

Lessons Learned for Teacher Education: Challenges of Teaching Online Classes During COVID-19, What Can Pre-Service Teachers Tell Us?

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Abstract

The rapid outbreak of Covid-19 pandemic was just sudden and dramatic. The current study aimed to identify the challenges facing pre-service English teachers while teaching online classes during school closure due to covid-19 in the spring 2020 and the lessons learned for teacher education. Data were collected through multiple methods, namely semi-structured interviews, with five English pre-service teachers. Inductive and deductive analysis followed, and the study found the followings: 1) there are six significant challenges faced by pre-service English teachers: a) nature of remote teaching, b) content delivery and limit, c) teaching styles, d) online assessment methods, and e) students' interests and differences; 2) pre-service teachers felt lost, anxious, and enter survival stage; 3) focusing on effective integration of technology and developing more aspects of teachers' competence are just some of the lessons learned for teacher education. The study offers some lessons learned for the novel experience of researchers, teachers and other educational personnel.

Keywords: pre-service teachers, virtual learning, Covid-19, challenges, and teacher education.

Introduction

The onset of COVID-19 pandemic has disrupted the lives of many people and strained many schools, colleges and other educational institutions around the world. The outbreak of the epidemic has just been sudden and dramatic (Vellea, Newman, Montgomery & Hyatt, 2020). Due to the spike of infections, many, if not all, teachers found themselves in urgent situations to adjust quickly to remote teaching and go 100 percent online. It was clear, moreover, that online classes and remote learning will likely be around for considerably a long time due to the health measures and restrictions.

However, there are some rising concerns about the quality of remote teaching and the teachers' capability to adjust and effectively deliver their lessons during this novel pandemic (Auxier & Anderson, 2020). Although online and virtual classes help in the continuity and flexibility of learning for students, the quick shift from traditional to remote learning and virtual teaching affected teachers unevenly and made teaching occurred in a completely unprepared and sudden

environment. The current teaching environment made teaching fraught with many significant challenges for all teachers in general and pre-service, in particular (König, Jäger-Biela & Glutsch, 2020).

As the situation of Covid-19 still evolves, it is essential for teacher education to learn lessons by first specifying the challenges associated with online teaching during covid-19 in order to be overcome. Although the majority of students today are assumed to be digitally literate, some pre-service teachers, and in some cases the majority of them, are not tech-savvy or even able to adopt remote teaching and online apps to teach (Basilaia & Kavadze, 2020).

The novel epidemic situation confronted teachers with entirely new challenges and more complicated struggles with online teaching (Huber and Helm 2020). However, the real challenges and common factors relevant to those challenges are still unknown (König, Jäger-Biela, & Glutsch, 2020). The current study aimed to investigate the challenges associated with teaching online classes from the pre-service teachers' perspectives teaching English in private schools or colleges during the spring 2020 term. The study aimed to address: 1) what are the challenges faced by pre-

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service teachers in the spring 2020 term, and 2) what are the lessons learned for teacher education programs.

COVID-19 and Saudi Education

Saudi Arabia has been one of the countries that had been hit by COVID-19. As a result, all schools and college campuses in Saudi Arabia, as in many other countries, were forcibly closed. Moreover, all types of teaching and learning prompted to go online and become 100 percent virtual starting March 09, 2020 (Author, 2020). Consequently, teachers lived a new, unprecedented situation of not being with their students inside in classrooms or even maintain minimum effective communication with their students (König, Jäger-Biela, & Glutsch, 2020).

What makes the current situation more challenging is that teacher education programs in Saudi Arabia and largely around the globe are heavily dominated by traditional approaches of teaching and learning, and the emphasis on the integration of technology in teaching effectively is unsatisfactory (Al Zahrani, 2015; Liu, 2012; Peeraer & Van Petegem, 2011; Polly, Mims, Shepherd & Inan, 2010). Consequently, the ability to successfully deliver the lectures should be investigated and challenges should be discussed.

With the rising number of confirmed covid-19 infected cases in Saudi Arabia, many lenient policies took place in favour of students. College students, for instance, were given the freedom to be absent from their classes with no penalties, withdraw from their courses at any time, and not counting any grades less than their current GPAs. Moreover, content delivery of curriculum was a bit affected. Many teachers and students were facing some technological difficulties or disruptions due to the online teaching readiness or literacy (author, 2020).

Moreover, spring semester of 2020 was indeed a unique and challenging term for pre-service trainees. They often spend the first three to four weeks of the semester observing classrooms with hands-on learning. They are also expected to work and interact effectively with the host teachers. In or after the fourth week, pre-service teachers begin to teach lessons gradually to students under the supervision of the host teachers. However, due to the coronavirus related issues, the pre-service teachers were not able to observe classrooms fully or cooperate with their host teachers in the ways they usually and traditionally would.

What makes the situation more complicated is that many of the host teachers were having some difficulties themselves teaching online classes with

many disruptions and discontinuities. Amidst of this situation, pre-service teachers teaching at private colleges were struggling with little assistance and even training from their teacher education programs. They did not get a continuous and comprehensive feedbacks from their host teachers or program mentors. They, or at least some of them, were also left behind, and were not fully able to address their concerns regarding what or what not to teach, how to teach or even how to assess (Barnesa et la., 2020).

Literature Review

With the unexpected outbreak of COVID-19 pandemic, teaching has become harder and more demanding with uncertainties to overcome. Recent studies have shown that many pre-service teachers often face many challenges in their teaching practice to enter survival stage rather than learning from experiences (Korthagen, 2010; Secret Teachers, 2020). However, current literature still has a gap on the challenges faced by early career teachers as a result of the quick and unprepared shift to online teaching. As the situation evolves more, pre-service teachers found themselves with little help or guidance: 'some thrive, some sink and most find it difficult but struggle through' (Secret Teachers, 2020).

Teaching at the time of the novel pandemic is different and an unprecedented experience for all teachers and students. Muacevic & Adler (2020) stated that the rapid increase in the number of confirmed covid-19 cases has created a sense of anxiety and panic among students and teachers alike about the current situation and what might happen in the future. The worries about their safety, health and wellbeing not only for teachers and students, but also their families and loved ones increase the level of anxiety and stress. As a result, teaching and learning were both happening stress and uncertainty which would eventually lead to some undesired effects on both teachers and students (Kafka, 2020; Zhai & Du, 2020).

In this emerging situation, moreover, König, Jäger-Biela & Glutsch (2020) stressed the fact that the current situation requires teachers to have a series of competences, more than just knowledge and skills; it also requires confidence in their abilities to be successful in online teaching. Similarly, they pointed out the importance of teachers' self-efficacy as one of the significant features of teacher competences. Self-efficacy means, as Bandura (1997) defined it, the degree to which teachers' beliefs in their abilities to succeed in emerging or specific situations. The degree to

which teachers obtain such efficacy greatly influence the efforts and actions they take or the length they could sustain these challenges (Tschannen-Moran and Hoy 2001).

Similarly, Baran (2011) argued that despite the spread of online classes among students, some teachers are still having some considerable doubts about the value and quality of online teaching practices. In this novel current pandemic, Adnan & Anwar (2020) believed that the transition or moving from traditional teaching method to distance online classes would not be smooth or even easy. The quick shift would surely cause many obstacles and challenges (Crawford, Butler-Henderson, Rudolph, & Glowatz, 2020).

The challenges faced by teachers, and pre-service teachers in particular, are just a reality. The current literature highlighted some of those challenges. Content knowledge and delivery of the knowledge has, for instance, been a challenge stated more often in recent studies. Tynjälä and Heikkinen (2011) found that one common challenge faced by the early career teacher was the inadequate knowledge of subject content and skill. They, moreover, stated that most of the pre-service teachers feel that their teacher education inadequately provided them with the skills and attributes needed in teaching (Boakye & Ampiah, 2017). As a matter of fact, Watson (2006) found that for most teacher education programs, there is a mismatch between the curriculum contents in the teacher education and the field of experiences.

In addition, assessment and evaluation types and procedures used during online teaching is considered as a big challenge. Due to the difficulties of proctoring the tests, for instance, many schools and universities in Saudi Arabia waived their semester-end final exams or change the norms or forms of the assessment (Barnesa et al. 2020). On the other hand, despite the fact that online and distance teaching have been around for quite a long time, the assessment and evaluation aspect of it is still underdeveloped (Timmis, Broadfoot, Sutherland & Oldfield, 2015). They, moreover, believe that applying the same traditional methods of assessments is a challenging task in remote teaching. During this current epidemic, moreover, many instructors adjusted the forms of their tests or adopted new ones just to fit the online mode regardless of suitability or effectiveness.

However, without the proper type of assessment, it might be difficult for teachers to diagnose students enough and fulfil their needs (König, Jäger-Biela & Glutsch, 2020). Similarly, ethics often associated with multiple types of

online assessments is another challenge. Watson and Sottile (2020) stated that it is indeed difficult to monitor students' behaviours during online or distance learning which might result in some misconduct actions during online assessments such as cheating. Kaur (2020) believed that what had made the situation worse is that face-to-face assessments are not possible to conduct online during COVID-19.

Although we live in the era of digital devices, teacher education programs have been under scrutiny for not effectively or even sufficiently integrate technology in the curriculum. In fact, several recent studies highlighted current teacher education programs themselves as essential reasons for the challenges faced by pre-service teachers for those programs a) focus heavily on theory rather than practical skills (Tynjälä & Heikkinen, 2011); b) isolates the pre service from their counterparts with little help or guidance, if any; c) ineffective or even satisfactory of technological integration (Boakye & Ampiah, 2017; Al Zahrani, 2015); d) heavily dominated by the traditional approaches of instruction (Katyal, 2010; Liu, 2012; Peeraer & Van Petegem, 2011); e) little, or not at all, constructive and useful feedbacks for pre-service teachers about their teaching performance and weakness (Tynjälä & Heikkinen, 2011; Boakye & Ampiah, 2017).

In Saudi Arabia, as in many other places, the lack of technology integration and digital devices in the curriculum of teacher education programs have been discussed in current studies (Al Zahrani, 2015; Alsharidah, 2012; Bingimlas, 2010). The calls have been made for current pre-service teacher preparation programs around the globe to integrate technology more to have adequate virtual teaching skills in the study plans. The focus should be on the three main skills: basic technological literacy, skills of teaching associated with technology and the use of this knowledge during placement (Liu, 2012; Teo, Lee & Chai, 2008).

For instance, in their study investigating the attitudes of 85 EFL teachers in Turkey towards integrating online teaching, Hismanoglu & Hismanoglu (2011) used mixed methods, a survey and semi-structured interviews with 22 EFL teachers. The study found that the majority of respondents had negative attitudes towards and perceptions of integration technology in classrooms due to the lack of training and lack of confidence using these technical apps and devices. Moreover, possible technical difficulties were a significant factor for such attitudes and perceptions along with some factors such as lack of technical support and

the unfamiliarity of online assessment methods and tools.

Indeed, the intensity of the transition to remote teaching during COVID-19 pandemic is unprecedented and challenging. Adjusting or even adopting teaching styles to be more meaningful and effective and suite the online teaching is necessary (Mayadas, 2019; Adnan & Anwar, 2020) as there is a difference between well-designed effective teaching and the ones that done overnight. Several recent studies have as well stated that the teacher education should greatly provide the pre-service teachers with the following three main skills: computer literacy, basic knowledge and training for using different educational technologies in teaching, and practice utilizing the technological devices effectively in their instruction (Alzahrani, 2015; Liu, 2012; Teo, Lee & Chai, 2008).

Method

The current study used multiple data collection methods, namely online survey and semi-structured interviews, to achieve the triangulation of data. Purposive sampling consisting of (24) surveys and semi structured interviews with five pre-service teachers, 3 males and 2 females, teaching English in some private colleges during the spring semester 2020 participated in the study. Purposive sampling was used because of the limited number of primary data sources due to the few number of pre-service students doing their practicum during COVID-19 pandemic. The semi-structured interview method as an exploratory qualitative technique allows for more involvements in discussing of the themes or issues freely and in depth (Beyea & Nicoll, 2000). All the pre-service teachers participated in the study were teaching English in private colleges in the central and western regions of Saudi Arabia. The participants' length of teaching practices and training varied and ranged from 1 to 4 months.

The data collection began early April and continued till the end of the school year in May. As for the survey, the current study adopted Jäger-Biela, Kaspar, and König (2020) survey on the pre-service and early career teachers' competence during their training in teacher education. The survey scale consists of six content areas ranging from less-order 'operation of the program' to the highest-order 'problem solving' to measure whether pre-service teachers are adequately prepared for online teaching and emerging situations through their teacher education programs.

All interviews were conducted in English,

recorded, and transcribed. Before each interview, the informant was given sufficient information regarding the purposes and questions of the study. The interviewees were assured about the confidentiality of data and their rights to participate or withdraw at any time. Their participation was completely voluntary and for research purposes only. The pre-service teachers' ages ranged from 22-26 (Mean= 23), and were coded as 'ST1, ST2,ST5'. The following table summarizes the characteristics of interviewees.

Table 1. Demographic Characteristics of interviewees

Codes	Age	Gender	length of experience
interviewees:			
ST1	24	M	1 month
ST2	26	M	4 months
ST3	25	F	3 months
ST4	25	M	2 months
ST5	24	F	3 moths

Before the interviews began, some leading open-ended questions were written and in mind which were: 1) the challenges of teaching English online as a result of the sudden switch to online teaching, and 2) the lessons learned for teacher preparation education. Although the researcher conducted the interviews with guiding questions, the interviews were open to follow informants' leads into areas that arose during the interviews. The interviewees were asked to talk about the challenges they were facing in teaching online during spring 2020 term. Each interview lasted approximately 25 minutes.

Data Analysis

To analyse the qualitative data, a typological model of analysis was used. LeCompte & Preissle (1993) define the typological analysis as "dividing everything observed into groups or categories on the basis of some canon for disaggregating the whole phenomenon under study" (p. 257). Typological analysis has three types all of which were used in the analysis: open coding, selective coding and categories. In the qualitative data, as Hatch (2002) states, it was possible to see patterns, identify themes, and make some relationships or categories. Data analysis, moreover, immediately followed the conducted interviews. Some excerpts were included to take the readers inside the contexts and allow them to hear informants' voices.

Linear regression was also used to analyse the quantitative data in exploring the relationship of the two predictive variables with the challenges

faced by the pre-service teachers. Field (2009) noted that, "Regression Analysis enables us to predict future outcomes based on the predictor variables"(p. 198). SPSS, the Statistical Package for Social Sciences, was used. The analysis of some potential factors influencing the pre-service teachers' ability to perform better or even their control over possible challenges during covid-19 closures, separate models of regression were used with each of these six challenges as a criterion variable. Other variables adopted from König, Jäger-Biela & Glutsch (2020) study were used as predictor variables with some indicators.

Results

The *RQ1* explored some real challenges faced by the pre-service teachers in teaching online classes during covid-19 in spring 2020. Five pre-service teachers were interviewed. The qualitative data, as Hatch (2002) indicates, allows us to see patterns, identify themes, and make some relationships from informants' perspectives; it 'creates a sense of having been there' (Guba & Lincoln, 1985, p.149). Data analysis, moreover, immediately followed the conducted semi-structured interviews. Some powerful examples were selected to support the findings.

It was clear from the informants' discussions that asynchronous online teaching and learning delivery is and could be an *effective* and *safe* substitute for traditional instruction when time requires. One of the good thing was that content delivery and learning continued with no disruptions during school closures. However, the shift to remote learning was quick and dramatic despite lack of funds, technological literacy, and readiness. The analysis of qualitative data revealed the six challenges faced by pre-service teachers:

1) Nature of remote learning

Many pre-service teachers pointed out that schools, districts and colleges should understand the nature and requirements of online teaching and remote learning. Not all students and teachers could have stable internet connections, and not all students could secure available mobile devices or desktops, especially those students with poverty, learning difficulties, and/or technological literacy. With the quick and sudden shift to remote teaching, there were so many things to do and handle. It was a sudden and unprecedented situation. ST3, for instance, clearly stated that

"Well, it has been a rough term for us all with many ups and downs. It was unprecedented situation for all teachers,

students, and parents. Also, not all

students have full access to teaching and learning systems, platforms, and

devices. Honestly, I felt myself lost sometimes."

Pre-service teachers were thus feeling left behind. The intensity and urgency of transfer to the complete remote teaching in spring 2020 term required some adjustments to content, instruction and lesson plans. Of course, not all instructors and students could easily and quickly adjust to remote learning in order to deliver good lessons and effectively engaged students in the class.

2) Teaching content and limits

During covid-19 and due to the intensity of time and fear of internet interruptions and other technological issues, focusing only and merely on the basics while teaching was a common practice. However, some, if not all, pre-service teachers were challenged by the limits of content knowledge delivery; they do not exactly know what the basics are and how to teach them. ST4 clearly stated this practice:

ST4: *'In every day and for each topic, I was told to ask myself one important*

question: what is the important thing for my students to do or know or

practice? I already know that it is hard for students and their parents to

keep up with me all the class time. I had many technological problems and

sometimes we could not hear each other. So, I usually limit the scope of the lesson and focus only on the most important stuff in the textbook.'

This emerging situation provoked the delivery of content as some of the pre-service teachers tried new things on their own to be more creative and innovative. One of the interviewees, ST5, stated that

I have been cooperating with a colleague to make or share many materials

such as YouTube and other video resources. We are also using other handy

mobile program to deliver the materials and make it clear for interested students.'

3) Feedback & Support

One essential objective for pre-service teacher is to receive continuous and constructive feedbacks from the host teacher, host school principal, colleagues and even parents. However, spring 2020 was a different term in which the amount and quality of the feedbacks received by the pre-teachers were indeed affected. During the current

situation, pre-service teachers received limited, interrupted support and inconsistent feedbacks. Several of the pre-service teachers explicate the situation as ST1 who stated that

ST1: 'I was connected with a host teacher, and things were going smoothly. But, when covid-19 hit here, the shift to remote teaching was so quick and greatly affected me a lot. Honestly, I did not receive proper feedbacks and supports from the host teacher because he was busy with his own difficulties.

Sometimes, I don't know what to teach, how to teach, and what my weaknesses and strengths are in teaching. I needed just to get the job done!

Indeed, the pressure of time and the novelty of the situation resulted in fear and anxiety for some schools, teachers, and educational staffs. Schools, teachers, and other educational personnel were busy dealing with the situation, adjusting the plans, and enacting some lenient or temporary policies. All pre-service teachers interviewed expressed the change and modification of teaching methods and styles.

4) Teaching Styles

Experiencing some teaching methods is one of the main objectives in pre-service teacher training. It gives them the opportunity to see what method is effective and what method suits them and what it does not. However, the intense and dramatic shift to remote teaching created a sense of confusion. As a result, redesigning the teaching styles was a common way to survive. Some informants stressed this issue

ST 4: *'I am the kind of person who values the human connection and always*

try to build a good and sometimes strong relationship with my students.

But, with remote learning, I just could not feel the same of connection.

And sometimes I can't tell if students hear me or even paying attention.'

ST5: *'I teach English, and I love English. But solving a grammatical problem*

or explaining a poem is not the most important outcome for teaching

English, at least not now. This experienced reshaped my teaching styles greatly.'

It was clear that reacting to the new situation pushed the pre-service teachers from teaching to survival stage. However, the teaching itself is a new thing for them and teaching lessons that they have never taught before. Moreover, assessment for the students whom the pre-service teachers just met

for the first time was indeed a challenge.

5) Assessment of students

One of the big challenges faced by the pre-service teachers was the assessment and evaluation procedures of students; because of their novice teaching career and lack of experience, pre-service teachers reported that they do not really know or even certain if their students understand or were able to do and perform the skills. ST3 clearly stated that

'Honestly, it was difficult for me to conduct a clear assessment and evaluation

for my students due to disruption of communications or internet connections.

So, I am not sure if my students really mastered the skills and understand the topics. I always give them more grades than they actually deserve.'

Moreover, the pre-service teachers are usually overwhelmed with the new possible profession for them, new materials to teach, and new responsibilities to handle. However, teaching students that the pre-service teachers meet for the first time was indeed a big challenge. Students come from different backgrounds, different status, and more importantly different interests.

6) Students' differences and interests

Although we live in a technological era, the premise that all teachers and students are tech-savvy or even have the interest is not supported or even accepted. Teaching through a learning platform or learning system might be a difficult thing to do for even the most expert teachers or those with a long time of teaching. Moreover, drawing the attention and focus of students is indeed difficult for even expert teachers. ST4 clearly stated that

ST4: *'In this year many unexpected issues or emerging situations happened.*

For me, I found myself learning and embracing the different platforms

of technologies that I did not choose or even familiar with. What made

the situation worse was that not all students are interested in the subject

or even me. They all know I am temporary.'

Another pre-service teacher, ST2, stated

ST2: *'It's been a huge challenge to find the best ways to support students'*

needs and deal with their individual differences.

I wish we learned in

the teacher preparation programs to meet the unpredictable needs and

characteristics of students.'

This quote indicates some direct comments regarding the teacher education in which study plan need to focus more on dealing effectively with students' differences.

Findings from regression analysis

The study RQ 2 related to the potential factors influencing the challenges faced by the pre-service teachers during the novel epidemic. Each of the six challenges was specified as a dependant variable

using regression analysis. On the other hand, several other related variables were used as predictors. Technological literacy and self-efficacy, the belief of ability to succeed, were used as indicators for teacher competence. The two components of teacher education (instructional confidence and study plan) were used as indicators for teacher education, as they turned out as significant predictors in preliminary analysis. The significant results of the regression analysis is shown in the table 2.

Table 2. Regression analysis finding for factors affecting the challenges

OA	FB	SI	TS	IT	OC	
						<i>Teacher Competence</i>
.14	-.01	.23*	.25**	.39 ***	.35 ***	Technological literacy
.07	.30 **	.36 **	.19	.27 **	.15	Self- efficacy
						<i>Teacher Education issues</i>
.27 **	-.07	.25 **	.36 ***	.23 *	.33 ***	Instructional Training
.14*	.12	.20	.22	.31 ***	.25 **	Study Plan
.15	.23	.28	.18	.29	.37	R ²

Note. OC- Online Content, IT- Integration of technology, TS- Teaching Style, SI- Students Interest, FB- Providing Feedback, OA- Online Assessment.

*** $p \leq .001$, ** $p \leq .01$, * $p \leq .05$

The findings of regression analysis, shown in table 2, indicates the variation of online content delivery can be explained significantly to a large degree ($R^2 = .37$) then the effective integration of technology ($R^2 = .29$), which indicates the percentage of variance in the challenges explained by the online content delivery and integration of technology in teacher preparation programs. This means that the All the two independent areas (teacher competence, and teacher education) include significant indicators. Instructional training significantly predict the ability of pre-service English teachers to deal with different types of online formative assessment. Teachers' self-efficacy is a key in predictor when it comes to dealing with different students' interests and feedbacks. Among the teacher competence, technological literacy emerged as a significant predictor for three potential challenges (delivery of online content, integration of technology in instruction, and feeling comfortable with many teaching styles). Instructional training as a significant indicator of the teacher education issues which would predict three essential future challenges. Using different types of online assessments can hardly be explained ($R^2 = .15$) without other predictors.

Discussion and conclusion

Covid-19 has changed many aspects and concepts in life. As the situation evolves, educators, teachers and students need to learn from this difficult time and overcome the series of real and potential challenges and obstacles. During the current pandemic, as the current study found, pre-service teachers felt more challenged like an excessive burden waited on them. The current study shows that the pre-service teachers faced varied challenges during their practicum in this pandemic. The quick shift to remote learning and the differences between online teaching and face-to-face had been just fast and dramatic. Most, if not all, pre-service teachers were not familiar with the virtual learning themselves as they indicated that their teacher education did not prepare them with the real tasks or the necessary skills to get the job done. This finding aligned with the findings of Adnan & Anwar (2020), and Crawford, Butler-Henderson, Rudolph, & Glowatz (2020).

In addition, some of the challenges highlighted in the current study aligned with the recent studies: 1) nature and requirements of remote teaching Mausevic & Adler, 2020; 2) assessment issues as a real challenge indicated in Watson and Scottile's study (2020) and Kaur(2020); 3) students' interests as found in Boakye and Ampiah (2019) and Watson and Sottile (2020); 4) teaching style as found in Mayadas, 2019; Adnan & Anwar, 2020) studies; and 5) student's interest as some students might be not interested or need discipline as this challenge cited Boakye & Ampiah (2019) and Watson (2016) .

Furthermore, the current study provides some

implicit lessons for teacher education programs. More integration of technology as stated in many studies was one of the lessons learned from this pandemic to equip the pre-service teachers with the skills needed. Recent literature has urged for more integration as in Al Zahrani, 2015; Al Sharidah, 2019. Also, focusing on the development of teacher competence is another important lesson learned as cited in the study of König, Jäger-Biela & Glutsch (2020). Self-efficacy as defined in Bandura 1997 and Kafka 2020 is indeed an attribute that pre or early service teachers need.

In addition, current teacher education in Saudi Arabia, and may be in other places elsewhere, need to work more on their study plans to equip the pre-service teachers better with what they actually need. As a result of the current teacher education, the study found those trainees try to survive in their training to keep going rather than learning deeply from their experience. This finding is supported by many previous studies such as Boakye & Joseph (2019) and Tynjälä & Heikkinen (2011).

However, as the study indicated that those challenges and their impacts vary among teachers and schools; some teachers were able to overcome those challenges, some were able to quickly adapt, even to some degree, to remote learning, and some just could not. The pre-service teacher tried to learn new tactics to overcome those challenges and keep going. Teacher education in Saudi Arabia should thus better learn the lessons and prepare trainees for any possible disruptions in the future.

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