Chapter 14

Supporting Schools in Times of Crisis: A Case of Partnerships and Networking with Schools by the Institute of Education at the University of Lisbon

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Abstract This chapter examines the Institute of Education at the University of Lisbon (IE-ULisbon) and its engagement with schools during the current COVID-19 pandemic. We aim to supplement knowledge about responses to unanticipated crises impacting schools, factors influencing schools' coping strategies, and IE-ULisbon's actions in this unfolding context. Therefore, this case study follows two IE-ULisbon experiences with school clusters (totaling 1700 students and 160 teachers), meeting the challenges posed by the pandemic. Both examples relate to longer-term projects aiming to improve students' learning through innovative practices and teachers' capacity-building. However, the crisis instigated new difficulties for teachers, and researchers responded by empowering and enabling teachers to create learning environments to facilitate educational consistency and foster academic achievement.

14.1 Introduction

Crises such as COVID-19 are unpredictable and create widespread challenges for all sectors, particularly, to public authorities who must develop the appropriate responses to protect society. Crises are ambiguous in their causes, effects, and ways of resolution (Farazmand, 2007; Wart & Kapucu, 2011).

Due to COVID-19, 80% of the world's students were affected by school closures in 138 countries – including Portugal – according to UNESCO's Section of Education Policy. School closures caused enormous concern and anxiety among school actors, students, and parents. The Ministry of Education (ME) and the *Rádio Televisão Portuguesa* (the State television) offered television classes under

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the name *#EstudoEmCasa* [#Studying at home]. The ME also developed a website called “*Apoio às Escolas*” [Supporting Schools] with information about exams, guidelines for using various platforms, distanced assessments, and a platform for teachers to share practices. Likewise, for each level of schooling, the ME distributed each subject’s topics, essential learning checkpoints, and work proposals to aid teachers.

As teaching moved online, teachers adapted their methodologies within a short timeframe, providing their classes via electronic platforms and implementing new teaching strategies in an unprecedented way. However, some teachers found it difficult to take advantage of technology; instead of changing their practices to suit distance learning, they tended to overload students with homework and use archival (rather than discussion-based) platforms.

These circumstances reinforced the importance of a support system for schools relying on the existing networks with some higher education institutions (HEI). The Institute of Education at the University of Lisbon (IE-ULisbon) capitalized on existing partnerships to provide intensive assistance to schools. This case focuses on IE-ULisbon’s engagement with schools and the factors impacting schools’ coping strategies. We seek to answer the question: How did existing partnerships and networks help IE-ULisbon respond to the challenges of contemporary education systems during the pandemic?

In the first part of the paper we describe the school and university partnerships within the Portuguese context, especially related to school change and improvement. Then, we describe IE-ULisbon, the study’s methodology, and the university’s two examples of support during the pandemic. We close the article by discussing the results and presenting some challenges to consider in future scenarios.

14.2 An Overview on School/University Partnerships

Traditionally, a “network” is defined as a set of actors (individuals or organizations) joined by links, formally or informally (Borgatti & Foster, 2003). In its most basic form, it is a group of interconnected people from different sectors, suggesting the exchange of knowledge, skills, and resources for a common goal and the mutual benefit of all involved.

The Education and Training 2020¹ Working Group on Schools considers interinstitutional networks an effective approach: supporting horizontal decision-making; solving complex problems; sharing responsibilities; creating synergies between stakeholders; promoting knowledge-sharing and the dissemination of practice; enabling innovations to evolve more quickly; enhancing the professional development of teachers; supporting capacity-building in schools; optimizing the

¹https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-working-groups_en

use of time and resources; and mediating between different levels of the system (European Commission, 2017).

Hadfield et al. (2006) define networks as “groups or systems of interconnected people and organizations (including schools) whose aims and purposes include the improvement of learning and aspects of well-being known to affect learning” (p. 5). Muijs et al. (2010) suggest a more comprehensive definition for educational networks, meaning “at least two organizations working together for a common purpose for at least some of the time” (p.6). According to the authors, networks aim to achieve goals related to school improvement, expanding opportunities, and sharing resources. Likewise, Muijs et al. (2010) state “school improvement partnerships frequently involve LEAs, universities, or external consultants” (p.19).

Our understanding of university-school partnerships and networks aims to create a space for the construction of educational knowledge that favors nonhierarchical, dialogic, and complementarity interactions among the various participants in the network, each one mobilizing “their own knowledgeability” and agency (Wenger, 2009; Westheimer, 2008). As stated by the EC (2017), “collaborative networks, whether online or face-to-face, enable innovations to evolve more quickly and are more effective as more people are involved in testing and improving new approaches given that diverse views help collaborators” (p.9).

Since IE-ULisbon has been fostering synergies and common interests with schools, we use the aforementioned conceptual framework to consider networking as an enterprise that can favor collaborative work and innovative learning and to research opportunities on current educational challenges, which should be relevant and useful for the diverse members of the network.

14.3 The Policy Context: Supporting Portuguese Schools’ Efforts to Innovate and Improve

In Portugal, the extension of compulsory schooling up to the 12th year (Law no. 85, August 27, 2009)² accompanied high dropout rates and school failure, instigating authorities to push policy initiatives eliminating grade retention (Decree-Law no. 17, April 4, 2016)³ and improving educational quality. The ME instituted pilot programs to improve student academic achievement and decrease grade retention and dropout rates (e.g., the More Success Program (2009–2012); the Early Bilingual Education Project (2010–2015) and the Pilot Project on Pedagogical Innovation (2016–2019), etc.). Therefore, current educational policies in Portugal focus on broadening the pedagogical autonomy of schools (Decree-Law no. 55, July 6, 2018),⁴ allowing them to have greater flexibility in curriculum management

²<https://dre.pt/pesquisa/-/search/488826/details/maximized>

³<https://dre.pt/pesquisa/-/search/74007250/details/maximized>

⁴<https://dre.pt/home/-/dre/115652962/details/maximized>

(Ordinance 181, June 11, 2019),⁵ more inclusivity (Decree-Law no. 54, July 6, 2018),⁶ and interdisciplinary articulation practices.

As schools have more autonomy and public authorities prefer school-based management, schools are requested greater accountability to respond to problems in each educational context (Costa & Almeida, 2019; Costa et al., 2020). Therefore, IE-ULisbon has been responding to a growing range of school clusters for intervention and support, monitoring and evaluation, and consolidation of teaching and research. Additionally, IE-ULisbon has been supporting the innovations that schools desire to achieve objectives such as intensification of collaborative relationships with organizations and education professionals; collaboration with education organizations and professionals in public programs to improve educational offerings and practices; interventions with education organizations and professionals for organizational and professional development; and creation, mobilization, and dissemination practices to promote educational quality. Briefly, IE-ULisbon's mission concerns school educational practices and organizational processes at the center of dynamics that generate intentional interrogation to feed processes of renewal and improvement of knowledge and action based on a culture of inquiry (cf. Fullan, 2001).

14.4 An Overview of IE-ULisbon's Mission: Networking to Improve the Education System

The University of Lisbon (ULisbon) is the largest and most prestigious university in Portugal. Seven centuries old, it is comprised of 18 schools, connecting science, technology, social sciences, arts, and humanities. IE-ULisbon is the University of Lisbon's graduate school of education, which is committed to research in education and training. Research is a central activity of the institute, combining fundamental and applied research in key domains of education and training. In 2019–2020, there were 1000 students enrolled in IE-ULisbon programs, including students from 17 countries, especially from countries where the official language is Portuguese.

As stated in the Director's *Action Program*, IE-ULisbon's mission is associated with the expansion and intensification of continued relationships with educational sectors and significant interlocutors. The goal is to improve the country's education system and generate knowledge for effective support to public education policies through research, training, intervention, and support (Carvalho, 2018). However, despite offering research and training activities in undergraduate and graduate programs, IE-ULisbon also creates and maintains meaningful partnerships and networks with different stakeholders located at different levels of the education system.

Organizations of different natures benefit from cooperation and joint responses to impactful issues around success and equity in the education sector. Following

⁵<https://dre.pt/home/-/dre/122541299/details/maximized>

⁶<https://dre.pt/home/-/dre/115652961/details/maximized>

UNESCO's understanding that "the challenge for HEIs is to engage with society in an integral manner as a way of improving teaching and research and collaborate in social transformation," (PRIA, 2015, p.2), the Director's Action Program makes IE-ULisbon's social engagement evident, which is comprised of collaboration with various stakeholders in the definition and implementation of local educational policies and the development of new educational projects within the framework of decentralization policies (PRIA, 2015, p.2; Carvalho, 2018). Through what UNESCO called a "Multi-function Focus Engagement," which covers the three functions of HEI (teaching, research, and outreach/practice), IE-ULisbon outreach comprises activities such as research and intervention projects, consultation and evaluation services, and training activities, among others (PRIA, 2015, p.6). Furthermore, this outreach relies on networking by establishing partnerships of different kinds and operating through a multidisciplinary approach in the areas of curriculum, didactics, ICT, assessment, school evaluation and improvement, teacher education, and school administration.

14.5 Methodology

The case study is an in-depth exploration of a bounded system based on extensive data collection. "Bounded" means that the case is detached from research concerning time, place, and physical boundaries (Creswell, 2009). According to Cohen et al. (2007), contexts are unique and dynamic, and they examine and report on "the complexity of dynamics and interactions of events, and social actors and other issues in unique instance" (p.317). In this sense, the present study is focused on contemporary events, with experiences in real contexts related to daily life at schools. The case shares IE-ULisbon's activity to provide more accurate contributions to foster knowledge-based change and improvement in education. Specifically, it focuses on how the existing partnerships and networks of collaborative work and reflective processes helped the Institute to respond to the challenges of contemporary education systems, particularly during the current COVID-19 pandemic. Here, two IE-ULisbon school cluster experiences are followed throughout the challenges posed by the pandemic. Both relate to broader projects aiming to improve students' learning through innovative practices and teachers' capacity-building.

As each of the experiences vary based on their environmental context and the skills of those who work within the organizations, different data-gathering instruments were used (Fischbacher-Smith, 2016). In the first experience, data were collected from interviews to identify the school staff's understanding of IE-ULisbon's support. After interview protocols were developed, interviews were conducted with school principals, teachers, and coordinators. The transcripts were then subjected to content analysis (Bardin, 2009). In the second experience, we interviewed the school management and the project coordinator. Additionally, data were gathered from audio recordings of teacher training sessions throughout the time of COVID-19 and written reflections from teachers after the training program.

14.6 The Collaborations with Schools

14.6.1 *Networking to Support Teacher Needs on Assessing Students*

This first experience addresses the support to a school cluster located in Lisbon district by the IE-ULisbon's "Centre for Competence in Technologies and Innovation" (C2TI). Before the pandemic, the C2TI researchers had already developed outreach and follow-up work with teachers to promote their digital competencies. More specifically, the C2TI team intended for teachers to collaborate and develop their digital competencies based on the Digital Competence Framework for Educators (DigCompEdu).⁷ DigCompEdu's focus on the digital competencies of teachers is useful to assess the digital competencies of the organization.

Therefore, to understand the extent to which digital technologies were integrated into teaching and utilized by teachers, the C2TI researchers developed a project whose results defined priority areas for intervention in the school cluster. As the results were not satisfactory, the C2TI team developed and implemented an organizational Digital Action Plan. The school management prioritized digital competencies, and the Digital Action Plan was built collaboratively with the school management team, teachers, and students. Its implementation included the provision of training resources, process monitoring, and evaluation and was funded by the ME, involving approximately 100 teachers and indirectly about 900 students.

When the pandemic began, the IE-ULisbon C2TI team was developing the Digital Action Plan with teachers. At the same time, the team also offered a training program about the integration of digital technologies in teaching and learning and their incorporation in STEM activities with programming and robotics. However, the COVID-19 crisis necessitated rethinking about how to work with teachers in this new scenario. The face-to-face sessions switched to distance training sessions using digital platforms, and the Digital Action Plan changed to a Distance Learning Plan (DLP – Plano E@D).

In this context, one important aspect for school actors was that they could count on the IE-ULisbon C2TI team, which guided and helped them modify the planned actions. As mentioned by one of the interviewees, "In the situation of COVID-19 (...) there was always support from the Institute of Education in the construction of the plan E@D of our school" (Interview, Teacher 1). In addition, during the crisis, teachers requested specific support to make changes to the training plan in response to the difficulties they were experiencing. The adjusted trainings relied on teamwork. Specific training on student learning assessments in distance learning was shared with teachers and implemented as quickly as possible. As one of the teachers told us: "It is worth mentioning the capacity for almost immediate response to the

⁷European Framework for the Digital Competence of Educators: DigCompEdu. JRC (2017).

school cluster in a completely unexpected and anomalous situation and which, in our opinion, reinforced our sense of belonging” (Interview, Teacher 3).

The pandemic provided a window of opportunity for schools to develop organizational learning through training and joint reflection. Likewise, the intervention of the IE-ULisbon researchers promoted synergy among school actors, who pushed their school to be a center of change with flexibility to adapt to sudden circumstances and respond to subsequent challenges. As stated in a teacher’s words: “The synergies we have generated between ourselves and with our partners, namely IE-ULisbon, made us aware that a true educational community goes far beyond a physical space!” (Interview, Teacher 5).

The school principal valued the importance of this specific training and its impact on teachers’ conceptions; in her words: “The IE-ULisbon researchers always were present and available for counseling on the various structures of our school cluster. And, since the way to assess students’ learning would be in the E@D model, this has become a real concern in the context of the pandemic. The training carried out on Formative Assessment with Digital (...) had an extremely positive feedback” (Interview, School Principal).

This specific training enhanced professional development, and the shift in response to the teachers’ needs became an opportunity for collective learning and reflection. Not only did the training mobilize the researchers’ knowledge, but also it inspired new avenues for teachers to consider about students’ assessments. The school principal stated that “The alerts given, the practical examples, the questioning, and the intentional provocation of doubts that emerged, created in the teachers the need to make a deep reflection on this whole theme, causing (I hope) changes in the way they face the students’ assessment” (Interview, School Principal).

The COVID-19 crisis increased a general willingness for joint reflection and debate throughout the researchers’ intervention. Schools needed solutions for the pandemic’s effects on teacher responsibilities and student achievement. Therefore, reflection generated from the discussions between schools and IE-ULisbon fostered a useful analysis of problems and aligned with the training designed before COVID. For instance, student assessments were reviewed and transposed to an online format through organizational and individual maturation processes. Moreover, the training empowered teachers and helped them “to understand the importance of formative assessment and how to do it through digital resources and diversified strategies (active methodologies), with an impact on student learning, which was a fundamental support in COVID times” (Interview, Teacher 2).

With concern for monitoring of the Digital Action Plan, a questionnaire was developed and given to teachers, parents, and students. This instrument helped ascertain their perceptions about the implementation of the Distance Learning Plan during COVID-19.

The results showed that all teachers followed the Distance Learning Plan guidelines implemented at the school cluster during the pandemic. Most of the respondents said they easily adapted to the use of the platform and digital technologies, and that the articulated work with IE-ULisbon was essential. As for parents, most mentioned that teachers supported them by responding to difficulties with the

digital platform during distance activities with their children. Students believed that they adapted well to distance learning, most valued teachers' support, and the diversity of weekly tasks they developed during this time.

14.6.2 Networking to Ensure Students Learning

This second experience is part of a research project called "Let's GoSTEM", funded by the National Agency (FCT) and coordinated by IE-ULisbon. Within its framework, an IE-ULisbon team developed a collaborative project with the management, coordinators, and teachers at a school cluster located in the center of the country. IE-ULisbon and this school cluster have maintained a lasting history of partnership and networking.

The project involved approximately 60 teachers and 800 students from 1st to 9th grade and aimed to assess the impact of a STEM approach on students' (i) grasp of physics, (ii) motivation to learn science, and (iii) interest in STEM careers. To achieve these goals, the IE-ULisbon team developed a five-phase training program for teachers: (1) creation of STEM activities in collaboration with teachers; (2) implementation of activities by teachers with the support of the IE-ULisbon team; (3) collection of information by teachers, regarding student learning, motivation, and interest; (4) development of instruments for collecting data by the IE-ULisbon team; and (5) teacher reflection about their experiences and student results. During Phase 1 (September 2019 – March 2020), a sequence of STEM activities included the following aspects: curriculum integration, curriculum and STEM content connection, and identification of a physics problem linked to the students' reality, i.e., their local context. This was the starting point for student engagement, leading to the development of an investigation – using technological tools, engineering, and mathematics – to answer questions. Phases 2 and 3 of the teachers' training program started before the pandemic in January 2020 but ended in June 2020 due to the pandemic. Phase 4 occurred entirely during the COVID-19 pandemic period.

Given the unexpected situation caused by the virus, IE-ULisbon and the school cluster adjusted the training program to continue the project. The first alteration of training sessions was the transition to online classes starting in March 2020. For this change to be possible, researchers and the school cluster project coordinator divided the teachers in the training program into three groups of about 20 teachers, so smaller groups would foster a better discussion about the necessary changes to STEM activities. Teachers recognized the quick Institute response: "I highlight the performance of the IE-ULisbon team, with their work, availability, and demonstrated understanding. They motivated everyone's participation and commitment and allowed the project to continue, by videoconference, under exceptional conditions, in a context of social confinement given the pandemic of COVID-19" (Written reflection, Teacher 1).

The second change was related to the STEM activities planned in Phase 1, intended as face-to-face activities involving local partners (e.g., the municipality

and the local biomass center). However, with the crisis, students needed to do the activities remotely. Teacher training and its contribution to student achievement deeply concerned the school principal, who had worked very closely with IE-ULisbon to guide and create effective directions for teachers.

Therefore, through a bottom-up approach, IE-ULisbon researchers empowered teachers to make their own decisions and have confidence in them. As a deputy principal said, “Each teacher, given his context and level of education, could decide how many synchronous classes he would take per week and which platform to use for classes” (Interview, Management). Thus, teachers became responsible for the adaptations based on the characteristics of their class, including if they had already started teaching the STEM activities before switching to the online platform.

All changes were discussed online with the IE-ULisbon team. Based on collective discussions, decisions were agreed upon, such as in the case of the activity of organizing an open discussion with the local community to debate the implementation of the region’s Biomass Center. The activity started before the pandemic. As stated by a teacher, students had already been “divided into groups. We started by collecting information from websites. Then, before the visit to the Biomass Centre, we made its location. In addition, we scheduled a meeting with the Mayor, who received us and answered the students’ questions” (Audio recording training session, Teacher 3).

Despite the pandemic’s interruption, the activity had to continue, and students needed to prepare a discussion and collect information to make informed decisions. However, it was necessary to introduce changes to the subsequent facets of the activity. Consequently, the training sessions fostered the exchange of views and information, and a platform for reflection mediated by the IE-ULisbon researchers was created.

Furthermore, these were strategic moments to align teachers’ actions. According to one of the teachers, “When we moved to non-face-to-face sessions, we had to move from students group work to individual. Then, the work was divided amongst students. (...) Everyone prepared questions for the debate” (Audio recording training session, Teacher 3). The group of teachers decided to keep an online discussion open to the community. In addition, other decisions enhanced the activity and valued the distance work developed by students – “a digital book with the students’ productions” (Audio recording training session, Teacher 4). Interactions between all the participants were online but had not lost their significance because people were strongly committed to responding to the crisis constraints and subsequent complex problems.

Another change from the pandemic is related to the project monitoring. Before the pandemic, the IE-ULisbon team intended to assess the effects of the project on science learning, student motivation to learn science, and student interest in pursuing STEM careers. For this purpose, the researchers developed a questionnaire offered twice: once, before the start of STEM activities (pretest), and again after the activities’ completion (posttest). In September 2019, the students took the pretest, and the posttest was scheduled for June 2020. With the pandemic, it was necessary to adjust data collection instruments to the new reality.

Therefore, monitoring students' learning was carried out in close collaboration with the school cluster, using three data collection instruments: written student responses about the activities altered during the pandemic to know about their science learning progress, written teacher reflections in June to learn about their evaluation of the project and student involvement in STEM activities, and an interview with the project coordinator to hear his perspective on the project development.

In general, through analysis of the students' responses, there was a gradual and progressive evolution of their learning about science and its processes, which required students to adapt to new ways of learning, persistence, and support systems. Also, the work was developed either asynchronously or synchronously under the essential guidance of teachers. During a training session, a teacher explained, "We know that not all students responded in the beginning in the same way to distance learning and that this was reflected in their learning. However, for everyone to be able to do the activities, I used different resources and more individualized support. I often called the students and talked to their parents to ask questions. Students learned differently" (Written reflection, Teacher 6). The project coordinator also highlighted that the students "made learning related to the project activities in the context of a pandemic. Through a questionnaire, students gave very positive feedback about the activities, a large part of whom identifying it as what they most enjoyed during confinement. Their degree of motivation and involvement with the project activities, even in the context of COVID-19, was high and allowed them to develop their autonomy" (Interview, project coordinator).

In addition, the project coordinator stressed that the continuity of "support from the IE-ULisbon team, even in the situation we live in, was essential for things to go well. Teachers knew they would be supported in the changes to be introduced and the project will continue, even under COVID-19 constraints, with the implementation of changes for nonclassroom teaching...and this motivated them to continue, involved them. This is reflected, of course, in the performance of students and their learning" (Interview, project coordinator).

14.7 Discussion

The case study follows two IE-ULisbon collaborations with school clusters that faced challenges posed by the COVID-19 crisis. Both are related to broader projects aiming to improve student learning through innovative practices and teacher capacity-building. The two collaborations also illustrate IE-ULisbon's activity in public action, thus contributing to social transformation and knowledge-building, as well as their aim to find common and meaningful responses to crisis situations.

Moreover, according to the strategy of IE-ULisbon, "the Education organizations and professionals are central to promoting quality public education and social development. More than recipients of the knowledge disseminated by IE-ULisbon, they are fundamental partners for the achievement of IE-ULisbon's missions" (Carvalho, 2018, p.4). In the strategic plan of the Institute, the processes of

contextual construction of knowledge and practices in basic and secondary education are encouraged. The engagement of IE-ULisbon researchers in the two collaborations examined corroborates the importance of an orientation towards the purpose of working “within the framework of an interaction between those involved in public programs to improve educational offerings and practices” (idem, p.5).

The engagement of researchers in the two collaborations also confirms the importance of a defined orientation by the IE-ULisbon leadership, whose strategic guidance is delineated and networking-oriented. Both collaborations show partnerships and networking benefits, which were particularly important during the pandemic in empowering teachers to create learning and formatively assess their students online (Borgatti & Foster, 2003; EC, 2017; Mujis et al., 2010).

The results show that collaborative work with the school clusters – understood as “joint activities between actors from different organizations within the network” – developed by the researchers before the pandemic was based on caring and trusting relationships (Mujis et al., 2010). One of the advantages of collaboration within networks is the promotion of mutual learning. Moreover, they also helped to mitigate the effects of the crisis by reducing uncertainty (Borgatti & Foster, 2003). This proved to be crucial for teachers, as they felt comfortable and willing to quickly adopt new practices associated with distance learning, thus, continuing the activities during the pandemic.

Additionally, the fact that teacher training has continued – changing from face-to-face instruction to distance learning – encouraged teachers, helping them believe that everything was under control and it was possible to implement the Distance Learning Plan and evaluate students learning at a distance (in the case of the first experience), or to adapt STEM activities to distance learning (in the case of the second experience).

HEI and school partnerships play an important role in crisis contexts. From an institutional point of view, the Institute’s engagement with social priority areas and academic goals is clearly identified in its mission. The idea of partnership is highly valued, with the cooperation of various stakeholders to meet mutual needs, as referred to by UNESCO’s report as a “mutual exchange of knowledge between the universities and communities in an attempt to produce an output which is of benefit to the larger society” (PRIA, 2015, p. 3). However, these were not isolated engagements but relationships built in a research-practice context that provides benefits for both IE-ULisbon and schools. Responding to such an emergency like COVID-19 has been easier because networking already existed and the HEI institutional mission and researchers were committed to the projects. The levels of engagement in both experiences are high because they operate within projects from the IE-ULisbon goal framework for the improvement of the education system.

The fact that IE-ULisbon teams and school actors co-built their own solutions instead of simply implementing proposals developed from the outside shows the potential of inside networking. As it was proved, in crisis situations, networking by means of research projects, intervention programs, and training activities are critical to assuage anxiety and achieve success.

The results of these two experiences are encouraging. It is, therefore, the intention of IE-ULisbon to continue to collaborate with the school clusters and accompany them on their journey next school year in the continued pandemic scenario.

14.8 Conclusion

These experiences lead us to conclude that there is a need for supporting teachers in the use of digital platforms and collaborative activity preparation together with researchers. Teachers then can teach in distance learning and systematically monitor students' learning.

Some questions arise from this case study: Based on these experiences, what characteristics should the training have? What kind of activities should we do with teachers in the future? How do we best monitor students' learning? Both experiences give clues for future situations. In a pandemic context, teacher training must mitigate risks. For this reason, it may be important to support teachers' development of digital skills and create collaborative groups for sharing and discussing their work, the exploration of new ideas, and evidence-based reflection about students' learning and difficulties through interactions and joint reflection. In the next year, C2Ti will collaborate with the ME in the promotion of several awareness-raising and training activities for 90,000 teachers to use technologies more efficiently and to design more meaningful and diversified assessment activities.

Another crucial aspect is students' learning and their motivation to learn in pandemic contexts. One way to ensure their motivation is through intentional and systematic data collection with teacher assistance. In this case, the role of middle-level management appears to foster useful communication and collective alignment around a common mission. Based on nonhierarchical relationships, networking can help to widen opportunities and solve problems in crisis situations, especially if school principals and middle-level management are focused on the instructional core of schooling, as evidenced in both experiences (cf. Leithwood & Louis, 2011; Hallinger, 2012).

Moreover, the assumption that leadership is one of the factors with a significant impact on education quality (OECD, 2013) was visible in this study. As it could be seen in the two experiences, school management teams were committed to teacher education and saw IE-ULisbon as an ally to help cultivate teacher alignment. Ultimately, as already studied, leadership for learning is a determinant to build school capacity to improve student learning outcomes (Hallinger & Heck, 2010).

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