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Teachers' concerns and teaching experience during the pandemic and beyond: implications for research, policy and practice

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ABSTRACT

This paper reports on findings arising from a wider study aimed at investigating teachers' concerns during the pandemic and their views regarding changes in teaching in the post-COVID context. Adopting a mixed-method approach, data were gathered through a survey including both open-ended and closed-ended questions. The study involved 2,192 teachers from all sectors of education. Both the quantitative and qualitative data indicate that teachers' most frequent concerns are related to students and their families, to their own personal issues, to poor working conditions, and to work-life balance. Furthermore, the findings suggest that the teaching experience during the second lockdown was generally more positive compared to the first lockdown. The participants advocate for changes in the post-pandemic scenario, particularly focusing on continuous professional development, enhancing institutional conditions, and securing access to adequate resources. Differences in responses to sociodemographic questions were also found relating to Remote Teaching Concerns (RTC) and Remote Teaching Experience (RTE). This study offers implications for further research, policy development, and practical applications in the field.

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Introduction

Education around the world has undergone unprecedented change, especially in response to the challenges posed by the COVID-19 pandemic. The key challenge in this context involved the shift to distance learning, which required both students and teachers to adapt to new methods of teaching and learning, highlighting the need for greater flexibility and personalization in education (González et al., 2023). In Portugal, the Digital Transition Action Plan (Resolution no. 31/2020) served as a framework to promote digital transformation and innovation across the country, which involved investments in digital infrastructure, skills development and digital innovation. Additional measures were also taken in order to address the impact of the pandemic on education (Decree-Law no. 20-H/2020), on teachers' work and on curriculum development (Decree-Law no. 10-b/2021). These measures aimed to guarantee the continuity of educational and teaching activities in a fair and equitable way. Nevertheless, teachers had to face a range of challenges and concerns during COVID-19 times. Existing literature reports issues concerning learning loss (Di Pietro, 2023; Flores et al., 2024; Maldonado & De Witt, 2022; NFER, 2020), lack of conditions and access to technological resources (Flores, Machado et al., 2021; Judd et al., 2020) and issues of well-being (Alves et al., 2020; Anderson et al., 2020; Elharake et al., 2023; Folkman et al., 2023; Kim et al., 2022; Tang, 2023; Woltran et al., 2021).

Involvement in distance teaching and learning brought about transformations in teachers' work as well as shifts in the emotional dynamics of teaching and learning, potentially affecting the overall teaching experience (Hargreaves, 2021) and intensifying teacher shortages (Gillani et al., 2022; Wharton-Beck

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et al., 2024). However, some studies suggest that teachers experienced a generally positive adaptation process, managing to implement their pre-planned teaching strategies effectively, even in the face of significant challenges (Flores et al., 2024). Based on these challenges, discussions have emerged around education in the post-COVID-19 era. Although some empirical studies have looked into these issues, more needs to be known in the aftermath of the pandemic. Furthermore, a significant number of published studies tend to be descriptive in nature, providing superficial findings and the absence of mixed-method approaches hinders the ability to obtain a comprehensive understanding of the situation (Woltran et al., 2021). The goal of this study is to integrate data from a comprehensive nationwide online survey including both quantitative and qualitative data. To contribute to the growing literature on the lasting effects beyond the pandemic, this study has focused on teachers' concerns during the second lockdown, comparing their experience of remote teaching between the first and second lockdowns and seeking to understand their perspectives on the changes in teaching in the post-COVID era.

Teachers' concerns and experiences

Several studies have emphasized that one of the most prevalent concerns among teachers was student engagement, particularly as traditional learning environments were disrupted. Teachers had to devise new strategies to motivate students, hold them accountable for their learning, and provide support in remote or hybrid settings (Ávalos et al., 2022; Di Pietro, 2023; Flores, Machado et al., 2021; Francom et al., 2021; Phillips et al., 2024). Multiple challenges had an adverse impact on students' learning experiences, including information overload, the need for advanced technical skills, reduced social interactions (Conrad et al., 2022), and challenges related to access to the internet and computers (Francom et al., 2021). Personal and student-related challenges have also emerged in the literature as significant concerns for teachers during these difficult times. Research highlights the emotional exhaustion experienced by teachers (Chan et al., 2021) and the high levels of stress they faced (Alves et al., 2020; Anderson et al., 2020; Flores, Barros et al., 2021), which may negatively impact student outcomes (Robinson et al., 2023), diminish teachers' sense of agency (Heikkilä & Mankki, 2021), and reduce their capacity to offer creative learning opportunities (Anderson et al., 2020). Given the unexpected changes in family dynamics during these challenging times, working mothers, for instance, faced an increased burden, leading to negative emotions and a decline in their psychological well-being (Clark et al., 2021). Research further indicates that teachers have been increasingly concerned with students' well-being, extending beyond academic performance (Robinson et al., 2023). In fact, teachers often perceive their own difficulties as less significant compared to the challenges faced by their students (Ávalos et al., 2022). Since teachers were not able to closely monitor students' well-being, it was a matter of great concern from the teachers' point of view (Kim & Asbury, 2020). The study by Folkman et al. (2023) suggests that, as a consequence of the pandemic, the role of teachers in ensuring social and emotional well-being has been strengthened. Moreover, with closure of schools, teachers had to balance their work responsibilities with their personal lives. This has been particularly challenging and a cause of concern for female teachers with young children or sick family members (Auger & Formentin, 2021; Rawal, 2023). Other studies found that teachers who had to work from home during the pandemic faced irregular working hours, role conflicts and lack of proper working conditions (Ünal & Dulay, 2022). The inappropriate conditions put a significant pressure on teachers. Different issues were well documented in the literature such as access to technology and software, reliable internet connections and training on how to use digital tools effectively (Francom et al., 2021; Henriques et al., 2021). Time management, particularly the additional time required by remote learning as well as the workload, were also significant challenges for teachers during the lockdown (Prado-Gascó et al., 2020). Teachers had to develop new strategies to manage their time effectively and balance their teaching responsibilities with their personal obligations (Auger & Formentin, 2021; Phillips et al., 2024; Rawal, 2023; Woltran et al., 2021). Research has identified three distinct teacher profiles: 'relaxed teachers', 'worried and stressed teachers', and 'happy workaholic teachers', suggesting that these categories may influence how educators coped with and experienced the changes brought about by the pandemic (Kupers et al., 2022).

Despite the challenges associated with remote teaching during the first lockdown, the extant literature indicates that it also fostered positive experiences in terms of new learning opportunities and the

development of skills for both teachers and students (Flores, Machado et al., 2021). For students, the increased use of digital technology has had a positive impact on learning and engagement, fostering greater adaptability, initiative, and innovation in teaching (Anggadwita et al., 2024). For teachers, it has provided an opportunity to collaborate with new colleagues in professional service teams in ways that were not previously explored (Dissanayeke et al., 2024). These experiences fundamentally reshaped interactions with students by enabling the effective integration of innovative tools to diversify the curriculum (Scull et al., 2020) while also promoting collaborative and interactive learning environments (González et al., 2023). Previous research also supports this perspective, illustrating that, for instance, the adaptation of assessment practices in remote teaching fostered an environment conducive to pedagogical reflection and innovation among educators (Yakimova et al., 2023). The pandemic catalyzed a reassessment of teachers' roles and professional identities, encouraging the adoption of innovative pedagogical approaches while simultaneously questioning established models of continuous professional development (Dempsey & Mestry, 2023). Moreover, existing literature underscored the necessity for more adaptive and responsive teaching strategies that correspond to the changing educational landscape. It emphasized the importance of investing in teacher education and developing learning environments that promote innovative approaches, encouraging collaborative and interactive experiences (González et al., 2023). It is therefore important to better understand the perceptions of Portuguese teachers regarding their concerns, experiences and perspectives about changes in teaching in the aftermath of the pandemic.

Method

Research questions

This study aims to explore teachers' concerns during the second lockdown (2021) and compare the remote teaching experience between the first and second lockdowns but also to understand how they view changes in teaching in the post-COVID era. Subsequently, the following research questions (RQ) were used to guide the present study:

- RQ1. What were the teachers' key concerns in the second period of remote teaching?
 - RQ1.1. Are there any gender differences in teachers' concerns?
 - RQ1.2. Are there any age differences in teachers' concerns?
 - RQ1.3. Are there any differences in teachers' concerns according to teaching experience?
 - RQ1.4. Are there any differences in teachers' concerns with regard to teaching sector?
- RQ2. How did teachers experience the second lockdown compared to the first one?
 - RQ2.1. Are there any gender differences in teachers' experience?
 - RQ2.2. Are there any age differences in teachers' experience?
 - RQ2.3. Are there any differences in teachers' experience according to years of teaching?
 - RQ2.4. Are there any differences in teachers' experience regarding teaching sector?
- RQ3. How do teachers perceive the impact of the pandemic on teaching practices, particularly in terms of systemic changes, teachers' roles, and instructional strategies?

Participants

The sample consisted of 2,192 teachers from different teaching sectors (cf. Table 1). Most participants were female (82.2%) and aged over 50 years old. In addition, 24.6% of the teachers were aged between 51 and 55 years old, 21.7% between 56 and 60 years old, 11.0% between 61 and 65 years old, and .4% aged over 65 years old. The participants are a group of experienced teachers, 21.4% having between 21 and 25 years of teaching experience, 21.8% having between 26 and 30 years' experience, and 20.7% having between 31 and 35 years of experience as teachers (cf. Table 1). Teachers who responded to the online questionnaire taught different subjects. Additionally, 65.3% hold a bachelor's (*Licenciatura*)

Table 1. Participants.

	<i>f</i>	%
Gender		
Male	391	17.8
Female	1,801	82.2
Age		
21–25	4	0.2
26–30	17	0.8
31–35	16	0.7
36–40	114	5.2
41–45	314	14.3
46–50	461	21.0
51–55	539	24.6
56–60	476	21.7
61–65	242	11.0
Over 65	9	0.4
Experience as teacher		
[0–5]	72	3.3
[6–10]	93	4.2
[11–15]	117	5.3
[16–20]	222	10.1
[21–25]	469	21.4
[26–30]	477	21.8
[31–35]	454	20.7
[36–40]	224	10.2
Over 40	64	2.9
Qualification		
Bachelor's Degree	46	2.1
Degree	1,431	65.3
Post-graduation	170	7.8
Master	482	22.0
PhD	63	2.9
Type of school		
State school	2,099	95.8
Private school	93	4.2
Missing	157	
Pupils' socio-economic background		
High	56	2.6
Medium	1,454	66.3
Low	682	31.1
School location		
Urban	980	44.7
Sub-urban	789	36.0
Rural	423	19.3
Region in which the school is located		
North	1,048	47.8
Centre	558	25.5
Lisbon and Tejo Valley	329	15.0
Algarve	103	4.7
Autonomous Region of Madeira	62	2.8
Alentejo	59	2.7
Autonomous Region of Azores	33	1.5
Total	2,192	100.0

degree, 22.0% hold a master's degree and 2.9% a PhD. The participants taught in all education sectors (from preschool to secondary school). The participants are from all regions of Portugal, including the Autonomous Regions of Madeira and the Azores: 47.8% are from the Northern Region, 25.5% from the Center, 15.0% from the Lisbon and Tejo Valley region, 4.7% from the Algarve, 2.8% from the Autonomous Region of Madeira, 2.7% from Alentejo and 1.5% from the Autonomous Region of the Azores. Finally, 95.8% of teachers worked in state schools, 44.7% of the schools are in urban areas, 36.0% in suburban areas and 19.3% in rural areas. The students who attended the participants' schools are predominantly of middle (66.3%) and low (31.1%) socioeconomic status (cf. Table 1).

Instruments

A questionnaire based on a previous study of the experience of teachers in remote teaching, which resulted from both legal and theoretical frameworks related to teaching and assessment, was devised

(Flores, Machado et al., 2021). The survey included both open and closed-ended questions arranged in three sections. Section 1 is composed of 21 closed-ended questions focused on Remote Teaching Concerns experienced in the second lockdown. Section 2 includes 23 closed-ended questions aimed at comparing the remote teaching experience between the first and second lockdown. Section 3 includes the open-ended questions: (1) What were your main concerns during the period between the first and second lockdown?; (2) What was your teaching experience like during the second lockdown? (3) What was your main learning experience? (4) What are you going to change in your practice in the post-pandemic era? Lastly, sociodemographic questions included gender, age, teaching experience and teaching sector. To enhance the validity, sensitivity, and reliability in measuring a comparison of teaching concerns and experiences between the first and second lockdown, we developed two multi-item measures (Sommer & Sommer, 1997; Tabachnick & Fidell, 2007). The items in the survey were tried out for understanding and content validity with an appropriate group of practicing teachers, who provided written suggestions for improving item wording. After conducting content analysis on this material, we created 21 items that tap teachers' concerns regarding personal issues, students, and their families, working conditions and work-life balance and a further 23 items describing teachers' experience in terms of teaching strategies, assessment, technical conditions of remote teaching and collaborative work. The description and validation processes of the two questionnaires are described below. Both measures were developed in the Portuguese language.

Remote Teaching Concerns in Pandemic Times (RTC)

The original version of the questionnaire is composed of 21 items that reflect four themes emerging from the previous procedure described above. Teachers' concerns and challenges included issues related to themselves (sample item: *Concerns about my health*), students and their respective families (sample item: *Concerns about students' emotional well-being*), working conditions (sample item: *Concerns about weak internet connection*), and work-life balance (sample item: *Concerns about how to separate work from family life*). RTC instructions asked teachers to indicate the frequency of worrying about a number of professional and personal issues in the second phase of remote teaching (which in Portugal took place in March–April 2021). Answers followed a five Likert-type scale ranging from (1) 'never' to (5) 'always'.

RTC validation. The 21 items were submitted to principal component analysis. Results indicate KMO value of .88 which is considered adequate for factorial analysis (Kaiser, 1974; Tabachnick & Fidell, 2007). Based on the criterion of eigenvalues greater than 1 and the examination of the scree plot (Stevens, 1992), a four-factor solution was submitted to varimax rotation. The solution obtained was considered meaningful and items with factor loadings equal or greater than .40 were retained. Only one item was excluded. The final instrument retained 20 items divided into four aspects. The total questionnaire accounted for 63% of the variance. The first factor 'Personal issues' consisted of six items that accounted for 23% of the total variance. Items analysis suggest that this factor assesses teachers' concerns and challenges related to themselves and their family (e.g. *Concern with my children's mental health*). The second factor 'Students and their families' is composed of 6 items that accounted for 16% of the total variance. One sample item is *Concern with students' learning*. The third factor named 'Working conditions' consists of 5 items that accounted for 13%. One sample item is *Difficult access to the computer*. Finally, the fourth factor entitled 'Work-life balance' accounted for 12% of the total variance and constitutes three items. This factor included items such as *Not having a quiet place to work at home*. To evaluate the internal consistency reliability of the Remote Teaching Concerns (RTC) in Pandemic Times, Cronbach' Alpha was computed. RTC showed strong internal consistency reliability, with a Cronback Alpha of .96. This analysis was also undertaken for each factor separately and the results also showed good internal consistency reliability (Walsh & Betz, 1995) for all factors ($F1 = .91$, $F2 = .84$, $F3 = .75$, and $F4 = .79$). Factor scores were obtained by the sum of respective items divided by their number. Consequently, higher scores reflect higher frequency of Remote Teaching Concerns reported by teachers.

Remote teaching experience in pandemic times (RTE). The original version of the questionnaire is composed of 23 items that reflect teachers' experience in terms of teaching, assessment, technical conditions, and collaborative work while engaged in remote teaching during the second lockdown.

RTE instructions asked participants to compare their remote teaching experience as compared to the first lockdown experience. Answers followed a five Likert-type scale ranging from (1) 'totally disagree' to (5) 'totally agree'. One sample item includes 'I used more suitable teaching-learning strategies for remote learning' and 'I felt less stressed about the student assessment process'.

RTE validation. The 23 items were submitted to principal component analysis in the IBM SPSS program (v.26). Results indicate KMO value of .94 which is considered adequate for factorial analysis (Kaiser, 1974; Tabachnick & Fidell, 2007). Based on the criterion of eigenvalues greater than 1 and examination of the scree plot (Stevens, 1992), a four-factor solution was submitted to varimax rotation. The solution obtained was considered meaningful and items with factor loadings equal or greater than .40 were retained. The final instrument retained the 23 items distributed by four dimensions. The total questionnaire accounted for 60% of the variance. The first factor named 'Teaching' consisted of nine items that accounted for 22% of the total variance. Items analysis suggest that this factor assesses more positive teaching experiences in the second lockdown than in the first (*e.g. I adapted the moments and means to give feedback to the students in a more efficient and balanced way*). The second factor concerns 'Assessment' and is composed of eight items that accounted for 19% of the total variance. One sample item is *There was greater articulation between teaching-learning objectives and assessment*. The third factor named 'Technical conditions of remote teaching' consists of three items that accounted for 10%. One sample item is *There were less technical problems*. Lastly, the fourth factor entitled 'collaborative work' accounted for 9% of the total variance and constitutes three items. This factor included items such as *I developed more collaborative work with colleagues in my disciplinary group*. The *Remote Teaching Experiences in Pandemic Times* (RTE) questionnaire showed strong internal consistency reliability (Cronback Alpha = .94). This analysis was also undertaken for each factor separately and the results also showed good internal consistency reliability (Walsh & Betz, 1995) for all factors (F1 = .90, F2 = .85, F3 = .75, and F4 = .70). Factor scores were obtained by the sum of respective items divided by their number. Consequently, higher scores reflect more positive teaching experience in the second lockdown as compared to the first.

Data collection and ethical issues

Data collection included information on the aims of the study and assurance of confidentiality was guaranteed. Participation in the study was entirely voluntary, and all participants were provided with clear, detailed information about the purpose of the research, its procedures, and their right to withdraw at any stage without any consequences. Informed consent was obtained prior to data collection, and participants were assured that their data would only be used for research purposes and kept confidential at all times. After providing informed consent the online questionnaire was disseminated. A link to the survey was created through Google forms and sent out to the teachers via the directors of the Teachers' Professional Associations and Teachers' Unions with a request to forward it to associated teachers. Teachers from all sectors of education were invited. A non-probability convenience sample was used. The research project was carried out according to international educational research ethics standards, specifically concerning data confidentiality, informed consent, voluntary participation, and the use of data only for research purposes. The project was approved by the Ethics Committee for Research in Social and Human Sciences at the University of Minho (Ref. CEICSH 055/2020). Participants were informed about the goals of the project before giving their consent. The link to complete the questionnaire and the research protocol was sent to all participants, all of whom confirmed their voluntary informed consent to participate in the study. Anonymity was maintained by assigning unique, non-identifiable codes to all participants, ensuring that their responses could not be traced back to their identities. Any identifying information was excluded from the dataset and securely stored in compliance with data protection regulations.

Data analysis procedures

Data were analyzed with IBM SPSS Statistics v.26. Descriptive analysis was used to explore the teachers' key concerns in the second moment of remote teaching (RQ1) and teachers' experience of the second lockdown in comparison to the first one (RQ2). To test gender differences (RQ1.1. and RQ2.1.) we ran

two-sample independent T-tests. To explore differences across groups based on age group, teaching experience and teaching sector (RQ1.2., RQ1.3., RQ1.4., RQ2.2., RQ2.3. and RQ2.4.) data was analyzed with analysis of variance (ANOVA) followed by post-hoc tests in the case of groups with more than two categories. Data collected through open-ended questions were analyzed through content analysis guided by the principles of completeness, representativeness, consistency, exclusivity and relevance (Bardin, 1977) and by recognizing the interactive nature of the data analysis process (Miles & Huberman, 1994). For content analysis, the definitions of more general categories were privileged (Bardin, 1977), articulating an inductive (emergent character of the data) (Cho & Lee, 2014) and a deductive perspective through the definition of categories in light of the research goals and theoretical framework (Ezzy, 2002). The categories of analysis were semantic (Miles & Huberman, 1994).

Findings

Remote Teaching Concerns (RTC)

Remote Teaching Concerns (RTC) descriptives (mean and standard deviation) by total sample, gender, age group, teaching experience and teaching sector are presented in Table 2. Considering the total sample, the most frequent concerns reported by teachers relate to students and their families followed by personal issues. Two-sample independent T-tests were run to analyze differences in the four factors by gender. Results show a significant effect for gender in 'Personal issues' [$t(1401) = -2.83$, $p = .005$] and 'Students and their families' [$t(2013) = -4.80$, $p < .001$], with women reporting higher levels of concern than men. However, there were no significant gender differences regarding concerns about 'Working conditions' or 'Work-life balance' [$t(1766) = -.46$, $p = .884$; $t(1629) = -1.60$, $p = .110$, respectively]. Analysis of variance showed differences by age group related to the frequency of concern with 'Personal issues' [$F(2,1400) = 12.566$; $p < .001$], 'Working conditions' [$F(2,1765) = 10.396$; $p < .001$] and 'Work-life balance' [$F(2,1628) = 121.975$; $p < .001$] but not with 'Students and their families' [$F(2,2012) = 1.956$; $p = .140$]. Results from post-hoc comparisons suggest that concerns with personal issues and work-life balance differ among the three age groups and successively decrease with age. Additionally, concerns with working conditions are higher in the youngest age group than in the two older groups. Less experienced teachers reported the highest frequency of concerns with 'Personal issues' [$F(2,1400) = 7.718$; $p < .001$], 'Working conditions' [$F(2,1765) = 19.855$; $p < .001$] and 'Work-life balance' [$F(2,1628) = 113.877$; $p < .001$] but not with 'Students and their families' [$F(2,2012) = .922$; $p = .398$]. Finally, ANOVA results suggest an effect of teaching sector in all factors, namely 'Personal issues' [$F(3,1281) = 3.091$; $p = .026$], 'Students and their families' [$F(3,1843) = 11.735$; $p < .001$], 'Working conditions' [$F(3,1614) = 8.396$; $p < .001$] and 'Work-life balance' [$F(3,1495) = 9.145$; $p < .001$]. Post comparison tests show that secondary teachers reported the lowest level of concern compared with the other sectors.

Table 2. Remote Teaching Concerns (RTC) descriptives by factors.

		Factor 1		Factor 2		Factor 3		Factor 4	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Total sample		3,46	1,01	3,64	0,72	2,28	0,79	2,69	1,07
Gender	Male	3,30	1,09	3,48	0,73	2,27	0,83	2,60	1,08
	Female	3,49	0,99	3,68	0,72	2,28	0,78	2,71	1,07
Age	<46	3,66	0,92	3,63	0,71	2,42	0,76	3,34	0,99
	46–55	3,46	1,00	3,62	0,74	2,27	0,80	2,66	1,03
	>55	3,28	1,08	3,69	0,71	2,18	0,79	2,25	0,96
Teaching Practice in years	<26	3,57	0,96	3,62	0,74	2,40	0,79	3,08	1,04
	26–35	3,37	1,04	3,67	0,70	2,18	0,77	2,43	1,00
	>35	3,32	1,08	3,64	0,72	2,13	0,78	2,07	0,91
Teaching Sector	1st cycle	3,58	0,94	3,78	0,71	2,42	0,76	2,82	1,08
	2nd cycle	3,52	1,02	3,71	0,69	2,29	0,80	2,65	1,04
	3th cycle	3,46	1,01	3,60	0,72	2,28	0,81	2,82	1,06
	Secondary	3,35	1,06	3,52	0,72	2,15	0,74	2,49	1,06

Note. Factor 1 = Personal issues, Factor 2 = Students and their families, Factor 3 = Working conditions, and Factor 4 = Work-life balance.

According to teachers' open-ended responses, the most frequent concerns were also related to students and their families followed by personal issues. The lack of adequate working conditions and work life balance also emerged as concerns in teachers' responses.

Students and their families

Students' well-being was identified by teachers as a cause of great concern. Fragile emotional states, suicide attempts and the growing anxiety felt by students were identified by teachers as an aspect that made them feel uncomfortable. Particularly, the difficulties of some students to manage their emotions led to an increase in the number of students with anxiety and depression, even with regard to the possibility of having the disease (COVID-19). These issues had repercussions on students' well-being and on their learning and engagement. During this period, teachers were also faced with some constraints regarding their students and their families since the situation allowed them to get to know more closely the reality of many students' lives. Teachers essentially refer that they were sad and worried about the economic difficulties of students' families, particularly the poor living conditions in their homes, and the lack of basic necessities such as hygiene and food. One class director mentioned 'I was concerned about the economic difficulties of the families of some students who were forced to appeal to the food baskets provided by the municipality' (T. 868). Teachers therefore report that the educational community mobilized to help hungry and needy families with regard to essential goods. Teachers also stated that they were worried since the economic/emotional difficulties that many families were going through meant that 'many students in 12th grade class had to start working to help at home, arriving at classes clearly exhausted' (T. 1853).

All of these issues had implications for students' support, parental control and supervision. Several teachers spoke of the lack of any kind of students' monitoring at home 'both in terms of digital technology and in terms of meeting schedules and carrying out tasks' (T. 1373). In some cases, this lack of control was due to parents having to work with the result that 'several students have to be left alone at home, at their mercy, due to the need for parents to go to work and older siblings having to take care of the younger ones' (T. 418). In some cases, in addition to the lack of parental supervision and failure to monitor children's schooling during lockdown, teachers spoke of lack of parental authority 'I've witnessed children giving orders to their parents and deliberately disobeying parental authority' (T. 644). However, in other cases, teachers identified parental negligence and behaviors that often disrupted the learning environment during online classes. They highlighted instances where some parents failed to provide adequate support for their children's learning and, in certain situations, displayed disrespectful attitudes toward teachers' work. For example, teachers reported parents interfering directly in synchronous classes, providing answers to students, or engaging in irrelevant conversations during lessons. These behaviors not only undermined the teacher's authority but also blurred the boundaries between home and school, creating additional challenges for maintaining an effective learning environment.

The intrusion of parents during synchronous classes, giving answers to students and attempts at dialogue during classes on issues beyond the discipline of English and my task as a teacher. (T. 362)

The negative attitudes of some parents in front of the computer allowed me to better understand the living conditions of some children and their relationship with their parents. (T. 1266)

Students who already face significant challenges in face-to-face learning struggled even more with distance learning. Despite parents becoming aware of these difficulties, it was still difficult to convey the importance of attending synchronous classes, completing assigned tasks, and participating in support lessons. (T. 1410)

It was challenging to manage some conflicts between parents and children in the middle of a synchronous lesson. I had to intervene, even from a distance. (T. 912)

Finally, broken and dysfunctional families of some students deserved great attention and concern on the part of the teachers. Teachers observed that the attitudes and actions of some parents revealed deeper systemic issues, such as strained family relationships and unsuitable living conditions, which impacted students' ability to engage fully in their education. As teachers reported,

There were family members attending classes and mouthing off to their children about the lesson, with the microphone switched off (especially in dysfunctional families with poorly educated people ...). (T. 798)

Students who had dysfunctional families were at a great disadvantage. It was a very difficult year. (T. 1462)

In some cases, teachers were informed and sometimes witnessed far from pleasant situations such as students calling for help in cases of domestic violence in the home.

Personal issues

Several teachers spoke of physical and psychological illnesses as well as negative emotions felt by them during this period, namely states of anxiety, depression, or burnout. For instance, other teachers reported feeling anxious, particularly regarding the pressure that they felt to have everything planned on time and to be able to meet the syllabus and students' assessments. According to teachers they lived through hard times:

My almost burnout ... and I persisted in continuing to work, because my students had a national exam. I think I crossed my limit. (T. 1393)

Being at home and having to work directly with students who don't want to know anything about school and didn't show up for online classes. It was suffocating, emotionally very draining to be confined at home and in the end having to say what you did to capture these students. (T. 680)

The difficulty of sleeping, given the number of professional and family tasks to deal with, which led me to burnout. (T. 397)

In some cases, teachers reported that the excessive workload, combined with a lack of recognition, significantly contributed to the development of stress, anxiety, depression, and burnout. This lack of appreciation for their efforts is identified as a key factor in worsening physical and emotional exhaustion, highlighting the need for better working conditions.

I had more anxiety and anger from the excessive, undervalued workload of teachers. (T. 1502)

We have had a lot of work and a lack of recognition from our leaders. (T. 698)

Working conditions

Teachers perceived the lack of adequate working conditions as a difficulty that led them to be concerned about students' learning. Particularly, teachers highlighted some situations 'good students who wanted to be more active in class and in carrying out tasks and the technological means they did not allow it' (T. 1495) or 'Having to go to a student's house, put the PC in conditions to attend classes so as not to be marked as a lack of attendance, because he lives with a 75-year-old grandmother' (T. 1793). As one teacher shared:

Some students who, in March, did not have the necessary technological means for work and, in good Portuguese fashion, had to manage with their cell phones, taking advantage of the internet in neighboring cafés to complete their tasks. (T. 1242)

In addition, some teachers also highlighted the fact that the internet went down due to overload, since they gave synchronous classes while their children attended their classes too. A teacher also drew attention to the lack of physical conditions such as 'rooms with open doors and windows at a time when it was extremely cold, without the possibility of turning on the air conditioning' (T. 1320).

Work-life balance

The imbalance between family life and work in the lives of teachers in this period is mainly guided by work overload, as has already been mentioned above, which does not allow teachers to pay attention to their families, in particular to younger children. One teacher mentioned that 'my daughter is in her first year of school and I cannot follow her online activities because I am teaching classes at the same time' (T. 392). In the teachers' responses stands out the difficulty to manage their personal life with work in these conditions

The management of my professional activity with schedules, tasks and school obligations for my three minor children, in addition to accumulating with the necessary domestic tasks: meals, organization, cleaning. (T. 545)

The fact that I was alone at home with two young children who were students and had to manage everything ... was a big challenge. (T. 607)

I take away the certainty that the teacher is a 'jack of all trades', who reinvents the teaching activity whenever he/she is confronted with new situations and uses his personal equipment and the familiar communications package that he/she has or doesn't have without expecting anything in return, with the main objective being the integral development of the students. (T. 656)

In this regard, some teachers consider that the government's response was late and inadequate, particularly regarding the issue of teachers, parents of children of preschool age or younger who, not belonging to the group of essential workers, could not leave their children in the kindergartens or pre-schools, being forced to work with very young children at home. According to some teachers, they received emails and phone calls from students at dawn, and that constant lack of separation between the personal/family dimension and professional aspects was a cause for great concern and one of the least positive aspects of the pandemic.

Receiving a phone call from a student at ten past midnight crying because she couldn't complete an assignment because of the computer/net. (T. 1544)

Phone calls from students' parents after 10pm. (T. 762)

Remote teaching experiences (RTE)

Remote Teaching Experiences (RTE) descriptives (mean and standard deviation) by total sample, gender, age group, teaching practice and teaching sector are presented in Table 3. Considering the total sample, we may say that in general the teaching experience during the second lockdown was more positive when compared to the first as all the means are equal or above 3.26. In descending order, there were positive changes in 'Teaching', 'Assessment', 'Technical conditions' and 'Collaborative work'.

Two-sample independent T-tests were run to analyze differences in the four factors by gender. When comparing the first to the second lockdown, results show a significant effect for gender only in 'Teaching' [$t(2190) = -2.94, p = .003$]. Women reported higher levels of positive change related to the teaching experience in the second lockdown than men. There were no gender differences in terms of changes in 'Assessment', 'Technical conditions' and 'Collaborative work' [$t(2190) = -.96, p = .336$; $t(2190) = -1.38, p = .165$ and, $t(2190) = .20, p = .841$, respectively]. Analysis of variance did not show any difference in remote teaching experience changes from the 1st to the 2nd lockdown among age groups ['Teaching' $F(2,2189) = 1.207$; $p = .029$; 'Assessment' $F(2,2189) = .818$; $p = .441$; 'Technical conditions' $F(2,2189) = 2.450$; $p = .086$; 'Collaborative work' $F(2,2189) = 1.533$; $p = .216$], neither in years of professional practice in terms. ['Teaching' $F(3,1281) = 3.012$; $p = .059$, 'Assessment' $F(3,1281) = .430$; $p = .650$; 'Technical conditions' $F(3,1281) = .432$; $p = .655$; 'Collaborative work' $F(3,1281) = 2.747$; $p = .064$].

Lastly, ANOVA results suggest an effect of teaching sector in 'Assessment' [$F(3,1998) = 3.763$; $p = .010$], 'Technical conditions' [$F(3, 1998) = 6.055$; $p < .001$], 'Collaborative work' [$F(3, 1998) = 3.286$; $p < .020$] but not in 'Teaching' [$F(3, 1998) = 2.064$; $p = .103$]. Post doc comparison tests show that secondary teachers reported lower levels of positive change in terms of assessment and technical conditions when

Table 3. Remote Teaching Experience (RTE) descriptives by factors.

		Factor 1		Factor 2		Factor 3		Factor 4	
		M	SD	M	SD	M	SD	M	SD
Total sample		3,82	0,60	3,51	0,66	3,41	0,83	3,26	0,78
Gender	Male	3,74	0,60	3,48	0,61	3,36	0,82	3,27	0,77
	Female	3,84	0,60	3,52	0,67	3,42	0,84	3,26	0,79
Age	<46	3,82	0,61	3,49	0,68	3,37	0,86	3,28	0,79
	46–55	3,84	0,57	3,53	0,64	3,45	0,81	3,28	0,79
	>55	3,80	0,62	3,50	0,67	3,37	0,85	3,22	0,81
Teaching practice in years	<26	3,84	0,57	3,53	0,65	3,40	0,82	3,30	0,76
	26–35	3,83	0,61	3,51	0,66	3,43	0,85	3,25	0,79
	>35	3,74	0,64	3,49	0,69	3,38	0,85	3,17	0,84
Sectors of teaching	1 st Cycle	3,84	0,62	3,56	0,70	3,37	0,88	3,35	0,79
	2 nd Cycle	3,83	0,60	3,52	0,63	3,48	0,81	3,28	0,77
	3 rd Cycle	3,87	0,54	3,58	0,64	3,53	0,80	3,24	0,79
	Secondary	3,78	0,63	3,45	0,64	3,34	0,85	3,21	0,78

Note. Factor 1 = Teaching, Factor 2 = Assessment, Factor 3 = Technical conditions, and Factor 4 = Collaborative work.

compared to teachers in the 3rd Cycle. Additionally, secondary teachers also reported lower levels of positive change in collaborative work but only when compared to teachers in the 1st Cycle.

Overall, according to teachers' open-ended responses in the survey, teaching experience during the second lockdown was generally more positive when compared to the first. Most teachers spoke of greater digital literacy and increased mastery in the use of educational platforms and digital tools in the 2nd lockdown, highlighting 'easier access to webinars and other training actions' (T. 4) as well as 'greater ability to select what is really important to develop with/for students' (T. 42). During the second lockdown, having learned from the previous experience, students and teachers showed greater ability to adapt to different situations. Teachers pointed out that in the second lockdown there was the 'possibility of more meaningful learning in an online context' (T. 900) and there was also better curriculum management, including the assessment process:

There was more time for deep reflection on the design of learning contexts as a whole (gestalt) on the relationship between learning objectives, design of tasks and resources, and respective assessment and feedback and feedforward. Defending the minimalist assumption that "less is more": negotiating with students the division of classes into shifts (alternately synchronous and asynchronous), enabled improvement in the quality of learning: students now have more time to focus on tasks (and respective production/realization); more time for feedback given and understanding of learning objectives; the quality of communication/attention to each and every one improved significantly. (T. 38)

In a similar vein, teachers spoke of more 'diversification of formative assessment and increased feedback' (T. 88). Some teachers, albeit fewer, also suggested that with the 'intensification of digital [learning]' in the second lockdown, there was 'greater appreciation of citizenship and collaborative work' (T. 1156).

Changes after the pandemic

Teachers' experiences during the implementation of distance learning have highlighted the need for several changes in the educational system, with an emphasis on adequate resources and equipment; structural and institutional conditions; professional development for teachers; distance learning and in-person teaching; student autonomy and effective monitoring of learning; and teachers' and students' wellbeing.

Adequate resources and equipment

Most teachers stressed the importance of ensuring that both students and teachers have access to appropriate technological devices and stable internet connections capable of supporting the demands of remote teaching. As some teachers noted:

All students and teachers should have access to computers and the internet; it is essential that all families have access to IT equipment [...] and the school should provide technicians to fix any issues. (P. 695)

There is a lack of technical and material support for teachers... lack of legal framework for the various professional practices of distance learning. (T. 2063)

Another statement reinforced this need: 'Provide participants with equipment; demand reliable speeds and connections from service providers; allocate more class time for ICT throughout the curriculum; reduce the teaching load of teachers' schedules; reduce the number of students per class; assign more teaching hours to those in leadership positions; training'. (T. 2396). Additionally, suggestions were made for partnerships with state bodies and subsidies for the acquisition of equipment: 'Subsidies for the purchase of technological equipment (for both teachers and students) is important' (P. 1683). This recognition underscores the urgency of providing equitable access to education and continuous technical support, preventing the difficulties experienced by both students and teachers.

Structural and institutional conditions

Teachers also emphasized the importance of improving structural and institutional conditions, particularly regarding reducing bureaucratic overload. Many participants pointed out that the time spent on unnecessary administrative tasks detracted from the quality of teaching and their own well-being. Some teachers commented that:

It is necessary not to overload teachers with unnecessary bureaucracy. (P. 849)

To adopt strategies for making the most of and optimizing distance learning/work by reducing bureaucracy and encouraging flexibility, which can only be achieved with creativity, entrepreneurial spirit, innovation and efficiency. Something that can be recognised as scientifically credible and as an enabler of innovative learning. (T. 2062)

Other teachers suggested the need for clear rules regarding the functioning of online platforms: 'clear rules regarding work schedules and functioning, including break times, should be established' (P. 276). Additionally, the creation of new assessment criteria adapted to remote teaching was identified as essential: 'create new assessment criteria; methods and materials in various formats that facilitate the completion and marking of work' (P. 2507).

Professional development for teachers

Teachers also acknowledged that while they had managed to adapt to remote teaching, the lack of specific training in digital pedagogy and technological tools limited their effectiveness. As some teachers stated:

It is essential to provide teachers with specific training in distance learning pedagogy. (P. 136)

More training will also be necessary for teaching in a virtual environment, as I feel that at times I merely transferred the classroom method to the online setting. (P.249)

Others expressed the need to learn more about technologies in order to apply them creatively in teaching: 'Gaining more knowledge about new technologies to apply in projects' (P. 62). Training in digital assessment was also seen as urgent, given the inadequacy of traditional methods in the online context: 'Training on how to assess students accurately in distance learning is needed' (P. 2031).

In some cases, teachers highlighted the opportunities provided by e-learning and digital tools to enhance their professional development and collaboration with colleagues. The integration of these resources not only facilitated the continuation of classroom practices but also allowed for the exploration of new tools and methodologies, particularly for those already accustomed to using digital technologies in their teaching.

Distance learning enable me to do more training and share constructivist resources/methodologies with colleagues. As I worked in a workshop class, it was easy to continue with distance learning. I already used a lot of digital resources, I learnt a lot more tools, but it was already a classroom practice. (T. 2109)

Distance learning and in-person teaching

In relation to proposed changes teachers also suggested adopting in future a hybrid model (blended learning) that combines face-to-face classes with asynchronous activities. The flexibility of this system was seen as a way to optimize teaching, allowing students to learn at their own pace while maintaining the essential face-to-face interaction. One teacher highlighted:

If possible, I believe we should consider a system of both in-person and remote classes, which would be much more suitable for the demands of the 21st century. Some students were more motivated because they could work at their own pace; however, everyone missed the presence of friends and the classroom environment. I see the blended learning system as an option to explore. If we have to opt for full distance learning again, it is necessary to ensure digital equipment for everyone, effective internet access, training, and to provide teachers with more time in their schedules for preparing materials and activities, as well as for grading assignments. In other words, we cannot assume the same type of school schedule. I felt that during these months, I was always "online," whether in class or responding to students, grading and preparing assignments, attending meetings, etc. In that sense, it was difficult. (P. 282)

Others advocated for better regulation of distance learning: "Just as face-to-face learning is regulated, so too should distance learning be". (P. 185)

Student autonomy and effective monitoring of learning

Some teachers pointed out that students generally lacked the necessary skills to manage their own learning effectively during remote education. One teacher remarked: 'Distance learning works well with adults [...] but home dynamics are different' (P. 211), underscoring the need to cultivate greater

responsibility and autonomy in students. Alongside this, teachers highlighted the difficulties in ensuring consistent engagement and monitoring student activities in virtual environments. As one teacher explained, 'Platforms should allow more effective use of cameras and microphones [...] to monitor the authenticity of student work' (P. 107). To address this challenge, they emphasize the need for the development of more engaging resources, such as videos, quizzes, and interactive images, to foster greater independence in student learning within these contexts.

The degree of autonomy of some students in the pedagogical use of some platforms is very limited. (T. 809).

More resources (videos, quizzes, interactive images) should be created to encourage student autonomy during their learning in these contexts. (T. 831)

Teacher and student well-being in remote teaching

The well-being of both teachers and students emerged as a critical concern during remote education. Teachers reported high levels of stress and exhaustion, with one sharing that 'it was a period of loneliness, anguish, and a lot of tiredness' (P. 1556), and another describing the emotional toll of the second lockdown, stating, 'I felt desolate, sad, and crying compulsively when, on 22 January 2021, we returned to another lockdown' (P. 2183). These testimonies reflect the significant emotional pressure educators faced, underscoring the urgent need for measures to promote a better work-life balance and support their mental health. Equally important, the well-being of students was highlighted, alongside the need for family collaboration. Teachers emphasized that effective remote learning requires closer collaboration with families, noting that 'Parents need to be more involved to help students feel supported at home' (P. 226). This partnership is crucial for ensuring that students maintain their emotional well-being and effectively navigate the challenges of distance learning. The interplay between teacher and student well-being, along with strong family engagement is vital for the overall success of remote education.

Conclusion and discussion

This study aimed at exploring teachers' concerns in the second moment of remote teaching (RQ1), teachers' experience in the second lockdown as compared to the first one (RQ2) and teachers' perceptions of the impact of the pandemic on teaching practices, particularly in terms of systemic changes, teachers' roles, and instructional strategies (RQ3). In general, the most frequent concerns reported by teachers focused on students and their families followed by personal issues. Studies elsewhere also found that teachers consider their students' personal issues more problematic than their own personal issues, which corroborate the results of this study (Ávalos et al., 2022; Auger & Formentin, 2021). Regarding the variable gender, most available studies focus on teachers in higher education settings. However, the few studies carried out in lower teaching levels found that female teachers reported higher levels of stress and work-life balance challenges than men (Alves et al., 2020; Klapproth et al., 2020) although childcare duties were reported as an important factor that impacts the work-life balance of both female and male teachers (Leo et al., 2022). Work-life balance is particularly destabilized by having to teach remotely at the same time as homeschooling children, caring for parents and by teachers' own anxiety or mental issues (Auger & Formentin, 2021; Rawal, 2023). However, the study carried out by Rawal (2023) shows that the support from family members was essential to maintain work-life balancing during the pandemic. Thus, since female teachers are traditionally likely to have more caregiving responsibilities, this aspect corroborates the findings of the present study since women reported higher levels of concern about 'Personal issues' and 'Students and their families' than men. These results may be further explained by the higher number of female teachers than male teachers in the teaching profession, especially in the primary teaching sector. The fact that younger teachers report more frequent concerns about 'Personal issues', 'Working conditions' and 'Work-life balance' is expected since they are teachers in the initial phase of their career, working in unfavorable conditions, and often still likely to have their own children to take care of. These findings are in line with earlier research (Flores et al., 2024). Less experienced teachers reported the highest frequency of concerns regarding 'Personal issues' 'Working conditions' and 'Work-life balance', the assumption being they are younger teachers since they have less

experience and professional stability. The fact that secondary school teachers reported the lowest level of concern about 'Personal issues', 'Working conditions' and 'Work-life balance' compared with the other sectors may be explained by the fact that these teachers are more likely to have access to better working conditions, namely resources and structures, since secondary schools are usually located in the main building of school clusters. Teachers who teach at this level may have collaborative work practices, or greater opportunities for sharing and discussing among peers, unlike preschool and basic education teachers who work more in isolation in separate buildings. In addition, the teachers' open-ended responses in the survey also reveal that the COVID-19 pandemic brought about great concern with respect to students and their families, their personal issues as well as lack of adequate working conditions and work-life balance. This study highlights the significant role of gender and career experience in explaining teachers' concerns, particularly around work-life balance and personal issues. Female teachers and younger, less experienced teachers face greater challenges, suggesting the need for targeted support policies, such as flexible work arrangements and mental health resources. The findings also emphasize the importance of providing better working conditions, particularly for teachers in primary and early education settings, who often work in isolation and lack adequate resources. Additionally, studies could explore how collaborative work practices in secondary education might mitigate concerns about working conditions and support teachers in other teaching sectors.

Regarding the teaching experience during the second lockdown, qualitative and quantitative data show that it was generally more positive when compared to the first one. Specifically, teachers spoke of more digital literacy and greater mastery in the use of educational platforms and digital tools in the second lockdown and opportunity for better curriculum management, including new learning and more feedback in the assessment process. The fact that secondary level teachers reported lower levels of positive change in terms of assessment and technical conditions when compared to teachers in the 3rd Cycle could be explained by several complex reasons. It is possible that secondary school teachers faced unique challenges in comparison with 3rd cycle teachers, since at this level of education external assessment tests are carried out, particularly preparation for the national exams that allow access to higher education. Future research could explore the long-term effects of these adaptations on teaching practices and student outcomes, particularly in subjects with high-stakes assessments as it is the case of secondary education. Regarding technical issues, this may be related to the fact that the headquarters of school clusters are usually located in secondary schools, and thus, in the first lockdown, they were among the first to receive technological resources, while in the second lockdown the equipment and technical conditions were extended to the remaining schools. Women also reported higher levels of positive change in 'Teaching' related to their experience in the second lockdown than men. Since women have a more active role as caregivers, this result may be explained by the fact that in the second lockdown they were already more adapted to online teaching and to the management of time dedicated to family and work. Secondary school teachers also reported lower levels of positive change in collaborative work compared to teachers in the 1st cycle. There could be several reasons for this difference. For example, teachers who teach at secondary level are busier with external assessment, which does not occur in the 1st cycle or perhaps since in the first lockdown there was a tendency for teachers to unite more and work together to overcome the difficulties brought about by COVID than in the second lockdown. The positive shift in teaching experiences during the second lockdown, particularly in terms of digital literacy and curriculum management, emphasizes the value of continuous adaptation and professional development for teachers. However, data also suggest that targeted professional support, including time management and technical training, should be prioritized for both male and female teachers.

Regarding teachers' perceptions on changes in the post-COVID context, qualitative findings highlight areas for improvement. Teachers stressed the pressing need to bridge the digital divide, with many reporting that both students and teachers encountered significant challenges due to insufficient access to appropriate technological devices and stable internet connectivity. This limitation critically impacted the effectiveness of remote teaching, a concern that has been extensively documented in the relevant literature (Flores, Barros et al., 2021; Hass et al., 2023; Kamaludin & Sundarasan, 2023; Roy et al., 2023). Another critical change identified pertains to the excessive administrative workload, which negatively impacted teaching quality and significantly contributed to teacher burnout. Participants emphasized the

importance of simplifying bureaucratic procedures and establishing clearer guidelines for online teaching, including optimized scheduling and revised assessment criteria suited to digital environments. This aligns with findings from other studies, where teachers reported increased emotional exhaustion, experiencing the pandemic as particularly detrimental to their mental and emotional well-being (Elharake et al., 2023; Folkman et al., 2023; Tang, 2023). Other studies reveal that, compared to pre-pandemic conditions, teachers experienced a decline in well-being during the first lockdown in April 2020. However, by July 2020, teacher reports suggested a recovery in well-being as the school year ended (Kim et al., 2022). These results collectively highlight the dual pressures of administrative overload and emotional pressure, underscoring the need for structural reforms that address both workload management and the mental health of teachers.

The pandemic also revealed significant gaps in teachers' digital competencies. While many teachers adapted to the shift to online teaching (Flores et al., 2024), the lack of formal training in digital pedagogy limited the effectiveness of their efforts (Beattie et al., 2022; González et al., 2023; Teichert et al., 2023). Teachers expressed the need for training, particularly in using technology creatively in their teaching practices and designing digital assessments suited to online learning environments. In addition, there was broad support for exploring blended learning models that combine face-to-face and online activities. Teachers noted the flexibility these models offer allowing students to learn at their own pace while retaining essential in-person interactions.

However, concerns were raised about the increased workload associated with such systems, especially without additional time for preparation and grading. This indicates that any move toward blended learning must be accompanied by structural changes, including adjustments to teacher workloads and support mechanisms, to ensure its sustainability and effectiveness. This finding is consistent with other studies suggesting that, in the post-pandemic context, institutions must develop comprehensive visions that provide support, clear structure, and a unified strategy to normalize blended learning and promote its sustained adoption (Hill & Smith, 2023). Teachers further noted that students often struggled with autonomy and self-management during distance learning, particularly younger learners. Other studies are also in line with this finding, noting that learner autonomy is vital in shaping students' experiences during distance education (Eberle & Hobrecht, 2021) closely linked to their personal traits and motivation to take responsibility for their learning. In distance learning contexts, innovative learner-centered approaches should be prioritized to foster autonomy (Fotiadou et al., 2017). There is a clear need to foster students' autonomous learning and ensure that virtual classroom tools effectively monitor engagement and maintain academic integrity. This highlights the importance of strategies that encourage student responsibility and robust monitoring systems in future distance learning scenarios, as institutional policies should strive to balance academic integrity with a positive experience for both students and teachers (Gribbins & Bonk, 2023). Fostering student autonomy in distance learning should be prioritized, with research examining how to use learner-centered approaches and technology to monitor engagement and maintain academic integrity.

Finally, the well-being of both teachers and students was also of concern. The emotional toll of the pandemic, particularly during extended lockdowns, was considerable, with many educators reporting feelings of isolation, stress, and burnout. Similarly, students faced challenges in maintaining motivation and engagement without the regular structure and social interaction of the classroom. Teachers emphasized the need for policies that promote a better balance between work and personal life, as well as mental health support for teachers. Additionally, they pointed to the crucial role of family involvement in supporting students' emotional well-being and learning, underscoring that effective remote education requires strong collaboration between schools and families. The remote schooling period negatively affected both teachers and students in various aspects of teaching, learning, and well-being. Students' learning experiences and peer interactions strongly influenced their well-being, while assessment design and teacher feedback were key factors in predicting teacher well-being (Burke et al., 2023). Our findings are consistent with this and other studies emphasizing the importance of incorporating elements related to personal well-being, both for students and teachers, into the broader assessment of educational quality (Klusmann et al., 2022; Woltran et al., 2021).

Implications for research, policy, and practice

Finally, this study provides implications for research, policy, and practice. In terms of research, there is a need to investigate teachers' experiences throughout the pandemic that can provide valuable insights into how to support and retain teachers in the future. Research can also explore the effectiveness of different teaching methods during the pandemic and identify best practices for hybrid and remote learning. Additionally, this study underlines the need for further exploration of the specific challenges teachers encounter during remote teaching, especially across diverse contexts, including various educational sectors and demographic groups (such as urban vs. rural areas, public vs. private schools, or varying age groups). Such insights would help create tailored solutions for different settings and ensure that all teachers and students receive the necessary support to overcome technological and pedagogical barriers. Future studies could investigate the long-term effects of these experiences on teaching practices and teacher well-being as well as the changes that have occurred in the post-pandemic context.

As for policy, there is a need to address the challenges that teachers faced during the pandemic, including increased workload, lack of resources, and lack of support. Policies that provide financial and material resources, mental health support, and professional development opportunities can help reduce these challenges and support teachers in their efforts to provide quality education to their students. Policymakers can also consider flexible work arrangements, such as reduced work hours or job-sharing, to support teachers' work-life balance. An investment in education and the professionalism of teachers to address these constraints are required in the future (Phillips et al., 2024) as well as the fact that discourse on curriculum should be central to the post-COVID-19 agenda in view of teacher education, and in teaching in general (Biberman-Shalev et al., 2023). The future of teaching in the post-COVID-19 context will involve increased utilization of virtual and digital learning within traditional in-person school settings, based on a transition toward hybrid models of curriculum delivery and new virtual modes of professional collaboration (Hargreaves, 2021). Thus, given the significant increase in remote and hybrid teaching, it is crucial that educational policies invest in ongoing professional development programs for teachers, focusing on digital skills as well as adaptive pedagogies for online teaching. Additionally, students should receive deeper, more contextualized training in the use of digital tools to ensure they can fully benefit from technology in the learning process.

As far as practice is concerned, there is a need to develop strategies that support teachers' and students' well-being (Klusmann et al., 2022), which is in line with a current trend in education based on a shift away from solely prioritizing learning outcomes as the sole indicator of high-quality education. Instead, there is a growing recognition of the importance of incorporating aspects such as personal well-being, both for students and teachers, into the evaluation of educational quality (Elharake et al., 2023; Folkman et al., 2023; Woltran et al., 2021). Teachers also need access to adequate technology and resources to facilitate effective teaching and learning. School leaders can support teachers by providing access to resources and technology, creating a supportive and collaborative work environment, and providing training in digital technologies for parents, teachers and pupils (Beattie et al., 2022). Moreover, there is a need to review educational curricula to ensure they are more flexible and suitable for the new realities of hybrid and digital learning. This involves reimagining how content is delivered and how assessments are conducted, promoting an approach that prioritizes student-centered learning and competency acquisition rather than just content coverage. Schools should be encouraged to adopt a more interdisciplinary and integrated approach, allowing for more fluid and adaptable learning to meet the individual needs of students.

Understanding the concerns and teaching experience of teachers during the pandemic is crucial for research, policy, and practice. By addressing the challenges faced by teachers during the pandemic, policymakers and school leaders can better support teachers and provide quality education to students. It is clear that reflective practices and collaboration among educators play a vital role in improving crisis responses. This aligns with Manca and Delfino's (2021) findings, which emphasize the importance of leveraging favorable preexisting conditions and fostering a strong shared school culture to enable prompt and effective reactions to an unexpected situation. Nonetheless, the future of teaching after COVID-19 will be complex, uncertain, and contingent on policy decisions and professional directions (Hargreaves, 2021). Attention needs to be given to opportunities to prepare the way for teachers to explore

innovative methods of promoting successful instructional delivery in the times to come (Cahapay & Anoba, 2020). It is essential to initiate a curriculum-based structural shift while reimagining pedagogical methods within the realm of post-COVID-19 education (Biberman-Shalev et al., 2023). By embracing these challenges and changes, teachers will not only enhance their teaching practices but also create a more resilient and adaptive framework that addresses the evolving needs of students as well as their own needs.

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