

# Teachers' Role during the COVID-19 Pandemic

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A teacher's professional role embodies a multitude of implications. Generally, its meaning has improved through professional experience over time. The concept of a teacher's professional role is dynamic and is formed and reformed through time. The teacher's professional role is indispensable to education. Without the professional role of teachers, school activities are difficult to be carried out effectively.

Keywords: COVID-19 ; teacher professional role ; digital literacy

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## 1. Introduction

The COVID-19 pandemic has unexpectedly affected the educational process worldwide, forcing teachers and students to transfer to an online teaching and learning format. Educators and students had to gradually adapt to the digital educational platform, which is a tremendous challenge for all participants. Undoubtedly, online teaching during the COVID-19 pandemic or current half-virtual education format will bring about professional role changes, career satisfaction alterations, and new requirements for teachers' digital literacy <sup>[1]</sup>. There have been extensive studies on these issues before the COVID-19 health crisis; research on these topics has never stopped. What new research directions are there in the pandemic with the virtual teaching format?

Compared with the traditional face-to-face teaching methods, teachers' professional role, career satisfaction level, and digital literacy have been challenged in the COVID-19 health crisis. Teachers' professional role and their satisfaction level play a crucial role that can affect the completion of curriculums. Meanwhile, remote teaching relied more on computer technology, which profoundly impacted reconstructing education during and after the COVID-19 pandemic <sup>[2]</sup>. The present study tends to explore research areas of teachers' professional role, satisfaction, and digital literacy.

Teachers must have adequate digital literacy to teach online, which is required in the current educational model. Nevertheless, digital literacy alone could not facilitate the teaching process <sup>[1]</sup>. A successful teaching process also involves teachers' professional roles and satisfaction. The three elements are intertwined and essential for overall online teaching and learning <sup>[2]</sup>. The present study explores the changes in teachers' professional role and career satisfaction levels and the challenges to their digital literacy during the COVID-19 pandemic worldwide. The combination of the three elements may enable teachers to perform duties in schools better. Moreover, the present study explores the changes of the role of online higher education as an active agent during the COVID-19 pandemic, because teachers and students are mainly dependent on online-technology-based platforms to sustain their education.

As frontline providers of education, teachers are increasingly important in educational settings, especially in the virtual teaching and learning environments. The COVID-19 pandemic accelerated the process of educational virtualization <sup>[3]</sup>. It seems that education at all levels developed online virtual learning platforms <sup>[3]</sup>. Teachers' profession can be regarded as a motivator to use virtualization in teaching, where many different aspects of the teaching process are connected. The teacher's professional role, as a pedagogue, can solve students' problems <sup>[4]</sup>. A teacher's career satisfaction is a pleasant mental state arising from their appreciation of their work or experience <sup>[4]</sup>. It is important for teachers to feel satisfied with their work or profession. Teachers' digital literacy indicates the ability to use digital resources and virtual learning platforms in the educational environment. Teachers equipped with basic digital literacy will be highly competitive in future online or classroom practice <sup>[5]</sup>. Overall, as a knowledge transmitter, the teacher plays a significant role in virtual educational settings during the COVID-19 pandemic.

## 2. Teacher's Professional Role

### 2.1. Learning to Teach

Numerous studies (e.g., Rodriguez-Segura et al., Almazova et al., Kraft et al., Daumiller et al., Tejedor et al., Konig et al., Perifanou et al.) have shown that with the outbreak of the pandemic, the connotation of the teacher's professional role has undergone a more profound transformation and has become more complex <sup>[4][6][7][8][9][10][11]</sup>. With the pandemic of closed schools, teachers began to teach to meet higher quality requirements <sup>[12]</sup>. It was highlighted that teachers had to prepare for more profound teaching to make up for students' learning loss, resulting in a healing-informed teaching practice <sup>[13]</sup>. From in-person to online, high-achieving educational systems depend on the improved teacher professional role during the COVID-19 pandemic and future hybrid teaching. A survey from the United States showed that although before the outbreak of the COVID-19 pandemic, there had been a shortage of teachers, and on average less than 60% of teachers attached importance to new knowledge of cognition and instructional computer technology. This ratio reached 100% of teachers ranging from Sweden, Spain, Vietnam, Singapore, the Philippines, to China <sup>[14][15]</sup>. The role of teachers has been updated and reinforced at an unprecedented speed to meet the needs of today's society.

### 2.2. Online Learning Guardian of Emotions

The world has witnessed a variation in professional teacher roles from the on-site teaching practice due to the COVID-19 pandemic <sup>[16]</sup>. More was to be conducted by a teacher-led model in online teaching and learning processes, which was different from the student-centered method. Teachers played a more crucial role in monitoring students' learning effects, and their psychological or technical problems appeared in online teaching platforms. Recent studies (e.g., Almazova et al., Daumiller et al., Sales et al., Adov & Maeots) showed that teachers needed to positively influence their students who had problems with self-regulated learning ability, attention, and computer literacy <sup>[6][8][16][17]</sup>. Furthermore, students were inclined to fall into depression or frustration when they met difficulties with distant learning. They could question their ability to learn. Teachers needed to guard learners to adapt and pay attention to their psychological acceptance <sup>[18]</sup>.

RQ2: Are teachers satisfied with their teaching profession during the COVID-19 pandemic worldwide?

### 2.3. Teacher's Career Satisfaction

#### 2.3.1. Decline of Satisfaction Levels

Numerous studies (e.g., Almazova et al., Kraft et al., Daumille et al., Konig et al., Sales et al., Lei & So, Hussein et al., Alves et al., Truzoli et al., Aperribai et al., Hong et al.) revealed that teacher's satisfaction levels dropped and found that they were quickly in emotional exhaustion with the advent of the COVID-19 <sup>[6][7][8][10][16][19][20][21][22][23][24]</sup>. Although teaching half in-person and half distantly now could accelerate teacher's stress, which was closely linked with changes <sup>[25]</sup>, teachers remained frustrated. They felt a sudden sense of failure and depression. Furthermore, teacher's satisfaction could be improved via convenient learning management systems <sup>[20]</sup>. Some anonymous online questionnaires regarding teacher's satisfaction levels carried out in some countries, such as Hong Kong <sup>[26]</sup>, Portugal <sup>[24]</sup>, and Iraq <sup>[20]</sup>, revealed that teacher's professional satisfaction and well-being reduced. In contrast, their positive perception of satisfaction could be testified before the pandemic, which caused some stress and concern about teacher's future careers and teaching difficulties. Furthermore, research showed that teacher's mental conditions were impacted between September 2020 and October 2020 in Australia <sup>[27]</sup>. Overall, the COVID-19 pandemic dilapidated the foundation of teacher's emotional satisfaction, derived from a face-to-face student-teacher relationship in China, Japan, and the United States <sup>[22][28]</sup>. Available reports in a few studies pointed out that female teachers had survived lower satisfaction levels <sup>[29]</sup>. However, existing literature pointed out that teacher's satisfaction had no change during the pandemic and no significant predictors impacted teacher's satisfaction <sup>[30]</sup>. Numerous studies showed that teacher's satisfaction levels dropped with the COVID-19 outbreak although some factors were beyond control.

#### 2.3.2. Solutions

More research literature (e.g., Almazova et al., Kraft et al., Daumille et al., Konig et al., Sales et al., Lei & So, Hussein et al., Alves, et al., Truzoli et al., Aperribai, et al., Hong et al.) aimed to improve school teacher's satisfaction levels. Teacher's sense of satisfaction could be supported with working conditions <sup>[6][7][8][10][16][19][20][21][22][23][24]</sup>. Moreover, keeping their satisfaction could be critical to improving teacher's professional well-being <sup>[20]</sup>. Strong communities and school service quality could help promote teacher's satisfaction in the pandemic crisis <sup>[20]</sup>. If online teaching had become the primary method during and beyond the pandemic, teachers could appreciate this challenge as part of the education system, which was helpful to ease their dissatisfaction levels <sup>[29]</sup>. So, it was necessary to explore teacher's potential and competence towards the shift and motivate them to achieve teaching approach goals via training programs. Meanwhile,

teacher's ability development could reduce their work reluctance and dissatisfaction [8]. Physical activities seemed to affect teacher's satisfaction levels. Data from the research showed that physical activity acted as a curb during the COVID-19 pandemic [23]. Still, some literature demonstrated that teacher's satisfaction levels rose if workloads, parenting stress, and work-family conflicts were reduced [24].

The COVID-19 pandemic has been affecting school teaching and learning processes for two years. Numerous studies have proved that the pandemic resulted in lower teacher's satisfaction levels. However, we could substantially adjust the current situation and make specific guidance interventions in the long run.

RQ3: What is the role of digital literacy during the COVID-19 pandemic worldwide?

## **2.4. Development of Teacher's Digital Literacy**

### **2.4.1. Educational Policy**

Some studies (e.g., Almazova et al., Kraft et al., Daumille et al., Konig et al., Sales et al., Lei & So, Hussein et al., Alves, et al., Truzoli et al., Aperribai, et al., Hong et al.) revealed that the concept of teacher's digital literacy development has been universally accepted in many countries and expected to be blended correspondingly within school education development with the advent of the COVID-19 pandemic [6][7][8][10][16][19][20][21][22][23][24]. Many changes adapted gradually to enhance the online educational environment in countries ranging from the United States, China, Spain, Italy, to Canada [31][32][33]. Local authorities provided some guidelines and encouraged new digital media, new digital competencies, new digital sources, and a new digital learning environment to facilitate sharing resources, which aimed at a multidimensional advancement of teacher's digital literacy [9]. Mainly, digital skills and knowledge were ensured in higher education. Almost all governments and countries in the world strived to improve teacher's digital literacy development at all costs. Organizational collaboration development was also emphasized in many governments worldwide, such as Italy, which built up digital platforms in schools. In Spain, governments provided numerous training programs, such as INTEF, to school staff purposefully and systematically [1].

### **2.4.2. Teacher Involvement**

Current studies (e.g., Daumiller et al., Konig et al., Adov & Maeots, Masry-Herzalah & Dor-Haim) showed that digital literacy played a leading role in high-quality education in current situations [8][10][17][34]. Teachers at all academic levels were eager to develop their digital literacy in a short period owing to the virtual teaching and learning format [32]. They were compelled to adapt to online teaching. It seemed that digital competence had become a necessity in education [34][35]. Furthermore, teaching communities had urgently requested to gain digital skills for information collection, digital teaching content creation, communication, and collaboration. Still, teacher's feedback activities were favored to promote their feedback literacy [36]. However, teacher's digital competencies were low and had to be strengthened, especially in creating digital content, QR codes, and programs to modify software and apps [1].

## **2.5. An Active Agent**

Given that the pandemic continues to spread and derail normal operations, educational institutes adopted extensive online provisions through virtual learning platforms in some countries [5]. Online higher education is still the right choice for most students and is becoming increasingly popular as an attractive option for students during the COVID-19 pandemic. Students' dropout from online higher education could be high for many reasons and online higher education still had much room to enhance students' educational experience [5]. Furthermore, the COVID-19 pandemic helped online higher education gain market popularity and leverage, intentionally or unintentionally.

Overall, due to the paradigm change caused by the COVID-19 pandemic and the shift from traditional in-class education to online education, online higher education should be a promoter of development [5]. As an active agent, it is also expected to handle risks flexibly. It somehow succeeded in realizing more learning opportunities worldwide, which people had promised before. Moreover, in this new online higher education context, those with time, distance, and access difficulties were provided with genuinely accessible learning opportunities. Moreover, as a real change agent, online higher education yielded a substantial return to the investment for universities [5]. Even the pandemic has accelerated online higher education to become an active agent.

RQ5: Does online technology provide a sustainable education in terms of academic success and job readiness before and during COVID-19?

## 2.6. The Role of Online Technology

It was found that online-technology-based sustainable education might be the main tool for making money <sup>[37]</sup>. It could not ensure a sustainable education system for better educational development <sup>[38]</sup>. Online technology in the name of a sustainable education might mislead students for lack of a supply cycle and a specific demand <sup>[37]</sup>. Online-technology-based sustainable education was a tool to earn money. It would tarnish the reputation of higher education for a long time. Consequently, the role of sustainable education will be doubtful <sup>[39]</sup>. Online technology would aggravate the diploma crisis during the COVID-19 pandemic <sup>[39]</sup>. So, a rigid and regulatory framework was needed to ensure the quality of sustainable education; the framework should be driven with application and required revision continuously during the COVID-19 pandemic. Some literature explored a better technique that might be employed to ensure a sustainable education between industry and universities via relieving the diploma disease crisis <sup>[40]</sup>.

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