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Teacher education in times of COVID-19 pandemic in Portugal: national, institutional and pedagogical responses

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ABSTRACT

This paper focuses on the national, institutional and pedagogical responses as a result of the closure of schools and universities in March 2020 in Portugal. It includes a brief description and analysis of the initiatives and responses to the crisis as well as the difficulties, the challenges and the opportunities. The paper concludes with the discussion of the implications for teaching and teacher education in such uncertain times, particularly in regard to the role of practice as well as issues of mentoring within the context of a practicum as a 'real practice' versus 'an ideal(ised) practice'.

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Introduction

The spread of the COVID-19 pandemic has affected all sectors in society and, in particular, education. The COVID-19 crisis has led to an education crisis (Education International 2020) for which no one was prepared. School closures worldwide have affected millions of pupils the effects of which are yet to be known. 'Emergency remote teaching' as a temporary solution (Bozkurt and Sharma 2020) has been adopted in order to mitigate the effects of the pandemic on education.

Internationally, it is possible to identify contributions and recommendations to support teachers and schools to put into place an 'emergency remote teaching' (e.g. COL 2020; OECD 2020). The use of online platforms has been a reality in many contexts. While some see in this unprecedented, rapid and forced shift from face-to-face to online teaching (or 'online emergency remote teaching', Bozkurt and Sharma 2020) an opportunity to change education or even a 'revolution' that needs to be continued, others are more cautious and call into question its implications in terms of equity and social justice. Clearly, issues of inequalities and exclusion in education became even more visible and critical during and in the post-COVID period.

Existing literature points to the impact of COVID-19 on teaching in many parts of the world, particularly in terms of difficulties, constraints and challenges faced by governments, institutions and stakeholders (Zhang et al. 2020; Judd et al. 2020; NFER 2020; Huber and Helm 2020). Other publications focus on experiences, innovations and strategies to deal with remote teaching (Ferdig et al. 2020) as well as descriptions of how institutions

and stakeholders adapted to the new scenario created by COVID-19 pandemic (Moorhouse 2020; Zhang et al. 2020; Bao 2020).

In this paper, we look at the national, institutional and pedagogical responses in the Portuguese context as a result of the closure of schools and universities in March 2020. It includes a brief description and analysis of the initiatives and responses to the crisis as well as the difficulties, the challenges and the opportunities. The paper ends with the implications for education generally, and particularly for teacher education.

National response to the COVID-19 crisis in the education sector: school closure and policy initiatives

In an effort to mitigate the spread of the COVID-19 pandemic, the Portuguese government decided to close down all schools in the country on 16 March 2020, just two weeks before the Easter break. As such, schools and teachers had rapidly and suddenly to adapt to what can only be described as an unprecedented emergency educational response. This situation entailed a number of challenges the most critical of which was the existence of inequalities in the access of electronic means (equipment and internet access) to ensure adequate online teaching to all children and young people.

In order to deal with the sudden transition from face-to-face to remote teaching, the Ministry of Education developed a number of initiatives. First, a set of guidelines for schools to organise online teaching and learning was issued. This so-called 'Roadmap – Guiding Principles for the Implementation of Distance Teaching E@D in Schools' (DGE 2020a), issued on 27 March, provided schools and teachers with suggestions and recommendations for setting up a strategy for developing remote teaching in the face of existing conditions in each school and community. This document identifies eight broad guiding principles: mobilising for change; communicating in network; deciding on the model for Remote Teaching; collaborating and articulating teachers' work; defining teaching methods; selecting the technological means for remote teaching; taking care of the school community and monitoring the development of the activities. Amongst other features, the Roadmap emphasises the need to involve the stakeholders to find the best solutions for each context, the building of a remote teaching plan adequate to existing resources and characteristics of the student population and the articulation among all the stakeholders. As stated in the same document, the aim is to 'make sure that all children and pupils continue to learn in the present context' (DGE 2020a, 1). According to the document issued by the Ministry of Education, the support from Microsoft and Google would help in the process 'of adaptation and enlargement of the use of digital platforms for remote teaching' (DGE 2020b). Most of the schools decided to use synchronous sessions through the online platforms Googlemeet and Classroom Teams provided, free of charge, by Google and Microsoft, respectively. Some schools also used the Skype and Zoom platforms, the latter had some issues related to its limited use in the free of charge version as well as some security problems. Teachers made the most of the potential of the Moodle platforms that already existed in their schools before the COVID-19 pandemic.

It is worth noting the key role of local institutions and authorities. They were aware of the needs of the communities, and helped in collecting worksheets and tasks from schools and delivering them to the pupils' homes. They also returned those sheets/tasks to the schools. In other cases, those institutions helped in providing pupils with

equipment and/or opening their facilities for pupils to receive the tasks sent to them by their teachers.

Another initiative developed by the Ministry of Education relates to broadcasting educational content on national television (*RTP Memória*), a programme called *#EstudoEmCasa* (Studying at Home) which was launched on 20 April. This initiative made available educational resources for pupils in elementary education (from year 1 to year 9: 6 years old to 15 years old). A timetable was provided and lessons were presented by teachers from Monday to Friday. The programme was seen as an important resource for pupils without access to the internet or equipment but it could also be used by teachers to organise their teaching activities within the context of the Remote Teaching plan in each school. A recent study conducted in Portugal revealed that only 15,3% claim that they always use the *#EstudoEmCasa* programme to support their teaching activities (Flores, Machado, and Alves 2020).

In addition, two other initiatives were developed to support teachers and schools in the transition to online teaching: i) the provision, in partnership with the Open University, of a course entitled 'Training for Digital and Network Teaching' (DGE 2020c) aimed at supporting schools in developing distance learning; and ii) the creation of the website 'Support to schools' where teachers and schools can find a wide array of materials and resources related to remote teaching (documents, sharing of practices, tools, FAQ, etc.).

On 13 April, the Council of Ministers approved the Decree-Law n-º 14-G/2020 which stipulates 'exceptional and temporary measures in the sector of education, within the scope of the COVID-19 pandemic'. Amongst other features, it was decided that the third term starting on 14 April was to be done in remote teaching mode; grades will be given to pupils at the end of the term; secondary education will reopen if the development of the epidemiological situation would allow; no national exams will be administered for elementary education (in years 2, 5, 8 and 9). As for the secondary school, exams will remain for the 22 subjects whose grade is necessary to enter higher education. Year 11 and 12 students went back to school on 18 May but only for the subjects in which national exams for entering higher education applied.

A recent study carried out in Portugal (Flores, Machado, and Alves 2020) showed that, on average, teachers were not able to interact with 2 pupils per class, due to the lack of resources or equipment, varying between 0 and 20 pupils per class. Teachers also identified the main difficulties they had to handle: lack of adequate equipment for pupils, involving pupils in their learning, lack of time, lack of adequate training on online teaching, lack of support from parents. In most cases, teachers had to use their own technological devices to teach. Most of the participating teachers claimed that the time spent in remote teaching has increased when compared to face-to-face teaching, but pupil participation in assessment has decreased.

In general, teachers claimed that pupils 'hide behind their cameras' as they were not obliged to turn them on. In general, pupil participation has decreased thus contributing to accentuating the gap in terms of pupils' opportunities for learning and achievement, due to the lack of adequate conditions in their homes (including lack of technological resources) and to the lack of support from their parents. As such, while, in general, teachers have adapted to remote teaching in a rapid and effective manner, remote teaching has exacerbated the inequalities in education. If the technical and instrumental response was of paramount importance at the beginning of the transition period from

face-to-face to remote teaching, the need to focus on pedagogical matters in order to address pupils' needs became evident. As such, more focused and specific responses will be needed in order to make sure that no pupil is left behind.

The COVID-19 pandemic and its immediate effects on higher education institutions

In Portugal, our institution was one of the first universities to close down. Due to the identification of the first case of COVID-19, face-to-face teaching was cancelled on 7 March. The decision to suspend all activities was announced through the Rectoral Order (RT-23 2020), 7th March, including missions, libraries, teaching and educational services, events and sports, seminars and conferences.

On 13 March, the Ministry of Science, Technology and Higher Education has announced the decision to close down all institutions of higher education and has defined issues related to remote working, meetings, etc. Thus, all activities which include the presence of students were suspended on 16 March. Furthermore, the same communication stipulated that 'efforts should be done to promote online teaching and learning, keeping the activities through teacher and student interaction via digital tools'. It further announced that 'wherever possible institutions should guarantee remote working, mainly for vulnerable and at risk groups' (MCTES 2020, 1).

As far as our institution is concerned, remote working was developed in terms of teaching and management as well as other activities. Online teaching was promoted through the platform in use at our university called Blackboard which allows a number of functions such as chats, forums, sharing of materials, assessment and synchronous sessions.

Later on, the decision to keep online teaching for the duration of semester two including assessment was announced (RT-33 2020). The same Rectoral Order stipulates that semester two was extended until 27th June in order to 'enable a more flexible management of the development of curriculum units' (p.1). It was also recommended that 'teachers, in articulation with programme coordinators and pedagogical councils, would: i) adjust teaching and learning strategies in the light of the context of remote learning; ii) make educational resources available for students to undertake learning activities in a diversity of timetables; iii) to provide students with regular feedback about their progress in terms of learning; iv) to register all activities in a form of summary; v) to take notes about the participation of the students in the activities'; and, as far as assessment is concerned, 'to adjust the strategies and, whenever necessary, the assessment tools in the light of the context of online teaching' (RT-33 2020, 2). The same document also clarifies that 'Teachers should share with the students the changes made to teaching and agree with them assessment methodologies to be adopted, making available, until 20th April, all relevant information at the platform to support teaching adopted at the University of Minho and in other platforms that could be used for teaching purposes'.

Additionally, information was shared about how to use other platforms for online teaching such as Zoom, Colibri, etc. The transition from face-to-face to online teaching has entailed some pedagogical challenges, not only in terms of teaching methods but also with regard to assessment strategies and tools. The need to plan and adapt pedagogy and resources to online teaching environments was a process marked by an

ongoing search for the best solutions to meet students' needs as well as the goals of each curriculum unit.

In order to support teachers in this transition, the Centro IDEA-UMinho (Centre for Innovation and Development of Teaching and Learning) has developed a number of actions namely the DigitalIDEA in order to disseminate tips and suggestions via Blog, Sharing IDEAS and Flipped Webinars. How to teach online, how to moderate activities online, etc. are examples of such tips. Lecturers as well as students and other stakeholders also had the possibility to participate in the informal online sessions to share their experiences. Despite this, how academic staff used the platforms and developed pedagogy to fulfil institutional requirements of the programmes remains to be seen.

Teacher education response: general and practical elements

The transition from face-to-face to online teaching was sudden and unexpected. This is true to all courses and programmes in higher education, but particularly challenging for teacher education. If in the foundational courses the process of adaptation entailed the need to focus on resources, ways of interacting with the students, pedagogical decisions, etc., in the case of practice-based modules, and in particular, in practicum, the process was even more demanding and challenging.

There were no specific recommendations for teacher education programmes. General recommendations pointed to the importance of maintaining the interaction with the student teachers and to do teaching online, making the necessary adjustments in pedagogy and assessment. In some cases, some practices used in face-to-face teaching were transposed to the online environments, but there were diverse and in some cases innovative experiences.

In the case of our courses, all the sessions were developed online through the combination of synchronous and asynchronous sessions via online platforms. Our students continue to carry out the activities that had been planned previously for semester 2 before the spread of the COVID-19 pandemic. In one case, student teachers developed a reflexive portfolio over time to document their learning process and led the discussion of texts online. In addition, it was also possible to develop group work focusing on the analysis of the macro, meso and micro levels of the process of curriculum development. In the other case, student teachers had to plan five lessons based on five concepts related to History according to three specific moments: identification of pre-conceptions; development of a diversity of pedagogical tasks; and meta-analysis and meta-cognition by reflecting on how the learning process has occurred. Student teachers had two weeks to develop the lessons under the supervision of the teacher educator via phone, WhatsApp and Skype. Student teachers presented the lessons and then a discussion on each group presentation took place.

Doing practicum 'virtually': idealising practice

One of the biggest challenges as far as initial teacher education is concerned relates to the practicum. Abruptly, student teachers had to cancel their visits to schools and had to follow their cooperating teachers' activities online. The pace and diversity of tasks and initiatives as well as the student teachers' involvement were dependent on the context

and sector of teaching. It is, therefore, possible to identify very different experiences concerning the practicum.

Our Institute of Education, as was the case in other institutions, was given the opportunity to make decisions with regard to ways of operating the practicum component of the programmes. In the case of the teacher education programmes, the Institute of Education has stipulated that the interaction between cooperating teachers (school-based mentors) and supervisors should be kept following the institutional guidelines for practicum. This interaction was to be done online. In addition, there was the possibility of adapting the pedagogical intervention of the student teachers during their practicum. The same applies to the research component which is a key aspect of the practicum model in our institution (Flores 2018; Vieira et al. 2019). The institutional recommendation stipulated the adaptation of practicum in case of 'impossibility of carrying out activities related to online teaching, of planning the educational process, including pedagogical materials, based on a theoretical framework and reflection about the idealisation of practice' (IE 2020, 2). In addition, the same document states that if total or partial implementation of the research component in the classroom is impossible, practicum should adopt 'a more theoretical and reflexive scope, integrating the activities included in the Plan of Intervention devised [at the beginning of practicum] as well as the materials developed within this context' (IE 2020, 3). It is also said that assessment criteria needed to be adapted: 'The report structure, as well the assessment criteria, must be adjusted to consider the nature of the activities developed within the practicum component of the programmes' (IE 2020, 3).

In general, student teachers continued with their practicum but they had to adapt very quickly and to follow the ongoing guidelines and recommendations that were issued continuously. This meant for them a process of adaptation almost in 'real time'. Schools have developed a variety of practices but the majority have adopted a weekly time of synchronous teaching. This session tends to be used for interacting with pupils and reinforcing the affective interaction between the teacher and the pupils but also for clarifying the tasks to be carried out over the following week(s) depending on their level of complexity and broadness. In such sessions, student teachers usually asked pupils to clarify the task they had to do in order to find out if they had understood it. In other cases, pupils would ask student teachers to make explicit the aims and scope of the tasks to be undertaken.

As far as technical issues are concerned, some constraints were found. These were linked to lack of internet access or lack of equipment as well as to a deficit in terms of digital literacy. In some cases, pupils did not possess the required equipment either because they did not have a laptop or tablet and they had to share the same equipment with other family members. In other cases, there was no internet access or there were technical problems. In addition, some pupils found it difficult to navigate in the online platforms to communicate and to find the tasks to be solved.

In year 2 of the Master's degree in Teaching, weekly meetings were promoted around reflections done by the student teachers based on a particular pedagogical-educational initiative undertaken. Webinars have also been conducted as well as pedagogical proposals related to online teaching. In addition to these virtual meetings, student teachers produced materials and lessons and they also monitored synchronous and asynchronous sessions that were observed by the university supervisor as well as by the cooperating

teacher. Student teachers have adapted to the context of online teaching by promoting materials and tasks oriented towards the challenges that pupils in elementary and secondary school were supposed to do. Student teachers made use of email, WhatsApp, Skype, chats and forums to interact with the pupils. Platforms such as GoogleMeet, Zoom and Skype were also used for online teaching.

It should be noted that student teachers need to teach around 24 lessons and to develop a research-based pedagogical intervention the focus of which emerges from observation and from their own practice. As such, they are supposed to collect data in the classroom context. When the pandemic spread and led to the closure of schools, some student teachers had already started their teaching but most of them had not collected any data for their research project. Thus, student teachers had to do remote teaching and to collect their data virtually with implications for both the procedures and processes of doing teaching and research in such circumstances. Student teachers' participation both quantitatively and qualitatively in the activities within the context of practicum is far behind of what would be expected from them. This is also true as far as monitoring and mentoring processes are concerned. The cooperating teachers had to teach several classes in remote teaching mode and their availability to support student teachers was not the same, because they too were adapting to the new context of teaching.

There was a need for 'being in touch' almost permanently with the student teachers, in year 1 and in year 2 of the Master degree, by responding to their doubts and questions via digital tools. In addition to online meetings, there was a need to reinforce feedback in shortened periods of time and in written form. This necessity to provide feedback to the student teachers on the part of supervisors implied an almost immediate availability, which have implied long hours devoted to work, even though in a much more flexible and diverse manner.

As such, mentoring processes had to be adapted to online tools including all the constraints and limitations of a 'remote supervision'. Debates about theory and practice of teaching were promoted, but these forums also provided a space for student teachers to share their anxieties, concerns and fears with regard to the experiences they were living both professional and personal.

Final thoughts

The ways in which students and teachers (and teacher educators) interact, teach and learn have changed as a result of the lockdown due to the spread of COVID-19. The new context of remote teaching and supervision has implied an ongoing adaptation process on the part of all stakeholders. This is particularly relevant in the case of practicum as student teachers, supervisors, cooperating teachers and pupils (as well as their parents) had to interact, work and communicate in very different ways. The challenges and disruptions caused by school and university closures may be seen also as opportunities to learn and to reshape traditional roles and practices.

In general, the responses to the COVID-19 crisis in education on the part of all stakeholders have been characterised by a rapid focus on the possibilities offered by the unexpected and sudden situation caused by school and university closures. However, it is also clear that student teachers spent less time and contact hours with pupils in the classroom as well as in the physical schools. The duration of the immersion in the context

of teaching is a key element in the process of learning to teach. Although student teachers have benefited from a peculiar situation of remote teaching as they took part in a process of adaptation and learning together with their cooperating teachers, supervisors and pupils, the fewer hours of real interaction in classrooms have affected their professional development.

The articulation between theory and practice is a process that requires time and experience in real contexts as well as reflection. In a context of a practicum with a limited number of hours of teaching in real classrooms, the challenges revolve around the justification of pedagogical decisions including also the justification for parents when pedagogical decisions were made. The new scenario has also encompassed more challenges for the cycle of observation-planning-evaluation. It has imposed even more demands in terms of support for student teachers, especially in a context of practicum aimed at 'idealising practice'. Online mentoring and supervision focused, therefore, on theory and practice of teaching as well as on personal and emotional aspects. While the focus on a solid theoretical framework for pedagogical actions in an 'idealised scenario' or in a context of remote teaching was important in terms of professional knowledge and development, the new reality of practicum did not compensate the lack of a real context of practice. This is particularly critical within a transformative view of education advocated in the model of teacher education and of practicum in our institution (Flores 2018; Vieira et al. 2019).

The diverse experiences of learning to teach in a context of remote teaching were dependent on the context. Thus, student teachers were provided with very different possibilities and strategies to carry on their formative process with implications for the development of their professional knowledge. These were related to the conditions for learning to teach in terms of time, space, forms of interaction with pupils and mentoring processes. As such, inequalities in terms of opportunities to learn can be identified. This is related to the concrete experiences of student teachers during the pandemic and also to the tension between practicum as a 'real practice' or as 'an ideal(ised) practice'. Additionally, it has implications for what it means to be a teacher in these uncertain and unpredictable times. Immediate responses may lead to an accumulative professional growth rather than a transformational development of teachers-to-be, which can be linked to the tension between managerial and organisational professionalism versus democratic and occupational professionalism (Evetts 2009; Sachs 2016). The rapid and immediate responses that teachers have provided within a compliance logic with external rules and regulations may reinforce more instrumental and narrow views of teaching. These responses may also contribute to understandings of teachers as mere doers or implementers who actually do 'what works' rather than activist and committed professionals whose practice and pedagogical actions are research-informed (La Velle and Flores 2018). Mentoring processes need more flexible and sophisticated approaches in order to enhance the potential of new spaces for teaching and learning to teach. These may contribute to counteracting prevailing models in teacher education, and in particular in practicum, especially if the willingness to try new approaches and to experiment with different strategies, which marked some contexts of teaching and learning to teach, is maintained in the post-COVID-19 times.

Disclosure statement

No potential conflict of interest was reported by the authors.

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