensive courses on how to use the Blackboard."

## Fourth: Absence of Live Class Experience

This defect is the only one limited to the online practicum experience. All the students, with different points of view, agreed on the importance of the live class experience, and that online training does not cover its absence. Suzan pointed out, "In the actual class experience, we face things that do not occur to our minds and that require us to act immediately." The online practicum includes deliberate procedures and artificial situations to simulate reality in the classroom. Therefore, there is no potential for an unexpected and difficult situation to arise which the trainee feels unable to resolve. Which she considered a defect, because this zone of current safety is accompanied by anxiety about the future, as the student teachers remain fearful of the live confrontation they will experience when faced with actual students. Shaden added: "There are some impossible skills to develop online, for example, interacting with students, and breaking the dread barrier of standing in class."

This result conflicts with Kim's [4] study that found an online practicum course provided student teachers with the opportunity to interact with children, moreover, to promote their learning. However, the current study findings consider the absence of interaction with students as the main defect of the online practicum. These different findings might be impacted by each course design, as the online practicum course in Kim's [4] study was designed to enable pre-teachers to practice on schools' platforms, but in this study, classroom video records were used as an alternative to classroom practice.

Notably, this study didn't find other defects present that were mentioned in some previous studies like Taqatqa, Hasasneh, and Atmizi [18], which showed a range of obstacles and problems faced by trainee students, including the lack of student attendance, the absence of continuous university supervision, and the delay of the student training process. We found that none of those obstacles were mentioned by the trainees except for the university's failure to hold training courses. Perhaps the reason is due to the different number of trainees in each course. While this study applied to a class limited to only six students, other universities might have many trainees in each class. The small group of trainees made the focus on each student and one-on-one follow-up easy to manage.

# **4** Conclusion

The study reflects the experiences of six student teachers enrolled in a practicum course that shifted from in-school to online training. The findings revealed important data regarding the participants development of practice through an online course, explored student teachers' fears and their willingness toward the shift and highlighted the opportunities and barriers of an online practicum. However, the study findings are dependent on this particular context of quarantine and the forced nature of online learning. Hence, the findings are not generalizable. Nonetheless, they provide important and real insights into the theory of VCoP by developing the student teachers teaching skills through a virtual community with shared common concepts, knowledge, authorities, and other social tools. Their involvement with the online practicum

created communal properties and products for the members of that community, as they shared mostly the same benefits and challenges.

Additionally, the study findings highlighted for educators and decision makers the robust merits of an online practicum system. As this study was conducted during an international crisis, there may be learnings regarding how external difficulties can affect training quality. Hopefully, these results can enhance the development of a framework for professionally rich online practicum, however, the future of these online courses is still unclear, and it's uncertain whether the model will fade or persist and develop over time. More research in this regard is urgently required.

# limitations of the Study

This research is a case study design focused on one group of six student teachers. Although this is an acceptable number for a case study research design, others can consider the sample size of this study as a limitation. Also, this research is only applied to education pre-service teacher programs of BA Islamic education students, and it only examined one institution of higher education for teachers. Despite these drawbacks, the study can be used as a starting point for future studies using a larger sample size of participants and other educational disciplines.

# **Conflict of interest**

The authors declare that there is no conflict regarding the publication of this paper.

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