Teaching Practice Online: Challenges in Japan, India and Kenya Under Pandemic

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Abstract

The coronavirus pandemic affected the whole world in 2020, with high pressure on the health sector, many deaths, reduced business activity, rising unemployment rates, travel restrictions and social distancing. These developments have had severe consequences for all areas of every society around the globe. This also includes education. In many countries, primary and secondary pupils and university students alike were sent home as schools and universities closed abruptly as part of efforts to control the spread of the virus. As teaching moved online, learners and teachers were unprepared for the new situation, which posed a unique set of challenges. In this context, trainee teachers at a Swedish university were encouraged to support online teaching at schools in Japan, India and Kenya. The purpose of the digital internship was threefold: to continue the trainees' teaching placements in the absence of opportunities for in-class teaching; to provide an opportunity for trainee teachers to develop their own competence in online teaching; and to assist the foreign schools in the challenging task of delivering online classes. This article aims to investigate the challenges faced by pupils in Japanese, Indian and Kenyan schools and by 27 Swedish trainee teachers during this project. Data collection consisted of interviews, an online questionnaire, lesson observations, assessment forms, and reports given by trainees. The main challenges identified through our findings included internet access in host countries, the use of a teacher-centred approach to learning, and difficulty for trainees to relate to the pupils' life conditions. However, we conclude that the trainee teachers increased their global awareness through a climate-friendly alternative to the traditional teaching placement abroad.

Keywords: COVID-19, challenges, lockdown, online teaching, trainee teachers

As COVID-19 spread across the world, school activities temporarily shut down, and pupils and students were sent home. The United Nations Sustainable Development Goal 4 states there should be access to quality education for all children, but the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020) estimated that 60% of the world's student population, 1.5 billion learners in 109 countries, were affected by school and university closures in March/April 2020. This created tough conditions for children and youth, affecting their wellbeing and educational future. There is no doubt that school closures will impact inequalities in education and affect school attainment among pupils and students (Haeck & Lefebvre, 2020).

Learners and teachers were unprepared for the transition to distance learning. Neither learners nor teachers had sufficient experience of online teaching, despite the common use of computers. Naidu (2020, p. 425) argues that "the irony is that it has taken a calamity for us to rethink and reengineer our approaches to learning and teaching, despite evidence in favour of the need to do so, long before COVID-19 struck". Due to the COVID-19 outbreak, teachers and pupils/students found themselves in a situation where they were compelled to embrace the online teaching and learning experience (Mishra et al., 2020). However, many teachers were attempting to understand online teaching for the first time and to source free digital resources to apply in their teaching. Rouadi and Anouti (2020) found in a study from Lebanon that online teaching during the pandemic was a failure in many secondary schools. However, it was successful when teachers used a variety of teaching methods, developed good communication with learners, and encouraged active participation during lessons.

There are, therefore, challenges to implementing online teaching: pedagogical, technical and social (Hansson, 2015). Firstly, a pedagogical challenge is introducing digital tools in formal education when teachers have limited experience of online teaching and pupils have limited digital competence. Digital devices may be frequently used outside school, but many pupils lack experience of use in an educational setting. Another pedagogical challenge is moving from teacher-centred to learner-centred approaches, with the purpose of engaging the student and encouraging active participation in learning. Studies show that learners prefer, and are more engaged by, blended learning (a combination of traditional classroom teaching and online educational materials) rather than a fully online learning approach (Crichton & Onguko, 2013; Wanner & Palmer, 2015). This has led researchers to investigate what people learn in "knowledge-rich environments", of which online teaching can be considered an example (Hansson, 2015).

Secondly, technical challenges concern the use of an appropriate mobile device and the cost of internet access. Digital and mobile technologies have great potential to support learning because of being ubiquitous, reliable, cheap, and both social and personal (Royle et al., 2014). The learners can move between content and context. It offers flexibility and students can accordingly learn at any time and any place. Thus, "learners will be able to seamless start a lesson in school, continue the lesson on the bus, and complete the learning at home" (Ramnath & Kuriakose, 2015, p. 659). However, learners in low- and middle-income countries may face barriers to digital learning such as network failures, lack of power and lack of access to the Internet (Crichton & Onguko, 2013; Hansson & Jobe, 2014). Escueta et al. (2020) point out that despite expanding access to technology, the digital divide is increasing. Further, even "when disadvantaged students can access technology, they may lack the guidance needed for productive utilisation - a 'digital-use divide'" (Escueta et al., 2020, p. 898).

Rasheed et al. (2020) argue that the main challenges for teachers in distance learning are the use of technology and the selection of appropriate instructional technology. Therefore, proper techniques and learning support should be provided to teachers as well as to students (Dhawan, 2020). However, teachers have been found to show resistance to using new technology for teaching (Rasheed et al., 2020). Lenkaitis et al. (2020) suggest that teacher training programmes should integrate virtual exchange opportunities with international partners, which have been highlighted as even more valuable during the COVID-19 crisis.

Thirdly, social challenges include a lack of familiarity with and ability to use digital and mobile technology. Digital skills need to be improved, particularly in low-income countries. In addition, gender must be considered: worldwide girls have fewer educational opportunities, and secondary school completion rate is in favour of boys (Singh & Mukherjee, 2020). Moreover, as Dhawan (2020) points out:

> We cannot ignore and forget the students who do not have access to all online technology. These students are less affluent and belong to less tech-savvy families with financial resources restrictions; therefore, they may lose out when classes occur online. They may lose out because of the heavy costs associated with digital devices and internet data plans (p. 17).

The project examined in this study takes an approach that is different from many other international collaborations, where one party tends to be more interested than the other. Western countries often seek collaborations with partners in low-income countries where the exchange occurs in one direction: for example, Western participants travel to the low-income setting. The project studied here began with a request from local schools in low-, middle- and high-income countries to a Swedish teacher training programme to support their online teaching and mitigate the impact of school closures. Concurrently, the Swedish university was searching for opportunities to develop trainee teachers' online teaching skills; it was therefore a perfect match.

The purpose of this study is to investigate teaching placement online under lockdown. The research question is: What are the challenges involved in online learning for pupils in Japanese, Indian and Kenyan schools and for Swedish trainee teachers? The next section describes the background to the project, followed by the methodology of the study including settings, target groups, data collection and data analysis. Thereafter, findings are presented, followed by categorisation and analysis of results. The paper concludes with the discussion, limitations, conclusion and key recommendations for future research.

Background

In March 2020, when the university in Sweden moved from campus teaching to online, it was a challenge for the Department of Education to continue with teaching placements as part of teacher training courses. However, following requests for assistance from three schools in Japan, India and Kenya, respectively, a digital internship module of 7.5 European Credit Transfer and Accumulation System (ECTS) was created. The internship period was five weeks in June and July 2020. The application period for the placement was short, which meant limited preparation time for prospective participants. Five students (three male and two female) were accepted. Before the placement started, the university arranged two digital seminars covering the educational systems of the different countries, life conditions, the United Nations' Agenda 2030 for sustainable development, cultural context, ethics, prerequisites and practicalities. After

digital meetings with directors, headmasters and supervisors, the internship was organized. A second group of trainee teachers were admitted for an online teaching placement abroad in November 2020 and January/February 2021. This second group of 22 students (9 male and 13 female) conducted their placement at primary and secondary level in India and Kenya for 3-5 weeks.

The participating schools were located in Nara (Japan), Bangalore (India) and Nairobi (Kenya), representing high-, middle- and low-income countries, respectively. In Japan, two trainees were placed at a secondary school. English was the only subject accepted. In India, four trainees taught all subjects at a primary school, one trainee taught French in upper primary, and six trainees taught Social Science at a secondary school. In Kenya, two trainees taught Mathematics and Biology, and 12 taught Social Science (History & Government according to the Kenyan syllabus), all at a secondary school. The Swedish trainees were all in the third year of their teacher training, except for one student who was already working as a teacher but did not yet have a certificate.

Table 1: Overview of selected schools and placements

Country/city	School level	Placement	Trainee teacher(s)	Subject
Japan/Nara	Secondary	Form 1–3	2 male	English
India/Bangalore	Primary Upper primary/ Secondary	Grade 2-5 Grade 7–8 Grade 10-11	2 male/2 female 1 male 1 male/5 female	All French Social Science
Kenya/Nairobi	Secondary	Form 3–4 Form 1-2	2 female 6 male/6 female	Maths/Biology Social Science

Prerequisites

The participating schools were private, and teaching was based on the national syllabus and curriculum. The Japanese school was a girls' school and the others were mixed. The Japanese and Indian schools charged fees, whereas the school in Kenya did not, as it served disadvantaged youth. The total number of pupils in the schools was 700 in Nara, 900 in Bangalore and 300 in Nairobi. Class sizes were 40+ in Nara, 20+ in Bangalore and 30+ in Nairobi. In general, all pupils had limited experience of digital learning before this project. In terms of technology, the Japanese pupils had their own laptops and/or tablets, internet access and use of a digital school platform. The Indian pupils used their own computers or mobile phones with internet access and Google Classroom as a learning management system (LMS). The Kenyan pupils used tablets with internet access provided by the school and a locally designed digital platform called "The Big Blue Button" to access educational material.

Method

A mixed-method approach was used for data collection, consisting of lesson observations, an online questionnaire, semi-structured interviews, assessment forms, and trainees' oral and written reports (see Table 2).

Lesson observations were followed by a 30-minute digital meeting to discuss the lesson, pupils' activity, the teacher's role, challenges encountered, and so forth. The online questionnaire consisted of 18 questions using a Likert scale where the pupils were asked to agree or disagree with a series of statements. A five-point scale was used, ranging from 1 = *not at all* to 5 = *yes,*

absolutely. The pupils also had the opportunity to add responses in their own words. In total, 56 questionnaires were collected from the pupils after having been distributed in the first phase of the project (July 2020).

Table 2: Overview of data collection

Method	Japan	India	Kenya
Lesson observation	2 lessons of 40 min	5 lessons of 60 min	4 lessons of 50 min
Online questionnaire	33	12	11
Interview	2 x 50 min	1 x 50 min	4 x 45 min
Assessment form	2	11	14
Oral & written report	2	11	14

Online interviews were conducted with all five trainee teachers from the first group and two students from the placement in November a few weeks after teaching was completed. The trainees on placement in January/February 2021 had only just finished the internship at the time of writing, and it was therefore not possible to include interviews with them. The semi-structured interviews were guided by themes and questions. Each interview took the form of a conversation, rather than simply ticking off questions from a list, although in every interview the same questions were asked. Each interview lasted 45-50 minutes and was recorded and transcribed. An assessment form containing open and closed questions was submitted by the trainees' supervisors. Finally, oral and written reports were given by the trainee teachers.

Ethics

The participants were informed about the study and were given the opportunity to consent to participation. The data material was anonymised and coded, and only the researcher had access to the material. All results are presented in an anonymised way so that no individual can be identified. Nevertheless, transparency and communication with the participants are of importance. Online education leaves digital footprints which constitute sensitive information and privacy can easily be violated, thus personal data must be handled with confidentiality. Consequently, pseudonyms were created for the participants to maintain their anonymity.

Data Analysis

The analysis is based on both quantitative and qualitative data with the aim of taking a holistic perspective. Rich data and systematic search for categories are at the core of qualitative content analysis, and important are a reduction of data and systematisation (Schreier, 2014). Therefore, Bryman's (2015) four stages of analysis were used. Firstly, the transcribed interviews were read as a whole and notes were taken. Secondly, the text was labelled and systematically coded. Thirdly, codes were reduced, and interviews compared and categorised. Fourthly, codes and categories were related to the research question and relevant studies. Thereafter, online questionnaires were compared, and notes taken about the responses, which were related to the interviews and categorised. Finally, notes from lesson observations, comments from assessment forms, and notes from trainees' reports were related to the other data and included in the categorisation. The analysis of the empirical data produced three categories: technical, pedagogical and social challenges. In addition, there is a category of trainee teachers' experiences.

Findings

In this section, the results from the different methods of data collection are presented under main categories, illustrated with extracts from interviews and reports together with quantitative data from the online questionnaire and pupils' comments.

Pupils, trainees and supervisors reported uniformly that they were not used to online teaching before this project. The teachers started in-service training to receive hands-on material of online teaching, alongside teaching their pupils under lockdown. As one trainee teacher put it,

> *... so we kind of learned together. Both the pupils, teachers, and me. At the same time* (Interview, female trainee teacher).

Japan

In the first week of the internship (early June 2020), all Japanese pupils were at home, with their regular teachers providing live teaching through Zoom. The trainee teachers observed lessons. From the second week onwards, the pupils resumed school attendance. Face masks were mandatory, which presented a significant challenge to conducting English language teaching. The Swedish trainees were now responsible for the lessons, and the pupils were all in class together with two of their regular English teachers. The Swedish trainees, who attended via video link and were displayed in the classroom via a projector, instructed the pupils via the regular teachers, and pupils completed exercises individually or in groups. The Swedish trainee gave oral and written examples in English and used the webcam to illustrate the content with body language, and the local teachers asked the pupils in Japanese to respond back to the trainee. The pupils presented their assignments in front of the webcam directly to the Swedish trainee teacher.

India

The pupils were at home using their computers or mobile phones to access Google Meet for distance learning. The Swedish trainee teacher conducted the lesson supervised by a local teacher. All pupils had their webcams on for the whole lesson. Pupils shared their screens when presenting their homework, and used the chat feature to ask questions or make comments, for example "This was easy". During the project period in June and July 2020, the Indian government gradually revised its policy on digital education. This was confusing for the teachers due to numerous changes being made and affected online teaching when pupils' screen time was reduced. The government introduced a maximum of 1.5 hours per day in front of a screen, with pupils working on individual assignments for the rest of the school day. The policy changed again while the second trainee teacher group was active to allow only 30 minutes at the time followed by a break. Pupils then spent half the school day online.

Kenya

All pupils were from disadvantaged communities in various parts of Kenya, to which they were sent home when the day- and boarding school closed. The pupils in Forms 3 and 4 were then equipped with tablets but had no previous experience of using them. While waiting for the new tablets to be delivered, some pupils in Form 3 used borrowed mobile phones to access the educational material. The content was uploaded by teachers and/or Swedish trainee teachers on the Big Blue Button platform. This was an LMS with an integrated video tool (similar to Zoom) for live teaching, a digital whiteboard to illustrate lesson content, a screen-sharing facility to show PowerPoint presentations, and pupils could ask questions either orally or by using the chat feature. The Kenyan pupils did not use their video cameras at all, due to poor bandwidth.

In January 2021, the pupils were back in class using tablets when trainee teachers conducted their online lessons.

Technical Challenges

Teachers were accustomed to using WhatsApp in day-to-day life. Under lockdown, the teachers used WhatsApp and telephone to discuss teaching material and to check on the students. This was in particular important in Kenya, where pupils returned to their hometowns in often remote rural locations with limited internet connectivity and interrupted power supply. In Bangalore and Nara, WhatsApp was a reliable tool used to communicate with pupils, but from an early stage in the project schools used their LMS because they were already integrated in teaching and learning. Nonetheless, the LMS were a challenge at all schools in this project. Both pupils and trainee teachers experienced difficulties accessing the school learning platforms, with interrupted internet links and poor internet connection being the main explanations. Table 3 shows the technical difficulties experienced by pupils at the different schools.

Table 3: Pupils' technical challenges

	Japan	**India**	**Kenya**
Internet access	16	5	5
Lack of power	4	1	4
Problems accessing the platform	3	0	1
None	10	6	1
Total no. of pupils	33	12	11

A major problem for the pupils (26 of 56, or 46%) at all three schools was accessing the Internet. The survey does not identify the frequency of such difficulties, whether they occurred all the time or only occasionally, but according to the trainee teachers it was a common problem. This meant that pupils could be in and out during a lesson. Thus, a challenge not depending on if the pupil were in a low-, middle- or high-income country. In the Kenyan pupils' case, they received data bundles (Internet time) from the school administration, and these did not cover the whole period (monthly). Other pupils relied on Wi-Fi. Lack of power was frequently a concern for Japanese pupils, due to learners spending many hours in front of screens and forgetting to charge the device. Difficulties with power were also apparent for Kenyan pupils, but this was usually related to power shortages in their rural home locations. Technical issues led to high rates of absence among Kenyan pupils. For example, a lesson observed in Form 4 had 10 pupils present out of a class of 54. Students attending had their video cameras switched off to ensure a better connection. Overall, 30% of all pupils had no technical challenges at all.

Kenyan pupils who used a mobile phone, which usually belonged to a parent, encountered challenges in sharing the device. For example, one Kenyan pupil said: "I am using my mother's mobile phone, and sometimes she doesn't stay at home during my study time, so I miss the classes". Other challenges occurring at the three schools included pupils forgetting to mute their microphones, which led to unwanted background noise; problems sharing screens when accessing lessons on a mobile phone; and pupils pretending to have technical issues when the teacher asked a question that was too difficult. On the other hand, pupils sometimes complained of difficulties in the other direction: "We can't hear the teacher or see him due to technical problems" (Indian pupil). According to the trainee teachers, the Japanese pupils were used to using digital tools and showed digital competence, but they also had problems accessing the Internet (16 of 33, or 48%). Additionally, trainee teachers faced difficulties when sharing

screens on the local platform because it was then not possible to see the chat, where pupils frequently asked questions or informed the lecturer that they could not see the shared screen or hear the teacher.

Pedagogical Challenges

The Swedish trainee teachers sometimes had difficulties understanding whether all the pupils were following the lesson properly. One female trainee stated:

> *I do not know how much they understood. It was the hardest thing for me to know.*

This was especially difficult when pupils' microphones and cameras were turned off, and the latter occurred frequently with the Kenyan pupils due to low bandwidth. All online teaching was live, and another common issue was pupils forgetting to mute their microphones, which brought in background noise – for instance from siblings, neighbours, chickens or motorbikes. Kenyan pupils in particular stated that they experienced a disruptive environment. The pupils themselves sometimes disturbed the lesson as well, and in some cases used the chat function to bully other pupils. On the one hand, the pupils sometimes took advantage of the digital setting. One male trainee teacher said:

> *I ask if a pupil can answer and then the pupil's internet collapses. Or the camera is not working. But if he or she wants to ask me something, the camera works perfectly and there is no internet problem.*

On the other hand, the trainees noticed by observing the regular teachers that they sometimes did not give the pupils time to respond.

> *The pupils have learned that if they wait 2-3 seconds, the teacher will give the answer* (Interview, male trainee).

Additionally, some Japanese pupils argued they had problems concentrating, thus difficulties with the subject content in the online environment. An explanation of this, according to the trainees and supervisors, is that the combination of online teaching and English as a subject was too difficult for the Japanese pupils. However, teaching was generally considered to be relevant and interesting. According to pupils, the overall grade for online teaching provided by the trainees was a mean 4.19 (out of 5). Pupils considered the teaching approach to be at a level suited to the pupils' knowledge, and the content was considered not too difficult (mean 2.93) and relevant for the learning objectives (mean 3.82). According to the pupils, the effort required to follow the teaching was medium (61%) or high (31%). Active participation and interaction between pupils occurred during lessons. One Indian pupil said: "We watched a lot of interactive videos and did a lot of fun activities". Thus, overall, the pupils felt positively about the teaching from abroad (mean 3.35), and found lessons both different and interesting.

Some pupils stated that they had difficulty understanding because the trainees had a different (as in Swedish) accent when speaking English, and recommended that they speak more slowly. Vice versa, trainees initially had difficulty understanding the English spoken by pupils and supervisors. Nonetheless, the atmosphere was supportive: "Everyone was given an equal chance, and politely corrected when someone made a mistake" (Indian pupil). Pupils felt they developed skills (for example, language skills): "It was very easy to understand even in online

classes" (Japanese pupil). One Kenyan pupil expressed his approval of the trainee teacher via the online questionnaire as follows: "Keep it up 👍".

Social Challenges

The trainee teachers reported that it was a challenge to relate to the pupils in the digital environment. To be able to move between formal and informal engagement is important to create rapport with learners and sustain interest and motivation. One supervisor from India commented: "He (the trainee teacher) didn't get an opportunity to explore this as the internship was online" (assessment form). Thus, the social skills objectives as part of the teacher training were problematic to fulfill. In addition, a Kenyan supervisor writes:

> NN [trainee] demonstrated an ability to change the way she communicates, based on conscious social and pedagogical considerations of the Kenyan students. NN joined us under unprecedented circumstances. We were grappling with finding our way with online teaching. She was quick to think on her feet when assigned lessons. She fashioned the lessons very independently such that they did not need much adjustment. (Assessment form)

The Swedish trainees said that teaching was made difficult due to limited possibilities for using body language, which limited his modes of expression and available ways of explaining the content. The trainees had no previous knowledge of the pupils nor their background, life conditions, and so on. Interviews and written reports from trainees reveal difficulties pronouncing pupils' names, or even knowing whether the name displayed on the screen was a first name or a surname, due to cultural differences. Additionally, it was sometimes difficult for the trainees to know whether a pupil was male or female from their name alone. During the internship, trainees deepened their knowledge about their host country by reading about the culture, traditions, food, and so on, and/or by interviewing the supervisor about the pupils' life situations. These investigations allowed them to adapt their teaching practice to the context in which the pupils lived. For example, the Kenyan supervisor pointed out that pupils were sometimes required by their families to do small jobs to receive a daily income, and were therefore absent from class at certain times.

Trainees' Experience

The trainee teachers reported limited experience of online teaching prior to the placement; only theory of digitalisation had been discussed during the teacher training programme. Trainees understood the importance of online teaching aids, flipped classroom, and so forth, and appreciated the opportunity to practice. One female trainee said in an interview:

> *I think I have learned more in this practice than in any other practice. Because it has been so intensive, and I have had to learn so much. Technical, cultural, and I had to teach […] the usual in teaching practice plus more components. So, it has been very intense mentally even though it has been 1-2 lessons a day.*

The trainees increased their self-confidence and learned to be flexible and take the initiative. This was particularly apparent when, for example, the network of regular teachers failed, and the trainee suddenly had to step in as class teacher. For the most part, the different time zones did not pose a great challenge, but in the case of the Japanese school, trainees had to wake up

at 04.30 am to start teaching and sometimes found it challenging to motivate, inspire and engage the pupils in the lesson.

Trainees cited varied reasons for participating in the internship. The main reason was wanting to help out the participating schools under lockdown, followed by a desire to develop their own digital teaching competence. Trainees stated they would not have applied for face-to-face teaching abroad, which the university regularly offers as a summer course. Reasons for not applying for such courses were lack of time, fear of flying, and considering it more important to develop their digital competence. However, following the online placement, trainees showed an interest in undertaking teaching practice in selected countries the following year due to having been well-received by the host schools and supervisors. This interest in both globalisation and digitalisation developed steadily during the digital internship according to the initial digital seminars, and trainees' oral and written reports.

Discussion

This study explores the challenges faced by three schools in three different countries in the transition from face-to-face teaching in classrooms to fully online teaching, which presented a totally new learning situation for both teachers and pupils. The implementation of online teaching regarding organisational, technical and pedagogical aspects was not thoroughly planned by the schools before they started their online programmes. In addition, there was uncertainty from governments, and their guidelines and policies changed from month to month. For instance, in July 2020 the Indian government significantly reduced pupils' screen time to encourage reading and study in the traditional way (i.e., textbooks). This may have been motivated by concern that pupils might simply copy text from the Internet, and that teachers would have little insight into learners' experience. Thus, this requires a mind change if full learning potential is to be achieved. The findings of this study show that the main challenge encountered in online learning was not the technology itself, even if the pupils had difficulties with insufficient networks and internet access, but rather teaching methods and pedagogical approach (see Escueta et al., 2020; Hansson, 2015; Rouadi & Anouti, 2020).

The pedagogical approach taken by trainees was initially mainly teacher centred. A typical lesson consisted of a trainee giving a lecture by sharing PowerPoint slides, or a pre-recorded video lecture. The pupils were then passive participants, and understandably found the lessons rather monotonous. According to the questionnaire, the pupils suggested that teaching be made more fun and delivered with a smile. The Swedish trainee teachers then faced the same dilemma as the local teachers in the schools. Together, teachers on both sides gradually moved towards a different approach, learning about the technology and attempting to blend pedagogy to create more interactive and personalised instructional videos. In some subjects they offered digital textbooks, this can be a development aspect to integrate at larger scale in the school platform.

Three of the trainees in the first group were teaching foreign languages in Indian and Japanese schools. The pupils stated clearly that they found language learning difficult and therefore they were less motivated. The main social challenge for all the trainees was a lack of understanding of the pupils' context, background, life conditions, and so on. The trainees had been given some relevant information by the course coordinator and supervisors, but as outsiders their understanding remained limited, particularly in terms of relating to a poor setting such as Kenya when coming from a high-income country like Sweden. The trainees also pointed out that in face-to-face teaching, it is possible to use body language and eye contact, to chat with pupils before and after lessons, and so forth. In the online setting, there was a lack of opportunity to

build social relationships, which trainees considered to have a negative effect on learning. Consequently, there is a need for more and other forms of interaction – for instance, through WhatsApp or Facebook Messenger. However, in general, the pupils were satisfied with the teaching provided by trainees. An Indian pupil concluded: "The foreign teacher gave me a wider perspective on the cultures and lifestyles of those in several countries."

Recommendations

Innovation and emergent technology optimism are not enough to ensure quality in online education. There are other aspects to consider such as infrastructure, teachers' digital competence, and the relationships between online resources and learners. Rasheed et al. (2020) and Lenkaitis et al. (2020) point out that an important question in teacher training is how to provide effective online activities for trainees. Trainee teachers have criticised teacher training programmes as being too theoretical when it comes to digitalisation. The digital internship was a capacity-building project, helping to equip trainees with 21st-century skills and foster lifelong learning. It is important for trainees, and pupils, to develop digital literacy, which encompasses skills to access, synthesise, analyse, interpret and critically evaluate information (Kong, 2014).

The trainee teachers in this project developed new perspectives on both the Swedish education system and those of other countries. The trainees increased their global awareness and received new pedagogical ideas about how to integrate digital learning in normal teaching. Further, this internship reached trainee teachers who would not normally have participated in mobility programmes. Trainees have a clear interest in globalisation, but their mobility is limited for various reasons, and it is of importance that trainees still receive global exposure regardless. Online teaching placements are a cost-effective and climate-friendly solution to improve trainee teachers' skills.

The online internship can be scaled up to groups of trainees who can teach abroad when it is suitable both for them and for selected schools. With this said, schools and teachers have learned from the experience to be better prepared for online teaching in the event of a future pandemic or similar disruption.

Limitations

Like any small-scale qualitative study, this research has limitations. The study is limited to three schools in three different countries with a limited number of trainee teachers, and generalisability has yet to be examined in other contexts and cultures. Another notable shortcoming is that not all objectives (social and pedagogical) for a teacher training placement have been examined; nor is there scope in the current article to identify the qualities and behaviours of supervisors.

Conclusion

The coronavirus pandemic that began in 2020 has affected the whole world and will continue to have consequences on a number of sectors for an unforeseen period of time, including education. When national lockdowns came into effect, the schools in this study mobilised quickly to transition from classroom teaching to online teaching. The teachers and pupils had very limited experience of digital tools or online teaching. Three schools in Japan, India and Kenya asked for support from trainee teachers in Sweden, who themselves had limited practical experience of online teaching. This study presents challenges and learning experiences from online teaching both under lockdown and when pupils had just resumed school attendance. While technical challenges were numerous, such as access to the Internet, the key concern at

all three schools related to pedagogical approaches. Pupils came from different socio-economic backgrounds, while teachers applied one and the same pedagogical approach, and there were shortcomings in the understanding of individual differences. In the online environment, teachers and trainees found it difficult to know whether pupils were active and had a good understanding of lesson content. On the other hand, pupils often found online lectures to be less motivating. Subsequently, the trainee teachers encouraged active participation and interaction, which was well-received by the pupils. Thus, a shift took place towards a learner-centred approach which was flexible and provided pupils with a variety of learning choices to make learning useful, exciting and motivating. There are small but important steps to be taken in the wake of the pandemic for developing quality in online education.

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