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Intervention Proposal in a Public Basic and Secondary School in Portugal: crucial Leadership Competencies to cope with change

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Master in Human Resources Management and Organizational Consultancy

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"If I have seen further, it is by standing on the shoulders of giants."

Isaac Newton

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We made it!

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Abstract

Education is one of the most important pillars of our society, thus, there's a constant need of adapting to new contexts. Currently, we are facing the Covid-19 pandemic, which impacted schools and demanded imposed change. This project, conducted in a Portuguese public basic and secondary school, aims at developing an intervention proposal under the assessment of the pandemic's impact in such organizations and what the crucial leadership competencies are while dealing with this unprecedent situation. Hence, a literature review on the topic was performed, comprising a framing of the current conditions and relevant constructs to cope with change. Examples of the last, are reflexivity, psychological safety, transformational leadership and adaptivity. This review led to the diagnosis and the intervention proposal development, following, respectively, Porras' (1992) and Kurt Lewin's (1947) change models. The diagnosis encompassed the conduction of interviews with the leadership, focus groups with teachers, and questionnaires to the teachers and students. From these, the needs of the school arose, and topics such as exhaustion; weak support from the Leadership and the colleagues; low digital skills, resources, and technologies' integration; and weak internal communication were mentioned. Hence, several intervention proposals framed by the Job Demands and Resources model by Bakker et al. (2014) were developed to improve health and well-being at the school; improve internal communication; promote psychological safety; provide job control; and develop leadership competencies. All the proposals are presented in this project, as well as their desired effects. The limitations and future progress are also considered.

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Resumo

A Educação é um pilar crucial da nossa sociedade, sofrendo uma necessidade constante de adaptação a novos contextos. Atualmente, estamos a enfrentar a pandemia Covid-19, que impactou as escolas e lhes impôs mudanças. Este projeto, implementado numa Escola Pública Básica e Secundária Portuguesa, pretende desenvolver uma proposta de intervenção, com base na perceção do impacto da pandemia nestas organizações e de quais as competências de liderança necessárias para lidar com situações semelhantes. Deste modo, foi efetuada uma revisão de literatura, contendo uma contextualização da atualidade e vários conceitos relevantes para lidar com a mudança, como a reflexividade, segurança psicológica, liderança transformacional e adaptação. Esta revisão levou ao diagnóstico, baseado no modelo da mudança de Porras (1992), e à proposta de intervenção, com base no modelo da mudança de Kurt Lewin (1947). O diagnóstico consistiu na condução de entrevistas com a liderança, grupos focais com professores, e questionários enviados aos alunos e professores. Destes, extraíram-se dificuldades da escola, tais como a exaustão; falta de suporte por parte da Liderança; baixas competências digitais, recursos e integração tecnológica; e fraca comunicação interna. Foram, assim, desenvolvidas propostas de intervenção inseridas no modelo das Exigências e Recursos do Trabalho, desenvolvido por Bakker et al. (2014), de forma a melhorar a saúde e bem-estar dos alunos e professores; melhorar a comunicação interna; promover a segurança psicológica; providenciar controlo do trabalho; e desenvolver competências específicas de liderança. As propostas são desenvolvidas neste projeto, bem como os seus efeitos esperados. As limitações e progresso futuro também são discutidos.

Palavras-chave: Educação; Mudança imposta; Escolas públicas; Liderança; Competências; Pandemia Covid-19

Classificação JEL: O15 (Recursos Humanos); H75 (Estado e Governo Local: Educação)

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1. Introduction

Education is one of the most important pillars of our society, serving as a basis for the gathering of knowledge and competencies necessary to approach all the other sectors. In fact, some of the main goals of the Portuguese education system are the favouring of the personality development, to be inclusive and embracing, to value the human dimension of work, and to promote the development of a democratic and pluralist spirit (DRE, 2021). Without a proper education, younger generations will not have the right abilities and needed preparation to cope with every challenge life is going to put ahead of them, or even to play certain roles in society.

At the same time, the world as we know it is rapidly shifting, with several events currently occurring and imposing change to most entities and organizations, schools included. Moreover, this change process creates the need of the development of new competencies (Ferreira, 2011), which were not perceived as needed before. And these competencies, for schools, are not only needed from the side of the students, but the teachers and the Leadership as well. Even though the students need to develop a new set of competencies which allow them to strive in the future, teachers need to adapt their teaching methods. Thus, the Leadership needs to come up with new ways of providing teachers with the proper tools and support for them to be able to develop these methodologies and start this process. From here, conclusions are that schools need to follow the changes society and the external environment are facing, and the Leaderships are the starter and the main responsible for this to happen.

This change process is strongly happening now. At the moment, the world as we know it is changing due to an unprecedent situation, the Covid-19 pandemic. Even though there were other pandemics before, such as the Spanish flu, we have never been as global as we are now, and information never spread so fast.

On the 2nd of March 2020, the 1st case of COVID-19 had reached Portugal (SIC Notícias, 2020). With the increase of cases, the Government declared the beginning of the lockdown state, which led to the temporary closure of several services and entities, including Public Basic and Secondary Schools (Reis, 2020);(XXII Governo, 2021). Regarding these Schools, the closure was extended to the 3rd term and lasted for approximately 6 months (XXII Governo, 2020). Remote classes restarted on the 8th of February and lasted until the 29th of March, with the Easter break (Rosa, 2021). Even though day-cares and primary schools reopened before, the 2nd and 3rd cycles just restarted presential classes on the 5th of April and the Secondary ones on the 19th of April (Renascença, 2021). This means that there was an extremely urgent need for adaptation, since all classes, meetings, evaluations, among other procedures, were performed remotely, which had never been the reality of the sector. Also, teachers and students were forced to use their own personal digital resources, namely internet and devices, to be able to deliver and attend classes. With this new context, several already existing problems became

more exposed, namely the lack of personal digital resources, since it is estimated that 20% of the students did not have a computer at home, which ended up excluding them from the classes and the execution of their work (Sábado, 2020).

At the same time, there is little to no information about the personal digital resources of the teachers, as well as their state and adequation to provide the classes remotely. Teachers needed to fully adapt their way of preparing and delivering classes, evaluating students, and performing activities. But were they prepared for this quick adaptation? Did they have the right resources (cognitive, physical, and mental)? What was the impact of lockdown on teachers' personal and professional lives? Did they have the right support from the Government and from their Leaders?

Another crucial aspect that also suffered a major change during lockdown was the way schools were managed by the Leadership Boards. All the management and communication with teachers and students needed to change and became remote, but only 35% of schools had a strong and efficient digital platform, in September 2020 (TSF, 2020). Is that enough to cope with this situation? Did the Leadership Boards have the right competences and resources to help teachers and students on the adaptation to this change and prevent some of the previously mentioned issues?

This Project was developed in a Public Basic and Secondary School in Portugal and aims at developing a set of solutions to solve the predominant issues extracted from the results' analysis and discussion.

2. Literature Review

2.1. Change

One aspect that characterizes the current situation schools are going through, namely Public Basic and Secondary Schools in Portugal, is the need to change and adapt to the new circumstances of an unprecedent situation to overcome some imposed obstacles (Sabath & Kubr, 1977).

Change is seen as one crucial aspect for the success and development of organizations and, thus, understanding the nature of this process, as well as perceiving the social, political, economic, or other aspects that drive or hinder it, are seen as very important competencies of Organizational Development professionals (Anderson, 2012). Moreover, change in people and organizations is not only affected by the internal forces, but also by the external environment, which is something that, even though it does not integrate the organization directly, is brought by people and "stays with them when they come to work" (Sabath & Kubr, 1977, page 88).

Change can occur in many ways and at different levels, namely individual, group or team, organizational and suprasystem levels (Anderson, 2012). The individual level concerns to the person, when each one of the individuals develops new skills, for instance, through training. Concerning schools, we can perceive this change process when Teachers receive specific training for the promotion and implementation of new teaching methods. The team or group level comprises both the development of new methods within the teams, while establishing new goals, for instance; and the synergy between several groups, intergroup change, and the establishment of measures to promote interdependency. This change level is also very important for schools since teachers tend to work closely as a team within their teaching area. It is important for them to work on developing their methods as a team and standardize them within the same, so that all students can learn receiving the same methods. Also, it is very important that teachers from the several teaching areas and disciplines work together and share their methods and procedures. This can lead to the solving of several problems which specifics teams are facing, in a faster way, at the same time it promotes interdependency. The organizational level comprises the strategic decisions which affect all the members and end up shaping the future of the organization. The Leadership of the Schools, represented by the Executive Board or Direction, alongside with other internal entities, has the role of setting the strategy, making decisions, and driving the teachers, students, operational assistants, and the parents to achieve one common vision. Lastly, the suprasystem levels regard the connection of the organizational itself with external entities, groups, or other organizations. Schools, namely Public Basic and Secondary Schools in Portugal, have several entities that end up shaping their strategic path, such as the Government, other schools, and training centres.

Society in general exerts pressure in the schools for these to integrate new methods and procedures, and become permeable towards them. Thus, schools need to be aware of the role they

have in the society concerning change (Ferreira, 2011) and manage these several forces. This happens in many ways and with numerous external entities. There is the example of budget attribution, which is provided by the government, and that usually is perceived as not enough for the schools to innovate and update their resources, even though they are needed by the school (FNE, 2020) so, contradictory forces can be perceived here. At the same time, it happens with other schools, since each one of them competes to achieve a higher position at the rankings or to have a bigger and more diverse group of students and teachers, with better teaching methodologies.

Still concerning this constant need of change, schools also need to adapt and shape the way they perform to cope with students' requests and needs (Ferreira, 2011), which are so volatile. They need to adapt their teaching procedures and the used techniques accordingly to the arising of new methodologies and trends.

Lastly, the change process can either be prescribed, meaning that the organization has a stable path and adapts its development towards the achievement of a certain goal; or constructive, which is unpredicted and discontinuous, determining new actions and routines (van de Ven & Poole, 1995). The first one corresponds to a first order change, which happens within the same system, through incremental small changes leading to a big one. On the other hand, the second one corresponds to a second order change, which comprises the change of goals and the breaking of past suppositions about the events (van de Ven & Poole, 1995). Concerning schools, the current change process is a mix of both. It started by being constructive (second order change), with the rising of the pandemic, and measures had to be taken accordingly to what was happening at that moment in a random way and following the guidelines of external entities, leading to big changes. At the same time, during this constructive change process, a prescribed one (first order change) started to emerge as well, with schools developing coping plans and methodologies to adapt to this new reality and integrating new procedures to achieve the final goal of being successful in overcoming this situation and developing skills for the future.

2.2. Schools as organizations

For many years, in Europe, the movement that largely influenced schools was the School Effectiveness, Improvement and Culture (SEIC), which assessed the effectiveness and quality standards of these institutions through educational outcomes (Coppieters, 2005). This deterministic approach, led to several educational reforms and interventions, which often led to unsatisfactory results, and even some discomfort in schools with the high increase of administrative processes (Bowen et al., 2007). Moreover, the education system is not known to keep a good track record on innovation and following new trends (Kools & Stoll, 2016). To change these aspects, and lead schools towards the achievement

of effectiveness and innovation, there is the need to perceive them as organizations, namely Learning Organizations.

But what are Learning Organizations? Even though this concept is still considered vague (Bowen et al., 2007), it is far from new (Kools & Stoll, 2016). Peter Senge (1990) defined learning organizations as "organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (Senge, 1990, page 3). Moreover, it is important to state that Schools are not only Learning Organizations with the aim of teaching the students, as it might seem, but also to share knowledge and new methods among the teachers, parents, the Leadership, and other internal and external entities impacting the organization.

There are several aspects that allow us to characterize Learning Organizations and perceive public schools as such (Senge, 1990), namely the learning through joint insights and the usage of shared mental models to spread knowledge. At the same time, the nurture and development of this thinking models to allow the members of the organization to achieve desired results, while promoting collective learning (Senge, 1990), collaboration and team knowledge (Bowen et al., 2007) is also a characteristic. Lastly, the self-continuous transformation and development (Pedler et al., 1991, as cited in Coppieters, 2005), since there is a feeling of ownership which will make the members of the Learning Organization - the leadership, the students, teachers, staff, and parents - accountable for the development and maintaining of the organization (Hiatt-Michael, 2001, as cited in Bowen, et al., 2007).

The final aim of perceiving public schools as learning organizations, with cultures mirroring their directions and strategies to accomplish their goals and mission (Schein, 1992, as cited in Bowen, et al. 2007), is the creation of an environment which will allows the increase of teachers' performance and students' goal achievement, as well as the preparation of the last for the future (Bowen et al., 2007). At the same time, this process will turn schools more able to bridge some substantial gaps and start their creative journey towards change (Bowen et al., 2007). All this implies that public schools need to be seen as complex dynamic systems with organizational learning as an internal process (Whitehead, 1929, as cited in Coppieters, 2005), other than simply "administratively driven organizations", with typically long bottom-down information flows (Harris & Jones, 2018).

Lastly, the concept of Learning Organization is deeply connected with the need of disruptive change, which is needed for the development, improvement and knowledge sharing withing the groups belonging to the organization, which will only happen with the existence of a strong Leadership, the next topic (Portugal & Yukl, 1994).

2.3. Leadership Generally Applied to Schools as Learning Organizations

Leadership is rising as a common theme when talking about modernization and improvement of public services and it has also a very important role in striving for innovation and excellence in these same services (Hartley & Allison, 2010). Local authorities, being responsible for services such as education, health, social security, among others, need to be seen as more than mere service providers, but as entities having a leading role in governing the communities and promoting the interaction between all the services. It is all about driving people, creating a sense of direction and inspiration to achieve and follow a certain vision, which is much different than management itself, often seen as the only competence connected with public services. It is Leadership and not Management that transforms organizations (Bichard, 2000). But what is the role of Leadership when talking about change management?

Portugal and Yukl (1994) stated a two-dimensional framework applied to Environmental Leadership (Annex E), being the first dimension the one already stated regarding the internal and external environment, which they define as "types of influence relationships"; and the second one the levels of influence, individual and organizational. This two-dimensional dichotomy for Environmental Leadership Processes can be transposed to Learning Organizations, namely to Public Schools' Leadership, which is the reason why this framework was chosen to contextualize Leadership in Public Basic and Secondary Schools. Each one of the dimensions will, in the next paragraphs be described, and the way they apply to Learning Organizations will also be explain, so that the transposition is clear.

Regarding the "levels of influence", the individual one takes place when the contact happens with an individual or a small group, and it consists of raising ownership and selflessness on the members of the organization, so that the previously mentioned self-development, self-continuous transformation, and organizational improvement occur. During this process, the persuasion and influence of colleagues or people external to organization also happens (Portugal & Yukl, 1994). Concerning schools, this happens when the Leadership constantly motivates the Teachers' Boards for them to develop and integrate new teaching methods, for instance. This process, if succeeded, will aware teachers of the benefits of integrating new methods, as well as the results they will get from that integration, and indirectly motivate them to perpetuate this behaviour.

On the other hand, at the organizational level, the leader has a direct impact on several people simultaneously, or indirect impact, through the change of several internal processes such as, for instance, the organizational culture, incentive systems, strategies, budgets, and several kinds of programs, shaping the perception and opinion of the followers (Harris & Jones, 2018). Schools are unique social systems, comprising students, teachers, staff, parents, the autarchy, and several other entities. All these groups will affect the school culture, strategies, and vision. Thus, it is extremely

important for the Leadership to share a common vision for the future and goals of the school and create the right platform to guarantee that all groups are aligned and following the same path.

For both dimensions, school leaders are extremely important for the support of their members, regardless of the group, promoting organizational learning through investigation and problem solving, for instance, as driving forces for development and change (Kools & Stoll, 1998, as cited in Harris & Jones, 2018).

Now, concerning the "types of influence relationships", the internal leadership regards the maintenance of the collaboration within the organization, the setting of the mission and the driving of people to accomplish it (Harris & Jones, 2018). Meaning the previously mentioned platform to guarantee that all the groups belonging or directly impacting the organization follow the same path and are aware of the final goals.

The external leadership concerns the connection with several external stakeholders, the analysis of external information and the assessment of the impact of numerous forces, as well as the way they impact the organization and the achievement of its mission and goals. For the schools, it is extremely important to constantly be aware of new teaching methods, to learn with other similar schools and to understand what the trends are and try to follow them if they suit the schools. To have the up-to-the-minute awareness of the external environment and to figure out ways of adapting the school to them, is one of the roles of the Leadership.

These leadership dimensions are extremely important for the proper functioning of public schools, having in mind all its focuses and actuation areas, all its internal processes and the way they will impact multiples groups, directly and indirectly connected with them.

A strong leadership, with the right competencies and knowledge, positively shapes the outcomes of a Learning Organization through the creation of strong learning groups, promoting effectiveness (Yukl, 1989). At the same time, a strong leadership board must still be a priority policy in schools due to the connection of it with the management of organizational change, which is always important (Harris & Jones, 2015, as cited in Harris & Jones, 2018).

Lastly for this section, it is important to state what is understood by "Leadership" when concerning the Public Basic and Secondary Schools in Portugal. For this specific Project, the Leadership comprises a specific team composed by the Director, the Sub Director, the Adjuncts, Advisors, and the Technology Leaders. All these members of the organization are responsible for integrating the already mentioned behaviours and drive the organization towards the common vision.

2.4. Transformational Leadership

As already mentioned, a strong Leadership with the right behaviours and competencies is crucial to cope with this fast need and imposed change. This becomes even more important having in mind the

current pandemic situation and the way public schools are being affected by it, demanding several quick changes in several areas such as, for instance, remote teaching and working, students' evaluation and the communication with the Leadership.

Transformational Leadership concerns the process of strongly shaping the behaviours and perceptions of the members, influencing the way they understand the organizational mission and goals (Yukl, 1989), which strongly connects with the need of perceiving schools as learning organizations. The outcome of this influence is to create a collective vision on the members, striving for the collaboration while transforming and developing the organization (Yukl, 1989), aspect already stated as relevant when describing learning organizations (Pedler et al., 1991, as cited in Coppieters, 2005). At the same time, this Leadership approach is deeply connected with outcomes such as major changes in the culture and strategies of an organization or social system (Podsakoff et al., 1990), which fully regards to the current situation public schools are living and this urgent need to change methods and organizational culture and perceptions.

Since Public Basic and Secondary Schools in Portugal are currently going through a crucial stage, due to the pandemic situation, Leadership competencies comprising transformation, change and organizational culture, are crucial. This was the reason why, among many others, this was the chosen Leadership Model for the Project, and that will serve as a basis for the data gathering, which will be described later in the proper section.

Transformational Leadership can be considered either a micro or a macro-level influence process (Burns, 1978, as cited in Yukl, 1989), the first one concerning the influence between individuals, and the second one regarding the management of influence with the aim of changing "social systems and reform institutions" (Yukl, 1989, page 271). Both dimensions are crucial when referring to schools since, as already stated, they are a complex social system comprising multiple entities. There is the need of starting change at a micro level, beginning with the teachers and their methodologies, and then expanding this need of new integrations and methods to all the other stakeholders, making them aware of what their role is in this process.

During this transformational process, which can be conducted by any person belonging to the organizational structure and not necessarily one single person perceived as "the Leader", the appealing to strong emotions, such as justice, equality and peace is made (Burns, 1978, as cited in Yukl, 1989). The members are raised from their current selves to a better and more capable version, which is considered different than the influence exerted based on "bureaucratic authority" (Yukl, 1989, page 271), which emphasizes legitimate power and respect for rules and tradition (Burns, 1978, as cited in Yukl, 1989). At the same time, members end up performing more than what was expected of them (Yukl, 1989, as cited in Podsakoff, 1990). For instance, and as previously mentioned, whenever

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teachers understand the positive impact of the renewing of their methodologies, they will be motivated to perpetuate this behaviour.

For the transformational process to be effective, the Leadership needs to show and put in practice specific behaviours or competencies which will influence member's outcomes and behaviours as well. Several studies demonstrated that transformational leader behaviours have a positive impact on aspects, such as members' satisfaction and performance (Bass, 1985, as cited in Podsakoff et al., 1990). One very important aspect, also, is that these transformational leadership behaviours will have a bigger influence on member's extra job description behaviours(Graham, 1988, as cited in Podsakoff et al., 1990).

Regarding this topic, Podsakoff el al. (1990) studied the effect of six transformational leader behaviours on members' "citizenship behaviours", considered extra-role, mediated by their trust on the leadership. Conclusions were that transformational leadership behaviours indirectly impact member's "citizenship behaviours", having followers' trust in the leader as a mediator (Eisenberger et al., 1986). Concerning the six leadership behaviours that Podsakoff et al. (1990) studied, and which lead to the "citizenship behaviours" from the side of the members of the organization, they are "Identifying and Articulating a Vision", meaning the behaviour of the leader which consists of the creation of a clear vision for the organization, through the gathering of information, and driving people to achieve that vision with him; "Providing an appropriate model", which comprises "leading by example", being this example the leader sets, according to shared values with the members; "Fostering the Acceptance of Group Goals", which is the behaviour of the leader that promotes collaboration, team work and a team common vision; "High performance expectations", consisting of the behaviour of the leader which expects the best performance and excellence from the side of the members; "Providing individualized support", meaning the behaviour from the side of the leader showing appreciation and care for the member's personal needs and thoughts; and, lastly, "Intellectual stimulation", the behaviour which aims for the members to rethink their strategies and find new approaches for the job. These six behaviours are extremely important concerning several scopes, from driving change, to innovate and improving the experience of the members of the organization. Each one of them comprises specific aspects in which teachers, students, parents, among other entities and groups, strongly need the support of the Leadership to understand the mission of the organization and collect efforts to achieve final goals.

These Transformational Leadership behaviours also have an impact in what change and adaptivity are concerned. For instance, Griffin et al. (2010) studied the impact of the presence of a strong leader vision, one of the transformational leadership behaviours previously mentioned, on the levels of adaptivity of individuals high in openness to work role change. This impact was concluded to be positive (Griffin et al., 2010). Moreover, Albion & Gagliardi (2007) proved that transformational

leadership positively impact and predict job satisfaction during change, which is extremely important at the moment. Collective efficacy mediated these relationships (Albion & Gagliardi, 2007). These results propose that these transformational leadership behaviours, which are also connected with support, facilitate change (Albion & Gagliardi, 2007), once again, stating the importance of these transformational leadership behaviours in these organizations.

2.5. E-leadership

Due to the current pandemic situation, Public Basic and Secondary Schools needed to rapidly start working remotely, not only for the delivering of the classes to the students, but also for all the internal management, teachers' meetings, evaluations, among other tasks. Although this, there is not a broad amount of research concerning e-leadership in the public sector (van Wart et al., 2019).

But what is e-leadership? It is defined, by some researchers, as ''a social influence process embedded in both proximal and distal contexts mediated by AIT (Advanced Information Technology) that can produce a change in attitudes, feelings, thinking, behaviour, and performance'' (Avolio et al., 2014, as cited in Van Wart et al., 2019, page 107).

There are some reasons why this kind of Leadership is important. In several rankings, "communication" is on the top of the most important leadership skills and, living in a world where children are born and immediately introduced to technologies, there is the need to adapt communication means and tools (Avolio et al.,2014, as cited in Van Wart et al., 2019). At the same time, organizations are constantly changing and there is the emergency of patterns connected with the digital revolution, such as telework and electronical communication which needs to be managed by leaders (van Wart et al., 2019). There are called "collaboration tools" (Anthopoulos et al., 2007, as cited in Van Wart et al., 2019). Another reason is that, while all these changes are happening, the leadership itself also is, since there is an increase of the need of technologic competencies concerning new information and communication technologies (Groysberg, 2014, as cited in Van Wart et al., 2019).

Hence, for organizations, there is the need to integrate new technologies and digital methodologies, blending the traditional communication and management methods, with the new ones emerging from technologies developments. Concerning this practice, the Leadership, referred to as "e-leadership", is responsible for the adoption of these methods (van Wart et al., 2019).

For schools, and namely at this moment, it is extremely important for the leadership to have the right technology competencies and that eases digital integration in their methods. Moreover, it is important that these practices, which are crucial because of the pandemic, remain present even when the situation goes back to normal.

2.6. Technology integration in schools

The Fourth Industrial Revolution, being the "combination of Industry, automation, digitalization and the current Internet of Things (IoT) technology" (Adebayo et al., 2019, page 2478), is currently happening, and both the teachers and the Leadership of the schools need to be prepared to deal with it and its challenges so that educational organizations can continue to be transformed. In an environment where the teaching tools need to be preferably technologic, in order to keep the pace of the 21st Century classroom pedagogy, the representatives in school need to become, themselves, technology leaders so that they can spearhead the embracing of the inevitable and ever transforming digital era (Raman, Thannimalai, & Ismail, 2018).

Leadership is the component key in guiding the teaching-learning process thus, leaders need to motivate teachers to develop their teaching skills in order to approach a method connected with the digital era (Raman, Thannimalai, & Ismail, 2018). The way teachers perceive the importance of technologies in their classes shapes the way they teach (Sugar, Crawley & Fine, 2004, as cited in ChanLin, 2005) and, again, this awareness can strongly be created with the help of the Leaders, and it will bring strong benefits for the schools.

There is the perception that the integration of technologies on teaching methods boosts students' creativity (ChanLin, 2005) and familiarize them with the intellectual inquiry process (Berg et al., 1998). The usage of certain software, considered "productivity software", such as word processors, data bases, drawing programs, among others, are thought to provide to the students intellectually stimulating educational involvements (Berg et al., 1998). At the same time, there are several studies and research proving that technologies integration enhances teachers' confidence and willingness to adapt new methodologies and resources (Sugar et al., 2004).

However, for this integration to be successful, teachers need to adapt their practices and gather specific knowledge (Wiske, Sick & Wirsig, 2001, as cited in ChanLin, 2005) and, for this to happen, they need the right competences' development. Thus, two questions are important to answer: on the one hand, what are the conditions that motivate teachers to integrate technologies in their classroom (Demetriadis et al., 2003); and, on the other, what kind of support they need to gain that motivation and effectively implement new methodologies, such as resources or training, for instance.

But more than being delivered the right training and resources, there are several other aspects that can concern teachers during the process, such as the motivation provided by the community in general, the accomplishment of curricular goals (Shayo, Olfman & Guthrie, 2000, as cited in ChanLin, 2005), and the support mechanisms to cope with technical problems during the usage of technologies (ChanLin, 2005). Concerns and worries about the integration of new technologies exist and need to be approached to tailor professional development (Hall & Hord, 1987, as cited in Wiske et al., 2001).

Both the teachers and the students benefit from technology integration on the teaching/learning process and the appearance of new methodologies; however, conclusions are that it is extremely important that the right resources, both intellectual and physical, are provided so that this process is consistent. But is the Leadership of the schools, namely Public Basic and Secondary Schools in Portugal, ready to provide this support to the teachers? Do they have the right competencies? Are they digital leaders?

Again, the main goal for this project is to develop an intervention proposal under the assessment of the impact of the Covid-19 pandemic in a public basic and secondary school in Portugal, as well as what were the crucial Leadership Competencies to deal with this imposed change. The solutions are meant to be transversal and useful for the school during the whole schoolyear, and not only during critical situation which demand imposed change.

2.7. Current state of Leadership in Portugal's Public Administration

In 2019, the OECD provided a recommendation, which was accepted by Portugal, regarding leadership and public services competencies, which consists in three main pillars: shared values in the public service, which influences the organizational culture, leadership and the establishment of policies and services; a public service able to identify the competencies needed and align its employment systems towards the promotion of the full application of those competencies and skills; and a flexible public service, with the capacity of efficacy and efficiency while responding at the current and emergent challenges (DGAEP, 2019).

On the 27th of June 2018, there was an encounter fully dedicated to Innovation in the Public Administration and Leadership was a predominant topic. Mário Centeno, the finance minister at the time, stated that the big challenge placed to today's public services is to develop environments and work models which, through a mobilizing leadership, allow the workers to identify problems, formulate ideas, develop proposals, implement projects, evaluate results, and share knowledge in a more collaborative way (Centeno, 2019; INA, 2018).

Also, in July 2019, the Government presented the Leadership Development Centre, which was specially developed for the public Administration. This centre aims at developing certain leadership skills on managers and not-managers and the diffusion of innovative practices of management and leadership in public context (Centeno, 2019). The proposal presents training for Superior Directors, Intermediate Managers and Future Leaders, being the first two optional and the third one mandatory for the workers who start a certain position. For the Superior Direction, the intervention areas are public policies and management; Strategy, innovation, and change; Leadership in public services and Methodologies of collaborative work and management. For the Intermediate Management the areas are Ethics; Leadership; Strategy and Planning; Innovation and change; HR Management; Performance

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Management; Work and Family life management; Equality and non-discrimination; Health and Safety at work; Financial Resources Management; Public Hiring; Logistics; Knowledge and Information Management; Management through data; Management through communication; Digital transformation in public services; Marketing in public services; International Networks and Environmental sustainability. Lastly, for the Future Leaders, the intervention areas are Leadership and self-knowledge; Leadership Context; Management and Leadership at Public Administration and Leadership on Innovation.

To the best of our knowledge, only 3 sessions were delivered so far, about legal regimes and health and safety at work, having this last one a 70€ fee, and being all of them online. At the same time, these training is very broad regarding the sector, and there is only information about the existence of specific incidence on the leadership competences for the implementation of technologies on the public sector. This research can be used as a new topic for the program or even a complementary one for the already existing one.

Conclusions are that Leadership regarding the Public Administration is starting to be seen as a very important matter for the strive and management of organizations, as well as technologic competencies and integration, but there is still a way to go concerning the implementation of Leadership development practices.

2.8. Crucial basis to cope with change
2.8.1. Perceived Organizational Support

More than just a strong Leadership, there are other extremely important aspects that will help Public Schools on coping with the previously mentioned situation, change, and allow a fast achievement of their goals. One of them, and which will be reviewed now, is the Perceived Organizational Support (Eisenberger et al., 1986).

Employment is often seen as an exchange between the employee or member the organization, and the organization itself, where the first one provides commitment and hard work, and the second one delivers material possessions, such as the salary, which led to the need of studying this "social exchange" (Eisenberger et al., 1986). But more than the providence of economic means, and the perception of them, from the side of the members, as rewards, these last also develop emotional relationships with the organization (Buchanan, 1974, 1975, as cited in Eisenberger, 1986). Perceived Organizational Support increases the positive feelings members have towards the organization and their expectation of recognition whenever they commit to it (Eisenberger et al., 1986). This perspective of emotional organizational commitment is defined as "employee's identification with and involvement in a particular organization" (Mowday, Steers & Porter, 1979; Porter, Steers, Mowday, & Boulian, 1974, as cited in Eisenberger, 1986, page 500).

Members of an organization usually personify it by attributing a personality with positive or negative intentions towards them (Côté et al., 2021). As human beings, we tend to perceive actions from specific agents belonging to it, as events performed by the organization itself (Levinson, 1965, as cited in Eisenberger, 1986). In this regard, employees or members of the organization tend to establish beliefs concerning the extent of the additional reward they will get in exchange for the increase work and commitment, meaning that the perceived support from the side of the members would increase the expectation of the same towards seeing their efforts being rewarded ("effort-outcome expectancy"). In its turn, this "effort-outcome expectancy" will encourage the members to achieve organizational goals and increase efforts. This perception of organizational support can be compared to the commitment one exchanges in a social relationship (Michaéla C. Schippers et al., 2007).

Perceived Organizational support relates to other constructs. For instance, uncertainty is a common feeling when dealing with change (Bordia et al., 2004, as cited in Cullen et al., 2014), which can lead to the increasing of unhealthy behaviours and decreasing of job performance (Cullen et al., 2014). Thus, it is extremely important for the individuals to feel supported, and to perceive that the organization is providing them with a proper platform to cope with change and the associated negative experiences (Eisenberger et al., 1997). In this sense, Cullen et al. (2014) studied the effect of perceived organizational support on the negative relationship between change related uncertainty and job satisfaction, and on the negative relationship between change related-uncertainty and job performance. Conclusions were that Perceived Organizational Support mediates both these negative relationships.

Moreover, there are several studies demonstrating the importance and the effect Perceived Organizational Support has concerning several scopes. For instance, Côté, Lauzier and Stinglhamber (2021) shown there is a significant moderating effect of Perceived Organizational Support on the relationship between work engagement and job satisfaction, stating that, then the levels of work engagement are low, to perceive organizational support influences job satisfaction (Côté et al., 2021). This is crucial for times of change when members of the organization can feel overwhelmed and demotivated, such as the ones the pandemic is leading to. Moreover, Kurtessis, Eisenberger, Ford, Buffardi, Stewart and Adis (2017) developed a meta-analytic assessment on the theme, comprising 558 studies, and reached to the conclusions that perceived organizational support is positively related to social exchange, trust in the organization, felt obligation and normative commitment, performance-reward expectancy, organizational identification, affective organizational commitment (strongly), job involvement, job satisfaction, organization-based self-efficacy and work-family balance (moderately). Moreover, it is also positively related to the effort on behalf of the organization, in-role performance, and Organization Citizenship behaviours (Kurtessis et al., 2017), which are also connected to Transformational Leadership. At the same time, it was found confirmed that Perceived Organizational

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Support is negatively related to job stress, burnout, emotional exhaustion, work-family conflict, and turnover intentions, among other constructs (Kurtessis et al., 2017).

Concerning schools, it becomes extremely important that the members of the organization, being them teachers, students, or even the leadership, share this perception of Organizational Support and commitment as an exchange relationship. This is not only beneficial for the school as an organization, promoting its development and increase of contributions from the side of all the groups, but also for the well-being of those as well. They will feel like their work is recognized, and they will reciprocate (Gouldner, 1960), increasing the efforts since they feel valued and share positive feelings towards the organization. This will lead to innovation in teaching methods, for instance, or a stronger contribution from the side of the students as well, which is also very important.

2.8.2. Reflexivity

Another very important topic which helps managing change in organizations and increases their effectiveness, is Reflexivity. The concept of "team reflexivity" is defined as "the extent to which group members overly reflect upon, and communicate about the group's objectives, strategies (e.g., decision-making) and processes (e.g., communication), and adapt them to current or anticipated circumstances" (Schippers, et al., 2007, p. 190).

Effectiveness at the team level is crucial for the success of dynamic organizations such as, for instance, learning ones (Michaéla C. Schippers et al., 2007). In its turn, reflexivity is an important element for team effectiveness (West, 1996, as cited in Schippers, et al., 2007), which will increase at the same time the members of the organization reflect on their work and the culture they are working at, and, accordingly to that reflection, they end up adapting and performing change (West, 2000, as cited in Schippers at al., 2007). In fact, reflexivity is proven to be a predictor of effectiveness (Carter & West, 1998). At the same time, teams which usually show a more reflective behaviour tend to be more proactive while facing changes, since they will pay more attention to the strategies and goals of the organization, as well as properly analyse the environment where they are performing (West et al., 1997, as cited in Schippers et al., 2007). For schools, namely now, this reflexive process is extremely important. The changes and methodologies applied now will also impact the future, not only while the pandemic is happening. It is crucial to align the communication and the strategy and adapt it to the current situation, but always thinking about how the school can make the best use of it in the future and what practices can remain.

The role of the Leadership, in this process, is to share the collective vision and to drive every group belonging to the organization in the same direction. In fact, overall, leaders are responsible for the proper functioning of the team and, hence, for the integration and influence of behaviours such as reflexivity (Michala C. Schippers et al., 2008). Moreover, these reflexive behaviours positively influence

transformational leadership (Michala C. Schippers et al., 2008), another evidence of the importance of this construct.

Reflexivity is an iterative process which has reflection as a component, meaning a team's collaborative investigation and gathering of issues related to their work, including behaviours as "questioning, planning, exploratory learning, analysis, (…), reviewing past events with self-awareness", among others (West, 2000, as cited in Schippers, 2007, page 191). Through this process, it is possible to understand what methods the organization is using now that are obsolete or not (Tjosvold, 1991, as cited in Schippers, 2007).

Reflection has three levels of depth, being shallow, moderate, and deep (Swift & West, 1998, as cited in Schippers, 2007). The first one regards more operational procedures such as the task division among team members, for instance, in the school and during the pandemic, who was going to be responsible for the support of the teacher bord concerning technologies, who were the responsible for guaranteeing that every student was having access to remote classes. The second one concerns a deeper approach on the analysis of the task objectives and the process of achievement itself, meaning, for the school, how was going to be ensured that all the students were having access to the classes, or how was the support to the teachers going to be provided, and the needs assessed. The third and last one relates to the organization as a whole and the analysis of its values and rules, as well as their impact for the team performance. This last level is more connected with the work performed by a management team of the organization (Marques-Quinteiro et al., 2015). For the school, this one is crucial and concerns the school management during the pandemic. For instance, even though the people and the methods of assessing the needs of the teachers and the students were established, what was the role of the leadership on providing support to these responsible people for those tasks? At the same time, what were the methodologies they adopted to manage all the front works of the school during the pandemic, comprising all the belonging entities (both internal and external)?

Another important component of Reflexivity is Adaptation, which needs to happen at the same time reflection does, since the latter does not promote change without the first. It is a condition for the sustainability of organizations (Michaéla C. Schippers et al., 2007). Adaptation is defined as "goal-directed behaviours relevant to achieving the desired changes in team objectives, strategies, processes, organizations or environments identified by the team during the stage of reflection" (West, 2000, as cited in Schippers et al., 2007, page 192). This kind of behaviours, when implemented, will promote the discovering of new information, which will allow an iterative ongoing process of reflection, preparation, and further adaptation (West, 2000, as cited in Schippers, 2007). In this situation, it makes sense to perceive adaptation with regards to implemented envisioned changes, which were perceived or planned during reflection (Michaéla C. Schippers et al., 2007). Adaptation was one of the core capacities schools needed to have at that moment.

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An additional construct which is equally important and connected with team reflexivity is: "feedback-seeking behaviour", meaning the "information about how far one has progressed toward the goal" (Frese and Zapf, 1994, as cited in Schippers, 2007, page 192). The implementation of these kind of behaviours from the side of the members is made with the purpose of achieve higher goals and increase performance, through the assessment of their work (Ashford & Cummings, 1983, as cited in Schippers, 2007). This information regarding their job performance is very important to promote reflection, and the way teams process this information and use it is perceived as a sign, and only a sign, of team reflexivity (West et al., 1997, as cited in Schippers, 2007). For teachers to understand how they can improve their methods and, at the same time, for the leadership to understand the same thing, is crucial. Moreover, this information must not only be exchanged between these two groups, but the assessment of this kind of feedback from the side of the students, the parents and the staff is also important. In fact, it is important to state that combining a team reflexivity intervention with feedback provided prior to this intervention was shown to be the most effective way of improving the development of shared team and task knowledge and adaptation, leading to the final goal, the improvement of performance (Konradt et al., 2015).

2.8.3. Psychologic Safety and Learning behaviour

Organizational learning can be perceived as a process of error finding and solving (Argyris & Schön, 1978, as cited in Edmondson, 1999), characterized by the adaptation of behaviours leading to change management or the increase of performance, for instance (Edmondson, 1999). Moreover, this process is achieved through "asking questions, seeking feedback, experimenting, reflecting on results, and discussing errors or unexpected outcomes of actions" (Edmondson, 1999, page 353).

Considering the schools as Learning Organizations, it is important to understand how this process happens and, at the same time, what aspects can ease it. One of these aspects can be psychological safety, meaning the belief that a group is safe for taking risks, at the interpersonal level (Edmondson, 1999). This perception of safety will make the members of the organization feel confident in changing (Schein & Bennis, 1965, as cited in Edmondson, 1999). The shared sense that a team is not going to punish someone or making them feel less valid because of a mistake or because of speaking up, is implemented, leading to mutual respect and trust (Edmondson, 1999). Moreover, this will provide the members of the organization with a positive and beneficial team climate (Edmondson, 1999).

This group perception will ease the learning process and increase learning behaviours because people will not be afraid of speaking up or sharing their mistakes with the fear of these being held against them. This is extremely important in schools, for the teachers to feel confident in sharing their concerns and the mistakes they might have made while implementing a specific methodology, so that the group, and the teachers themselves can learn from that mistake and improve methods in general.

This is also important for the students, the leadership, and the other groups belonging to the organization.

There are studies demonstrating the positive impact of psychologic safety towards several constructs. For instance, Frazier et al. (2017) performed a meta-analytic analysis on the topic and concluded that psychologic safety is positively related to a proactive personality, emotional stability and learning orientation; positive leader relations; the work design characteristics of autonomy, interdependence and role clarity; a supportive work context; work engagement; task performance; information sharing, citizenship behaviours and learning behaviours; commitment and satisfaction (Frazier et al., 2017).

All these constructs will be used as a base for the data gathering process and, at the same time, will justify the intervention proposals developed.

3. Methodology

3.1. School Characterization

The school where the Project is taking place is a Public Basic and Secondary School located in Bragança, a city in the Northeast of Portugal, since 1836.

The school currently has 152 teachers and 978 students, being the second biggest Public Basic and Secondary School in Bragança. It belongs to the Emídio Garcia Grouping, being the head school and giving it the name.

Emídio Garcia has students from the 7th grade, having approximately 12 years old, until the 12th grade, where the students are around 18 years old. It is a very diverse school, offering several options for the students in what regards the several courses, from Sciences and Technologies to Humanities and Languages, Arts and Economics. It also provides Professional/Technical Courses in areas such as Health and Socio-Cultural Animation.

Almost every year, the school has a strong student representation in what national and international competitions in several areas are concerned, such as Mathematics, National and International Debating and Sports, which shows the commitment the students have towards the school. At the same time, it is common for Emídio Garcia to occupy above the average places in several rankings (Observador, 2020; Santana & Cruz, n.d.), having been considered one of the top 50 public schools in Portugal for the 3rd cycle on the year of 2016 (TSF, 2016).

In what the internal structure is concerned, there are several entities and groups belonging to it. On a vertical perspective, above the Direction, there is the General Council, the most important organ of the school and that has the role of shaping the strategic path of the school and electing the Director. Then we have the Direction of the school, composed by the Director, the Sub Director and 3 adjuncts. The Direction is supported by advisors. The organogram of the Direction, Administration and Management of the School can be found on Annex D.

3.2. Methodological Approach

The Project development presented in this work comprises the first three stages of the Consulting Process defined by Sabath and Kubr (1977), which are the Entry, Diagnosis and Action Planning.

The Entry stage concerns to the first contact and communication with the school, which was performed through a call and scheduling of an initial meeting with the Sub Director of the school, the person responsible for this kind of projects. This approach was done following the practices of the Process Consultation Model developed by Edgar Schein (1990), which is stated to properly suit human systems. There is an assumption that the client, which, in this Project, is the Leadership of the School, does not know exactly what problems the school is facing from the beginning, being only aware of the context and some aspects that need improvement. The scope of the Project goes beyond what can be

perceived without assessing the several groups comprising the school. At the same time, the Leadership is not aware of the type of help which is available and relevant (Schein, 1990).

During the initial meeting, a proposal of a Project, with specific timeline and steps, was presented (Annex I). It was based on a preliminary analysis done to the social environment and the current situation caused by the Covid-19 pandemic, previously described. This analysis was performed through a research conducted mainly on social media, namely newspapers, official websites, and TV newscasts, regarding the issues several public schools in Portugal were facing, and that were being exposed. Having in mind the gathered information and the topics which were addressed the most, the proposal was thought and built.

The proposal was accepted and, thus, the next stages were also set during this meeting, as well as the establishment of the people directly collaborating in the Project and the communication means. The Sub Director of the School was the person to approach when needed, and he was accountable for downscaling information and establishing the contacts with people whose collaboration was also needed. In addition to the meetings, the communication frequently occurred via email or phone call, when the matter was urgent.

During the Diagnosis phase, the data gathering, its analysis, and building of a Feedback Report to the school, with the results (Annex W), took place, as well as its presentation. The data gathering process will be described in detail in the next section. The data analysis and further discussion was based on the Model of the Dynamics of planned change process, to be developed on that section (Robertson et al., 1993). Still following the Process Consultation Model (Schein, 1990), the Leadership of the school, represented by the Sub Director, was a part of the diagnosis process.

Lastly, the Action Planning consisted of the building and presentation of the Intervention Proposal, having in mind the results extracted from the data gathered, the perspective and context of the school. As established by Edgar Schein (1990), concerning the Process Consultation Model, only the Leadership of the school has a clear perspective about the intervention which will properly work in the school and that will suit the school culture. At the same time, it is very important for the Leadership of the school, to gather some knowledge concerning problem solving, so that, in the future, they can become more independent and develop effective solutions. The methodology's timeline can be found on Annex F.

3.3. Data gathering

A mixed data collection, both quantitative and qualitative, was performed in this project, aiming at understanding the context of the school before the pandemic and the effects it had concerning different scopes. The implemented methods were five interviews, two focus groups and two questionnaires, which I will describe in detail in the next sections.

The quantitative method, the questionnaires, were very important to understand the perspective of the respondents concerning the approached topics and transform those perspectives and behaviours, anchored in specific variables, into numbers, with the aim of being validated and correlated (Robson & McCartan, 2002). On the other hand, as a school is a social system and people are the core of it, the qualitative methods, the interviews and focus groups, were very important to implement to analyse the utilized language (including body language), the interaction between the participants concerning the topics, and a more personal perspective from the side of them (Robson & McCartan, 2002). At the same time, the qualitative methods will help the author of the project to understand some of the answers to the questionnaires, corresponding to a Convergent Parallel Mixed Method, with the aim of corroboration (Creswell, 2012, as cited in Ragab & Arisha, 2017).

Three main groups of the school were approached during the data gathering, being the Management Board, the Teachers, and the students. To have their perspective on the impact of the pandemic on the School Management, concerning the teaching and the learning is very important. At the same time this will allow the author of the Project to cross some information form the several perspectives and try to extract relevant conclusions and build a sustainable Intervention Proposal, adapted to all groups.

3.3.1. Questionnaires

3.3.1.1. Procedure

Regarding quantitative methods, two questionnaires were implemented, one of them being directed at the students (Annex K), and another one to the teachers (Annex J).

The questionnaires were downscaled by the Vice President of the School because of the General Data Protection Regulation, through email. They were sent to 333 students and 145 teachers of the school. Regarding the downscaling of the students' questionnaire, the Students' Association of the school was also approached, and the questionnaire was published on their social media, twice, reaching the target audience, which was extremely helpful for the gathering of responses (Annex G).

Both the questionnaires were sent to properly address the perception of all teachers and the students regarding the impact of the pandemic for their teaching and learning, respectively, as well as their ability to adapt and find new strategies to cope with the situation.

The questionnaire comprised both open and multiple-choice questions. The aims of the open questions were the gathering of more qualitative, adapted, and detailed information about the topics approached, as well as to be a way for the students and the teachers to provide some extra comment or suggestion if they wanted to. The students' questionnaire comprised more open questions since, for the teachers, Focus Groups were also conducted, as well as interviews with the Leadership.

The building of the questionnaires followed the good practices on Robson and McCartan (2002).

3.3.1.2. Sample

As already stated, the questionnaire was sent to 145 teachers belonging to the school and teaching all grades, from the 7th to the 12th. It was a non-probabilistic and purposeful sample, since it was predefined that the respondents would be teachers from that specific school (Saunders et al., 2009, as cited in Ragab & Arisha, 2017).

The questionnaire was directly sent to each one of the teachers, through email, twice, on the 3rd of November 2020, and the 30th of the same month and year, so that the ones who did not receive or did not answer in the first place, had another chance to do so, if wanted.

The students' questionnaire was only sent to students from the 11th and 12th grades, on the 3rd of November 2020, since they are believed to be the ones with a better understanding of the questions and more independence when answering them. It was sent to 169 students belonging to the 11th grade and 164 attending the 12th, making a total of 333 students. It was also a non-probabilistic and purposeful sample, since it was predefined that the respondents would be students from that specific school and from those specific grades (Saunders et al., 2009, as cited in Ragab & Arisha, 2017).

3.3.1.3. Variables and Scales

3.3.1.3.1. Teachers' Questionnaire

3.3.1.3.1.1. Demographic data

Concerning the demographics, the Age, Gender and Teaching area were asked. For the ages, the teachers had to choose one of the following options: "Between 20 and 30", "Between 31 and 40", "Between 41 and 50", "Between 51 and 60" and "Between 61 and 68".

3.3.1.3.1.2. Technologic Resources

For the assessment of the resources the teachers had available, the author of the project developed this section, comprising 4 subsections: "Internet", "Devices", "Platforms" and "Work Environment".

For the subsection "Internet", it was asked if the teachers had Internet at home, to which they had to choose between the options "Yes" or "No". The second question was only for the ones who had Internet at home, and it comprised the following statement: "If so, is my Internet connection stable", which was evaluated through a 5-point Likert Scale from "1 – Totally Disagree" to "5 – Totally Agree". The following statements were "If so, I had to buy Internet to be able to teach remotely" and "If so, my school provided my with Internet connection to be able to deliver online classes" and they were "Yes" or "No" questions. The last question was an open one and it was for the ones who did not have Internet at home: "If not, how did you delivered classes to your students?"

Concerning the "Devices" section, the first question comprised a list of devices for the teachers to choose through which one they delivered online classes from. The devices were "Computer", "Tablet",

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"Cell phone", and there was the option "Other". More than one option could be chosen. The next statements were "I had to buy a device to deliver online classes" and "My school provided me with a device for me to deliver online classes", which had to be evaluated through "Yes" or "No".

For the platforms, the first question was a list of platforms – "Zoom", "Google Meet", "Microsoft Teams" and the option "Other", for the teachers to choose the ones through which they delivered online classes. More than one option could be chosen. The second question was a "Yes" or "No" question asking if they considered it to be the right choice and, lastly, there was an open question asking "Why".

3.3.1.3.1.3. Impact of remote teaching

This group of questions was also developed by the author of this project, and it is composed by 9 statements to be ranked through a 7-point Likert-Scale, from "1 - Strongly Disagree" to "7 – Strongly Agree", according to the level of agreement. Some of the statements, 4 of them, were formulated negatively, for example "Covid had a negative impact in what managing work and personal life are concerned" or "I consider that my cyber security was compromised due to the online classes"; and the remaining 5 were formulated stating positive aspects, such as "The School Leadership provided me with support during this pandemic situation". Thus, these statements will be analysed separately.

3.3.1.3.1.4. Impact of presential classes during the pandemic

These questions were formulated by the author of the project and are related to the impact of presential classes during the pandemic and teacher's perception regarding them. The section comprises three questions measured through a 7-point Likert-Scale going from "1 – Totally Disagree" to "7 – Totally Agree".

3.3.1.3.1.5. Well-being before and after the pandemic

This group of questions was built by the supervisor of this project, specifically for studies concerning this topic. The group is composed by a set of seven questions measured by a 7-point Likert Scale. For 4 of these questions, the Likert Scales goes from "1 – It's much worse" to "7 – It's much better"; for 3 of them It varies from "1 – It's much lower" to "7 – It's much higher"; and the last item goes from "1 – It's much harder" to "7 – It's much easier".

These seven questions are split in two groups, the first one concerning "Health and Well-being", where all the questions are measured by the 7-point Liker scale varying from "1 – It's much worse" to "7 – It's much better", and comprising three statements which the respondent had to evaluate accordingly to their situation at the time they filled the survey; and the second one referring to "Personal and Professional life management", composed by 4 statements measured through the 3

previously stated 7-point Likert-scales. The statements "Comparing with your situation before the pandemic, at the moment, the amount of your working hours is…" and "Comparing with your situation before the pandemic, at the moment, your ability to relax and recover is…" vary from "1 – It's much lower" to "7 – It's much higher"; the statement "Comparing with your situation before the pandemic, at the moment your, time management is…" varies from "1 – It's much worse" to "7 – It's much better"; and the statement "Comparing with your situation before the pandemic, at the moment, to manage your personal and professional life is…" is measured from "1 – It's much harder" to "7 – It's much easier".

3.3.1.3.1.6.   Reflexivity

This group of questions is adapted from the Schippers et al. (2007) questionnaire. Three questions from the dimension "Reflexivity" were adapted, being measured through a 5-point Likert Scale from "1 – Totally Disagree" to "5 - Totally Agree"; as well as four questions from the "Feedback Seeking behaviour" dimension, measured through a 5-point Likert Scale from "1 – Never" to "5 – Always". These dimensions and constructs were previously described and analysed on the Literature Review section. Cronbach alpha is 0,82.

3.3.1.3.1.7.   Technologies

The first part of the assessment of the technology impacts on teachers' classes was based on the ChanLin's questionnaire (ChanLin, 2005), developed to assess the factors in technology integration among teachers. From this questionnaire, 16 statements were adapted and measured through a 5-point Likert Scale from "1-Totally Disagree" to "5 – Totally Agree". These statements were divided in 4 dimensions, being "Social Impact", meaning the impact of the social world, comprising 6 statements, "Curricular Concerns", how the integration of technologies is done on the curriculum, "Environmental Support" and "Interest and Experience" comprising 3 statements each. The Cronbach alpha is 0,89.

The second part of the technology's section on the questionnaire comprises two questions, based on the questionnaire developed by Berg et al. (1998), on the exemplary technology use in elementary classrooms. The scale was used, with the exact same questions, for the students and the teachers' questionnaire.

The first question of this section comprises a list of 14 technologies and processes which require digital means for the delivering of the classes, which were taken from the 40 topics presented on Berg's et al. (1998) questionnaire. The respondents had to rate each one of the technologies and processes using a 6-point Likert Scale from "1 – Not at all important" to "6 – Highly important". This question was inserted in both the students and teachers' questionnaires. Cronbach alpha is 0,85.

The second question for the same group was adapted and, for the 14 items chosen for the previous questions, the teachers had to evaluate their competencies through the statement "I believe I have the right competencies on using this technology to support my teaching methods". The evaluation was done through a 6-point Likert Scale, from "1 – Strongly disagree" to "7 – Strongly agree", developed by the author of the project. Regarding the students, for this question they had to evaluate their teachers' skills on the usage of this technologies. The main goal of these questions is to compare if the students' perspective aligns with the teachers' one.

3.3.1.3.1.8. Leadership Competencies

3.3.1.3.1.8.1. Transformational Leadership

The next section of questions concerns Transformational Leadership, and it was adapted from the questionnaire Podsakoff, MacKenzie, Moorman, and Fetter on the topic, and which was already analysed on the Literature review section (Podsakoff et al., 1990). From the six dimensions developed by the authors, for this questionnaire, the author of the project chose only 4, more connected with the need of coping with change due to modifications in the environment, being them "Identifying and articulating a vision", "Providing an appropriate model", "Intellectual Stimulation" and "Providing Individualized Support". For each one of the dimensions, three questions were adapted and measured through a 7-point Likert Scale from "1 – Totally Disagree" to "7 – Totally Agree". Each one of the presented statements had to be rate by the respondents following the sentence "My Leadership…". Cronbach alpha is 0,95.

3.3.1.3.1.8.2. E-leadership

The following group of questions was adapted from a questionnaire developed on the topic by Van Wart et al. (2019), already analysed on the Literature Review section. From the six dimensions, developed as skills, presented in the questionnaire, 3 were chosen for this study: "e-communication skills", meaning that the communication must be organized, clear, careful not to convey any unintentional messages, and ensure that the communication flow is proper; "e-team building skills", to ensure, through online means, that the team is motivated, that all the members are contributing and that they are recognized; and "e-technologic skills", to manage the blending between virtual and traditional methods, to know what are the trends concerning the topic and to have the proper skills to use them. Each one of the dimensions studies comprises respectively 5, 4 and 3 statements to rate through a 5-point Likert scale from "1- Totally Disagree" to "5 – Totally Agree". Cronbach alpha is 0,92.

3.3.1.3.1.9. Perceived organizational support

The following three commitment statements were adapted from the Eisenberger et al. (1986) questionnaire on the topic, previously referred. The respondents rated each one of them through a 7-point Likert Scale from "1 – Totally disagree" to "7 – Totally agree". Cronbach alpha is 0,93.

3.3.1.3.1.10. Team Psychological Safety

The next 4 questions were adapted from the questionnaire developed by Edmondson (1999), already analysed on the Literature Review section, comprising only the "Team Psychological Safety" dimension. All the statements were measured through a 7-point Likert Scale from "1 – Very Inaccurate" to "7 – Very Accurate". Cronbach alpha is 0,69 when excluding the 3rd item from the analysis.

3.3.1.3.1.11. Adaptive Performance

Lastly for the teachers' questionnaire, the 8 following questions were adapted from the Marques-Quinteiro et al. (2015), questionnaire on the adaptation topic, which was already analysed on the Literature review section. The statements comprise the 4 dimensions approached when measuring Individual Adaptive Performance: "Solving problems creatively", "Dealing with uncertain and unpredictable work situations", "Learning work tasks, technologies and procedures", and "Handling work stress". Each one of the dimensions comprise 2 statements, measured through a 7-point Likert Scale from "1 – Totally Disagree" to "7 – Totally Agree". Cronbach alpha is 0,91.

3.3.1.3.2. Students' Questionnaire
3.3.1.3.2.1. Demographics

Concerning the demographics, the Age, Gender and School Grade were asked. For the ages, the students had to choose a number between 13 and 20, or the "over 20" option. For the School Grades, they had to choose "11st" or "12nd".

3.3.1.3.2.2. Impact of the online classes

The next set of questions was developed by the author of the project with the aim of perceiving the impact the remote learning due to the pandemic had on the students. It comprises eleven statements to be rated through a 5-point Likert Scale from "1 – Totally Disagree" to "5 – Totally Agree". There are three statements describing negative impacts of the pandemic and eight statements describing positive behaviours while attending online classes, which will be analysed separately.

In the end of the group, there is also an open question for the students to provide suggestions for the improvement of remote learning, if it was the case to happen again, which did.

3.3.1.3.2.3. Presential classes impact

The next set of questions was developed by the author of the project with the aim of perceiving the impact of presential classes during the pandemic. It comprises 4 statements to be rated through a 5-point Likert Scale from "1 – Totally Disagree" to "5 – Totally Agree". Also, an open question was placed, at the end of the section, for the students to provide suggestions on how to improve presential classes during the pandemic.

3.3.1.3.2.4. Technologies and Adaptive Performance

Concerning the usage of technologies and its integration inside the classroom, this section comprises 10 questions developed by the author of the project, before the pandemic. The 10 items are evaluation through a 5-point Likert Scale from "1 – Totally Disagree" to "5 – Totally Agree".

The questions concerning technologies' social impact, technologies integration and adaptive performance were already developed for the teachers' questionnaire. The Cronbach alfas are, respectively, 0,75; 0,78; and 0,89. The same happens for the section concerning technology resources.

3.3.2. Interviews
3.3.2.1. Procedure

Concerning the first qualitative method, five individual interviews were conducted with the School Management, aiming at understanding better their job description, main difficulties, and perspective on the impact of the pandemic on the regular functioning of the school, namely from the management's perspective (Annex L).

As a qualitative method, the interview ends up being a flexible and adaptable way of gathering questions to certain answers, being useful to observe the behaviour of the interviewee (Robson & McCartan, 2002).

The interviews were semi structured (Robson & McCartan, 2002) since there was a pre-established script, which can be seen in Annex L, but not all questions were asked in each one of the interviews and some were added or rephrased accordingly to the conversation. At the same time, the order could be changed if needed (Greener, 2008, as cited in Ragab and Arisha, 2017).

All the interviews were done through the Zoom platform, the dates can be checked in Annex F, and they were recorded and transcribed with the permission of the interviewees. This authorization was asked in the beginning of each interview, at the same time an explanation of the scope of the project was done. The interviews lasted, in average, 33 minutes, leading to 49 pages of transcriptions, 9,8 each, average. The demographics were only requested after the interviews took place (Annex H).

The building and conduction of the interviews followed the good practices of Robson and McCartan (2002).

3.3.2.2. Sample

The participants belonged to the Management of the School and the Tech Team. It is a group of five male, with an average age of 55 years, seniority in the school of 22 years and 11 years working in the current position (Annex H).

The group of participants is composed by the Director of the School, the Sub Director, two Direction Advisors and the responsible for the Technology Team. They were chosen to be the participants since they are the ones who have a clearer perspective of the impact of the pandemic concerning all the work fronts of the school and the more important ones for coping with the pandemic.

3.3.3. Focus Groups
3.3.3.1. Procedure

Two focus groups were conducted with 15 schoolteachers, the first one being performed with 8 teachers, on the 18th of November, and the second one with 7, on the 21st of the same month. The main aim of the Focus Groups was to gather a more personal perspective from the side of the teachers, understanding their experience during the pandemic, mainly during remote teaching, being this one of the main difficulties. At the same time, the corroboration and explanation of some of the questions performed to the Management Board and placed both on the students and teachers' questionnaires, was also a goal.

The focus group was also semi structured since there was the flexibility to add or remove questions and to change their order (Greener, 2008, as cited in Ragab and Arisha, 2017).

As a qualitative method, the focus group allows to comprise a high amount of information, while consuming less time than an individual interview. At the same time, the group dynamics and the existence of brainstorming can lead to the gathering of very interesting conclusions, which would not be reached if the interviews were performed individually (Robson & McCartan, 2002).

The focus groups were all performed remotely, through the Zoom Platform, and they were recorded and then transcribed with the authorization of the participants. The teachers participated under anonymity; thus, any identity will be disclosed. In the beginning of the focus group, the explanation of the project scope was also done. The first focus group lasted 1 hour and 6 minutes, and the second one took 1 hour and 32 minutes, each one of them leading to, respectively, 24 and 30 transcribed pages. Demographic data was requested after the conduction of the Focus Groups and it will only be presented as average, when analysed, to maintain anonymity. The average age of the teachers was 53 years old, the average seniority is 29 years, overall, and 11 years in this specific school.

The building and conduction of the interviews followed the good practices of Robson and McCartan (2002).

3.3.3.2. Script

The building of the script was, as the interview one, fully developed by the author of the Project (Annex M), who was also the moderator of both the Focus Groups and Interviews.

It comprises four main sections: "Initial Questions", "School Before and during the pandemic", "The future" and "Final question". The first one comprises two questions were built with the aim of making the Teachers comfortable, and to unlock the conversation. It was asked to the teachers if they had any questions before staring and what, in a more general way, were their main difficulties while delivering remote classes to the students.

The second section, "Before and during the pandemic", comprises several sub sections with specific topics, some of them like the topics approached on the interviews with the Leadership, and which data will be them compared in the Results' section. The first subsection was "Technologies" and questions related to the resources, technologic competencies, and barriers to the implementation of technologies in the school were asked. The second subsection is "Communication with the Leadership" comprises questions concerning the communication during remote work and before and pandemic. Questions such as "During the period when remote classes took place, how was the connection with the Leadership, in terms of communication and support?" and "In a general way, how does the communication between the Leadership and the Teachers' Board work, in terms of exchange of feedback?" were asked. The third subsection was "Distance Teaching", and it was created with the aim of understanding specific difficulties the teachers had during the remote classes, such as personal and professional life management, the connection with the students and the effect of this teaching method on the way they prepared their classes, for instance. The last subsection regards "Training" and the teachers had to evaluate the way the training processes work at the school, concerning the relevance of the topics, and the way it works in general.

The third section, "The Future" was built for the teachers to think about what the impact of the pandemic will be for the future of the school and to unlock brainstorming among them.

Lastly, the "Final Question" was built to clear any doubt the teachers had before finishing the Focus Group, and to ask if they wanted to deliver any feedback or suggestion concerning the way the conversation was conducted, or the questions.

3.3.3.3. Analysis Method for the Interviews and the Focus Groups

For both the Interviews and the Focus Groups, the Template Analysis method (King, 2014), was the chosen one to thematically analyse qualitative data. A hierarchical coding template (Brooks et al., 2015) was developed (Annex N and O), summarizing all the important and relevant topics, the codes, approached by the interviewees and dividing them in four levels, from broader to more specific details about each one of them. Some of these topics, mainly the broader ones corresponding to the 1st level,

were defined *a priori*, since the author of the project was already expecting them to be approached. For instance, the Training and Development of the Teachers and the Technologic Resources, were established *a priori*, having in mind previous research and the building of the scripts. Several other were defined *posteriori*, since the author of the project was not expecting them to be mentioned, and these mainly corresponded to topics concerning the 2nd, 3rd, and 4th level, where the interviewees explained in detailed their situation and perceptions concerning each one of the broader topics.

The coding template was developed throughout the reading of the transcripts for the Focus Groups and the Interviews. There is a different template for the Interviews and the Focus Groups, but they will be analysed together, comparing the answers concerning the same topics since the Interviews were conducted with the Leadership and the Focus Groups with the Teachers. With the templates finished, the writing of the results became more intuitive and easier to perform since the data is distributed and coded.

3.3.3.4. Sample

The 15 schoolteachers were chosen to participate on the Focus Group, having in mind the grades they teach, the discipline they deliver to their students, and their age. The goal was to have a diverse group of teachers, with different ages, different disciplines and teaching different grades, to have an overall perspective of the impact of the Covid-19 pandemic, and the way they experienced the school, concerning the topics approached, before the pandemic.

4. Results

4.1. Questionnaires

4.1.1. Teachers and students' demographics

As already stated, the questionnaire was sent to 145 teachers. From these, 66% (96 teachers) interacted with the survey, opening it. From those who opened it, only 88 teachers, corresponding to 92%, answered at least one question and, lastly, from these 88, only 73 teachers answered 100% of the questions. Only the questionnaires with 100% responses were analysed. Regarding gender and age, 64,4% of the teachers were female and the majority of ages is between 51 and 60, with 47,9% of the respondents (Annex A).

In what the students are concerned, again, the questionnaire was downscaled with the purposed of reaching 333 students. If all the 11st and 12nd grades received the questionnaire through their Class Directors and social media of the Students' Association, 225 students, being 67,6%, interacted with the survey, opening it. From these 225, only 176 answered more than one question, corresponding to 80%. From these, only 82 answered all the questions, being 47%. Only the completed questionnaires will be used in the analysis. Concerning gender and age, 70,7% are female respondents, with 29,3% being male. 62,6% are now on the 12th grade and the majority of ages, 83,2%, are between 16 and 17 years old (Annex B).

4.1.2. Teachers' and students' technologic resources during the pandemic

When looking to Annex P – Table 9, 100% of the teachers had internet at home to deliver online classes. On the other hand, there were student who did not have this resource. They were asked "If not, (if they did not have internet at home) how did you attend to the online classes?". Three students answered this question stating: "I borrowed Internet", "through Mobile Data" and "I did not… Only did when I could find some place with Internet, which was hard since everything was closed at the time".

Both questionnaires had, to support the quantitative answer to the question "Was it the right choice?" regarding the used platform, an open question asking "Why?". For the teachers, responses such as "Because it worked well"; "Because I perform classes, tasks and other files"; "It allows collaborative work and share"; "Good organization with possibility for the teacher to deliver feedback"; "easy to use"; "It allowed me to maintain the contact with my students and simulate, remotely, the classroom environment" or "because there were no other options", supported the positive answers. Concerning the 4,1% that answered "No", justifications such as "Because I did not have training using them"; "the software was too heavy and did not allow a desktop with all the students showing up in the screen"; and "Because the diversity of authorized platforms, from the side of the school group, brought issues to the students" were the ones given.

From the side of the students, they justified their answer by stating "It was the only way for us to learn"; "It was easy to use, and we could do presentations"; "Even though it is not the same, it was the closest we had from a classroom" and "because of the safety". For the ones who disagreed with the choice, the justifications were "I couldn't understand things very well", "I had problems opening most of the files through Microsoft Teams"; "online classes did not catch up the attention of many students" and "it was confusing and an overload of work".

Teachers needed to adapt their resources to be able to deliver online classes, with the necessity of some personal investment as well, on Internet and Devices. Students also needed to do personal monetary investments to be able to attend to the online classes and, still, from this sample, there was still a student who was not able to attend the online classes.

Concerning the platforms, as expected, the one which was used the most was Microsoft Teams, the official one for public most schools in Portugal, with Zoom Platform being the second choice.

Lastly, for the teachers, concerning the conditions to perform online classes, there were still some constraints happening since the percentage of people totally agreeing the conditions are the right ones is significantly low, 8,2%, meaning that there are still aspects to improve. When analysing the Focus Groups conducted with the teachers, there will be a better understanding of why these conditions could be improved.

4.1.3. Teachers

4.1.3.1. Impact of remote teaching

Teachers agree the pandemic had a negative impact on their teaching in several fields (Annex Q – Graph 2). Plus, even though the teachers feel considerably supported by the school and the leadership during the pandemic situation, the perception is not the same when referring to the availability of technologic resources and training to properly use the same. Finally, teachers perceive presential classes as extremely important, even during the pandemic and, most of the respondents agree that the right measures were taken and complied with by their colleagues (Annex Q – Graphs 3 and 4).

4.1.3.2. Well-being before and after the pandemic

Both "Health and Well-being" (Annex Q – Graph 5) and "Professional and Personal life management" (Annex Q – Graph 6), the situation of the teachers got considerably worse. The reasons behind it can be further described, when analysing the Focus Groups.

Overall, the results are not positive concerning teachers' perspective on their health status when comparing with the beginning of the pandemic and the time when they filled the survey.

4.1.3.3. Variables connected to coping with change

Concerning Table 2 (page 34), the overall average score for each one of the variables is not very positive, but median. The lower results are shown for Reflexivity, technology integration and E-Leadership. On the other hand, the variables Transformational Leadership and Adaptive Performance have the highest scores.

Concerning the correlations, the only variable which is not significantly correlated with all the others is Psychological Safety, being only significantly and positively correlated to Reflexivity and Transformational Leadership. Other than that, all the other variables are significantly and positively correlated to each other. These results corroborate some of the correlations presented on the literature review, such as the positive correlation between reflexivity and transformational leadership (Michala C. Schippers et al., 2008).

4.1.4. Students
4.1.4.1. Impact of the online classes

Concerning the adaptation to remote learning (Annex R – Graphs 8 and 9), the overall perspective of the data is not very positive for some of the statements. Overall, there is the perception, from the side of the students, that the pandemic affected their school experience and their scholar success. At the same time, they also feel they were supported by their teachers, more than by the Leadership or the school itself.

When the students were asked about suggestions to improve online classes if they happen again, some answers such as "I hope It does not happen again", "Other ways to perform evaluation", "train the teachers on this method of teaching", which was stated several times, "to make sure there is equality and that there are not prejudiced students or students in favour", "more practice and interaction", "improve the internet of some teachers, deliver resources to some students and reduce the subjects to deliver", "the school needs to provide further support (…) For example, a computer that can run the Teams program, a camera that allows the transmission of the class and a microphone that allows you to hear the teacher", "shorter classes", "If the school does not develop a critical mindset or autonomy of its students, how can you ask them to organize and learn alone?" arose.

There is a general perception of the importance of presential classes from the side of the students but, at the same time, they do not make the needed efforts to comply with the safety rules, that, in their perspective, need to be reinforced (Annex R – Graph 10).

Some of the answers on how to improve presential classes during the pandemic are "to have more breaks", "to comply with all the rules, fear is not always a bad thing", "rethink the entrance and circulation of the students", "reinforcement of the rules and supervision of their compliance", "alternate weeks for half of the classes, with one half going during one week, and the other half on the

Table 1 – Means, standard deviations and correlations between variables related with coping with change in the teachers' sample

Variable	Average Score	SD	1	2	3	4	5	6	7	8
1. Reflexivity	2,90	0,67	1	0,290*	0,239*	0,661**	0,681**	0,610**	0,346*	0,257*
2. Technologies Integration	3,67	0,54	-	1	0,569**	0,309*	0,435**	0,475**	0,109	0,385**
3. Technologies Relevance	4,35	0,68	-	-	1	0,515**	0,437**	0,445**	0,189	0,482**
4. Transformational Leadership	5,33	1,21	-	-	-	1	0,848**	0,801**	0,337*	0,429**
5. E-Leadership	3,49	0,74	-	-	-	-	1	0,710**	0,204	0,333**
6. Perceived Organizational Support	4,97	1,45	-	-	-	-	-	1	0,227	0,304**
7. Psychological Safety	4,92	1,48	-	-	-	-	-	-	1	0,218
8. Adaptive Performance	5,72	0,79	-	-	-	-	-	-	-	1

*Significant correlation at the 0,05 level

** Significant correlation at the 0,01 level

other", "students refusing to properly use the mask shouldn't be allowed to enter the classroom in the first place", "stop the gatherings in front of the school and the entrance door" and "reduce the number of students per class". These are just some examples of the answers.

4.1.4.2. Technology impact during classes

Students do not perceive a strong technologic integration inside the classroom (Annex R – Graph 11 and 12). The overall perspective in what the Individual Adaptive Performance is concerned, is positive for each one of the behaviours. Overall, the students consider they had good adaptations skills during the pandemic (Annex R – Graph 9).

4.1.4.3. Variables connected to coping with change

Table 2 - Means, standard deviations and correlations between variables related to the school in the students' sample

Variable	Average Score	SD	1	2	3
1. Technologies social impact	3,50	0,80	1	0,364**	0,119
2. Technologies Relevance	4,54	0,62	-	1	0,154
3. Adaptability	5,38	1,05	-	-	1

** Significant correlation at the 0,01 level

Concerning the variables in Table 2, the overall average scored and median, with student perceiving a high adaptation capacity from their side. Regarding the correlations, none of them are strongly correlated, with only the Technologies Social Impact and the Technologies Relevance showing a significant and positive correlation.

4.1.5. Technologies' crossed information between students and teachers

Concerning the perception of the importance of the usage of the digital platforms during classes, in a general perspective, in most of the technologies or platforms, the students perceive more relevance than the teachers, namely in data base, digital portfolios and evaluation methods (Annex S – Graphs 13). On the other hand, regarding the competencies the teachers have in each one of the same technologies and platforms, overall, the teacher perceive they have a higher level of competencies than the students perceive they do. Even though the gap is not extremely wide, it is still a significant difference and in almost all the platforms (Annex S – Graphs 14).

4.2. Interviews and Focus Groups

As already stated, both the interviews performed to the leadership and the focus groups conducted with the teachers approach several topics, some of them identical, while others were different.

One aspect these two groups have in common, is that both were not ready to face such an unpredictable situation and, at the same time, met extreme difficulties. From the side of the Leadership, while managing the school, there were "bigger constraints" (Leader 5), since "the management before and after the pandemic is very different" (Leader 5), with several situations "needing to be well though in advance" (Leader 1) but lacking enough time to properly plan them. For instance, "now there is the need to deal with students that, for many reasons, are isolating or tested positive, and we need to support them" (Leader 5), meaning that there is the need to coordinate remote and presential classes at the same time, for the same class. But the school does not have the resources to make that happen, since the "school still is not equipped" (Leader 3). Even being needed, the school does not have the conditions to allow teachers to deliver remote classes using school's equipment. This led teachers to use their personal resources to deliver online and presential classes, and invest in new ones when needed, but "teachers were never asked if they had internet or not" (Teacher 1, Focus Group 1), or any other resource such as computer or tablet. "It was tacitly set that there were computers" (Teacher 8, Focus Group 1) and other conditions for classes to happen remotely. Thus, teachers needed to buy new resources and updated their devices: "When the devices did not exist, people bought them (….) I needed a camera, I bought a camera" (Teacher 8, Focus Group 1). In the end, "the ministry (…) and the school benefited from the volunteering of the teachers. Not only concerning their ability of reinventing themselves, but also concerning technologic resources" (Teacher 8, Focus Group 1). "There were investments of about 1000/1500 euros" (Leader 1) because "the equipment they (the teachers) had was obsolete" (Leader 2). "Education survived because of the teachers and their abilities, as well as the resources they possessed" (Teacher 6, Focus Group 1).

This situation mainly happened because, when the 2012 Digital Plan, concerning the delivery of digital devices to the schools. was implemented, Emídio Garcia School received a residual number of resources. This school "was one of the last ones within the technologic plan and we were always poorly served" (Leader 1) concerning the resources. This led to the need of equipping the school using the private budget and old resources from another school. At the same time, the resources the school now has, the most recent ones, already are 10 years old now: "the equipment we have needs to be updated" (Leader 4); "all the material the school has is outdated" (Leader 5). This means that "it must exist a huge investment in the school, from the side of the Ministry of Education" (Leader 5). To solve this problem, when the interview was conducted, computers "were reaching the school, phased (*laughs*)" (Leader 3).

Stress management was also a big concern both for the Leadership and the teachers, since they were afraid of getting infected with covid-19 and contaminate their families when going home, when the classes were presential again. At the same time, having to deal with technologic resources at home was also a stressor, for several reasons. One of them is that the internet was constantly failing during remote classes, and this happened while sharing the house with multiple people using the same network: "at my house, the four of us were dealing with remote classes" (Teacher 3, Focus Group 1). Together, students collaboration while the teachers were delivering online classes wasn't ideal: "it wasn't mandatory for them to turn their cameras on and, thus, I wasn't aware if they were following my teaching or not" (Teacher 4, Focus Group 2); "they did not turn on the camera because they were saying it did not work" (Teacher 5, Focus Group 2); "from the moment we entered lockdown, in their (students') spirit, they started vacations" (Teacher 1, Focus Group 1); "they (the students) were not very interested, and they were more concerned in exploring the resources, but not necessarily the classes' resources" (Teacher 6, Focus Group 2). "Teachers cannot understand if the student is there or not" (Leader 3). At the same time, providing classes with the parents assisting to them, was not comfortable for the teachers since "the platforms allow for the students to be together with the parents" (Leader 3). Teachers also stated that "we cannot forget that the rest of the family was also at home" (Teacher 2, Focus Group 1) and that all of them faced "an exhibition in which we were the target" (Teacher 4, Focus Group 1). Moreover, teachers felt like they were not downscaled with clear strategies and guidelines to cope with these situations and that "it wasn't clear what we had to do" (Teacher 6, Focus Group 1).

All these stressors led teachers to achieve a state of extreme tiredness and an inability to separate their personal and professional lives: "Here, it was extremely bad" (Teacher 3, Focus Group 1); "I was exhausted. Even though we had a lower number of classes (…) they occupied a lot more time" (Teacher 5, Focus Group 1); "I read studies which stated that even our sleep, it's not a restful sleep" (Teacher 8, Focus Group 1); "If you do not impose limits with some reasonableness, you are systematic and continuously responding, without taking any breaks…" (Teacher 8, Focus Group 1); "at 7pm we were coming here (to the platforms), we had something, at 9pm maybe we had another assignment, another question…" (Teacher 1, Focus Group 2), "my house became my school, and my school became my house (…) I was 24h in the physical space *my house*, automatically being 24h in the physical space *my school*" (Teacher 1, Focus Group 1). Moreover, this management was even harder for the teachers having small children: "I'll start there, because I have a 4-year-old daughter, and I was in one compartment, my wife in another, my oldest daughter in another, and the small one was completely alone inside the house. And the most complicated thing I had to deal with, was her saying that she felt alone at home with 4 people, which, as a father, hurt me a lot" (Teacher 2, Focus Grupo 2). One interesting thing a teacher told was, to understand the general environment, was: "my son does not

know what he wants to be when he grows up, be he is sure he does not want to be a teacher" (Teacher 7, Focus Group 1).

On the top of all this, the teachers and the leadership did not feel like they had the right skills to cope with remote learning, and were extremely afraid of failing: "students were asking for my help and I did not have to knowledge to explain them" (Teacher 7, Focus Group 2); "a lot of teachers had difficulties (…) and low digital literacy" (Teacher 6, Focus Group 1); "I had never worked with Teams Platform before" (Teacher 1, Focus Group 2); "I, personally, did not know Teams Platform existed" (Teacher 6, Focus Group 1); some of the leaders "never used Zoom, Meets, Teams and all those platforms" (Leader 1). Moreover, teachers did not feel supported as well while coping with these difficulties: "if there was some technologic evolution, and concerning technologic competencies, the merit was from the teachers, who wanted to self-learn (…) concerning our leaders, at the moment we would be the same" (Teacher 1, Focus Group 1); from the side of the Leadership "the truth is that there was some good will, but it did not go further than that" (Teacher 1, Focus Group 2); "I called the Leadership and told them that I am going to the school to deliver my classes (…) and they told me that couldn't be" (Teacher 1, Focus Group 2); "the leadership could have done more, we all could have done more" (Teacher 2, Focus Group 2). But, although this, teachers understand that "they (the Leadership) were also caught by surprise" (Teacher 7, Focus Group 1), "they were as stressed as we were" (Teacher 6, Focus Group 2). In the end the situation went well, and remote teaching was delivered since "there was a big effort from the side of the school and the grouping, to properly set the platform" (Leader 1).

To evaluate the students was also a concern for the teachers since it was the first time that evaluation methods needed to be implemented online: "one of my biggest difficulties was the evaluation" (Teacher 3, Focus Group 2). Some teachers provided feedback to their students, others did not, which made the students confused as well since they did not know if they were progressing or not" (Leader 3). At the same time, teachers were afraid of fraud from the side of the students and not knowing how to control this.

Lastly for the teachers, they did not feel like their work was recognized during the pandemic: "when you perform the case study, Catarina, I want you to refer that this is not the perspective of one teacher, it is a general situation (…) and I do not know if I can say that I am hurt, but, such as my colleagues, I was expecting that, such as some parents recognized, others stated that we reinvented ourselves and exceeded expectations in what we were doing (Teacher 6, Focus Group 2). And this was directed to the government and the leadership of the school. It is important to state that this was mentioned 13 times by the teachers.

Of course, the teachers and the leadership were not the only ones with difficulties, the students had them as well, namely "difficulties while accessing to the informatic network" (Leader 1). It was the

overall perspective that, even having some digital means, they did not have the proper ones to establish contact and correctly participate in online classes. Together, the social and knowledge gap between students become a lot wider, with "some deficiency, from the side of the Ministry and the municipality, in being able to provide students with the same conditions" (Leader 5). This will provide an impact on the learning process as well: "the good ones, remained good, the bad ones, became worse, and the dynamic we have inside the classroom, even though already being in person, does not help at all" (Teacher 2, Focus Group 2); "the students with special needs, they are getting lost and some of them… I fear they will never recover (Teacher 2, Focus Group 2). The school lost its embracing role.

At the same time, the students cannot spend their energy and were tired of distance learning, since they felt the need of being together with their colleagues: "They (the students) talk and reveal that worry that, in fact, there is the need of being together" (Teacher 7, Focus Group 1). Lastly, they ended up losing sense of what the classroom really is: "How will the students recover that context of the classroom as a place to be sit and properly sit, to listen and participate (…)?" (Teacher 6, Focus Group 2).

For all those reasons, the general perception is that "presential classes are the best option" (Leader 3) and that "for the ones who thought that they would move onto the almost exclusivity of e-learning in schools, forget that" (Teacher 7, Focus Group 1). And this happens because the social distancing brought an unwanted dehumanization of the education process, both because of the remote classes, but also because "nowadays, the teachers deliver their classes and go home. There is no social side of it. We look like robots, we get it, get out, and there is no social relationship". "And this makes us all extremely sad" (Leader 4). Which brings another problem: the way students perceive the school, more connected with the "younger ones, since we have 7th grade students that do not know what "Liceu" is, for them this is the school reality, when "Liceu" is nothing like this" (Leader 4).

But what aspects could have eased all these difficulties and issues? First, training and development, if properly implemented and if there were some bases prior to the pandemic, both for the teachers and the Leadership. Concerning training during the pandemic, for the teachers, the opinion is that it was delivered when online classes were already happening and it was training to teach how to deliver remote classes, also delivered remotely: "Us, teachers, are also students and we needed to learn from ourselves. In fact, a lot of the training in the beginning, several webinars were delivered but they were supposed to be applied on the next day, there was no time to consolidate that training and mature the teachers" (Leader 5). Moreover, the webinars and training "did not reach everyone" (Leader 2), but there is not an explanation for this aspect. In this sense, the Leadership and the teachers are counting on the support of the Digital Development Plan 2021, "where training will be delivered to the teachers, concerning digital abilities" (Leader 5). Concerning the topic on training, teachers feel like they did not

have enough support and that they are "at the same point where we were in March 2020" (Teacher 1, Focus Group 1). When it comes to the Digital Development Plan 2021, they are not very confident about its implementation: "when it reaches the ones with 60 years, they will not want it", "I know that it will not happen during that time" (Teacher 1, Focus Group 1).

At the same time, the Leadership perceived that there were some self and peer training happening, in order to cope with the pandemic situation, but some teachers still do not perceive this method as relevant: "these are aspects that, usually, a lot of people are not used to and, more than that, they do not accept it (…) and are not sensitized for peers training" (Teacher 1, Focus Group 1). Moreover, much of the knowledge the teachers gathered was through groups on social media. Although the lack of perception of the relevance of peer training the teacher "rely on each other, more than on an integrated plan" (Teacher 8, Focus Group 1).

Before the pandemic, there were some training sessions on digital literacy, but it was not perceived as very much adequate and training concerning remote learning never existed.

Concerning training for the Leadership, namely Leadership Competencies, "there were some sessions" (Leader 5), but not as much as needed. This leads to another issue, "the onset of good leaders (…), of someone who is available of accomplishing the role is all its scopes" (Leader 1). Moreover, "leadership in schools is a concept which is not instructed yet" (Leader 1), which is something necessary. A Leader should be someone considered fundamental in every team and with the ability of delegating. "A Leader had to be someone with the capacity of having a common vision and be able to delegate. This is another issue (…) I perceive a big difficulty in delegating (…) and in establishing our own goals and clear indicators" (Leader 1). Together, when the figure of the "Principal" appeared, "there was not an effort of preparing the leadership, they prepare them for administration" (Leader 1). "The school, now, can be compared to a company as well since they "are obliged to make profits" and "have goals to achieve" (Leader 1).

Another aspect that could have eased the coping with the pandemic was the communication with the teachers "The Direction of the school can't do anything if they do not have the teachers' support and collaboration" (Leader 5). There are some specific spaces and intermediary structures, such as class councils, disciplinary sections and "it is there where we get (…) some information and suggestions" (Leader 5). But there is the need to improve, all that communication and the Leadership "would like it to be a lot better and what is needed, from the side of everyone, is support" (Leader 5). Teachers consider that what was said in those specific communication spaces "simply (…) did not leave the space" (Teacher 6, Focus Group 2). The fact that there such a high number of teachers creates some noise concerning communication and is ends up dispersing. In the end, the Leadership considers that it works since "it is very easy to access to the Leadership and communicate in an informal way" (Leader 1). Another aspect that can lead for the communication to flow smoothly is the fact that some teachers

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still feel uncomfortable in writing what they need to say, and they rather transmit them verbally. "The majority of teachers still feel it is binding (to write), in some way" (Leader 4).

Financial autonomy is also a struggle. Concerning financial autonomy, "that is complicated because, actually, public accounts are hard by nature" (Leader 4) and the school "has to obey and each decision need to comply with strict procedures" (Leader 4). Whenever the school "needs something, it is always said that we do not have a budget" (Leader 2) and "schools face several issues which request money to solve, and that money is not easy to get (Leader 3). So, this lack of autonomy functions as a barrier for technology implementation since "school's budget is not enough to but informatic devices" (Leader 5).

Guidelines from the Government "could be clearer" (Leader 5) and "the Minister could be more present and guiding, regardless of politic ideologies (…) the guidelines were not specific and (…) there are dozens of guidelines stating *whenever possible* or *if possible*" (Leader 3). So, "there has been some lack of coordination in that sense" (Leader 3) and this leads for the "parents, students and teachers to be confused" (Leader 3), also existing "some contradictory information" (Leader 5). There was some "deficiency from the side of the Ministry of Education and from the side of the municipalities as well" (Leader 5); the Government as well… In fact, I do not know if we still have a Minister or not, because I haven't been seeing him anywhere *(laugh)*" (Teacher 5, Focus Group 2). Teachers agree with this aspect, that "guidelines are not clear to anyone" (Teacher 6, Focus Group 2), which brings several concerns, such as GDPR: "it worries me that, at the moment, there is not a clear guideline concerning Data Protection, and I do not know if, when I am placing a tablet or a laptop transmitting my class, if I am gathering students' voices without consent, I mean… I do not understand how, 8 months after the starting of the pandemic, there is not a clear guideline…" (Teacher 2, Focus Group 2). Despite this, in terms of safety material, such as masks and sanitizer, everything was delivered as promised when schools reopened.

Another constraint is the resistance to change, from the side of teachers, "and this does not come from the older ones only, there is a little bit of everything" (Leader 4) and "it all depends on the openness we (Leadership) have while dealing with new technologies" (Leader 4).

Nevertheless, there were not only negative aspects and both the Leadership, and the teacher were able to take positive things out of such a negative situation. First, there is the overall opinion that "teachers had an adaptation capacity to the circumstances, which was heroic" (Leader 4), and that was "truly surprising" (Leader 1) and teachers "did not want to leave their students behind" (Leader 3). Even the older teachers, almost retiring, provided with their contribute. From the side of the teachers, they consider that this situation was an "open window of opportunities" for them to "learn new tools, open doors to other kinds of methodologies" (Teacher 8, Focus Group 1). At the same time, the general perception was that teachers "adapted and reinvented themselves as fast as possible" (Teacher 8,

Focus Group 1) and gave all they had. "Even the colleagues not having a natural aptitude for technologies (…) assumed teaching not as a job, but as a mission" (Teacher 4, Focus Group 1).

Lastly, there was also a reflection towards what will the impacts of the pandemic be for the school. As expected, there is some uncertainty since "there is no evident data" (Leader 3) and it is the role of the Leadership and the school to ensure "that there aren't big changes" (Leader 5) for the students. At the same time, there is the need of awareness, both for the teachers and the government, "that education must not suffer as much as it does sometimes" (Leader 5). At the same time, it is very important, and this situation showed that "each one of us needs to self-train and understand that things can change very fast (…) and technologies are global" (Leader 2). Also, distance learning will become a more present reality and "each teacher, as well as the parents, need to possess these electronic tools, namely informatic ones, which allow to develop remote work" (Leader 3). "We lack the ability of performing remotely with the quality we perform in person" (Leader 3). From the side of the teachers, they are worried about the "consequences at the psychological level" since there is a "mental wear and tear" and "it will not be easy to go back to normal" (Teacher 2, Focus Group 2). There is also an expectation for the "parents of the students to value teachers more (…) which will be positive in the future" (Teacher 1, Focus Group 2).

About the leaders, there needs to exist "a full and constant attention for updating and recycling, training, and investment (…) or what is going to happen is that we will continue with the same paradigm of a 18th century school, in a 20th century building for 21st century generations" (Leader 1).

Concerning characteristics of the teachers' board there is the need to raise the awareness that this board is aged, "being very close to the average age of 60 years old" (Leader 3) and "there is always a certain resistance concerning adaptation to each one's needs of updating (…) there is always a certain resistance to change" (Leader 2). "Being a teacher, nowadays, is not the same of being a teacher 30 years ago (…) there is the need of permanently readapting strategies. From one moment to the other, students are different, parents are different, study contents are different, the learning methods are different…" (Leader 3). Also, there is a lack of awareness of the relevance of the platforms, and even for the future, when the current pandemic situation ends, everyone needs to understand that: "technologic means are not a precocity" (Leader 1).

Lastly, it is important to state that these small group moments with the teachers were valued by the teachers: "Catarina, I wanted to thank you for allowing us to have this space where we are being heard because, until today, we hadn't had the opportunity to do so" (Teacher 6, Focus Group 2).

The Table 10 in Annex T sums up all the information gathered from the interviews and the focus groups, dividing the content by themes and topics for each theme.

5. Intervention

5.1. Theoretical Rationale

The discussion and data organization will be performed having as a basis the model developed by Porras et al. (1992), which was also the diagnosis model used, concerning the dynamics of planned organizational change. The model assumes that "organizations are contexts within which individuals behave" (Robertson et al., 1993, page 620), and it comprises 4 systems which are connected among them: organizational arrangements, social factors, technology, and physical setting (Porras & Robertson, 1992, as cited in Robertson et al. 1993). These systems influence the way individuals behave in the organization.

Concerning the subsystems, Robertson et al. (1993) defined the four of them. The organizational arrangements comprise, for instance, the formal structures, since they are all the formal assumptions and factors needed to develop an organized activity. Social factors are the characteristics of the members of the organization, both individual and group ones, as well as the way they interact with each other. In its turn, technology includes job design and workflow design, namely everything that can be turned out into an output. Lastly, the physical setting encompasses the physical space and its characteristics.

Regarding the results, there are three specific sub systems needing change through an intervention, which will be presented next, being them the technology, the social factors and the organizational arrangements. About the technology subsystem, it was stated several times both from the side of the teachers and the leadership, that the resources provided by the school and that the teachers already possessed were not enough to cope with remote learning. At the same time, students did not have the proper technologic devices as well. This led to big investments from the side of all the groups, when possible. Moreover, neither the teachers of the Leadership felt they had the right competencies to use the platforms and the digital means in general, lacking training and knowledge about the processes, which led to several issues such as not being able to assess if the students were following the classes, students having doubts and teachers not being able to clarify them, and a high level of stress concerning technologies. More than that, concerning the questionnaire results, the average score for technology integration was not high. This subsection, however, will not be approached in our intervention proposal since the Government already is developing a training plan for teachers, on digital competencies, called DigCompEdu (Lucas & Moreira, 2018). This project started to be developed in 2018 and is starting to be implemented at the schools, within the time frame of three years. The training project comprises 22 competencies, split by 6 areas, being them Professional Involvement, meaning the usage of digital technologies for institutional communication, collaboration, and professional development; Digital Resources; Teaching and Learning; Students' Evaluation; Learning capacitation; and learners' digital competencies promotion. These areas will tackle all the

difficulties which were stated by the teachers concerning the usage of digital resources. At the same time, the Government is also delivering digital devices to teachers and students, even though the remote classes already ended, as a way of promoting digital learning and the inclusion of every person. This leaves social factors and organizational arrangements as the two main scopes for the intervention (Lucas & Moreira, 2018).

Concerning the social factors and using as theoretical framework the Job Demands-Resources Model (Bakker et al., 2014), the teachers, the Leadership and the students, all have seen their job demands, which are predictors of burnout and are aspects of the job that require high efforts (Demerouti et al., 2001, as cited in Bakker et al., 2014), increased, which can be easily perceived when analysing the results of the comparison questions concerning the health and well-being before and after the pandemic. This fact might have led to the overall feeling of tiredness and exhaustion since job demands predict burnout, which causes more phycological and physical health issues (Schaufeli & Enzmann ,1998; Shirom et al., 2005, as cited in Bakker at al., 2014). Moreover, their job resources, several aspects of the job which help on reducing job demands and promote goal achievement (Bakker & Demerouti, 2007, as cited on Bakker et al., 2014) and that predict job engagement (Halbesleben, 2010; Schaufeli & Bakker, 2004, as cited in Bakker et al., 2014), became scarcer, such as, for instance, the possibility, from the side of the teachers, of being with their colleagues, the same for the students. This is a negative aspect since job resources usually buffer the impact of job demands (Bakker et al., 2014). At the same time, job resources become more impactful when job demands increase (Bakker et al., 2014), reason why their decrease it is so prejudicial during this situation.

Overall, some job demands perceived from the side of teachers were the urgent need to cope with change and an unprecedent situation without feeling they had the right competencies, material resources – which they had to personally buy - or support from the side of the leadership and the government. At the same time, while remote teaching, there was not a clear perception about the students' development which led to the stress increase. These are all demands which happened during remote teaching and that, now that school became presential again, will be solved, at some extent.

But there are other demands, which will be developed next, that remain, even with the end of remote learning, and it is concerning those that the intervention must act upon. First, one of the issues stated by the teachers several times and that was perceived as one of the biggest difficulties was the establishment of work-home barriers, which are often sought (Kreiner et al., 2009), and the maintenance of balance between these two scopes, leading to technostress and to a worsening, at a larger extent, of the psychological and physical state of the teachers. The work-home interface functions as a boundary between the domains of work and home, and it is extremely important because it allows the organization members to percept the way they control the world (Clark, 2000; Nippert-Eng, 1996, as cited in Kreiner at al., 2009). These boundaries are usually negotiated with others

(Kreiner et al., 2009), and therefore it is crucial for the teachers to negotiate and manage expectations with the Leadership and, most important of all, with the students when remotely working. The incongruence between the boundaries established by the teachers and their understanding from the side of the other groups will lead to negative outcomes, such as strain and conflict (Kulka, 1979, as cited in Kreiner at al., 2009), as well as physical and emotional exhaustion (Kreiner et al., 2009) At the same time, this will lead to incompatibilities between the work and home scopes (Kreiner et al., 2009). Thus, an intervention concerning boundaries establishment and expectations management is needed.

Another demand, which hindered the coping with the pandemic, but that is also important for the general functioning of the school is communication, namely institutional communication. Both teachers and the Leadership stated that, even though internal communication happens, there is still a long way to go regarding improving it and implementing best practices. This communication is not only important for the proper flow of information between the teachers and the leadership, but it is also important for the interaction between the teachers themselves. This work of improving the communication patterns within the school is not only a work that needs to come from the Leadership, who, obviously is the starter of this process, but the collaboration of the teachers is also extremely important. This lack of communication between the teachers can, eventually, explain the lower average score of the Perceived Organizational Support and Psychologic Safety since there is not an exchange of information, methods, and solutions, not leading to the creation of a safe space and comfort to fail and ask for help.

From the side of the Leadership, communication is extremely important to keep every member of the organization in the same path and promote shared mental models and behaviour patterns which will promote goal achievement (Zaccaro et al., 2001). But more than the top-down communication, the group cohesion leading to the communication within the teachers, for them to share insights, to share contents and methodologies, and to ask for help, is very important and its promotion is, as well, one of the important roles of the Leadership. This group cohesion will create a sense of care within the group, since the members of the organization are concerned about group achievement (Zaccaro et al., 2001)

The lack of feedback and reflexivity behaviours both from the side of the leadership and the teachers is also a demand which the teachers faced and that difficulted the whole coping with change process, and this will be developed next on the organizational arrangements. It is the role of the Leaders to promote this feedback behaviour, both individual and collective, and reflection upon the methodologies used to achieve a certain goal (Zaccaro et al., 2001). This is one of the most effective ways of promoting team effectiveness (Zaccaro et al., 2001). This collective feedback process will also allow the team to deliver suggestions and brainstorm, boosting creativity and eventually reaching better solutions concerning the methodologies to implement.

Lastly, all these demands led to the teachers, the students, and the leadership to attain a state of tiredness and exhaustion and, thus, recovery mechanisms are needed. Stressful situations at work usually lead to a decrease of physical and psychological health and well-being (Sonnentag & Fritz, 2007), at the same they hinder job performance. Moreover, even though individual perceive they have job resources, stress usually threatens these and decreases health (Sonnentag & Fritz, 2007). Thus, recovery processes are important to maintain health, well-being, and job performance (deCroon, Sluiter & Blonk, 2004; Eden, 2001, as cited in Sonnentag & Fritz, 2007). In this sense, there are certain activities, which have common characteristics and promote certain experiences such as relaxation or psychological distance from the job mastery and job control, that will help during this recovery process (Sonnentag & Fritz, 2007) and increase engagement, health, and well-being.

Concerning the resources, which became less, teachers stated the leaving of the physical building of the school, the dehumanization of the teaching process, the cut concerning the proximity with the colleagues and, also very important, now that the school as reopened, the ability to use the teachers' room. These resources will gradually increase again while the current situation returns to normal and, thus, the intervention will not have these as scope.

Regarding the leadership, they have seen their demands increased as well, namely in what the number of constraints are concerned, which demanded fast answer; the dehumanization of the school, which was also felt by the teachers and the students; the dealing with several stakeholders and groups in a time when information flows were not clear and guidelines were not concrete. Just like as the teachers, the leadership never faced a situation such as the pandemic one and they did not feel like they had the proper skills and resources to manage it smoothly, even though all the effort were made. At the same time, the resistance to change from the side of some teachers also difficulted the whole process, but it is the Leader's role to drive this change process and avoid resistance behaviours. Lastly, the lack of financial autonomy also constrained the Leadership's possibilities of providing teachers with the proper resources to cope with remote learning.

Finally, concerning the organizational arrangements, the intervention towards this scope will focus of the Leadership Competencies and the way these shape the way the school functions. These Leadership behaviours, form the side of the top management team of the school, compose the final structure of the organization. At the same time, and as already stated, leaders are the starter for the changing process and, thus, to intervein in the competencies they have less developed, is crucial.

Teachers stated that they did not feel support from the side of the leadership, that they did not feel like their work was appreciated, that they were not provided the proper resources, did not receive feedback, and did not perceive their voice was heard when complaints and suggestions are concerned. At the same time, the average score concerning the E-Leadership competencies was also low, and the Transformational one was median. Even though this, it is very important to state that teachers also

acknowledged that the leadership was caught off guard and that they did their best to provide support having in mind their competencies and resources. Thus, it is important to understand what competencies Leaders need to develop and are both important to cope with similar situation in the future and are also needed daily.

Some Leadership behaviours which need to be developed by the Leaders were already developed in the Literature Review section, namely the ones concerning Transformational Leadership, E-Leadership, and the promotion of reflexive behaviours. More than that, some Functional Leadership behaviours, and functions (Morgeson et al., 2010), such as, in an initial stage, defining the mission of the team, to establish expectations and goals, to structure and plan activities and methods, to promote training and development for the team, and to promote sensemaking withing the members of the organization, are also very important for the achievement of the team's goals and its good functioning. At the same time, feedback provision is also seen as relevant, as already stated, alongside with monitoring the team, manage team boundaries, solve problems, provide with resources, and support the social climate (Morgeson et al., 2010). These leadership functions, when properly integrated by the leaders, promote the satisfaction of team needs and enhance effectiveness (Morgeson et al., 2010).

At the same time, there are other behaviours that will help the team in achieving their goals, namely the information use in problem solving and its processing within the team, the promotion of adaptation of the team concerning the external environment and the building of team mental models which will lead for the members of the team to perceive a shared vision and the same goals to attain (Zaccaro et al., 2001; Kozlowski et al., 2008). At the same time, the constant motivation of the team and the control of the affect of the several members is also extremely important, alongside with all the coordination processes (Zaccaro et al., 2001) and the promotion of cooperation (Kozlowski et al., 2008).

All these behaviours, needing development, were stated by the teachers as lacking during the pandemic but, the truth is that they are crucial for all situation and stages the school faces during the year. Thus, to intervein in training these behaviours is crucial for the future of the school. It is also important to state that, based on the correlation coefficients obtained from the data gathering on the questionnaires, to specifically intervein in some aspects will help on the improvement of other scopes since they are significantly and positively correlated.

Overall, the results extracted from the data were according to the expectations, except for the Perceived Organizational Support and Psychologic Safety variables, which presented average scores lower than what was expected. Having in mind the prior research done on the current situation of Public Basic and Secondary Schools in Portugal concerning the Pandemic, and regarding the Leadership Competencies development at Public Schools as well, a perception of lack of investment in these two areas was already estimated. All the results end up making sense since, despite all the difficulties,

Emídio Garcia School is a good school, with medium-high quality and a population with an average socio-economic background.

The Table 11 in Annex U sums up the Demands and Resources, framed by the model developed by Porras et al. (1992), which will be a focus for the intervention, and the Job Demands-Resources model.

5.2. Intervention proposals

Following the previously described model, interventions can be perceived as the activity of implementing changes in each one of the elements of a specific working set (Robertson et al., 1993).

The several interventions developed aiming this project will be framed using as a basis the Kurt Lewin's Change management model, which comprises three stages: unfreeze, moving and refreeze (Anderson, 2012). Change only happens when current practices and methodologies and abandoned, which corresponds to the unfreeze stage (Anderson, 2012). The moving stage takes place when the members of the organization are performing actions promoting change. Lastly, there is the need to refreeze these new practices, making them a common standard for the organization (Anderson, 2012). This change only happens when forces promoting change and forces promoting the status quo respectively increase or decrease in different extents.

It is also extremely important to state that the several interventions which will be described next will not be as much focused on solving specific situations, meaning, in decreasing specific job demands, which happened during the pandemic and the period when teachers were remote teaching, but the emphasis will be both on coping with situations which might still be currently happening and the long-term effects of the pandemic, increasing job resources for the future. At the same time, one of the aims of these interventions is to provide transversal competencies, skills and tools for the teachers, students, and the Leadership, to cope with change and other situations, which are constant on a daily basis. The Intervention Proposals are all detailed in Table 11, Annex V, comprising the Intervention, the scope, a description, results, and theory's evidence, the intervenient, timeline and desired effects. A toolkit to each one of the interventions, to deliver to the school and the teachers, can be found on Annex X. A chronogram for all the interventions can be found on Annex Z.

Lastly, it is important to state that the data gathering acted as an intervention itself, since the teachers were feeling the need to be heard: "I wanted to thank you for allowing us to have this space where we are being heard, since until this moment we didn't have the change to do so".

5.3. Relevance and contribution of the Intervention Proposals

The results and the intervention proposal were first presented to the Leadership of the school, namely to the Leader responsible for accompanying the project during the whole year. In that meeting,

feedback on both the results and the intervention proposals was given, with improvements for the second. Overall, the feedback from the side of the Leader was very positive, with agreement and understanding being shown concerning the results, and relevance (Annex Y) being perceived regarding the intervention proposals. Moreover, there was an explanation of what is already being done concerning the Technologies area, consisting of the previously described DigCompEdu. The presentation document was directly sent to the team responsible for the implementation of the Digital Development Plan of the school, and the feedback from their side is that an excellent work has been done during the project development (Annex Y).

On the 23rd of June 2021, the author of the project also presented the results and the intervention proposals to the teachers, one of them being responsible for the implementation of the school's digital plan. The feedback was extremely positive, with teachers stating that the intervention proposals were a "breath of fresh air", namely concerning the Feedback 360º Meetings and the periodic well-being assessments. They stated that, in that school, well-being is usually something secondary, and it should not be, so they will strive for this proposal to be implemented as soon as possible. Concerning the feedback meetings and the newsletter, they stated it was a very interesting idea to include the students and give them an active voice. Moreover, they also appreciated the data gathering process, stating that the questionnaire was well built, relevant and easy to answer.

Conclusions are that, overall, the teachers and leaders perceived the intervention proposals as extremely helpful and relevant for the school, and they will be a driving force for their implementation.

6. Limitations and improvements to be made

Even though the feedback from the side of the Leadership was positive, there were some limitations throughout the process, as well as aspects to improve.

First, concerning the participants of the study, data regarding the health and well-being of the school staff could also be gathered to include them in the several intervention proposals. Although some of them, such as the recovery plan and the feedback spaces, can also be applied to that group, a more extensive data gathering would have allowed the author of the project to adapt some measures and contents. Moreover, it would have been important to include the parents in the proposals directed to the students, to raise awareness and include them in the process. Lastly, concerning the participants, to include younger students, also belonging to other schools of the grouping, would have been interesting to understand how less autonomy affected their performance and the impact the pandemic had in their lives.

Regarding the data gathering, concerning the students' questionnaire, since it could not have been sent directly to the students due to data protection, there was not much control regarding the reception from the side of the students. Also, now referring to the teacher and the leadership, the

author of the project did not any practice on conducting interviews and focus groups. Moreover, the whole data gathering processing occurred during the covid-19 pandemic and while schools were closed due to the lockdown, which led to the whole process to be made remotely and there was not the change to perform some ground observation while delivering the methods.

It was previously referred that the General Council is one of the most important organs of the school, thus, it would be extremely important to conduct an interview with its President. This did not happen because he sadly passed away during the development of this project.

Schools are very particular organizations, and even though the feedback concerning the proposals was very positive, their implementation will be time consuming in a period where meetings, exams and final evaluations will be happening. Although this, the perception of the relevance and usefulness of the measures may hinder the effect of these events and efforts can be made to proceed with the implementation.

Lastly, due to lack of space on the body of the document, important tables such as the Intervention Proposal one had to be moved to the Annex, impacting the reading process of the document.

7. Conclusion

Education is a crucial pillar of our society and, perceiving schools as organizations, the adoption of leadership behaviours strongly shapes the way they deal with unexpected events and changes in the environment. At the same time, it improves the experience of the members of these types of organizations, the teachers, and the students, allowing the achievement of better outcomes.

Concerning this study, conclusions are that there is still a way to go when referring to leadership behaviours and the way the school is run regarding the measured variables, being this the overall perspective of both the leadership and the teachers. At the same time, the covid-19 pandemic made some of these concerns arise and become more evident since the teachers reached a state of exhaustion, needing a strong support from the side of the leadership.

Despite all the limitations, the project was well succeeded, and the intervention proposals were perceived as relevant and useful for the school, which validates the results gathered through the questionnaires, interviews and focus groups. At the same time, efforts will be made to implement the eight proposed interventions following the proposed schedule, which also demonstrates the commitment of the leadership on improving their processes and leadership behaviours.

Lastly, it is important to state that one of the goals of these interventions is for them to be developed and applied not only during times when the school is facing imposed change, or a crisis, but for them to be transversal and adaptable during the whole school year. Being them based on concepts and variables which are perceived as relevant and important for these kinds of organizations, they can also be implemented in other public basic and secondary schools in Portugal.

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Annex

Annex A: Teachers' demographics

Table 3 - Teachers' Gender

Gender	Percentage (%)
Female	64,4
Male	35,6
Total	100

Table 4 - Teachers' Age

Age	Percentage (%)
Between 20 and 30	1,4
Between 31 and 40	1,4
Between 41 and 50	31,5
Between 51 and 60	47,9
Between 61 and 68	17,8
Total	100

Annex B: Student's demographics

Table 5 - Students' Gender

Gender	Percentage (%)
Female	70,7
Male	29,3
Total	100

Table 6 - Students' Grade

Grade	Percentage (%)
11st	37,8
12nd	62,6
Total	100

Table 7 - Students' Age

Age	Percentage (%)
15	3,7
16	31,7
17	51,2
18	11,0
Over 18	2,4
Total	100

Annex C: Teachers' teaching area

Teaching Disciplines

(Horizontal bar chart, x-axis from 0% to 16%, disciplines listed top to bottom:)

- Phisolophy — ~2.7%
- Hygiene — ~1.4%
- Geography — ~1.4%
- History — ~4.1%
- Spanish — ~1.4%
- No answer — ~5.5%
- Physical Education — ~6.8%
- Religion — ~2.7%
- Maths — ~11%
- French — ~2.7%
- English — ~9.6%
- Biology and Geology — ~5.5%
- Chemistry and Physics — ~11%
- Portuguese — ~15.1%
- Arts — ~8.2%
- Informatics — ~11%
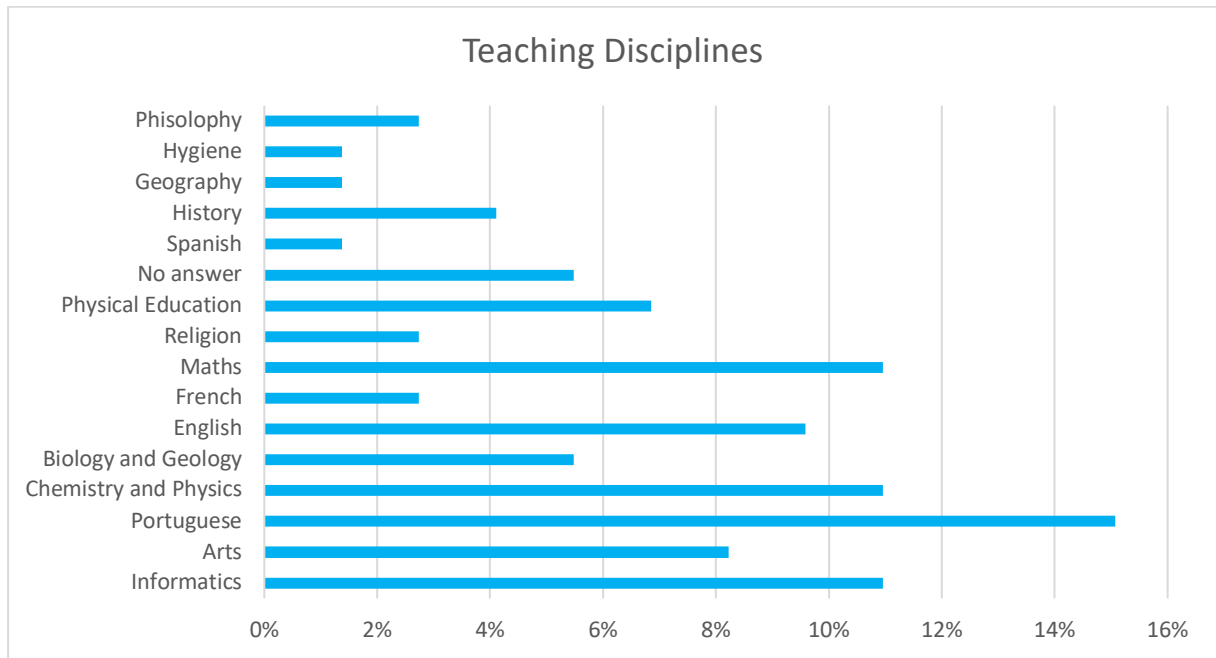
Graph 1 – Teachers' teaching area

Annex D: School Management and Administration Organogram

Strategic Direction of the School

General Councin
- Teachers (8)
- Non-teaching members (2)
- Parents and sponsors of education (3)
- Students (2)
- County (3)
- Local Comunity Members (3)

Direction
- Director
- Sub-Director
- Deputies (3)

Direction Advisor (1)

Direction's support and advice

Administrative Council
- Director
- Direction Adjunct
- Administrative Services' Chief

Administrative-financial management

Pedagogical Council
- 16 members

Team responsible for establishing the school educational guidelines

Figure 1 - School's Management and Administration Organogram

58

Annex E: Environmental Leadership - A Two-dimensional Framework for Environmental Leadership Processes

Type of relationship

	Internal	External
Individual		
Organizational		

Level of influence
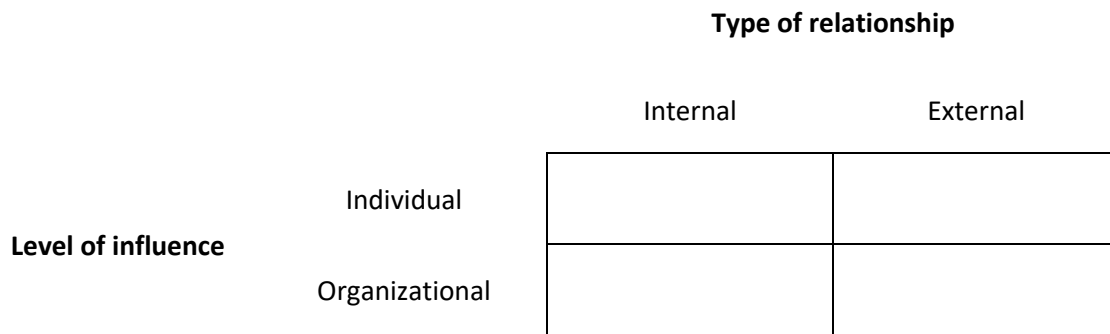
Figure 2 - Environmental Leadership Model

Annex F: Methodology Chronogram
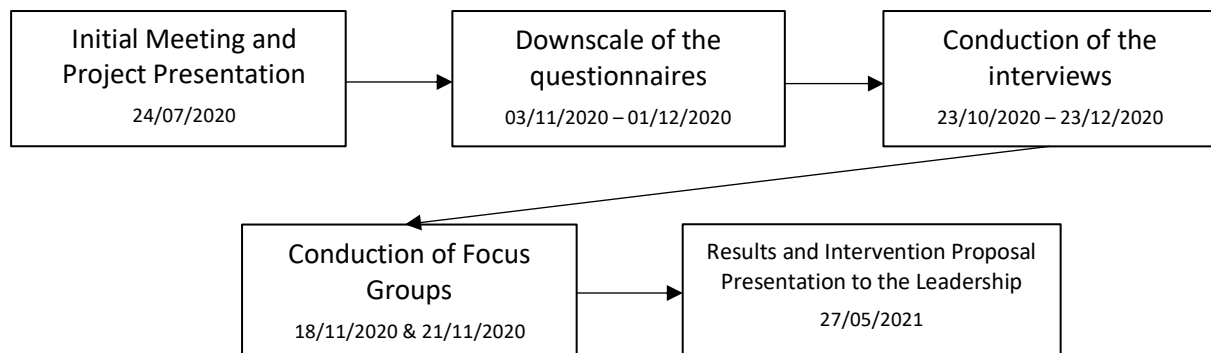
Figure 3 - Methodology Chronogram

Annex G: Social Media Posts for the Students' Questionnaire

Annex H: Interviewees' Demographic Data

Table 8 – Interviewees' Demographic data

	Gender	Age	Total Seniority	Seniority in the school	Teaching Area/Role	Seniority in the function
Interviews	Male	61	37	35	Director	11
	Male	54	31	33	Direction Adjunct	11
	Male	55	28	13	Tech Team	13
	Male	49	27	21	Direction Adjunct	11
	Male	55	31	9	Sub Director	9
	Average	55	31	22		11

Annex I: Initial Presentation to the Leadership

O ISCTE | Instituto Universitário de Lisboa
4 Escolas

Qualidade e inovação
no ensino

Business School, Ciências
Sociais e Humanas, Tecnologias
e Arquitetura e Sociologia
e Políticas Públicas.

10 500
estudantes

1126
estudantes
estrangeiros

Mais de
97
nacionalidades

500
docentes

Tema - Questão de Investigação:

"Quais são as Competências de Lideranças necessárias em período de adaptação à mudança nas escolas públicas?"

Educação como um dos pilares cruciais do mundo moderno	Competências de Liderança vistas como essenciais no Setor Público	Pandemia atual obriga a repensar quais as capacidade de liderança necessárias neste contexto
• O processo de desenvolvimento educacional começa no momento em que nascemos; • Necessidade do desenvolvimento de outras competências e capacidades mais específicas que apenas nos podem ser transmitidas através de um sistema educacional formal. • Escola, meio de formação dos cidadãos do amanhã, surge com a maior das importâncias.	• As Competências de Liderança têm cada vez mais relevância quando inseridas no contexto da melhoria e modernização do Setor Público. • Instituições locais como mais do que meros fornecedores de serviços; • Esta visão irá contribuir positivamente para o bem-estar e desenvolvimento da sociedade.	Com a situação atualmente vivida, a quase totalidade dos serviços teve de repensar, quase de repente, a sua forma de atuar e de atingir os seus objetivos finais. As escolas, nomeadamente as escolas públicas, como todos os obstáculos que enfrentam, não foram exceção. Desta forma, e dada a atualidade do tema, é da maior relevância estudar esta adaptação, qual o seu sentido e qual o impacto da mesma para a Direção das Escolas, a Liderança, os Professores e os alunos.

Metodologia:
Com a ajuda da escola | Etapas a implementar na escola

1. Entrevista com a Liderança

(com o Professor Carlos, com quem foi estabelecido o primeiro contacto e com o responsável pela tecnologia, dado ser crucial neste tema, o Professor Paulino)

De forma a perceber qual o contexto atual, quais foram as maiores mudanças que tiveram de ser implementadas, quais as maiores dificuldades da escola, quais os recursos que existem atualmente, qual a autonomia da escola relativamente à tomada de decisão, entre outros assuntos.

2. Questionário aos Professores (enviado a quem estiver disponível a colaborar no estudo)

De forma a perceber, na primeira pessoa, quais as suas maiores dificuldades, quais os métodos que utilizaram, qual o impacto desta adaptação nos seus métodos de ensino, como foi percebido o papel das competências de liderança nesta adaptação, entre outros assuntos.

3. Questionário aos Alunos → Se autorizado pela Liderança e pelos pais

Questionário simples, se for dada a autorização para tal, enviado de forma digital, para estudar qual o impacto desta adaptação na vida escolar dos alunos, como eles percebem a adaptação dos Professores, o que pode ter falhado e possíveis sugestões de melhoria nesse aspeto, quais os meios utilizados, entre outros temas.

Metodologia:
Com a ajuda da escola | Etapas a implementar na escola

4. Grupo Foco com alguns Professores

Conversa um pouco mais informal com um Grupo de Professores (uma amostra daqueles que aceitarem participar respondendo ao questionário), de forma a colocar algumas questões de forma presencial.

5. Implementação do Projeto Piloto de Treino

A definir o foco do plano de treino, o mesmo será determinado pelos resultados dos questionários que irão ser efetuados. Este treino irá ser implementado digital ou presencialmente, como for acordado pela escola dadas as circunstâncias.

6. Questionário aos alunos -> Se autorizado pela Liderança e pelos pais

Questionário muito semelhante ao preenchido pelos mesmos anteriormente de forma a conseguir medir a melhoria da performance dos professores/uma maior e melhor adaptação, após a implementação do Projeto de Treino na escola (através de comparação).

Porquê a Escola Secundária Emídio Garcia?

✓ Escola que frequentei durante 6 anos;

✓ Qualidade de ensino;

✓ Dimensão da escola;

✓ Conhecimento da escola da perspetiva do aluno;

✓ Conhecimento de membros do grupo docente.

Benefícios para o "Liceu"

✓ Projeto que pode alguma visibilidade à escola;

✓ Projeto de treino/formação gratuito e atual;

✓ Estudo feito de forma gratuita que pode levar à identificação de aspetos a melhorar;

✓ Escola vista como fonte de *boa prática (good case practice)*.

Ajuda necessária por parte da Escola

✓ Disponibilidade da Direção para algumas reuniões pontuais de acompanhamento do projeto e para a entrevista inicial;

✓ Escola como parceira do Projeto em todas as suas etapas.

✓ Disponibilização dos e-mail dos docentes e alunos para envio dos questionários ou envio dos mesmos pela Direção (como intermediária) –> plano de comunicação;

✓ Feedback;

✓ Preenchimento das formalidades (contrato e responsável)

O que podem esperar da minha parte:

✓ Compromisso;

✓ **Confidencialidade**;

✓ Agir conforme as normas internas da escola durante a execução do projeto;

✓ Dada a situação atual, autonomia dentro do possível de forma a não prejudicar o normal funcionamento das atividades;

✓ Flexibilidade e capacidade de adaptação.

Proposta de Cronograma

Fases a implementar presencialmente ou à distância de acordo com a situação no momento

Reunião com o Professor Carlos e Professor Paulino para alinhar como irá acontecer o projeto e quais as condições

Julho

Entrevista com a Liderança, envio dos questionários iniciais e execução do Grupo Foco

3 meses de recolha de dados

Setembro a Novembro

Análise dos Dados e definição do foco do Projeto de Treino/ Formação

Dezembro e Janeiro

Implementação do Plano de Treino e avaliação do mesmo, com envio do questionário final aos alunos

Fevereiro a Maio

Objetivos finais do Projeto

Teóricos	Práticos	Para a escola
Conseguir perceber, efetivamente, o papel das Competências de Liderança na adaptação ao contexto atual, bom como perceber se houve a necessidade de mudança das mesmas e quais as novas competências utilizadas.	Desenvolvimento de um Plano de Treino que seja replicado e implementado em outras Escolas Públicas do país, que enfrentam as mesmas dificuldades, de forma a conseguir uma maior adaptação das mesmas em contexto de incerteza e mudanças impostas pelas circunstâncias.	Ajudar a escola a perceber possíveis pontos de melhoria, trabalhar em melhorá-los e tornar a mesma num ponto de referência neste aspeto.

Complementaridade com o Projeto no plano já existente desenvolvido pelo Governo:
http://www.ina.pt/images/Ciclo_Inovadores_2019/powerpointCDL.pdf

iscte
BUSINESS SCHOOL

Obrigada!

Contactos
cfpfa1@iscte-iul.pt
+351 934 553 066

Professora Responsável:
patricia_costa@iscte-iul.pt

Annex J: Teachers' Questionnaire

ISCTE Instituto Universitário de Lisboa

Caro/a Professor/a do Agrupamento de Escolas Emídio Garcia,

Antes de mais, obrigada pela colaboração.

O meu nome é Catarina Falcão Ferreira e já fui aluna do Liceu.
Encontro-me a tirar o meu Mestrado em Gestão de Recursos Humanos e Consultoria Organizacional na Iscte Business School em Lisboa e estou, neste momento, a elaborar o meu Trabalho Final para o mesmo.

Nesse sentido, gostaria que respondesse a este inquérito, que não demora mais de 15 minutos, acerca das Competências de Liderança da Direção da Escola durante este período de pandemia e do impacto da Covid-19 no seu trabalho enquanto Docente do Liceu.

Neste questionário não existem respostas certas ou erradas, apenas gostaria de saber a sua opinião acerca dos diversos temas abordados.

O questionário é anónimo e não coloca em causa a sua segurança digital.

Qualquer dúvida ou problema que exista no preenchimento do questionário pode ser reportada para cfpfa1@iscte-iul.pt.

Muito obrigada.

→

ISCTE ⬡ Instituto Universitário de Lisboa

Idade
- ○ Entre 20 e 30
- ○ Entre 31 e 40
- ○ Entre 41 e 50
- ○ Entre 51 e 60
- ○ Entre 61 e 68

Sexo
- ○ Feminino
- ○ Masculino

Disciplina que leciona

[   ]

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Esta secção é acerca dos Recursos Informáticos que teve à sua disposição durante o período do confinamento, durante o qual as aulas foram leccionadas à distância.

Internet

Tem Internet em casa?
- ○ Sim
- ○ Não

→

Survey Powered By Qualtrics

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A sua ligação à Internet é estável.
- ○ Discordo totalmente
- ○ Discordo Moderadamente
- ○ Não concordo nem discordo
- ○ Concordo Moderadamente
- ○ Concordo Totalmente

Teve de adquirir Internet para poder leccionar as aulas à distância.
- ○ Sim
- ○ Não

Foi-lhe fornecida, pela Escola, uma ligação à Internet para poder leccionar as aulas à distância.
- ○ Sim
- ○ Não

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Dispositivos Informáticos

Que dispositivos utilizou de forma a leccionar as suas aulas à distância?
- ☐ Computador
- ☐ Tablet
- ☐ Telemóvel
- ☐ Outro

Teve de adquirir um dispositivo para poder leccionar as aulas à distância?
- ○ Sim
- ○ Não

Foi-lhe fornecido, pela Escola, um dispositivo para poder leccionar as aulas à distância .
- ○ Sim
- ○ Não

Plataformas

Qual a(s) plataforma(s) que usou para leccionar as suas aulas?
- ☐ Zoom
- ☐ Google Meet
- ☐ Microsoft Teams
- ☐ Outra

Considera ter sido a escolha certa?
- ○ Sim
- ○ Não

Porquê?

As condições sob as quais lecciona são as indicadas para poder trabalhar eficazmente.

(Não existem interrupções, barulho, a cadeira é apropriada, a altura da secretária também, a conexão da internet é a ideal, entre outros.)
- ○ Discordo Totalmente
- ○ Discordo Moderadamente
- ○ Não concordo nem discordo
- ○ Concordo Moderadamente
- ○ Concordo Totalmente

Esta secção é acerca da sua perceção relativamente ao impacto das aulas à distância.

Relativamente a cada uma das afirmações, selecione a opção que melhor traduz a sua opinião.

	Discordo Fortemente	Discordo Moderadamente	De alguma forma, discordo	Indiferente	De alguma forma, concordo	Concordo Moderadamente	Concordo Fortemente
A Covid teve um impacto negativo na conciliação entre o trabalho e a vida pessoal	○	○	○	○	○	○	○
A pandemia fez com que a qualidade das minhas aulas diminuísse	●	●	●	●	●	●	●
A pandemia fez com que os meus alunos ficassem menos interessados nas minhas aulas	○	○	○	○	○	○	○
Sinto que tenho as capacidades suficientes para lecionar aulas à distância com a mesma qualidade das minhas aulas presenciais	●	●	●	●	●	●	●
A Direção da minha escola apoiou-me nesta situação de Pandemia	○	○	○	○	○	○	○
Considero que a minha Escola me forneceu os recursos necessários para ser bem-sucedido/a a lecionar as minhas aulas	●	●	●	●	●	●	●
Considero que a minha Escola me forneceu a formação necessária para utilizar os recursos de forma a atingir o sucesso	○	○	○	○	○	○	○
Senti-me apoiado/a pela Escola nesta situação de Pandemia	●	●	●	●	●	●	●
Considero que a minha segurança digital foi comprometida devido às aulas à distância	○	○	○	○	○	○	○

Esta secção é acerca das aulas presenciais, a decorrer neste momento.

Relativamente a cada uma das afirmações, selecione a opção que melhor traduz a sua opinião.

	Discordo Totalmente	Discordo Moderadamente	De certa forma, discordo	Não concordo nem discordo	De certa forma, concordo	Concordo Moderadamente	Concordo Totalmente
Considero que as aulas presencias são necessárias	○	○	○	○	○	○	○
A minha escola tomou as medidas necessárias para que as aulas predicais decorressem em segurança	●	●	●	●	●	●	●
Sinto que os meus colegas cumprem, rigorosamente, todas as normas de segurança	○	○	○	○	○	○	○

Nas seguintes questões, irá ser feita uma comparação do estado dos seguintes aspetos, desde antes da situação de pandemia, até ao momento presente, incluindo o período de tempo durante o qual as aulas foram leccionadas à distância.

Comparando com a sua situação anterior à pandemia, neste momento, a sua saúde física:

○ Está extremamente pior

○ Está pior

○ Está um pouco pior

○ Está igual

○ Está um pouco melhor

○ Está melhor

○ Está extremamente melhor

Comparando com a sua situação anterior à pandemia, neste momento, a sua saúde mental:

○ Está extremamente pior

○ Está pior

○ Está um pouco pior

○ Está igual

○ Está um pouco melhor

○ Está melhor

○ Está extremamente melhor

Comparando com a sua situação anterior à pandemia, neste momento, o seu bem-estar geral:

○ Está extremamente pior

○ Está pior

○ Está um pouco pior

○ Está igual

○ Está um pouco melhor

○ Está melhor

○ Está extremamente melhor

Comparando com a sua situação anterior à pandemia, neste momento, gerir a sua vida pessoal com a sua vida profissional :

○ É muito mais difícil

○ É mais difícil

○ É um pouco mais difícil

○ É igual

○ É um pouco mais fácil

○ É mais fácil

○ É muito mais fácil

Comparando com a sua situação anterior à pandemia, neste momento, a sua gestão de tempo:

○ Está extremamente pior

○ Está pior

○ Está um pouco pior

○ Está igual

○ Está um pouco melhor

○ Está melhor

○ Está extremamente melhor

Comparando com a sua situação anterior à pandemia, neste momento, o seu número total de horas de trabalho:

○ É muito menor

○ É menor

○ É um pouco menor

○ É igual

○ É um pouco maior

○ É maior

○ É muito maior

Comparando com a sua situação anterior à pandemia, neste momento, a sua capacidade de relaxar e recuperar:

- ○ É muito menor
- ○ É menor
- ○ É um pouco menor
- ○ É igual
- ○ É um pouco maior
- ○ É maior
- ○ É muito maior

Em conjunto com a Direção da Escola:

	Discordo Totalmente	Discordo	Indiferente	Concordo	Concordo Completamente
Revemos os nossos métodos de trabalho como resultado de mudanças no ambiente (exemplo, Covid-19)	○	○	○	○	○
Examinamos as implicações que a mudança pode ter na dinâmica do nosso trabalho	●	●	●	●	●
Revemos periodicamente o trabalho passado de forma a melhorar no futuro	○	○	○	○	○

Relativamente a comportamentos de receção e entrega de feedback:

	Nunca	Quase nunca	Às vezes	A maioria das vezes	Sempre
Recolhemos periodicamente feedback por parte dos alunos acerca dos nossos métodos	○	○	○	○	○
A Direção da Escola dá feedback peródico aos Professores acerca dos seus métodos	●	●	●	●	●
A Direção da Escola recolhe, junto dos Professores, feedback periódico acerca dos seus métodos	○	○	○	○	○
Comparamos o nosso trabalho com o de outras Escolas Públicas em Portugal	●	●	●	●	●

As seguintes questões são relativas às tecnologias utilizadas antes e durante a pandemia, bem como o impacto das mesmas nas suas aulas e na forma como os alunos interagem nas mesmas.

	Discordo Completamente	Discordo	Indiferente	Concordo	Concordo Completamente
Considero que tenho apoio constante da Direção da minha escola no uso das tecnologias no meu dia a dia	○	○	○	○	○
Considero que o rendimento dos meus alunos é mais é mais elevado quando eu implemento práticas tecnológicas nas minhas aulas.	●	●	●	●	●
Considero que os meus alunos revelam mais interesse nas minhas aulas quando uso recursos digitais	○	○	○	○	○
Sigo as tendências tecnológicas e tento implementá-las no meu trabalho	●	●	●	●	●
Sinto que as minhas aulas têm mais valor quando uso tecnologias	○	○	○	○	○

Sinto que tenho autonomia suficiente para colocar estes métodos em prática	●	●	●	●	●
Sinto que consigo facilmente adaptar as tecnologias às estratégias educativas atualmente em vigor	○	○	○	○	○
Sinto que o uso das tecnologias facilita o cumprimento das minhas metas curriculares	●	●	●	●	●
Sinto que o uso das tecnologias me ajuda numa mais eficaz medição da performance dos meus alunos	○	○	○	○	○

A minha escola tem autonomia financeira para adquirir os recursos necessários	●	●	●	●	●
A grande totalidade dos alunos têm acesso a dispositivos tecnológicos e internet em casa	○	○	○	○	○
A gestão de recursos tecnológicos feita pela Direção da minha escola é sustentável	●	●	●	●	●
Sinto que o uso de tecnologias no meu trabalho contribui para o meu desenvolvimento pessoal	○	○	○	○	○
Sinto que estou a conseguir fazer a integração das tecnologias na minha vida pessoal	●	●	●	●	●
Revelo interesse pelo uso de tecnologias	○	○	○	○	○
Quando uso tecnologias, sou mais produtivo/a a preparar as minhas aulas	●	●	●	●	●

Quão importante considera cada uma destas plataformas para o bom funcionamento das suas aulas?

	Não é, de todo, importante	Revela muito pouca importância	Revela pouca importância	Revela alguma importância	Revela bastante importância	É extremamente importante
Processamento de texto (p.e. Microsoft Office Word)	○	○	○	○	○	○
Comunicação via e-mail	●	●	●	●	●	●
Pesquisa na Internet	○	○	○	○	○	○
Utilização de projetor	●	●	●	●	●	●
Plataformas de aulas digitais (p.e. Zoom, Google Meets, Microsoft Teams)	○	○	○	○	○	○
Implementação de métodos de avaliação online (testes, exames, questões aula, entre outros)	●	●	●	●	●	●
Portfólios digitais	○	○	○	○	○	○
Bases de dados	●	●	●	●	●	●
Folhas de cálculo	○	○	○	○	○	○
Mostra de vídeos (p.e. Youtube)	●	●	●	●	●	●
Software de construção de gráficos/tabelas (p.e. Microsoft Excel)	○	○	○	○	○	○
Apresentações (p.e. Microsoft PowerPoint)	●	●	●	●	●	●
Vídeo e câmara digital	○	○	○	○	○	○
Discussões e debates num chat online (p.e. Google Hangouts, Whatsapp, Microsoft Teams)	●	●	●	●	●	●

Nesta questão, gostaria que avaliasse a seguinte afirmação relativamente a cada uma das plataformas.

"Sinto que tenho as competências necessárias para o uso das seguintes tecnologias no suporte ao ensino":

Por exemplo, se considera que tem as competências necessárias para utilizar plataformas de processamento de escrita, escolhe a opção "concordo moderadamente" ou "concordo totalmente".

	Discordo Totalmente	Discordo Moderadamente	Não concordo nem discordo	Concordo Moderadamente	Concordo Totalmente
Processamento de escrita (p.e. Microsoft Office Word)	○	○	○	○	○
Comunicação via e-mail	○	○	○	○	○
Pesquisa na Internet	○	○	○	○	○
Utilização de projetor	○	○	○	○	○
Plataformas de aulas digitais (p.e. Zoom, Google Meets, Microsoft Teams)	○	○	○	○	○
Implementação de métodos de avaliação online (testes, exames, questões aula, entre outros)	○	○	○	○	○
Portfólios digitais	○	○	○	○	○
Bases de dados	○	○	○	○	○
Folhas de cálculo	○	○	○	○	○
Mostra de vídeos (p.e. Youtube)	○	○	○	○	○
Software de construção de gráficos/tabelas (p.e. Microsoft Excel)	○	○	○	○	○
Apresentações (p.e. Microsoft PowerPoint)	○	○	○	○	○
Vídeo e câmara digital	○	○	○	○	○
Discussões e debates num chat online (p.e. Google Hangouts, Whatsapp, Microsoft Teams)	○	○	○	○	○

Esta secção é acerca da Direção da sua Escola e das Competências de Liderança que a mesma possui.

A Direção da minha Escola:

	Discordo Totalmente	Discordo Moderadamente	De certa forma, discordo	Indiferente	De certa forma, concordo	Concordo moderadamente	Concordo Totalmente
Tem uma visão clara do futuro da Escola	○	○	○	○	○	○	○
Procura constantemente novas oportunidade para a Escola	○	○	○	○	○	○	○
Inspira a equipa Docente através dos seus planos para a Escola	○	○	○	○	○	○	○
Lidera "fazendo" e não apenas "dizendo"	○	○	○	○	○	○	○
Providencia-me um bom modelo a seguir	○	○	○	○	○	○	○
Lidera pelo exemplo	○	○	○	○	○	○	○
Desafia a equipa docente a pensar em problemas antigos de uma forma inovadora	○	○	○	○	○	○	○
Estimula a equipa docente de forma a repensar a maneira como esta executa o seu trabalho	○	○	○	○	○	○	○
Tem ideias e dá sugestões que me permitem reexaminar algumas assunções básicas do meu trabalho	○	○	○	○	○	○	○
Atua sem considerar a forma como eu me sinto	○	○	○	○	○	○	○
Demonstra respeito pelos meus sentimentos individuais	○	○	○	○	○	○	○
Comporta-se tendo consideração pelas minhas necessidades pessoais	○	○	○	○	○	○	○

As seguintes questões são relativas à comunicação com a Direção da Escola (Liderança) durante o período de confinamento, durante o qual as aulas foram leccionadas à distância.

	Discordo Totalmente	Discordo Moderadamente	Não concordo nem discordo	Concordo Moderadamente	Concordo Totalmente
A comunicação virtual, por parte da Liderança, foi efetuada de forma clara, organizada e permitiu o envio de feedback de forma a não existir qualquer mal entendido	○	○	○	○	○
A Liderança foi cuidadosa no sentido de não enviar demasiada comunicação digital à Equipa Docente, causando o desfoque da mesma	●	●	●	●	●
Alguma da comunicação digital enviada foi personalizada para cada um dos Docentes	○	○	○	○	○
A Liderança usa um leque vasto de métodos de comunicação digital	●	●	●	●	●
A comunicação digital enviada pela Liderança é inclusiva	○	○	○	○	○
A Liderança foi eficaz na gestão da Equipa Docente, enquanto equipa virtual	●	●	●	●	●
A Liderança conseguiu motivar a Equipa Docente, enquanto equipa virtual	○	○	○	○	○
A Liderança foi eficaz em implementar os novos meios e práticas digitais na Equipa Docente, enquanto equipa virtual	●	●	●	●	●
A Liderança foi eficaz na avaliação da utilização dos novos meios e práticas digitais na Equipa Docente, enquanto equipa virtual	○	○	○	○	○
A Liderança é ativa nas práticas de cyber-segurança da Equipa Docente	●	●	●	●	●
A Liderança foi eficaz na promoção da não intrusão excessiva das tecnologias na vida pessoal da Equipa Docente	○	○	○	○	○
A comunicação virtual é, agora, tão importante como a comunicação presencial/tradicional	●	●	●	●	●

As seguintes questões são acerca da forma como se sente a trabalhar dentro da sua Comunidade Escolar e com a Direção da Escola (nas seguintes afirmações, denominada como Liderança) :

	Discordo Totalmente	Discordo Moderadamente	De certa forma, discordo	Indiferente	De certa forma, concordo	Concordo moderadamente	Concordo Totalmente
A Comunidade Escolar e sua Liderança valorizam a minha contribuição para o seu bem-estar	○	○	○	○	○	○	○
A Comunidade Escolar e sua Liderança têm em consideração os meus interesses quando são tomadas decisões que me afetem	●	●	●	●	●	●	●
A Comunidade Escolar e sua Liderança estão dispostas a adaptar-se de forma a eu conseguir atingir melhores resultados no meu trabalho	○	○	○	○	○	○	○

As seguintes questões são acerca da forma como se sente a trabalhar com a sua Equipa Docente:

	Totalmente inorreto	Moderadamente incorreto	De certa forma, incorreto	Indiferente	De certa forma, correto	Moderadamente correto	Totalmente correto
Se eu cometer um erro, o mesmo vai ser usado contra mim no futuro	○	○	○	○	○	○	○
As pessoas da equipa docente têm dificuldade em aceitar as diferenças dos outros	●	●	●	●	●	●	●
Ninguém da equipa docente iria agir deliberadamente de forma a prejudicar o meu trabalho	○	○	○	○	○	○	○
É difícil pedir a outros membros da Equipa Docente ajuda para realizar o meu trabalho	●	●	●	●	●	●	●

Por fim, esta secção é relativa à sua capacidade de adaptação durante o período de pandemia:

	Discordo Totalmente	Discordo Moderadamente	De certa forma, discordo	Indiferente	De certa forma, concordo	Concordo moderadamente	Concordo Totalmente
Utilizo ideias criativas de forma a gerir eventos futuros	○	○	○	○	○	○	○
Encontro maneiras inovadoras de lidar com eventos inesperados	●	●	●	●	●	●	●
Tenho a capacidade de me adaptar e de lidar com situações imprevisíveis, alterando o meu foco, se necessário, e tomando ações racionais	○	○	○	○	○	○	○
Consigo desenhar planos alternativos num curto espaço de tempo, de forma a lidar com novas exigências nas minhas tarefas	●	●	●	●	●	●	●
Periodicamente, atualizo as minhas competências técnicas e interpessoais, de forma a preparar e dar melhor as minhas aulas	○	○	○	○	○	○	○
Procuro e desenvolvo novas competências de forma a lidar com novas situações	●	●	●	●	●	●	●
Tenho capacidade para me manter calma e ter um comportamento positivo enquanto lido com situações mais stressantes	○	○	○	○	○	○	○
Consigo manter o foco enquanto lido com diferentes situações e responsabilidades em simultâneo	●	●	●	●	●	●	●

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Obrigada pela sua colaboração.

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Annex K: Students' Questionnaire

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Caro/a aluno/a do Liceu,

Antes de mais, obrigada pela tua colaboração!
O meu nome é Catarina Falcão Ferreira e também já fui aluna da Escola Secundária Emídio Garcia, durante 6 anos. Neste momento, estou a tirar o meu Mestrado em Gestão de Recursos Humanos e Consultoria Organizacional na ISCTE Business School, em Lisboa.

Venho pedir-te que me ajudes, preenchendo este questionário acerca do impacto da COVID 19 no teu percurso escolar.

Neste questionário não existem respostas certas ou erradas, apenas importa a tua opinião acerca da situação atípica que estás a viver atualmente.

Todas as informações e respostas que deres aqui são anónimas e confidenciais, não pondo em risco a tua segurança.

Se tiveres alguma dúvida ou problema com o questionário, podes enviar um e-mail para cfpfa1@iscte-iul.pt.

Muito obrigada!

Idade
- 15
- 16
- 17
- 18
- + 18

Sexo
- Feminino
- Masculino
- Prefiro não responder

Ano de Escolaridade
- 11º
- 12º

Esta secção é acerca dos Recursos Informáticos que tiveste à tua disposição durante o período do confinamento, no qual tiveste aulas online.

Internet

Tens Internet em casa?
- Sim
- Não

A tua ligação à Internet é estável.

○ Discordo totalmente

○ Discordo

○ Não concordo nem discordo

○ Concordo

○ Concordo Totalmente

Tiveste de adquirir Internet para poder participar nas aulas à distância.

○ Sim

○ Não

Foi-te fornecida, pela Escola, uma ligação à Internet para poderes participar nas aulas à distância.

○ Sim

○ Não

Dispositivos Informáticos

Que dispositivos utilizaste de forma a aceder às aulas à distância?

☐ Computador

☐ Tablet

☐ Telemóvel

☐ Outro

Tiveste de adquirir um dispositivo para poder participar nas aulas à distância?

○ Sim

○ Não

Foi-te fornecido, pela Escola, um dispositivo para poderes participar nas aulas à distância .

○ Sim

○ Não

Plataformas

Qual a(s) plataforma(s) que usaste para aceder às aulas digitais?

☐ Zoom

☐ Google Meet

☐ Microsoft Teams

☐ Outra

Consideras ter sido a escolha certa?

○ Sim

○ Não

Porquê?

Nesta secção vais ter de responder acerca do impacto que a modalidade de aulas às distância teve no teu percurso escolar.

Lê cada uma das afirmações e responde se concordas totalmente, moderadamente, se não concordas nem discordas, ou se, de alguma forma, discordas com a informação apresentada.

	Discordo Totalmente	Discordo Moderadamente	Não concordo nem discordo	Concordo Moderadamente	Concordo Totalmente
Considero que a pandemia prejudicou o meu sucesso escolar	○	○	○	○	○
Considero que as aulas à distância comprometeram a minha experiência escolar	●	●	●	●	●
Os meus Professores esforçaram-se para que as aulas, mesmo que digitais, decorressem com a maior normalidade possível	○	○	○	○	○
A Direção da Escola esforçou-se para que as aulas, mesmo que digitais, decorressem com a maior normalidade possível	●	●	●	●	●
Eu esforcei-me para que as aulas, mesmo que digitais, decorressem com a maior normalidade possível	○	○	○	○	○
Considero que os meus Professores têm as competências/aptidões necessárias para dar aulas à distância	●	●	●	●	●
Considero que os meus Professores utilizaram métodos inovadores para dar aulas à distância	○	○	○	○	○
Senti-me apoiado/a pela Escola nesta situação de Pandemia	●	●	●	●	●

Considero que a minha Escola me forneceu os recursos necessários para ser bem-sucedido/a	○	○	○	○	○
Considero que a minha segurança digital foi comprometida devido às aulas à distância	●	●	●	●	●
Considero que fui bem sucedido/a a conciliar as aulas com a minha vida pessoal	○	○	○	○	○

Quais são as tuas sugestões para melhorar as aulas à distância, no caso de as mesmas voltarem a ser implementadas?

_____

Nesta secção vais ter de responder com informação acerca da forma como estão a acontecer as tuas aulas presenciais neste momento.

Da mesma forma que na secção anterior, lê as afirmações e responde de acordo com a tua opinião acerca da seguinte informação.

	Discordo Totalmente	Discordo Moderadamente	Não concordo nem discordo	Concordo Moderadamente	Concordo Totalmente
Acho que as aulas presenciais são necessárias	○	○	○	○	○
A minha escola tomou todas as medidas necessárias para que as aulas presenciais decorressem em segurança	●	●	●	●	●
Sinto que os meus colegas cumprem com rigor todas as normas de segurança	○	○	○	○	○
Sinto que todos os meus professores cumprem com rigor as normas de segurança	●	●	●	●	●

Quais são as tuas sugestões para melhorar as aulas presenciais a acontecer neste momento?

_____

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Nesta questão vais avaliar, dentro daquilo que é a tua opinião, a forma como os teus Professores utilizam as tecnologias nas suas aulas, tanto antes como durante e depois do confinamento.

Deves responder da mesma forma que respondeste às questões anteriores.

	Discordo Totalmente	Discordo Moderadamente	Não concordo nem discordo	Concordo Moderadamente	Concordo Totalmente
Os meus Professores usam, com frequência, meios digitais para lecionar	○	○	○	○	○
O uso desses mesmos meios digitais fez com que a minha aprendizagem melhorasse	●	●	●	●	●
O uso desses meios digitais fez com que eu tivesse mais interesse durante as aulas	○	○	○	○	○
Considero que os meios digitais podiam ser usados com mais frequência	●	●	●	●	●
Considero que os meios digitais que a minha escola tem são suficientes para tornar as aulas mais inovadoras	○	○	○	○	○
Os meus professores esforçam-se para tornar as aulas mais inovadoras	●	●	●	●	●
Os meus professores estão recetivos a feedback / opiniões e sugestões relativamente às suas aulas	○	○	○	○	○
Tenho acesso a recursos digitais de forma a melhorar o meu estudo	●	●	●	●	●
Considero que esses recursos contribuem para a melhoria das minhas notas	○	○	○	○	○

Quais são as tuas maiores dificuldades no uso desses recursos?

[   ]

Qual o impacto do uso das tecnologias nas tuas aulas?

	Discordo Completamente	Discordo Moderadamente	Não concordo nem discordo	Concordo Moderadamente	Concordo Totalmente
Considero que o meu rendimento é mais elevado quando são implementadas práticas tecnológicas nas aulas	○	○	○	○	○
Revelo mais interesse nas aulas quando são usados métodos digitais	●	●	●	●	●
Os meus professores seguem as tendências tecnológicas	○	○	○	○	○
Sinto que as aulas têm mais valor quando são usadas tecnologias	●	●	●	●	●

Quão importante consideras que é cada uma destas plataformas para o bom funcionamento das tuas aulas?

	Não é, de todo, importante	Revela muito pouca importância	Revela pouca importância	Revela alguma importância	Revela bastante importância	É extremamente importante
Processamento de texto (p.e. Microsoft Office Word)	○	○	○	○	○	○
Comunicação via e-mail	○	○	○	○	○	○
Pesquisa na Internet	○	○	○	○	○	○
Utilização de projetor	○	○	○	○	○	○
Plataformas de aulas digitais (p.e. Zoom, Google Meets, Microsoft Teams)	○	○	○	○	○	○
Implementação de métodos de avaliação online (testes, exames, questões aula, entre outros)	○	○	○	○	○	○
Portfólios digitais	○	○	○	○	○	○
Bases de dados	○	○	○	○	○	○
Folhas de cálculo	○	○	○	○	○	○
Mostra de vídeos (p.e. Youtube)	○	○	○	○	○	○
Software de construção de gráficos/tabelas (p.e. Microsoft Excel)	○	○	○	○	○	○
Apresentações (p.e. Microsoft PowerPoint)	○	○	○	○	○	○
Vídeo e câmara digital	○	○	○	○	○	○
Discussões e debates num chat online (p.e. Google Hangouts, Whatsapp, Microsoft Teams)	○	○	○	○	○	○

Nesta questão, gostaria que avaliasses a seguinte afirmação relativamente a cada uma das plataformas.

"Sinto que os meus Professores têm as competências necessárias para o uso das seguintes tecnologias no suporte ao ensino":

Por exemplo, se achas que os teus Professores têm as competências necessárias para utilizar plataformas de processamento de texto, escolhes a opção "concordo moderadamente" ou "concordo totalmente".

	Discordo Totalmente	Discordo Moderadamente	Não concordo nem discordo	Concordo Moderadamente	Concordo Totalmente
Processamento de texto (p.e. Microsoft Office Word)	○	○	○	○	○
Comunicação via e-mail	○	○	○	○	○
Pesquisa na Internet	○	○	○	○	○
Utilização de projetor	○	○	○	○	○
Plataformas de aulas digitais (p.e. Zoom, Google Meets, Microsoft Teams)	○	○	○	○	○
Implementação de métodos de avaliação online (testes, exames, questões aula, entre outros)	○	○	○	○	○
Portfólios digitais	○	○	○	○	○
Bases de dados	○	○	○	○	○
Folhas de cálculo	○	○	○	○	○
Mostra de vídeos (p.e. Youtube)	○	○	○	○	○
Software de construção de gráficos/tabelas (p.e. Microsoft Excel)	○	○	○	○	○
Apresentações (p.e. Microsoft PowerPoint)	○	○	○	○	○
Vídeo e câmara digital	○	○	○	○	○
Discussões e debates num chat online (p.e. Google Hangouts, Whatsapp, Microsoft Teams)	○	○	○	○	○

Quais são as tuas sugestões para melhoria das aulas presenciais, relativamente aos meios e recursos digitais utilizados/fornecidos (antes e durante a pandemia)?

Por fim, nesta questão gostava que avaliasses a tua capacidade de adaptação à situação de pandemia e de confinamento.

Responde à questão da mesma forma que respondeste às perguntas anteriores, escolhendo a opção com a qual mais te identificas.

	Discordo Totalmente	Discordo Moderadamente	De alguma forma, discordo	Indiferente	De alguma forma, concordo	Concordo Moderadamente	Concordo Totalmente
Utilizo ideias criativas de forma a gerir eventos futuros	○	○	○	○	○	○	○
Encontro maneiras inovadoras de lidar com eventos inesperados	●	●	●	●	●	●	●
Consigo adaptar-me e lidar com situações imprevisíveis, alterando o meu foco, se necessário, e tomando ações racionais	○	○	○	○	○	○	○
Consigo desenhar planos alternativos num curto espaço de tempo, de forma a lidar com novas exigências que a escola me impõe	●	●	●	●	●	●	●
Periodicamente, atualizo as minhas competências técnicas e interpessoais, de forma a preparar melhor aquilo que as aulas exigem de mim	○	○	○	○	○	○	○
Procuro e desenvolvo novas competências de forma a lidar com novas situações	●	●	●	●	●	●	●
Tenho capacidade para manter a calma e ter um comportamento positivo enquanto lido com situações mais stressantes	○	○	○	○	○	○	○
Consigo manter o foco enquanto lido com diferentes situações e responsabilidades em simultâneo	●	●	●	●	●	●	●

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Muito obrigada pela tua colaboração!

Annex L: Interviews' Script

Guião Entrevista Inicial com a Liderança

Introdução

Bom dia/tarde/noite, o meu nome é Catarina e sou aluna do 2º do Mestrado em Gestão de Recursos Humanos e Consultoria Organizacional na ISCTE Business School. Neste momento estou a elaborar o meu Projeto Final de Mestrado e o mesmo irá incidir nas Competências de Lideranças necessárias para lidar com situações de mudança impostas, tal como aquela que estamos a enfrentar atualmente, nas escolas públicas (básicas e secundárias) em Portugal. Esta entrevista surge nesse sentido e tem como objetivo a recolha de alguma informação acerca da adaptação da Escola Secundária Emídio Garcia à situação de pandemia que vivemos atualmente. Muito obrigada pela colaboração.

1. Antes de começar a entrevista gostaria de perguntar se tenho autorização para gravar a mesma de forma a, quando for efetuar a recolha de dados, todos os aspetos relevantes constarem dessa mesma recolha.
2. Tem alguma dúvida ou quer colocar alguma questão inicial?
3. Será que me podia dizer o seu nome e qual o seu papel na Escola Secundária Emídio Garcia?
4. *Quantos alunos tem a Escola atualmente?*
5. *Quantos Professores tem a Escola atualmente?*

Capacidades de Liderança <u>antes do Covid</u>

Irei começar por fazer algumas perguntas relativamente ao contexto da Escola antes da pandemia.

1. Gostaria de começar por perguntar qual a sua opinião acerca da Formação que é dada aos Docentes durante o ano letivo, na sua generalidade.
      a. Gostaria também de saber qual a sua opinião acerca dos temas abordados nessas formações *(se a pessoa não desenvolver, se se adequam à realidade das escolas e se existe alguma utilidade, etc)*.
2. Em termos de Competências de Liderança, quais são os maiores desafios ao gerir uma Escola e, consequentemente, o pessoal Docente?
    a) Quais as diferenças que pensa existirem entre as competências gerais que referiu anteriormente e aquelas que a situação atual exige?
    b) Qual a sua opinião relativamente à existência de Formação no âmbito destas Competências de Liderança (tanto para situações como esta, como para a gestão na sua generalidade) direcionada para a Equipa de Gestão da Escola?
3. Como funciona a comunicação entre a Equipa de Gestão da Escola e a Equipa Docente, em termos de troca de Feedback?
      a. Qual a relevância desta comunicação e deste Feedback dado nos dois sentidos, para o desenvolvimento da Escola e do Trabalho dos Docentes?
4. Quanto aos recursos Tecnológicos existentes atualmente na Escola, qual a sua opinião acerca da necessidade de obtenção de mais recursos, ou mesmo da manutenção e atualização daqueles que já existem?
5. Quais as maiores barreiras de implementação de tecnologias na escola?
6. Sabendo que se trata do Setor Público, a autonomia da Escola para implementação de certas estratégias e mesmo para a gestão de recursos físicos (tecnológicos e não só) é um pouco complexa. Como é que funcionam essa gestão e autonomia?

Adaptação por causa da Covid

As perguntas que se seguem já estão relacionadas com a situação pós/durante pandemia.

1. A autonomia de que me falou anteriormente, esta mantém-se ou houve alterações significativas devido à situação de pandemia?

2. Como avalia o apoio do Governo/Ministério da Educação em termos de diretrizes relativas à Gestão da Escola e dos Docentes desde Março? Porquê?

3. Quais foram as maiores dificuldades enfrentadas pela Gestão da Escola ao lidar com esta situação? (*se a pessoa não desenvolver, referir a falta de recursos físicos dos alunos, falta de recursos físicos dos Professores, falta de conhecimento técnico por parte dos professores, falta de competências de lideranças adaptadas à pandemia por parte da Direção*).

   a. Alguma situação específica da qual me possa falar em que tenha sentido essas dificuldades?

4. Quais foram as maiores mudanças relativamente à gestão dos Docentes?

   a. Na sua opinião, sente que eles estavam preparados, em termos de formação e recursos, para lecionar aulas à distância?

5. Quais foram as maiores dificuldades apontadas pelo Pessoal Docente durante a adaptação relativa à Pandemia?

6. Que tipo de formação considera que seria útil para o Pessoal Docente, neste momento, no sentido de desenvolver certas capacidades para lidar com a Pandemia, visto ser a realidade do momento e de um futuro próximo?

7. Qual vai ser, na sua perspetiva, o impacto da pandemia para o futuro da Escola?

Esta foi a minha última questão. Antes de terminarmos a nossa entrevista, gostaria de acrescentar alguma coisa ou colocar alguma questão? Gostaria de dar alguma sugestão de melhoria relativamente às questões que lhe coloquei?

Muito obrigada pela sua colaboração. Bom dia/tarde/noite.

Annex M: Focus Groups' Script

Guião para *Focus Group*

Boa noite a todos. Antes de mais, gostaria de agradecer a vossa presença e colaboração. Esta conversa surge no sentido do meu Projeto Final de Mestrado, que estou a terminar no ISCTE, e que se vai realizar no âmbito das Competências de Liderança necessárias em situações de mudança imposta, como esta que estamos a viver atualmente, nas Escolas Públicas (secundárias e básicas) em Portugal. O Liceu

aceitou colaborar comigo e eu achei que seriam as pessoas ideais para poder recolher alguma informação útil para a minha pesquisa.

Antes de começar gostaria de explicar brevemente como vai ser esta conversa: eu irei colocar questões, que não irão ser feitas diretamente a nenhum de vós. A ideia é todos contribuírem com alguma informação relativa à questão, exporem situações que tenham a ver com o tema e mesmo dar as sugestões que acharem pertinentes.

Gostaria de saber se tenho a vossa permissão para gravar esta conversa de forma a conseguir extrair toda a informação relevante da mesma aquando da recolha de dados.

Antes de começarmos, alguém te alguma questão?

Geral

1. Primeiramente, gostaria de saber como viveram o período de confinamento com as aulas à distância.
   a. Quais foram as vossas maiores dificuldades?

Tecnologias

2. Qual a vossa opinião acerca dos recursos que tiveram à vossa disposição durante esta altura?
3. Como avaliam as vossas competências no uso das plataformas digitais e recursos que vos foram disponibilizados?
   a. Quais as maiores dificuldades no uso das mesmas?
   b. Que tipo de apoios foram disponibilizados?
   c. Qual a vossa opinião sobre a utilidade desse apoio?
   d. Que outro tipo de apoio poderia ter sido importante?
4. Quais são, na generalidade, as maiores barreiras à implementação de tecnologias na vossa escola? (p.e. pouca autonomia por parte do Governo...)

Comunicação com a Direção

5. Durante o período em que houve aulas à distância, como foi a relação com a Direção, em termos de comunicação e apoio?
   a. Podem falar em situações específicas em que tenham sentido esse apoio?
   b. E a falta dele?
6. Como funciona a comunicação entre a Equipa de Gestão da Escola e a Equipa Docente, em termos de troca de Feedback?
   a. Qual a relevância desta comunicação e deste Feedback dado nos dois sentidos, para o desenvolvimento da Escola e do vosso trabalho?

7. Como conciliaram o trabalho com a vida pessoal?

        a. Em que medida sentem que a vossa vida pessoal foi afetada pelo facto de terem de dar aulas a partir de casa?

8. O que mudou na forma como preparavam as vossas aulas?

9. Relativamente ao contacto com os alunos, como avaliam impacto do ensino à distância?

10. Qual o efeito que teve no comportamento dos alunos em contexto de "sala de aula"?

11. Quais foram as maiores dificuldades que sentiram por parte dos alunos durante a pandemia? (ou que eles vos possam ter transmitido).

Formação

12. Gostaria de perguntar qual a vossa opinião acerca da Formação que vos é dada durante o ano letivo, na sua generalidade.

        a. Gostaria também de saber qual a vossa opinião acerca dos temas abordados nessas formações *(se a pessoa não desenvolver, se se adequam à realidade das escolas e se existe alguma utilidade, etc)*.

        b. Algum tema de Formação que achem relevante para a Direção da Escola?

        c. E para a Equipa Docente?

Finais

13. Que consequências acham que a pandemia veio trazer para a Comunidade Escolar no Geral?

Annex N: Interviews' Template Analysis

(*Category/subcategory – Example* | some of the categories do not have an example because the example is exactly the category name/title)

1. Training during the pandemic

    1.1. Teachers' training

        1.1.1. Usage of the digital platforms

            1.1.1.1. Just on top of the situation – "it was a training to be delivered the next day"

            1.1.1.2. Delivered Remotely – "I had the training remotely"

            1.1.1.3. Digital Development Plan 2021 – "and that existing flaw, we hope that with the Digital school, where teachers will be delivered training concerning digital competencies…"

            1.1.1.4. Did not reach all teachers – "it didn't reach everyone"

1.1.1.5. Building of tutorials and webinars by the school – "some tutorials and videos were done"

1.1.2. Topics still needed

1.1.2.1. Difference between presential and remote teaching – "I think that people who should have training in order to be able to understand the differences between face-to-face teaching and teaching distance learning,"

1.1.2.2. Planning of remote learning and evaluation – "foresee how to plan distance learning"

1.1.2.3. Everything concerning digital literacy

1.1.2.4. Interpersonal competencies - "Now there is one thing that we cannot forget, is that we are working with human beings, and as human beings, there is an aspect that should be worked on not only in the pandemic framework, but in other frameworks, which is, in fact, the aspect of interpersonal relationships, of interpersonal communication"

1.1.2.5. Resilience to deal with change – "mainly in what the resilience concept is concerned, we need to understand that school are constantly changing"

1.1.2.6. Teams Platform

1.2. Training for the Leadership

1.2.1. Topics still needed

1.2.1.1. Every topic related with this scope – "everything that comes reaches the school, concerning this scope, is welcome!"

2. Training before the pandemic

2.1. Teachers' training

2.1.1. Informatics and new technologies

2.1.1.1. Some sessions – "withing the school, at the moment we are not delivering that much training"

2.1.1.2. Inadequate – "training is not the one that should be happening so that every teacher had some digital skills"

2.1.1.3. Lack of interest from the side of the teachers – "there is a need of people wanting to learn and wanting to know"

2.1.1.4. A lower number of sessions than before – "before, there was more training"

2.1.1.5. "Self-training" – "it is that self-training each one does"

    2.1.1.6. Peers' training – "while doing our collaborative work, which is one of our trademarks, teachers could self-regulate and self-learn"

  2.1.2. Remote teaching

    2.1.2.1. Inexistent – "never scoped to this remote teaching"

  2.1.3. How the training for the teachers works – "public schools provide training mainly through Educational Area Training Centers, that is why these centers are centers, as the name indicates, that bring together the Directors of a certain geographical area, of their area of influence"

  2.1.4. It answers teachers' needs – "it answers to the disciplinary requests"

  2.1.5. Possibility of receiving online training from other places – "but this does not mean that we cannot do other kids of trainings, for instance, through the Teachers' House"

  2.1.6. Credited training needs to correspond to the teachers' teaching area

    2.1.6.1. Technologies can be inserted in this scope – "within each one's disciplinary area, we can obviously dig into technologies"

  2.1.7. The school does not have any autonomy concerning this topic – "schools do not define what they want to show"

  2.1.8. Teachers apply for training mainly if they need to upgrade ranks

 2.2. Training for the Leadership

  2.2.1. Leadership Competencies

    2.2.1.1. Little focused on leadership – "it was not much focused on the leadership scope"

    2.2.1.2. Little – "even though there were some sessions"

    2.2.1.3. Immediate – "we look for training to manage what we have at the moment, not to deepen the topic"

    2.2.1.4. There is some content in this scope – "there is some training"

3. Technologic Competencies

 3.1. From the teachers

  3.1.1. Usage of digital platforms before the pandemic

    3.1.1.1. Some teachers used them very often – "even though there were come colleagues who used the platforms often"

    3.1.1.2. Uncomfortable using them – "there are teachers that do not feel as comfortable"

    3.1.1.3. There was a stop on its usage at some point – "from one moment to the other, it stopped"

3.1.1.4.   The platforms existed in school, but they were not utilized – "it was installed, the credential were given to the teachers but it was not used"

3.1.2.   Usage of digital platforms during the pandemic

3.1.2.1.   Teachers were not ready – "I speak for myself, I had never used Zoom, Meets, Teams, never used all those platforms"

3.1.2.2.   There were things missing – "there were some things that did not go as well as we wanted"

3.1.2.3.   In the end, results were positive

3.1.2.4.   There was an effort, from the school, to use the already existing platform – "from the side of the school and the grouping, there was an huge effort to put the platform functioning and allow communication through digital means"

3.1.2.5.   Lack of awareness of the importance and the existence of the platform

4.   Leadership

4.1.   Difficulties while managing the school during the pandemic

4.1.1.   Several groups of people

4.1.2.   More constraints – "before the pandemic, the management was way easier than now, after the pandemic. The constraints are much bigger"

4.1.2.1.   With the need of immediate resolution – "some of the situations never occurred and they need to be solved in the moment"

4.1.3.   Absence of teachers – "we have many teachers belonging to the group that moved because of illness"

4.1.4.   Students in prophylactic isolation – "we have to deal with students that are isolating or tested positive, and we need to provide them with support"

4.1.5.   Teachers were resistant to change – "obviously we cannot change mentalities from one day to the other"

4.1.5.1.   Mainly teachers close to retirement – "there are some teachers who are close to the retirement date and had to adapt to this remote teaching situation"

4.1.6.   Growing anxiety from the side of the teachers – "it was a management of anxiety and stress of the teachers board"

4.1.6.1.   Scared of catching the virus and contaminating their families – "because, if the teachers get some health issue in the school, they will inevitably bring that problem to their families"

4.1.7. Presential learning as preferable – "presential learning, of course it is preferable"

4.1.8. Social distancing

4.1.8.1. Dehumanization of teaching – "we were used to have a personalized management and now the rules are clear"

4.1.8.2. Sadness and demotivation – "for us, that is very difficult and makes us all very sad"

4.1.9. Thinking and anticipating situations – "one of the biggest challenges a lider has at the moment is, exactly, think and anticipate"

4.1.10. The way students are living the school experience – "really, it is not the same"

4.2. Leadership competencies

4.2.1. Communication

4.2.1.1. Need of supporting the teachers – "if we do not have the teachers' support, their collaboration and suggestions, the management gets a lot harder"

4.2.1.2. Specific spaces of formal communication – "we have some intermediary structures where we go and collect the information"

4.2.1.3. Periodicity – "all this is done monthly"

4.2.1.4. Need of improvement – "there are a few aspects that we need to improve"

4.2.1.5. It Works – "generally, it Works"

4.2.1.6. Enormous effort to integrate everyone – "there are huge efforts to integrate everyone, and not to lose any student"

4.2.1.7. Several communication channels

4.2.1.8. Ease of communication informally - "Very easy to reach the management and talk to the Teachers, great ease in communicating in this informal way."

4.2.1.9. Need of creating the Image and Communication Office

4.2.1.10. The communication dilutes - "there are several organic units that are not in the school and, thus, the communication dilutes"

4.2.1.11. Mediatization of the communication during the pandemic – "with the pandemic, the communication stopped being immediate and became more mediatized"

4.2.1.12. Trying to use the institutional email

4.2.1.13. Teachers feel binded while communication in the written form – "Now, most teachers still think that putting things in writing is compromising in some way"

4.3. Challenges while managing the school before the pandemic

4.3.1. Relation with official entities – "concerning the management, when we place a problem to out entities, which should help us, most of the times those doors are closed"

4.3.2. Staff evaluation

4.3.3. Relationship with the parents – "stress management of teachers and also the parents"

4.3.4. Relationship with the colleagues (teachers)

4.3.4.1. Building the classes, in terms of diversity – "there are some teachers that rather have those homogenous classes and that think students should all be the same, but nowadays, schools is a stage of diversity"

4.3.4.2. Distribution of the schedules, concerning personal preference

4.3.5. Variety of audiences – "students, teachers, staff, technical and operational assistants, the institution became large and sometimes it is not easy to manage, in terms of human resources"

4.3.6. Deal with the students

4.3.7. Challenges with new technologies

4.3.8. Interpersonal relationships

4.3.9. Specific events needing fast decisions – "things happening every second"

4.4. Challenges concerning leadership

4.4.1. Appearance of good leaders – "it is not easy to have a leader that is capable of getting the role in all its scopes"

4.4.2. Concept not integrated in schools – "Obviously, leadership is a concept which is not intruded yet in schools"

4.4.3. There is still a way to go concerning this topic – "there is still a big and tumultuous way we need to go in order to reach the needed levels"

4.4.4. Leader needs to be considered a fundamental member of the team

4.4.5. Lack of ability to delegate – "I see an inability, not concerning the concept, but a big inability of delegating"

4.4.6. School is obliged to be run as a company – "at the moment it is mandatory for us to have profits, we have goals to reach and that is a concern".

4.4.7. Establishing of objectives and indicators – "What is lacking, mainly, is that ability to establish and measure our own goals"

5. Technologic resources

5.1. Lack of resources – "there is a fight concerning the lack of resources"

5.2. Usage of the teachers' personal resources – "It is based on the teachers using their own resources for things to happen"

5.3. Technologic Plan 2012

    5.3.1. Did not reach the school – "Concerning Emídio Garcia School, the technologic plan didn't reach us"

    5.3.2. Usage of resources from another school – "we had to go and get our luck from Paulo Quintela, and relocate some equipment for Emídio Garcia"

    5.3.3. The resources that reached the school were not enough – "we were never properly set when resources are concerned"

    5.3.4. Inefficient distribution of resources – "as we grouped with Paulo Quintela, and that school received an excess of resources, because there were not well distributed"

5.4. Resources are outdated – "the resources we have do not allow any type of renewing"

5.5. Need of investment – "Which means that there is the need of having a big investment, in the school, from the side of the Ministry of Education"

    5.5.1. Maintenance is costly for the school – "the budget the school had does not allow us to buy digital resources"

5.6. Internet/Network was inefficient – "the school is big, so (...) due to the distance, we can reach a terminal and the last does not have internet"

    5.6.1. There are days that it works, relatively – "there are days when the internet can have some flaws"

5.7. Digital Development Plan 2021

    5.7.1. Resources are slowly starting to reach the school – "two or three days ago, computers for the students reached the school"

5.8. They are enough to remedy the situation – "anyways, I don't think the situation is that bad, we are in-between"

5.9. Support from the side of the Ministry of Education

    5.9.1. Platform to support technologies – "there is a platform the ministry created, in order to support Technologies"

    5.9.2. Celebration of a contract with a company connecting the school and the Ministry of Education concerning technologies – "there was a contract the

school signed, with a company, to connect the ministry of education to the school"

6. Financial autonomy

6.1. Limited/Minimal – "if we are talking about financial autonomy, it makes no sense (…) there is no autonomy concerning financial means"

6.2. Technology implementation barrier – "the school budget does not allow us to buy digital resources"

6.3. Media stereotype – "it is a stereotype which has been propagated by the media, and which is old, and that the society thinks it is true, but it is not"

6.4. Lack of autonomy concerning every scope of the school – "I do not see any scope in which we have autonomy"

    6.4.1. Municipalization of education – "each day that goes by, we can perceive a municipalization of education"

7. Pandemic situation

7.1. Unexpected – "no one was expecting to face a situation like this one"

7.2. Government Guidelines

    7.2.1. Little clear – "The ministry of education should be more pragmatic concerning these situations"

    7.2.2. Little objective – "they were not objective"

    7.2.3. Contradictory information – "sometimes the problems come up, and we reach the superior entities twice and two contradictory answers are given"

    7.2.4. Little support – "little to no support, there was only some flexibilization of some processes"

    7.2.5. Lack of uniformization of measures within similar schools – "concerning the same situation, two different measures are taken"

    7.2.6. Without any impact or relevance – "the guidelines from the ministry of education, in this case, since March, did not have any impact or relevance concerning the school management"

    7.2.7. Concerning individual protection resources, it worked well – "concerning the acquiring of individual protection resources, they are accomplishing"

    7.2.8. Ineffectiveness in placing teachers in the school – "our main problem at the moment is still the placing of staff and teachers"

7.3. Teachers with a big capacity of adaptation when the situation require so – "there was a big capacity of adaptation (…) the big capacity the teachers had to adapt"

7.4. Creation of the technology team of the school – "there was a team created for the implementation of remote teaching"

    7.4.1. There were some flaws – "it is normal that there were some flaws"

    7.4.2. The way it was implemented – "the team was distributed by the several teaching cycles (…) and the goal was to cope with my colleagues' difficulties"

7.5. Some almost retired teachers wanted to provide their contribute to the school – "also, teachers who were close to the retiring age (…) wanted to contribute"

7.6. Creation of the figure "Tutor Teacher" – "to connect the students and the grouping to the students who did not have resources"

    7.6.1. No student was left without support – "no student was left without support"

7.7. No one was prepared – "we were not prepared"

7.8. Support on the delivery of resources, from the side of the autarchy – "there was a good work done by the autarchy concerning the giving access to digital resources to student who did not have them"

7.9. Partnership with entities from the local autarchy - "for instance, the support from the GNR, the PSP"

8. Difficulties stated by the teachers during the pandemic

8.1. Students without conditions of attending remote classes – "difficulties of the students in reaching the network"

    8.1.1. The school and the autarchy tried to solve this situation – "the school, together with the local power, made an effort"

8.2. Arise of social inequalities between students – "there was a ineffectiveness from the side of the ministry of education, of getting all the students in the same conditions, which did not happen"

8.3. Teachers did not have resources – "lack of resources"

8.4. Teachers' resources were outdated – "our software was not updated"

8.5. There was the need to buy personal resources – "we cannot forget that we were at our homes and, all of a sudden, had to buy cameras"

8.6. Students were absent from the platforms during the classes – "some teachers had difficulties in what the presence of the students were concerned (…) the teacher cannot understand if they are there or not"

8.7. Intrusion of the parents in the classes – "the platforms allow the student to be together with the tutor (…) but who am I evaluating?

8.8. Students' evaluation – "do not lower the students' level as much in order not to prejudice them"

8.9. Constant network issues – "there was the lack of network as a big difficulty"

9. Pandemic impact for the future of the school

9.1. Uncertainty

9.2. It will affect the way students perceive school – "there need to be efforts so that the students do not feel major changes in the way they face the school"

9.3. Family life – "it is affecting their personal lives"

9.4. School focus on the social-economical situations – "some social questions will arise"

9.5. Understanding that education cannot suffer as much – "Education do not suffer as much as it does in situations like this"

9.6. Trust from the side of the leadership – "I have confidence and I hope this confidence never leave us"

9.7. Fight for the school – "we, the leadership, as well as the students, we need to fight for the school we want to be"

9.8. Need of self-training – "each one of us needs to self-train since things can change at any moment"

9.9. To use, at an increasing rate, remote means – "the future can hold us more situations such as this one"

9.10. Need of updating technologic resources – "we need to update our resources"

9.11. To do remote work as well as presential one – "we need to perform in the platforms as well as we do in the classroom"

9.12. Reflexion about the damage human beings are causing in nature – "no one wins alone, all of a sudden we can face chaos and we need to reflex on the damage we are causing to mother nature"

9.13. To be able to go back to the comfort zone – "everything leads me to think that we will all be back to our comfort zones"

9.14. Need of updating and recycling the leadership – "there is the need, from the side of the leaders, a constant look for a constant update, recycling, training and investment"

9.15. Concerning learning and evaluations methods, the difference will not be as big – "I don't believe that, in terms of processes, there will be big changes"

9.16. Negative impact for the school dynamic – "we have a dynamic which is stopped at the moment, and stopped people get used to other realities and other things"

9.16.1. Several students' groups and activities – "we have several groups (…) which bring people together and now they are not working"

10. Characteristics of the teachers' board in general

10.1. Aged – "the teachers' group is a little aged"

10.2. Resistant to change – "there is always a certain resistance from them, to adapt to new stages"

10.3. Need of permanently readapt educational strategies – "a lot of the students' know how comes from outside (…) and the teachers always have a big adaptation capacity and adapt their practices to the reality of each school year"

Annex O: Focus Groups' Template Analysis

1. Teachers' difficulties while remote teaching

1.1. Bad internet connection – "that one of the problems, the internet always failing"

1.2. Several people sharing the same space/home – "here, four of us were having remote classes at the same time"

1.3. Feelings of lack of efforts from the side of the students

1.3.1. Students with an open session at the platforms, but they were absent – "sometimes you know you are talking to a wall"

1.3.2. Making up technical problems in order not to participate in the class – "sometimes I heard "the teachers is calling" and there he comes "oh, sorry, I had a technical issue"

1.3.3. In case of a new lockdown, there will be more difficulties – "if we were to be in a new lockdown (…) we would not have developed much more than in March"

1.3.4. Students were aware that they were not going to be prejudiced in what their evaluation is concerned – "they knew nothing effected their evaluation, either they worked or not"

1.3.5. Lack of awareness and understanding of the school/home space and routines – "didn't get the school spirit and routines"

1.3.6. Students were using the platforms for other things that were not the class – "they were not interested; they were interested in exploring the material for other purposes than the class"

1.3.7. Students were not turning the cameras on – "we were not seeing the student's faces"

1.4. Lack of preparation for the remote teaching

1.4.1. It started too fast – "all of a sudden someone let us to the lions and told us "My friends, the platform to work at the school is the Teams platform"

1.4.2. How to deal with the students that had no resources – "lack of procedures concerning what to do in case the student was not available, did not have the conditions"

1.4.3. Lack of technologic resources – "we are not that equipped to face the needs"

1.4.4. Presential teaching and the preferred method – "in person, which is fundamental to me, it is more important than any other kind of contact"

1.4.5. It was never done before – "I am here for 30 something years, and no one ever prepared us for remote teaching"

1.4.6. Students were placing doubts related to Technologies and the teachers did not have the knowledge to answer them

1.5. Usage of teachers' personal resources

1.5.1. It was never asked if the teachers had the proper resources to deliver online classes – "we were never asked if we had internet or not (…) computer or not"

1.5.2. Without teachers' contribution, classes would now have happened – "teaching and education survived due to the teachers' work and resources"

1.5.3. There was the need to buy technologic resources – "where there were no resources, people bought them"

1.5.4. Need of carrying their personal resources to the school

1.6. The school had no capacity to provide teachers with digital resources – "the school, if I didn't have my laptop and my internet, and did not make them available, they could not do it as well"

1.7. Lack of guidelines and clear strategies – "concerning strategy implementation, it was not always easy"

1.8. Evaluation

1.8.1. Indecision concerning students' evaluation – "those students who had a more indecisive evaluation, between the negative and positive, this did not go well"

1.8.2. Students with lower grades, lowered more – "it bridged more the gap between these situations"

1.8.3. Possibility of fraud – "who was I to tell them "you did this" or "you didn't do this"?"

1.9. Need of readapting – "even colleagues who did not have digital aptitudes readapted extraordinarily"

1.10. Lack of knowledge of the students' real situation – "And I thought that we did not have that problem"

1.11. Extreme tiredness and exhaustion – "I was exhausted"

1.12. Management of personal and professional lives

    1.12.1. Physical and mental health wear – "it is a tremendous stress"

    1.12.2. Need of creating working schedules – "there was no split between "the school finished, the work finished"

    1.12.3. Differentiation of the physical space school/home – " it is a permanent being, 24h, in the physical space "my house" and automatically I was 24h in the physical space "my school"

    1.12.4. Family life management - "and there was the need of having space for my daughter to have her remote classes"

        1.12.4.1. It is even more difficult when teachers have small children – "I had a small 4-year-old who felt abandoned with a house full of people"

1.13. Privacy invasion

    1.13.1. From the side of the students – "concerning privacy, when we are delivering a class, I think very often if I am being recorded"

    1.13.2. Intrusion of the parents on the classes - "the parents watching our classes and criticizing"

1.14. Unpredictability – "there was a moment when everything was new, nothing was predictable"

1.15. Deal with the other teachers

    1.15.1. Difficulties that they have shown concerning several scopes – "one of my biggest difficulties was to deal with my colleagues who had a lot of issues while using the tools"

1.16. How to reach all the students effectively – "how do I reach everyone?"

1.17. Difference between the autonomy of the younger and older students – "A student from the 7th grade, does not care"

1.18. Teachers' work was not, by any means, recognized – "I was hoping, that, such as the parents aknowledge that the teachers reinvented themselves and exceeded in what they were doing"

1.19. Class Directions

    1.19.1. Deal with the parents – "every day, I had parents sending emails because they didn't have this or didn't have that"

1.20. Lack of contact with the colleagues – "we needed those 20 minutes in the teachers' room (…) and now that does not happen"

2. **Teachers' digital competencies**

    2.1. Usage of the communication platforms during the pandemic

2.1.1. Some teachers delivered the classes through email – "there were some colleagues who didn't use Teams, they delivered their classes through email"

2.1.2. Several teachers were not able to work with the platforms

2.1.2.1. Lack of technical knowledge – "we didn't have the knowledge to work with the teams platform"

2.1.3. Unfamiliarity with the existence of the platforms – "I didn't know the platforms existed"

2.1.4. Waste of time exploring the platforms – "we used a lot of our time trying to understand how they worked"

2.1.5. Creation of material for the students – "we created new materials"

2.1.6. The existent upgrade and evolution were due to the teachers' work – "if there was some evolution in what digital competencies are concerned, it was our merit, of the teachers"

2.2. Usage of the communication platforms before the pandemic

2.2.1. Moodle Platform – "I have used the Moodle platform for several years, but with different motives"

2.2.2. They existed, the teachers knew them, but they were not used – "no one used the platforms frequently, but they existed"

3. Positive aspects to gather from the pandemic

3.1. Window of opportunities for the teachers

3.1.1. Gathering of new knowledge – "it was a window of opportunities"

3.1.2. Initial discovery period – "in the beginning I liked everything, everything was funny, and I got excited"

3.2. For most of the classes, it ended up going well

3.2.1. Mainly for the older students that had national exams – "I had a group of students who were very responsible and mature, that had the final goal which were the exams and finish the secondary education"

3.3. Teachers with a huge capacity of adaptation and resilience

3.3.1. Even the older ones – "the old ones like me reinvented themselves"

3.3.2. They used all the means they had at their disposal – "even people who did not have an aptitude, they reinvented themselves"

4. Difficulties of the students, from the teachers' perspective

4.1. Need of adapting, such as the teachers'

4.2. Special Needs' students

      4.2.1.   Accentuate the asymmetries between these students and those in regular education – "there was this specific group of students with more difficulties"

      4.2.2.   School showed several options, but there were no means – "the school tried several resource, they placed hypothesis... but there were no means"

  4.3.   Accentuate of social inequalities

      4.3.1.   School lost its embracing role – "there were several social weaknesses thar arose (…) and we were supposed to have the school with an embracing role"

      4.3.2.   Students without the support of the tutors/parents – "those who had some support made it. But not all of the student have that support"

  4.4.   Students were tired of distance learning

      4.4.1.   The need to be with their colleagues was shown – "the students, before this situation, thought the school was boring, but not, with the presential classes, they say "is the class already over? Do we need to leave now?""

  4.5.   Need of support from the side of the autarchy – "some of them got their personal vehicles and went getting students' works"

  4.6.   Privacy invasion – "sometimes I saw the father scolding the mother"

5.   Acknowledgment for the opportunity for Teachers to be heard – I wanted to thank you for allowing us to have this space where we are being heard, since at the moment we didn't have the change to do so".

6.   Important Notes – "people needed to adapt themselves in several sectors, not only schools"

7.   Teachers' training

  7.1.   The Leadership does not have autonomy – "the leadership, little or nothing can do concerning training"

  7.2.   How the training worked

      7.2.1.   Sporadically, it happened remotely

  7.3.   Peers' training

      7.3.1.   Relevance is not perceived – "some people are not used to it and, more than that, they do not accept it"

      7.3.2.   Most of the learning was done through social media – "work groups in the social media worked for people to place and clear doubts"

      7.3.3.   Teachers helped each other – "concerning training and digital means, teachers rely on each other"

  7.4.   There have been no developments concerning certified training, since March

      7.4.1.   Teachers still do not feel ready – "we don't have the technical knowledge we should have"

7.4.1.1. Need of learning how to work remotely, remotely – "it is not easy to teach using technology in a remote way"

7.4.2. There were just some webinars performed by the school – "I guided myself through the scripts the school sent us and the tutorials"

7.5. There was the proposal, for the leadership, to perform digital training – "there were some suggestions concerning the pedagogic council, to create more support"

7.6. The training, during the pandemic, was performed on top of the situation – "the training was being the done when the work already started, which caused stress"

7.7. Teachers learnt alone or with family members – "I have a major difficulty since I didn't have someone at home to help me, such as some colleagues"

8. Support from the Government or the Ministry of Education

8.1. None, in terms of competencies or digital resources – "concerning the superior entities, we are the same point as in March"

8.2. Digital Development Plan 2020

8.2.1. Teachers close to retirement may no longer be receptive – "when the training reaches the older ones, they will not want it"

8.2.2. Lack of confidence on its implementation – "I know that will not happen in that time"

8.2.3. Training for the teachers is predicted to happen in the next 3 years – "teachers will be receiving training in the next three years"

8.3. Unclear guidelines – "guidelines are unclear for everyone"

9. Leadership Role

9.1. Extremely low support – "support... well…"

9.2. Freedom to choose which digital platform to use – "it was a big advantage to let us use the email, Zoom…"

9.3. Leadership was caught off guard – "the were as stresses as the teachers"

9.3.1. Difficulty to deal with different scopes

9.4. Communication with the Leadership

9.4.1. It happens but it remains in that space – "there was a recognition of the teachers in the pedagogic council. Did it reach the teachers? No, it did not. Period."

9.5. Digital processes are extremely bureaucratic – "we depend on companies to create students' emails"

10. Consequences of the pandemic for the future of the school

10.1. For the students

10.1.1. Bigger accentuation of inequalities – "a bridge in the gap, in my opinion"

10.1.2. Special Needs' Students – "they are getting lost and I think some of them will never recover"

10.1.3. Not being able to spend their energy – "being able to run and jump and all, they miss that"

10.1.4. Lost of awareness of what the classroom is – "they lost the sense of what a classroom is"

10.2. For the teachers

10.2.1. Distancing from the students – "we do not send a student to the board (…) we are all scared of each other"

10.2.2. Distancing form their colleagues – "I need to talk a little bit (…) to say two or three nonsenses"

10.3. Huge psychologic wear – "the psychological side is not being an easy one"

10.4. Financially – "I think we will see several dramatic situations in what the financial resources are concerned"

10.5. Possible recognition by the parents of students – "I think parents will acknowledge our work"

10.6. A total return to normality was not expected – "I don't believe we will go back to normal after covid"

Annex P: Teachers' and Students Technologic Resources

Table 9 - Teachers' and Students' Technologic Resources

Topic	Scale	% Internet		Average Score		Std. Deviation	
		Teachers	Students	Teachers	Students	Teachers	Students
Internet at home	Yes	100	98,8	-	-	-	-
	No	0	1,2	-	-	-	-
Stable Internet connection	1 to 5	-	-	4,23	3,70	0,950	0,749
Had to buy internet to deliver classes	Yes	12,3	18,5	-	-	-	-
	No	87,7	81,5	-	-	-	-
Internet was provided by the school	Yes	4,1	6,2	-	-	-	-
	No	95,9	93,8	-	-	-	-
Devices							
Used device	Computer	98,6	93,9	-	-	-	-
	Tablet	15,1	8,5	-	-	-	-
	Cell Phone	39,7	61	-	-	-	-
	Other	4,1	1,2	-	-	-	-
Had to buy a device to deliver/attend to classes	Yes	26	24,4	-	-	-	-
	No	74	75,6	-	-	-	-
A device was provided by the school	Yes	0	0	-	-	-	-
	No	100	100	-	-	-	-
Platforms							
Used platform	Microsoft Teams	98,6	97,6	-	-	-	-
	Zoom	56,2	82,9	-	-	-	-
	Google Meet	2,7	2,4	-	-	-	-
	Other	1,4	2,4	-	-	-	-
Was it the right choice?	Yes	95,9	87,8	-	-	-	-
	No	4,1	12,2	-	-	-	-
Proper work conditions	1 to 5	-	-	3,42	-	1,066	-

Annex Q: Teachers' Questionnaire Results

Graph 2 - Negative impact of remote teaching

Negative Impact of Remote teaching
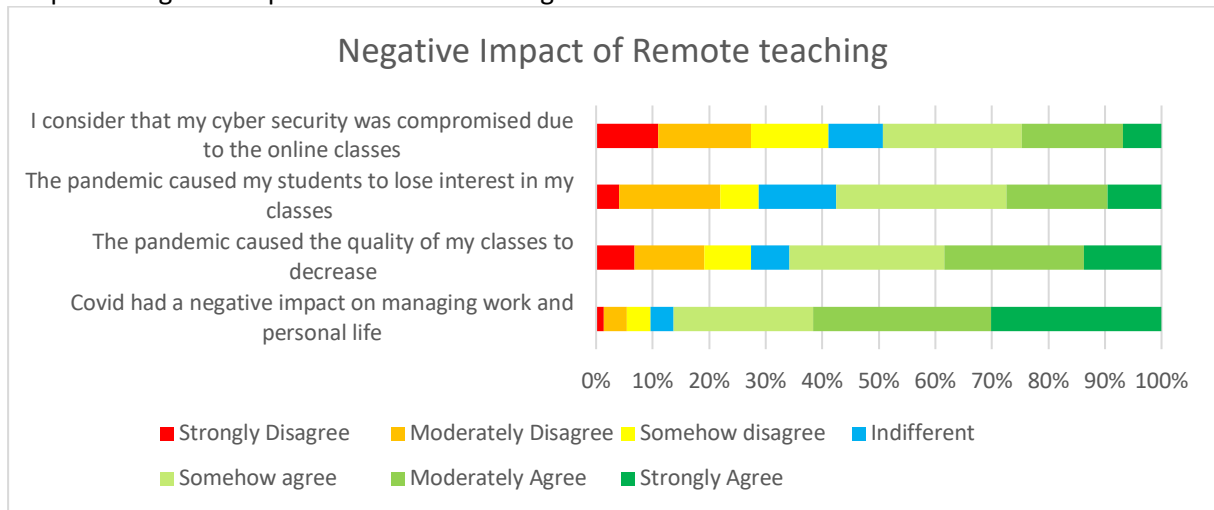
Graph 3 – Positive impact of remote teaching

Positive impact of remote teaching

Graph 4 – Impact of presential classes
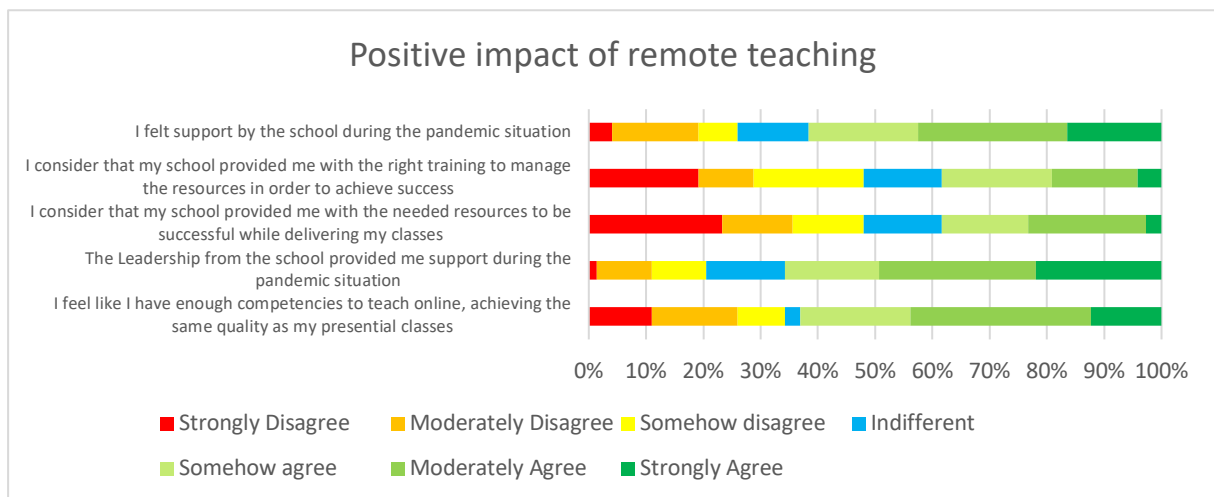
Impact of presential classes
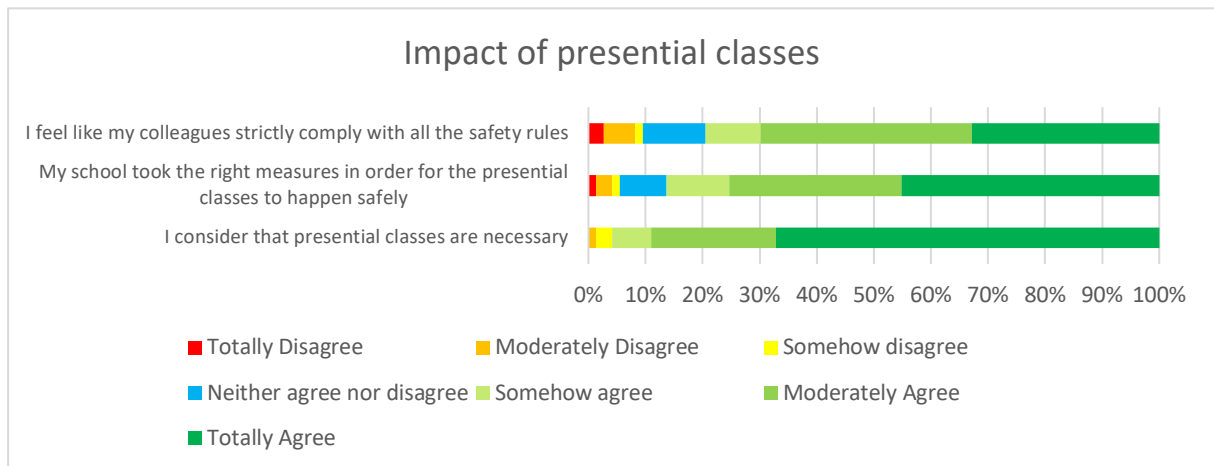
Graph 5 – Teachers' Health and Well-being
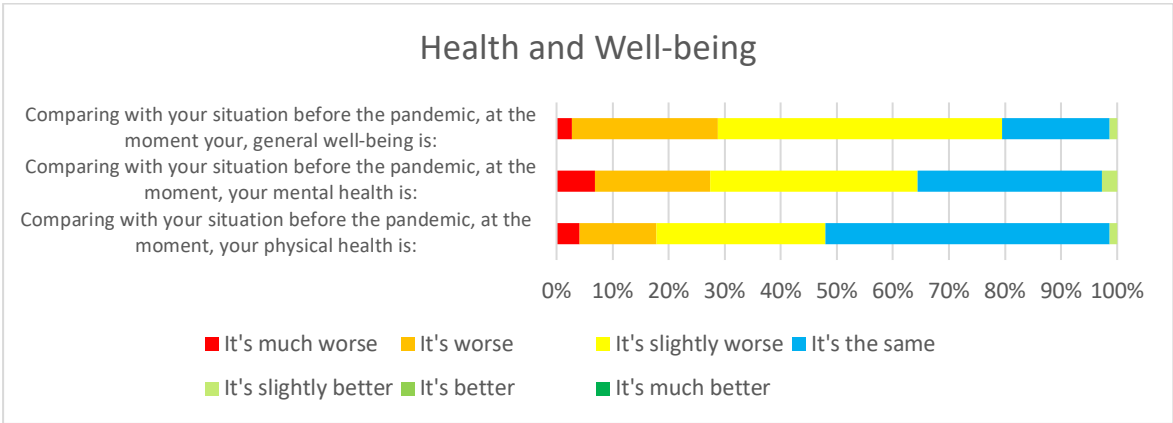
Graph 6 – Teachers' Personal and Professional life management
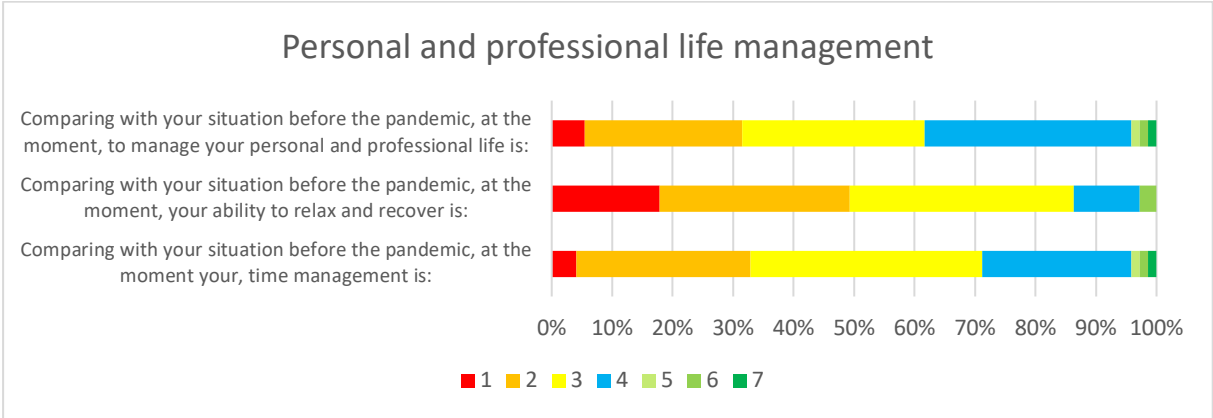
Graph 7 – Working hours comparision before and after the pandemic
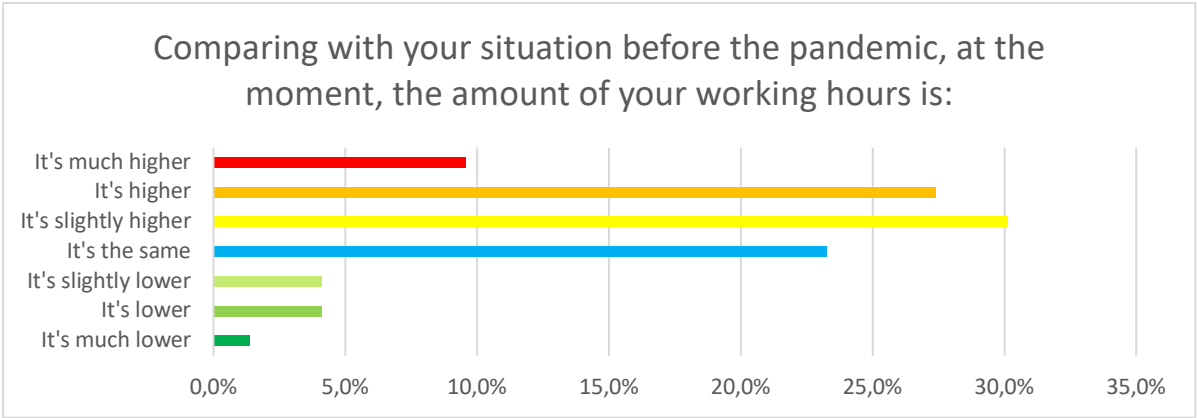
Annex R: Students' Questionnaire Results

Graph 8 - Negative impact of Online Classes

Negative Impact of Online classes

Statement	
I believe that my cyber securty was compromised due to remote learning	
I believe that the online classes compromised my school experience	
I believe that the pandemic prejudiced my school success	

Legend: ■ Totally disagree ■ Moderately disagree ■ Neither agree nor disagree ■ Moderately agree ■ Totally agree
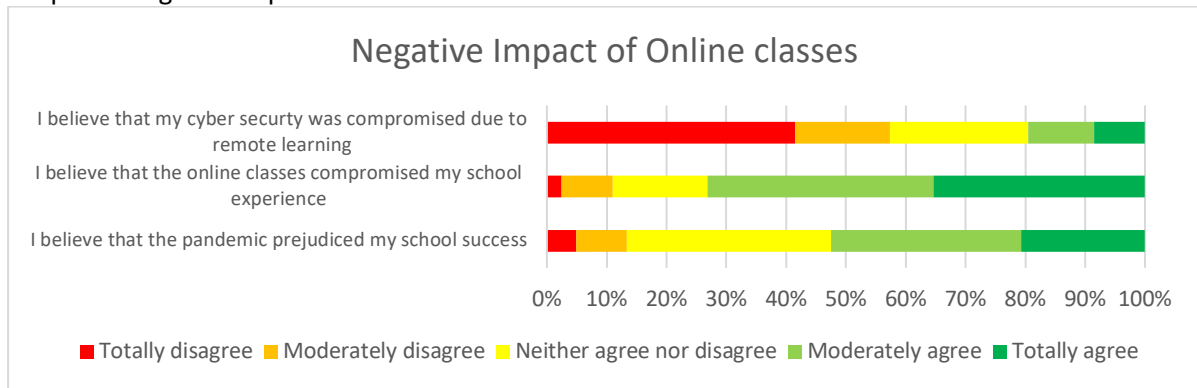
Graph 9 – Remote learning adaptation

Remote learning adaptation

Statement	
I believe I was successful while managing my personal life with online classes	
I believe my school provided me with the needed resources to be successful	
I felt supported by the school during this pandemic situation	
I believe that my teachers used innovative methods to provide online classes	
I believe that my techers have the right skills/competencies to provide online classes	
I strived to ensure that classes, even if online, took place as smoothly as possible	
The School Leadership strived to ensure that classes, even if online, took place as smoothly as possible	
My Teachers strived to ensure that classes, even if online, take place as smoothly as possible	

Legend: ■ Totally disagree ■ Moderately disagree ■ Neither agree nor disagree ■ Moderately agree ■ Totally agree

Graph 10 – Presential classes

Presential classes

Statement	
I feel like my teachers comply with all the saftey measures	
I feel like my colleaguescomply with all the safety measures	
My school took the right measures for the presential classes to happen safely	
Presential classes are necessary	

Legend: ■ Discordo Totalmente ■ Discordo Moderadamente ■ Não concordo nem discordo ■ Concordo Moderadamente ■ Concordo Totalmente

Graph 11 – Usage of digital means

I consider that digital means should be used more often
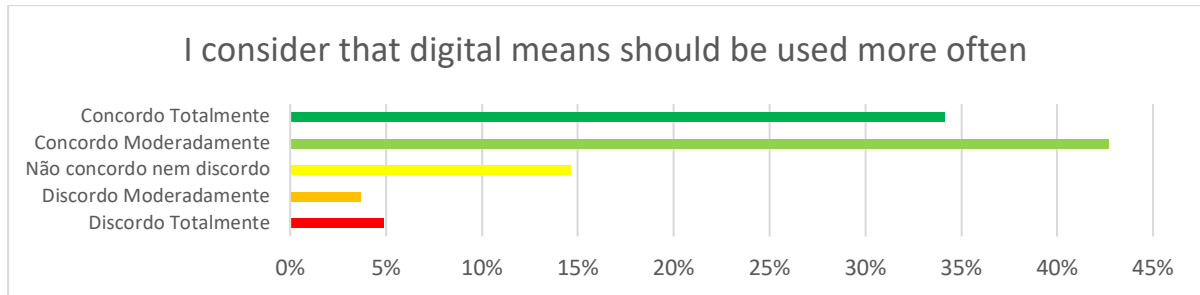
Graph 12 – Technologies impact inside the classroom

Technologies impact inside the classroom
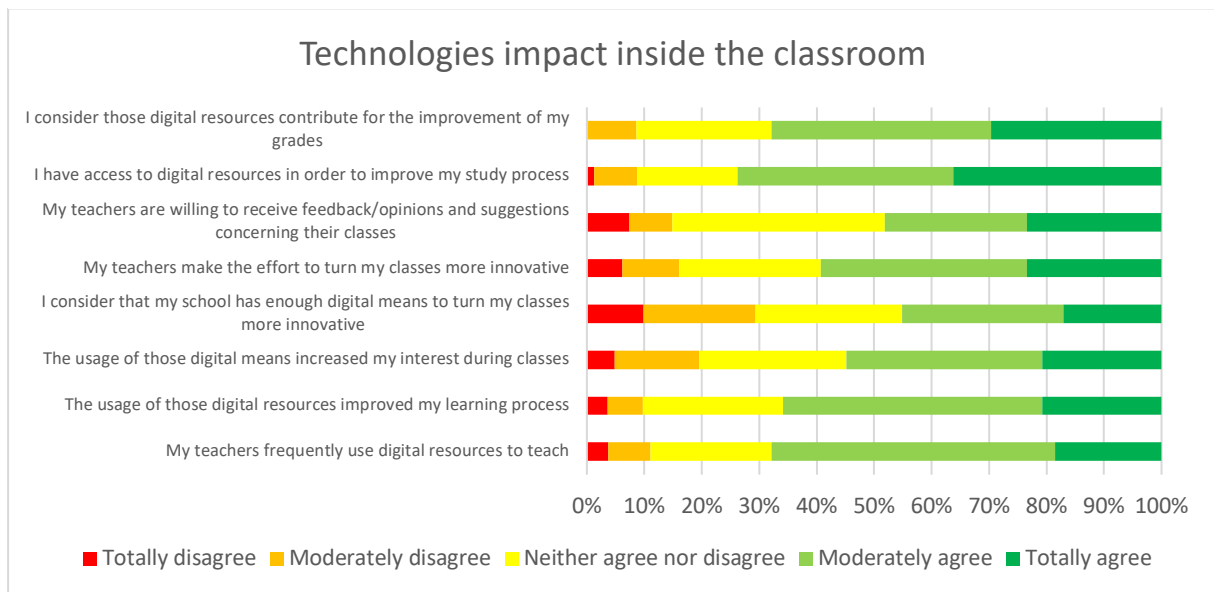
Graph 13 – Importance of the platforms during classes
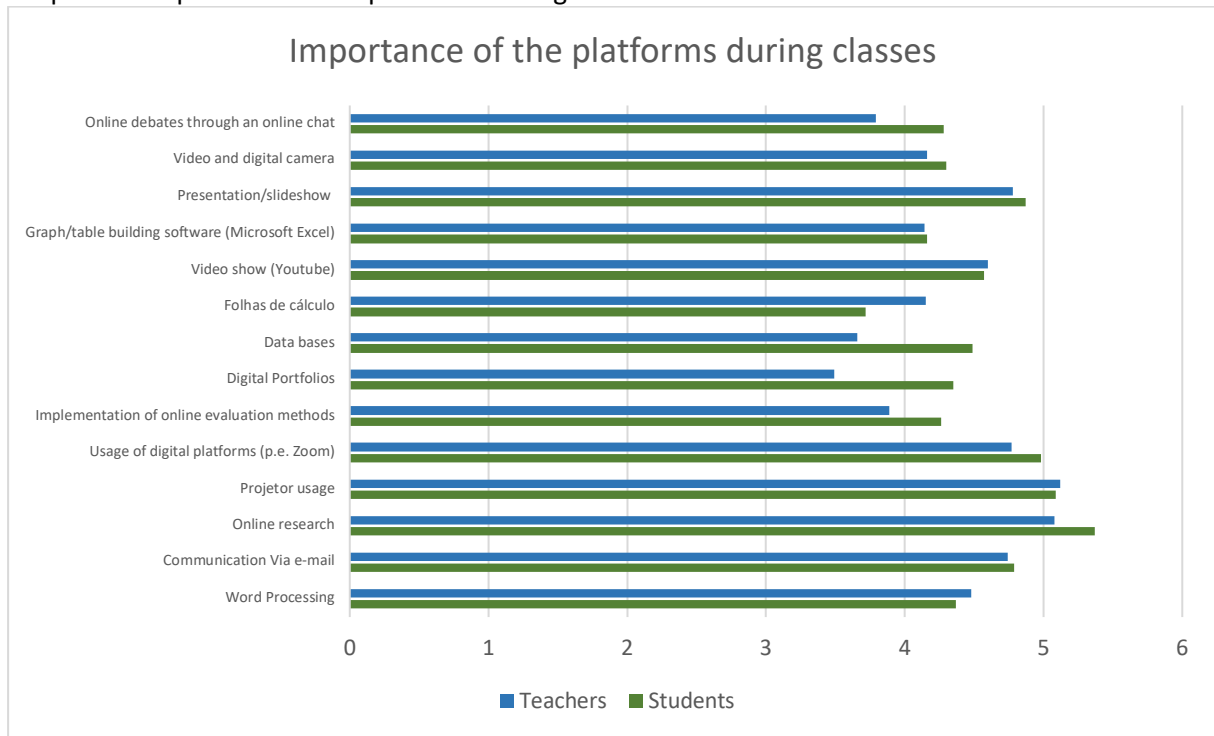
Graph 14 – Teachers' competencies using the platforms
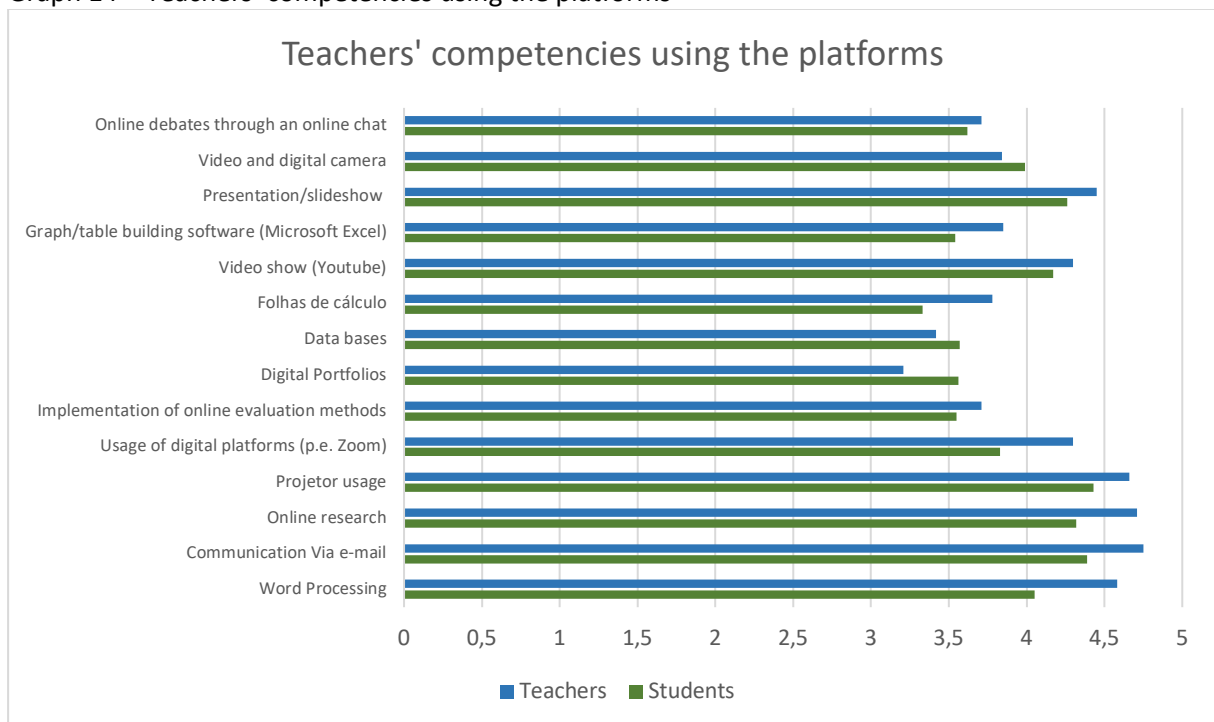
Annex T: Focus Groups and Interviews Summary table

Table 10 – Focus Groups and Interviews Summary Table

Theme	Topic	Teachers' Data	Leaders' Data
	Several work fronts	-	"…now there is the need to deal with students that, for many reasons, are isolating or tested positive, and we need to support them." (Leader 5)
	Lack of resources form the side of the school and the teachers	"It was tacitly set that there were computers" (Teacher 8, Focus Group 1) "When the devices did not exist, people bought them (….) I needed a camera, I bought a camera" (Teacher 8, Focus Group 1) "…teachers were never asked if they had internet or not" (Teacher 1, Focus Group 1);	"…the school still is not equipped" (Leader 3) "…the management before and after the pandemic is very different" (Leader 5)
Main difficulties	Lack of cooperation from the side of the students and their families	"…from the moment we entered lockdown, in their *(students')* spirit, they started vacations" (Teacher 1, Focus Group 1) "we cannot forget that the rest of the family was also at home" (Teacher 2, Focus Group 1) "it was an exhibition in which we were the target" (Teacher 4, Focus Group 1);	-
	Difficulties while managing personal and professional lives	"I was exhausted. Even though we had a lower number of classes (…) they occupied a lot more time" (Teacher 5, Focus Group 1) "at 7pm we were coming here *(to the platforms)*, we had something, at 9pm maybe we had another assignment, another question…" (Teacher 1, Focus Group 2) "my son does not know what he wants to be when he grows up, be he is sure he does not want to be a teacher" (Teacher 7, Focus Group 1)	-
	Lack of technical knowledge	"students were asking for my help and I did not have to knowledge to explain them" (Teacher 7, Focus Group 2)	"…never used Zoom, meets, teams and all those platforms" (Leader 1)

	Lack of technologic support	"if there was some technologic evolution, and concerning technologic competencies, the merit was from the teachers, who wanted to self-learn (…) concerning our leaders, at the moment we would be at the same point" (Teacher 1, Focus Group 1)	-
	Lack of support and recognition from the side of the Leadership	"when you perform the case study, Catarina, I want you to refer that this is not the perspective of one teacher, it is a general situation (…) and I do not know if I can say that I am hurt, but, such as my colleagues, I was expecting that, such as some parents recognized, others stated that we reinvented ourselves and exceeded expectations in what we were doing (Teacher 6, Focus Group 2).	-
	Preference for presential classes	"for the ones who thought that they would move onto the almost exclusivity of e-learning in schools, forget that" (Teacher 7, Focus Group 1)	"presential classes are the best option" (Leader 3) "nowadays, the teachers deliver their classes and go home. There is no social side of it. We look like robots, we get in, get out, and there is no social relationship (…) and this makes us all extremely sad" (Leader 4)
	Students' difficulties	"the good ones (students), remained good, the bad ones, became worse, and the dynamic we have inside the classroom, even though already being in person, does not help at all" (Teacher 2, Focus Group 2) "the students with special needs, they are getting lost and some of them… I fear they will never recover (Teacher 2, Focus Group 2) "They (the students) talk and reveal that worry that, in fact, there is the need of being together" (Teacher 7, Focus Group 1)	"difficulties while accessing to the informatic network" (Leader 1) "some deficiency, from the side of the Ministry (of Education) and the municipality, in being able to provide all students with the same conditions" (Leader 5)
What could have eased the whole process	Training and development on technologies	"(teachers feel that they are) at the same point where we were in March 2020" (Teacher 1, Focus Group 1)	"Us, teachers, are also students and we needed to learn from ourselves. In fact, a lot of the training in the

		"these are aspects that, usually, a lot of people are not used to and, more than that, they do not accept it (…) and are not sensitized for peers training" (Teacher 1, Focus Group 1) "a lot of teachers had difficulties (…) and low digital literacy" (Teacher 6, Focus Group 1)	beginning, several webinars were delivered but they were supposed to be applied the next day, there was no time to consolidate that training and mature the teachers" (Leader 5) "did not reach everyone" (Leader 2)
	Leadership competencies and training	"the truth is that there was some good will, but it did not go further than that" (Teacher 1, Focus Group 2) "the leadership could have done more, we all could have done more" (Teacher 2, Focus Group 2) "they (the Leadership) were also caught by surprise" (Teacher 7, Focus Group 1) "they were as stressed as we were" (Teacher 6, Focus Group 2)	"leadership in schools is a concept which is not instructed yet" (Leader 1) "I perceive a big difficulty in delegating and in establishing our own goals and clear indicators" (Leader 1)
	Communication between the teachers and the leadership	Specific communication spaces "simply (…) communication simply did not leave the space" (Teacher 6, Focus Group 2);	"The Direction of the school can't do anything if they do not have the teachers' support can collaboration" (Leader 5) "would like it to be a lot better and what is needed, from the side of everyone, is support" (Leader 5) "The majority of teachers still feel it is binding *(to write)*, in some way" (Leader 4)
	Financial Autonomy	-	"it is complicated because, actually, public accounts are hard by nature" (Leader 4) "*(when someone)* needs something, it is always said

			that we do not have a budget" (Leader 2)
	Guidelines and support from the government	"guidelines are not clear to anyone" (Teacher 6, Focus Group 2) Actually, I do not know if we still have a Minister or not, because I haven't been seeing him anywhere *(laughs)*" (Teacher 5, Focus Group 2) "I do not understand how, 8 months after the starting of the pandemic, there is not a clear guideline…" (Teacher 2, Focus Group 2) "it wasn't clear what we had to do" (Teacher 6, Focus Group 1)	"could be clearer" (Leader 5) the Minister could be more present and guiding, regardless of politic ideologies (…) the guidelines were not specific and (…) there are dozens of guidelines stating *whenever possible* or *if possible*" (Leader 3)
There were not only negative things	Adaptation capacities	"adapted and reinvented themselves as fast as possible" (Teacher 8, Focus Group 1) "Even the colleagues not having a natural aptitude for technologies (…) assumed teaching not as a job, but as a mission" (Teacher 4, Focus Group 1).	"teachers had an adaptation capacity to the circumstances, which was heroic" (Leader 4) "*(teachers)* did not want to leave their students behind" (Leader 3)
	Opportunity to learn new methodologies	"open window of opportunities" for them to "learn new tools, open doors to other kinds of methodologies" (Teacher 8, Focus Group 1)	
Impact of the pandemic for the future	Uncertainty	-	"there is no evident data" (Leader 3)
	Focus on Education	-	"that education must not suffer as much as it does sometimes" (Leader 5)
	Importance of technologies for the future of the school	-	"each one of us needs to self-train and understand that things can change very fast (…) and technologies are global" (Leader 2) "We lack the ability of performing remotely with the quality we perform in person" (Leader 3)

			"a full and constant attention for updating and recycling, training, and investment (…) or what is going to happen is that we will continue with the same paradigm of a 18th century school, in a 20th century building for 21st century generations" (Leader 1)
	Teachers' appreciation	"parents of the students to value teachers more (…) which will be positive in the future" (Teacher 1, Focus Group 2).	-

Annex U: Interviews and Focus Groups Summary table framed by the Porras' et al. (1992) and the Job Demands and Resources (1947) Models

Table 11 – Interviews and focus groups summary table (Porras and JD-R Model)

Scope (Porras et al. 1992)	Demand	Demands' negative effects	Resources to develop	Key references
Social Factors	Weak establishment of the work-home barrier (teachers)	Technostress and the deterioration of the physical and mental health of the teachers; incompatibilities within the home and work scope	Specific strategies demonstrating how can teachers, students and the leadership establish these barriers	"at 7pm we were coming here *(to the platforms)*, we had something, at 9pm maybe we had another assignment, another question…" (Teacher 1, Focus Group 2)
	The ineffectiveness of institutional Communication	Lack of collaboration; teachers in different paths; underachievement of common goals	Specific strategies to boost information flow and ensure its reception	"communication simply did not leave the space" (Teacher 6, Focus Group 2)
	Lack of feedback and reflexivity behaviours	Lack of team effectiveness and learning from past mistakes; underdevelopment of methodologies and innovation	Specific spaces for feedback and development of new strategies having in mind old experiences and methodologies	Questionnaires' results on the Reflexivity variable
	Tiredness and exhaustion	Inability to recover; decrease in mental and physical health	Specific tools and mechanisms for recovery	"I was exhausted. Even though we had a lower number of classes (…) they occupied a lot more time" (Teacher 5, Focus Group 1)
Organizational Arrangements	Lack of support of the teachers from the side of the leadership	Low perception of Organizational Support from teachers' side; demotivation	Strategies to promote a common vision and perception of organizational support from the side of the leadership	"if there was some technologic evolution, and concerning technologic competencies, the merit was from the teachers, who wanted to self-learn (…) concerning our leaders, at the moment we would be the

			same" (Teacher 1, Focus Group 1)
Lack of teachers' recognition from the side of the Leadership	Demotivation from the teachers' side; lack of perception of organizational support	Specific spaces for feedback and the recognition of good practices	"and I do not know if I can say that I am hurt, but, such as my colleagues, I was expecting that, such as some parents recognized, others stated that we reinvented ourselves and exceeded expectations in what we were doing" (Teacher 6, Focus Group 2)
Low Transformational Leadership Behaviours	Difficulty in leading the teacher's board; lack of outcomes concerning these leadership behaviours and perception, from the side of the members of the organization, of the lack of these transformational behaviours and other competencies	Training on Transformational Leadership Competencies	"leadership in schools is a concept which is not instructed yet" (Leader 1) Questionnaires results' on the Transformational Leadership variable
Low E-Leadership Competencies	Inability to implement technologic strategies and methodologies in the school and drive change towards a more digital environment	Training on E-Leadership Competencies	"…never used Zoom, meets, teams and all those platforms" (Leader 1)
Lack of feedback and reflexive behaviours	Lack of team effectiveness and learning from past mistakes; underdevelopment of methodologies and innovation	Specific spaces for feedback and development of new strategies having in mind old experiences and methodologies	Questionnaires' results on the Reflexivity variable

Annex V: Detailed Intervention Proposals

Table 12 – Detailed Intervention Proposals

Intervention	Scope (Porras et al. 1992)	Description	Results' evidence	Theory's evidence	From/ To whom	When	Desired effects
* Results' presentation session	Social Factors	Initial session, performed by the Leadership or the author of the project, aiming at presenting and clarifying the results obtained through the data gathered during the Project. During this session, a brief brainstorming moment between the Leadership/author of the project and the teachers, should also be done, as well as an opinion assessment.	"The Direction of the school can't do anything if they do not have the teachers' support and collaboration" (Leader 5)	From the side of the Leadership, communication is extremely important to keep every member of the organization in the same path, promote shared mental models and behaviour patterns which will promote goal achievement (Zaccaro et al., 2001) Some Functional Leadership behaviours and functions (Morgeson et al., 2010), such as, in an initial stage, defining the mission of the team, to establish expectations and goals, are also very	From the Leadership To the teachers	Teachers' final meetings On the 23rd June	To create the general sense and raise awareness for the need for the proposals to be presented next and understand what the immediate teachers' thoughts and suggestions are concerning the topic. At the same time, create the perception of an active participation of the teachers on an important topic for the school and making them a part of the process.

				important for the achievement of the team's goals and its good functioning. The building of team mental models which will lead for the members of the team to perceive a shared vision and the same goals to attain (Zaccaro et al., 2001; Kozlowski et al., 2008).			
** Training program on Leadership Competencies	Organizational Arrangements	Creation of a training plan for the Leadership, focusing on the competencies stated by the teachers as less developed, and others which will be equally important for the future. Examples of some target competencies are the feedback delivery, how to provide	"the leadership could have done more, we all could have done more" (Teacher 2, Focus Group 2) "leadership in schools is a concept which is not instructed yet" (Leader 1) "I perceive a big difficulty in	Some Functional Leadership behaviours and functions (Morgeson et al., 2010), such as, in an initial stage, defining the mission of the team, to establish expectations and goals, to structure and plan activities and methods, to promote training and development for the team, and to promote sensemaking withing	To the Leadership	For four weeks, starting in July, before classes start 3 days a week during the three weeks (9 sessions), plus the final assessment on the 4th week, being	The development of leadership skills that are not only useful during this time of pandemic and recovery, or other times of crisis and imposed change, but rather the creation of a range of cross-cutting skills to all stages (critical or not) gone through by the school. This intervention provides the leadership

| | | organizational support, creation and development of a common vision and a shared mental model among every member of the organization, communication, change management, among others. | delegating (…) and in establishing our own goals and clear indicators" (Leader 1)

Median average score on the evaluation of the Transformational Leadership Competencies on the teacher's questionnaire | the members of the organization, are also very important for the achievement of the team's goals and its good functioning. At the same time, feedback provision is also seen as relevant, as already stated, alongside with monitoring the team, manage team boundaries, solve problems, provide with resources, and support the social climate (Morgeson et al., 2010).

These leadership functions, when properly integrated by the leaders, promote the satisfaction of team needs and enhance effectiveness (Morgeson et al., 2010). | | this the 10th session | with job resources to cope with expected and unexpected demands, as well as prevent them. |

| ** Good Practices on e-teaching/learning | Social Factors | Development of a Good Practices' Manual not only concerning remote teaching/learning, but also regarding the mix of both presential and remote methods, as well as the integration of a digital component on presential methods. Topics such as boundaries' establishment, remote communication, how to properly use digital means, among others, will be developed. | "I was exhausted. Even though we had a lower number of classes (…) they occupied a lot more time" (Teacher 5, Focus Group 1)

"at 7pm we were coming here (to the platforms), we had something, at 9pm maybe we had another assignment, another question…" (Teacher 1, Focus Group 2)

Median average score on the evaluation of the E-Leadership Competencies on the teacher's questionnaire | The incongruence between the boundaries established by the teachers and their understanding from the side of the other groups will lead to negative outcomes, such as strain and conflict (Kulka, 1979, as cited in Kreiner at al., 2009), as well as physical and emotional exhaustion (Kreiner et al., 2009). | To the leadership, the teachers, and the students | To be developed from July, and to be delivered next September, in the beginning of the school year | Building of a healthy digital environment at the school, and the development of some capacity building skills. At the same time, to give the sense of the increase of job control to teachers and students, which will allow them to integrate technologies easier and faster in their work methodologies, feeling more comfortable with them and perceiving them as useful and not as an extra responsibility or task.

This intervention provides the leadership, the teachers and the students with job resources to deal with other existing demands. |

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| ** Recovery Program | Social Factors | Creation and implementation of a recovery program, consisting of a handbook delivered to the teachers and the students, with the needed tools and methodologies aiming at recovering from all the stress due to the pandemic and the lockdown period. This handbook will integrate useful practices not only for this kind of situation, but also for critical ones such as exams time, final meetings, among others. Aspects such as technologies detox, how to control stress and have a repairing sleep will be approached. Workshops and | "I was exhausted. Even though we had a lower number of classes (…) they occupied a lot more time" (Teacher 5, Focus Group 1) "at 7pm we were coming here (to the platforms), we had something, at 9pm maybe we had another assignment, another question…" (Teacher 1, Focus Group 2) "my son does not know what he wants to be when he grows up, be he is sure he does not want to be a teacher" (Teacher 7, Focus Group 1) | Stressful situations at work usually lead to a decrease of physical and psychological health and well-being (Sonnentag & Fritz, 2007), at the same they hinder job performance. There are certain activities, which have common characteristics and promote certain experiences such as relaxation or psychological distance from the job mastery and job control, that will help during this recovery process (Sonnentag & Fritz, 2007) and increase engagement, health and well-being. Recovery processes are important to maintain health, well-being and job performance | To the Leadership, the teachers, and the students | To be developed from July, and to be delivered next September, in the beginning of the school year | Creation and development of a transversal set of recovery skills for the teachers, leadership and students, which will not only allow them to recover during this period of pandemic, but also during all the critical stages of the school year. An increase in the perceived organizational support during the delivery of these materials might also happen, since teachers and students will feel that there is caution and care about their well-being. This intervention provides the leadership, the teachers and the students with job resources. |

		webinars concerning the several topics will also be delivered, being a part of the recovery plan.	"the management before and after the pandemic is very different" (Leader 5) It is evident the decrease of the physical and mental health and well-being of the teachers when analysing the comparison questions on the topics regarding the before and after the pandemic.	(deCroon, Sluiter & Blonk, 2004; Eden, 2001, as cited in Sonnentag & Fritz, 2007). Perceived Organizational Support increases the positive feelings the members have towards the organization and their expectation of recognition whenever they commit to it (Eisenberger et al., 1986).			
** & *** Formal spaces to promote 360º feedback	Social Factors and Organiz ational Arrange ments	Formal and periodic spaces for the teachers to deliver feedback to the leadership and vice-versa, in a feedback 360º model. These spaces must not be integrated in other meetings but should	"when you perform the case study, Catarina, I want you to refer that this is not the perspective of one teacher, it is a general situation (…) and I do not know if I can say	It is the role of the Leaders to promote this feedback behaviour, both individual and collective, and reflection upon the methodologies used to achieve a certain goal (Zaccaro et al., 2001).	From the Leadership To the teachers and the students	Every quarter	These spaces will generate discussion on relevant themes for teachers and for students, which will be extremely useful for the arising of new strategies and methodologies. It will promote knowledge sharing among all the

| | | be created specifically for that aim. Also, to create and provide a similar space between the students and the leadership is an action for this intervention. Inside these spaces, recognition of good practices must also be done. They must set and provided by the Leadership. | that I am hurt, but, such as my colleagues, I was expecting that, such as some parents recognized, others stated that we reinvented ourselves and exceeded expectations in what we were doing (Teacher 6, Focus Group 2)

Specific communication spaces "simply (…) communication simply did not leave the space" (Teacher 6, Focus Group 2)

"would like it to be a lot better and what is needed, from the side of | The implementation of these kind of feedback behaviours from the side of the members is made with the purpose of achieve higher goals and increase performance, through the assessment of their work (Ashford & Cummings, 1983, as cited in Schippers, 2007).

The perception of safety (psychological) will make the members of the organization feel confident in changing (Schein & Bennis, 1965, as cited in Edmondson, 1999). The shared sense that a team is not going to punish someone or making them feel less valid because of a mistake or because of speaking up, is implemented, leading | | | intervenient, increasing psychological safety and the *at ease* needed to address certain issues. Also, it will create the need to review old methodologies and practices to improve the current ones, which will be extremely positive for school. Teachers and leadership will be aware of what is being performed well and what can be improve, which will also lead to recognition of good practice.

This intervention provides the leadership, teachers and students with job resources. |
|---|---|---|---|---|---|---|

			everyone, is support" (Leader 5) Low average score concerning the evaluation of the variable Reflexivity; median average score concerning Psychological Safety and Perceived Organizational Support	to mutual respect and trust (Edmondson, 1999).			
** & *** Specific spaces for content and methods sharing	Social Factors	Create new ones and capacitate the already existing informal spaces to share contents, experiences and doubts between the teachers. This virtual space can be created, if not already existing, in Microsoft Teams, the platform which is currently being used by the school. The	"these are aspects that, usually, a lot of people are not used to and, more than that, they do not accept it (…) and are not sensitized for peers training" (Teacher 1, Focus Group 1) Median scores on the Psychological Safety variable, as well as on the	This group cohesion will create a sense of care within the group, since the members of the organization are concerned about group achievement (Zaccaro et al., 2001). This perception of safety will make the members of the organization feel confident in changing (Schein & Bennis, 1965,	From the Leadership To the teachers and the students	To start in the beginning of the next school year in September	Promote the sharing of experiences and knowledge among teachers. This progressive sharing of content and methodologies will generate a climate of safety (psychological) and promote common help. Innovative solutions and methodologies will also appear in these types of groups, at the same

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| | | groups must be created by teaching area, and a general group comprising all the teachers must also be created to share more general interesting content to everyone. The same must happen for the students, with groups being created by grade. | Perceived Organizational Support one. | as cited in Edmondson, 1999).

The shared sense that a team is not going to punish someone or making them feel less valid because of a mistake or because of speaking up, is implemented, leading to mutual respect and trust (Edmondson, 1999).

Perceived Organizational Support increases the positive feelings the members have towards the organization and their expectation of recognition whenever they commit to it (Eisenberger et al., 1986).

Organizations are constantly changing and | | | time the relationship between the teachers can also improve. |

				there is the emergency of patterns connected with the digital revolution, such as telework and electronical communication which needs to be managed by leaders (van Wart et al., 2019).			
** & *** Development of periodic newsletters	Social Factors	Creation of a communication plan materialized in monthly newsletters sent by the Leadership. These newsletters must comprise internal and external content, such as important legislation for the teachers, new methodologies, new decisions, among many other topics. In the same newsletter, a space to anonymous suggestions from the	Specific communication spaces "simply (…) communication simply did not leave the space" (Teacher 6, Focus Group 2)	Organizations are constantly changing and there is the emergency of patterns connected with the digital revolution, such as telework and electronical communication which needs to be managed by leaders (van Wart et al., 2019).	From the Leadership To the teachers	General template to be prepared in July, the first one to be released in September; monthly implementat ion	Make formal communication more active, creating a sense of equality of the reception of information among all the teachers, and keeping them informed of important aspects. Also, it makes communication more participatory for those who may not have so much confidence, at an early stage, to express their opinions publicly. The newsletter is a job resource which will

		side of the teachers must exist for them to use when necessary.					improve communication.
** & *** Periodic well-being assessments as follow ups	Social Factors	Following the recovery plan implementation, the development and implementation of a periodic assessment concerning the physical and psychologic well-being of teachers, students and the leadership. The building of a plan based on the assessment, if needed, must also be done and downscaled.	"I was exhausted. Even though we had a lower number of classes (…) they occupied a lot more time" (Teacher 5, Focus Group 1)	Recovery processes are important to maintain health, well-being, and job performance (deCroon, Sluiter & Blonk, 2004; Eden, 2001, as cited in Sonnentag & Fritz, 2007) Perceived Organizational Support increases the positive feelings the members have towards the organization and their expectation of recognition whenever they commit to it (Eisenberger et al., 1986).	From the Leadership To the students and the teachers	To be developed in July To be sent every six months, starting in September, after summer	Generate the perception of concern and support from the side of Leadership, towards teachers and students, which will lead to a more positive climate at the school. At the same time, it will allow the creation of preventive actions concerning the theme, and not reactive ones, which will be extremely useful while the management of situations that are already expected to be more stressful and exhausting during the school year.

*Unfreeze
** Moving
***Refreeze
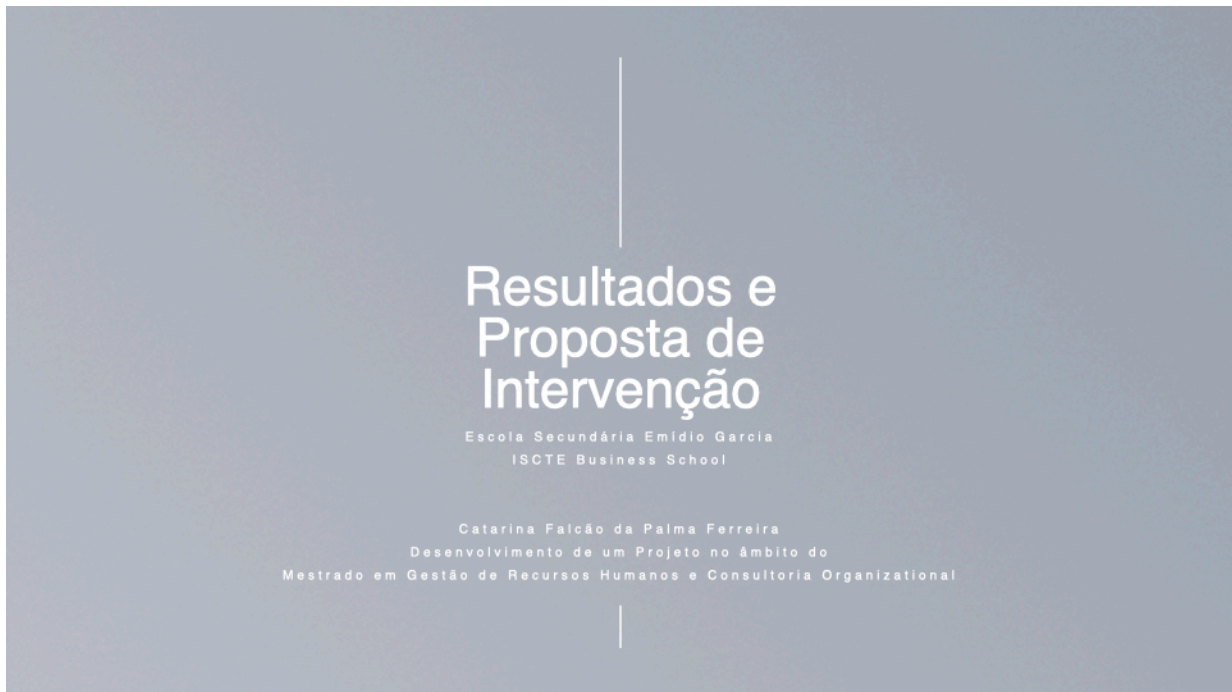
Resultados dos Questionários | Professores e Alunos

Resultados das Entrevistas e dos Grupos Foco | Professores e Liderança

Propostas de Intervenção para a Escola

QUESTIONÁRIOS RESPONDIDOS NA TOTALIDADE

PROFESSORES: 73

ALUNOS: 82

RECURSOS TECNOLÓGICOS

PROFESSORES
&
ALUNOS

Tópico	Escala	%		Valor médio	
		Internet			
		Professores	Alunos	Professores	Alunos
Internet em casa	Sim	100	98,8	-	-
	Não	0	1,2	-	-
Conexão de internet estável	1 a 5	-	-	4,23	3,70
Teve de comprar internet para dar/assistir às aulas	Sim	12,3	18,5	-	-
	Não	87,7	81,5	-	-
Internet foi providenciada pela escola	Sim	4,1	6,2	-	-
	Não	95,9	93,8	-	-
		Dispositivos			
Dispositivo utilizado	Computador	98,6	93,9	-	-
	Tablet	15,1	8,5	-	-
	Telemóvel	39,7	61	-	-
	Outros	4,1	1,2	-	-
Teve de comprar dispositivos	Sim	26	24,4	-	-
	Não	74	75,6	-	-
Foram-me providenciados dispositivos pela Escola	Sim	0	0	-	-
	Não	100	100	-	-
		Plataformas			
Plataforma utilizada	Microsoft Teams	98,6	97,6	-	-
	Zoom	56,2	82,9	-	-
	Google Meet	2,7	2,4	-	-
	Outro	1,4	2,4	-	-
Foi a escolha certa?	Sim	95,9	87,8	-	-
	Não	4,1	12,2	-	-
Condições propícias ao trabalho	1 a 5	-	-	3,42	-

Recursos Tecnológicos

Através dos dados, é possível perceber que:

- Ainda houve alunos que não conseguiram assistir às aulas à distância;
- Tanto Professores como Alunos tiveram de fazer investimentos, a título pessoal, para adquirir Internet ou Dispositivos;
- Na sua grande maioria, as plataformas utilizadas, tanto pelos Professores, como pelos Alunos, foram consideradas a escolha certa para entregar e assistir às aulas;
- Da parte dos Professores, é mediana a perceção de condições para entrega de aulas à distância, o que é normal visto que ninguém estava preparado.
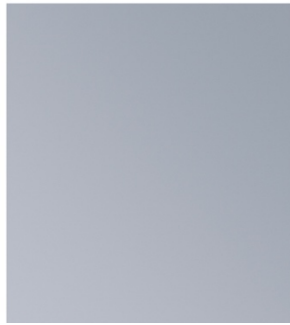
Impacto da Pandemia

PROFESSORES

Impacto da Pandemia

A pandemia teve efeitos negativos em campos como:

- Cyber segurança;

- Perda de interesse por parte dos alunos;

- Decréscimo da qualidade das aulas;

- Gestão da vida pessoal e profissional;

- Competências tecnológicas e para entregar aulas remotas;

- Inexistência de recursos tecnológicos.

Mas nem tudo foi negativo:

- Professores sentiram suporte por parte da Escola;

- Professores sentiram apoio por parte da Liderança;

- Já durante as aulas presenciais, todos colaboraram no que diz respeito às regras de segurança.

É importante dizer, também, que a grande maioria dos Professores não põe em questão o facto de aulas presenciais serem mais importantes e o método adequado para funcionamento da Escola.

Alguns destes pontos vão ser justificados na análise das entrevistas e dos Grupos Foco.
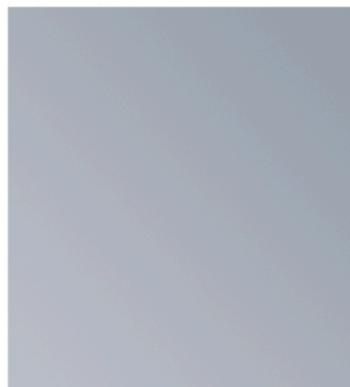
Saúde e Bem-Estar
Antes e depois da Pandemia

PROFESSORES

Saúde e Bem-Estar

Antes e depois do Confinamento

Em todos os tópicos abordados, os Professores consideram que a sua saúde e o seu bem-estar estão consideravelmente piores após o período de Confinamento. Os aspetos questionados foram:

- Bem-estar geral;
- Saúde Mental;
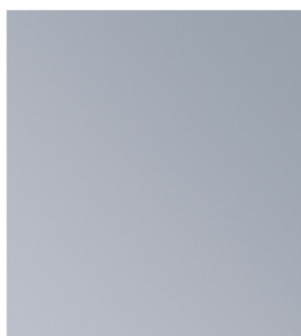- Saúde Física;
- Gestão da Vida Pessoal e Profissional;
- Capacidade de recuperar e relaxar;
- Gestão de tempo.

O número de horas de trabalho aumentou consideravelmente, na perspetiva dos docentes.

Alguns destes pontos vão ser justificados na análise das entrevistas e dos Grupos Foco.

Variáveis de Suporte
ao lidar com a Mudança

PROFESSORES

Variável	Definição	Escala	Média
1. Reflexividade	Avaliação de comportamentos existentes na escola, tais como a receção e entrega de feedback, reflexão no trabalho executado anteriormente e definição de estratégias a partir do mesmo	1 a 5	2,90
2. Integração de Tecnologias	Integração das diversas tecnologias na sala de aula	1 a 5	3,67
3. Relevância das tecnologias	Importância dessas mesmas tecnologias para o bom funcionamento das aulas	1 a 6	4,35
4. Liderança Transformacional	Avaliação de comportamentos, da parte da liderança, tais como "Identificar e articular uma visão comum", "ser um modelo a seguir", "estimulação intelectual dos docentes" e "providenciar apoio individualizado	1 a 7	5,33
5. E-Liderança	Avaliação das competências digitais da Liderança	1 a 5	3,49
6. Apoio Organizacional Percebido	Sensação de apoio por parte da Escola enquanto organização e Liderança, utilizando parâmetros como o reconhecimento, a preocupação aquando da tomada de decisão e adaptação.	1 a 7	4,97
7. Segurança Psicológica	Avaliação do à vontade, por parte dos docentes, para exporem os seus problemas, para encontrar, em conjunto, soluções para eventuais erros e pedir ajuda.	1 a 7	4,92
8. Capacidade de adaptação	Adaptação durante o período de pandemia, no que diz respeito à resolução de problemas, lidar com o imprevisto, aprender acerca do trabalho e novas tarefas, gestão de stress.	1 a 7	5,72

Alguns destes pontos vão ser justificados na análise das entrevistas e dos Grupos Foco.
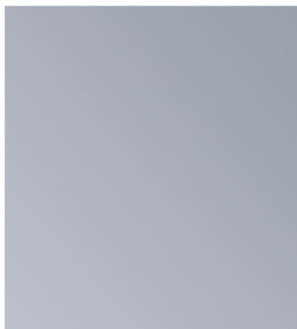
Efeitos da Pandemia

ESTUDANTES

Efeitos da Pandemia

Estudantes

Pelos alunos, através dos questionários, foram transmitidos vários aspetos:

- A pandemia afetou a sua experiência e sucesso escolar;
- Apesar disso, os alunos sentiram-se apoiados pelos Docentes (mais do que pela Liderança, o que faz sentido visto os Docentes terem sido o contacto direto dos alunos durante o confinamento);
- Aulas presenciais como insubstituíveis.

Foram-lhes pedidas algumas sugestões de melhoria, caso o ensino à distância volte a acontecer, por algum motivo:

- Outras maneiras de efetuar a avaliação;
- Formação para o ensino à distância;
- Entrega de alguns recursos por parte da Escola;
- Aulas mais curtas;
- Desenvolvimento do pensamento crítico e autonomia dos alunos, para os mesmos não serem tão dependentes.

Alguns destes pontos vão ser justificados na análise das entrevistas e dos Grupos Foco.

Tecnologias na sala de aula

ESTUDANTES

Tecnologias na sala de aula

Os estudantes não percepcionam uma forte integração das tecnologias em contexto sala de aula. No entanto, entendem que as mesmas são importantes para as suas aulas.

Variável	Escala	Média
1. Integração de tecnologias	1 a 5	3,50
2. Importância das tecnologias	1 a 6	4,54
3. Capacidade de adaptação	1 a 7	5,38

Conclui-se, também, que os alunos consideram ter tido uma boa capacidade de adaptação à pandemia.

Alguns destes pontos vão ser justificados na análise das entrevistas e dos Grupos Foco.
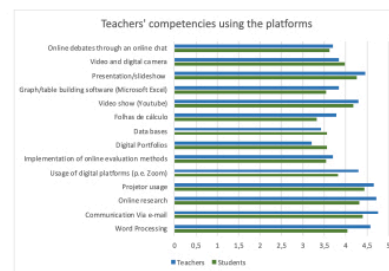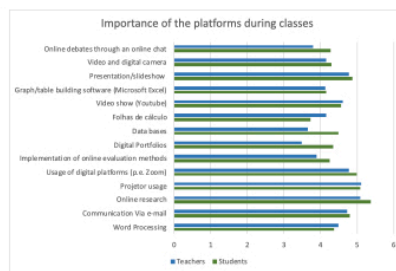
Foi pedido aos alunos e aos professores que avaliassem as competências dos docentes na utilização de diversas tecnologias importantes ao contexto sala de aula. Os docentes avaliam-se com mais capacidades do que aquelas que os alunos lhes conferem. Ao mesmo tempo, relativamente a todas estas tecnologias, os alunos conferem-lhes mais importância para o contexto sala de aula do que os docentes.
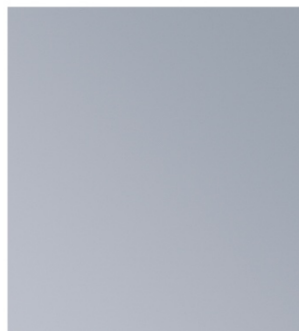
Entrevistas e Grupos Foco

Direção e Professores

Tema	Tópico	Professores	Liderança
Maiores dificuldades	Alunos e docentes com recursos tecnológicos escassos	"Foi contado tacitamente que havia computadores" "Quando os computadores não existiam, nós comprámos (…) eu precisei de uma câmara, eu comprei uma câmara" "…nunca foi perguntado aos Professores se eles tinham internet ou não"	"… a Escola ainda não está equipada" "a gestão antes e depois da pandemia é muito diferente"
	Falta de cooperação por parte dos estudantes	"desde o momento em que entraram em confinamento (os estudantes), no espírito deles, começam as férias" "não nos Podemos esquecer que o resto da família também estava em casa" "uma exposição em que fomos o centro alvo"	-
	Dificuldades na gestão da vida pessoal e profissional	"Eu estava exausta, mesmo com um menor número de aulas (…) elas ocuparam muito mais tempo" "às 19 estávamos a vir aqui (às plataformas), tínhamos qualquer coisa, às 21h talvez tivéssemos mais um trabalho, mais uma questão" "o meu filho não sabe o que quer ser quando for grande, mas tem a certeza que não quer ser professor"	-
	Falta de conhecimento técnico	"os alunos pediam ajuda e eu não sabia para lhes explicar"	"eu nunca tinha utilizado o zoom nem essas plataformas todas"
O que poderia ter facilitado este processo de adaptação?	Falta de suporte e reconhecimento por parte da Liderança	"se houve alguma evolução na parte tecnológica e de competências tecnológicas, foi por mérito de todos nós, dos professores que quisemos aprender por vontade própria, ou seja, as nossas chefias neste momento, estamos igual" "quando fizeres este estudo, Catarina, quero que refiras que isto não é a perspetiva de um professor, é uma situação geral (…) e eu não consigo dizer se estou magoado, mas tal como os meus colegas, eu estava à espera de que, tal como alguns pais reconheceram, outros também dissessem que nos reinventámos e excedemos as expectativas no que fizemos"	- -
	Preferência pelas aulas presenciais	"para aqueles que pensavam que passariam pela exclusividade quase do e-learning no ensino, esqueçam isso"	"as aulas presenciais são a melhor opção" "hoje em dia, os professores dão as suas aulas e vão para casa. Não existe componente social. Parecemos robots, entramos, saímos, e não existe relação social (…) e isto deixa-nos muito tristes"
	Dificuldades dos estudantes	"os que eram bons, permaneceram bons, o que eram maus, ficaram ainda piores, e a dinâmica dentro da sala de aula, mesmo que já estejamos presencialmente, não ajuda nada" "os alunos com necessidades educativas especiais, eles estão-se a perder e, muitos deles… eu receio que eles não vão recuperar" "Eles (os alunos) falam e revelam a preocupação que, de facto, existe a necessidade de eles estarem todos juntos"	"dificuldades ao aceder à rede informática" "alguma deficiência da parte do ministério e do município, em providenciar a todos os alunos as mesmas condições"
	Formação e desenvolvimento nas competências tecnológicas	"Estamos no mesmo ponto que estávamos em Março de 2020" "estes aspetos aos quais, normalmente muitas pessoas não estão habituadas e, mais do que isso, não aceitam (…) e não estão sensibilizados para o treino de pares" "muitos professores tiveram dificuldades (…) e baixa literacia digital"	"Nós, os professores, e os alunos, precisámos de aprender por nós mesmos. De facto, muito do treino inicial, alguns webinars foram entregues, mas era suposto serem aplicados no dia seguinte, não houve tempo de consolidar essa formação e maturar os professores" "não chegou a toda a gente"
	Formação e treino nas competências de Liderança	"a verdade é que houve boa vontade, mas não foi além dessa boa vontade" "a liderança podia ter feito mais, todos poderíamos ter feito mais" "Mas eles (a liderança) também foram apanhados de surpresa" "Eles estavam tão ansiosos como nós"	"a liderança nas escolas é um conceito que ainda não está instituído" "eu perceciono uma grande dificuldade em delegar (…) e em estabelecer os nossos objetivos e indicadores claros"
	Comunicação entre os docentes e a liderança	"a comunicação simplesmente não saía desse espaço"	"A Direção da Escola não pode fazer nada se não tiver o apoio e colaboração dos professores" "gostaria que funcionasse muito melhor, e o que é preciso da parte de todos, é suporte" "a maioria dos professores ainda sentem que é comprometedor comunicar algumas coisas por escrito"
	Diretrizes apoio do Governo	"as diretrizes não foram claras para ninguém" "não era claro o que tínhamos de fazer" "aliás, eu não sei se temos Ministro ou não, eu não o tenho visto em lado nenhum (risos)"	"podiam ser mais claras" "O Ministro podia ser mais presente, mais acutilante, independentemente de ideologias políticas (…) as diretrizes não foram específicas e (…)"

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		"eu não entendo como é que, passados 8 meses desde o início da pandemia, ainda não há diretrizes concretas"	houve dezenas de regras que diziam *quando for possível* ou *se possível*"
Não houve apenas aspetos negativos	Capacidade de adaptação	"adaptámo-nos e reinventámo-nos o mais rapidamente possível" "Mesmo quando os colegas não tinham uma aptidão natural para as tecnologias (...) assumiram isto não como um trabalho, mas como uma missão"	os professores tiveram uma capacidade de adaptação às circunstâncias, que foi heroica" "não quiseram deixar os seus alunos para trás"
	Oportunidade de aprender novas metodologias	"foi uma janela de oportunidades" e de "aprender novas ferramentas, abrindo portas para novas metodologias"	
Impacto da pandemia para o futuro da Escola	Incerteza	-	"não existem dados garantidos"
	Foco na educação	-	"a educação não pode sofrer tanto como sofre às vezes"
	Importância das tecnologias para o futuro da Escola	-	"cada um de nós precisa de se auto formar e perceber que as coisas podem mudar muito rápido (...) e que as tecnologias são globais" "Não temos a mesma capacidade para ensinar remotamente, que temos para ensinar presencialmente" É necessária "uma atenção plena e constante para a atualização, para a reciclagem, para a formação e para o investimento, ou quando não, continuamos com o mesmo paradigma que nós temos, que é uma escola do século 18, num edifício do século 20 para gerações do século 21."
	Reconhecimento dos docentes	"que os pais dos alunos nos valorizem mais (...) o que vai ser positivo no futuro"	-

Propostas de Intervenção

Proposta de Intervenção	Descrição	Intervenientes	Efeitos desejados
Sessão inicial de apresentação dos resultados deste Projeto	Sessão inicial com os Docentes, feita pela Liderança, onde se procedesse à apresentação e clarificação dos resultados obtidos durante o Projeto. Nessa mesma sessão, poderia já ser feita uma breve sessão de brainstorming e recolha de opiniões aos docentes.	Aos docentes	Criar a perceção geral da necessidade das propostas a ser apresentadas de seguida e perceber que tipo de sugestões os docentes podem dar. Ao mesmo tempo, vai criar a participação ativa dos mesmos no processo
Plano de formação e treino em competências de Liderança	Desenvolvimento do plano de treino para a Liderança, com foco nas competências apontadas pelos docentes como menos desenvolvidas, e noutras que serão úteis para o trabalho da Direção no futuro. Exemplo de algumas competências alvo de foco são a entrega de feedback, suporte organizacional, criação e divulgação de uma visão comum, divulgação de informação, gestão de mudança, entre outras.	Para a Liderança	O efeito é o desenvolvimento de competências de liderança que não sejam apenas úteis durante esta altura de pandemia, ou outras alturas de crise e mudança imposta, mas sim a criação de um leque de competências transversais a todas as alturas (críticas ou não) atravessadas pela Escola.
Manual de boas práticas digitais	Desenvolvimento de um manual de boas práticas, não só relativamente ao ensino totalmente remoto, mas também à mistura de ambas as componentes, cada vez mais presentes no Ensino. Neste manual, estarão presentes tópicos como a gestão de expectativas relativamente à comunicação digital (horário, canais de comunicação), bem como utilizar os meios digitais de forma saudável e eficaz.	Liderança, docentes e alunos	Criação de um ambiente digital saudável na escola e desenvolvimento de algumas competências de capacitação. Ao mesmo tempo, dar a sensação de maior controlo no trabalho aos docentes e aos alunos, o que irá fazer com que eles mais facilmente integrem tecnologias na sua forma de trabalho, sentindo-se mais confortáveis com as mesmas.

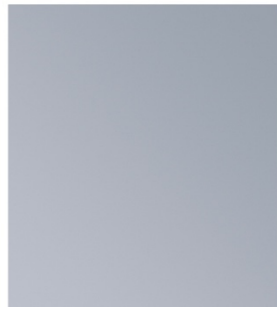|			
Espaços formais de entrega de feedback 360º	Espaços formais e periódicos de entrega de feedback da liderança para os professores e vice-versa. Estes espaços não devem ser incluídos noutras reuniões, devem ser espaços específicos para o efeito. Um espaço deste género com os estudantes também é muito importante, utilizando o representante dos mesmos para recolher opiniões da parte dos alunos e, posteriormente, transmitir à Liderança, que depois também pode entregar sugestões aos alunos. O reconhecimento de boas práticas também deve ser feito nestes espaços.	Liderança, docentes e alunos	Estes espaços irão gerar a discussão de temas relevantes para os docentes e para os alunos, os quais podem ser extremamente úteis para o aparecimento de novas estratégias e metodologias interessantes. Vai criar uma partilha de conhecimento entre todos, proporcionando segurança psicológica e o à-vontade necessário para abordar certos temas. Ao mesmo tempo, irá existir a necessidade de rever antigas metodologias e práticas de forma a aprimorar as atuais, o que será extremamente positivo para a Escola. Os docentes e a Liderança irão ter a consciência do que está bem e do que pode ser melhorado. Isto também irá levar ao reconhecimento de boas práticas, o que é muito importante.
Criação de métodos e espaços específicos para partilha de conteúdos e experiências	Criação de espaços informais de partilha de conteúdos, experiências, metodologias e dúvidas entre os professores. Se estes espaços já existirem, fomentar a sua utilização. O espaço virtual pode ser criado no Microsoft Teams, ao qual todos têm acesso. Os grupos podem ser criados por áreas, por disciplinas, ou pode até haver um grupo geral, para todos os docentes, em que houvesse partilha de conteúdos interessantes. O mesmo deveria acontecer para os alunos, tendo os mesmos grupos, por anos de escolaridade.	Docentes e alunos	Proporcionar a partilha de experiências e conhecimento entre os docentes. Esta partilha progressiva de conteúdos e metodologias vai gerar um clima de segurança e promover a entre ajuda. Soluções e metodologias inovadoras também podem aparecer neste tipo de grupos.
Plano de Recuperação	Desenvolvimento de um plano de recuperação, consistindo num manual entregue aos docentes e aos alunos, com as ferramentas e metodologias necessárias para proceder à recuperação do período de confinamento e todo o stress decorrente da pandemia ainda existente. Este manual terá práticas que são úteis, não apenas neste momento, mas em todas as alturas de stress (altura de testes, exames, reuniões, entre outros). Aspetos como a desintoxicação das tecnologias, como obter um sono reparador e como controlar o stress irão ser abordados. A existência de alguns workshops e webinars relativos ao tema, também fazem parte do plano.	Liderança, docentes e alunos	Criação de um conjunto transversal de competências de recuperação aos docentes, liderança e alunos, que não só lhes permita a recuperação durante este período de pandemia, mas sim durante todos os períodos mais críticos em que os mesmos sintam essa necessidade. Um aumento do apoio organizacional percebido, durante a entrega destes materiais, pode também acontecer porque os docentes vão sentir que existe uma preocupação relativamente ao seu bem-estar.
Desenvolvimento de Newsletters periódicas	Desenvolvimento de newsletters periódicas por parte da liderança, com conteúdos relevantes para todos os docentes, internos ou externos à Escola, e até ligados a legislação importante. Nesta mesma newsletter deveria haver um espaço para sugestões anónimas por parte dos docentes, para os mesmos poderem utilizar quando fosse necessário.	Liderança e docentes	Tornar a comunicação formal mais ativa na escola, criando uma sensação de igualdade de informação entre todos os docentes e mantendo-os informados de aspetos importantes para eles. Ao mesmo tempo, torna a comunicação mais participativa para aqueles que podem não tem tanta confiança, numa fase inicial, em expressar as opiniões publicamente.
Avaliações periódicas de bem-estar	No seguimento do plano de recuperação previamente descrito, é necessário implementar avaliações de bem-estar periódicas de forma a perceber o estado dos docentes, da liderança e dos alunos, e perceber que medidas e estratégias podem ser adotadas para melhorar aspetos que necessitem.	Liderança, docentes e alunos	Irá gerar a perceção de preocupação e suporte por parte de Liderança, para com os docentes e alunos, o que irá levar a um clima mais positivo na Escola. Ao mesmo tempo, vai permitir a criação de ações preventivas relativamente ao tema, e não reativas, o que pode ser extremamente útil na gestão de situações que já se prevejam como mais stressantes e desgastantes na Escola.

Obrigada!

Annex X: Interventions' Toolkit to send to the Leadership

Intervention Toolkit

Secondary School Emídio Garcia
ISCTE Business School

Catarina Falcão da Palma Ferreira
Project Development concerning the Master in Human Resources Management
and Organizational Consultancy

Index

Proposal 1:
Results' Presentation

Agenda for the results' presentation

- New explanation of the project context and the several data gathering stages;

- Presentation of the relevant results and the most important ones for the teachers;

- Presentation of which are the Leadership goals for the school, aiming the Project;

- Participative moment of feedback and suggestion gathering.

Proposal 2:
Leadership Training Program

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Session 1: Training Introduction

- Review of the project's results;
- Overview of the Leadership current state in schools;
- Answer to the question: Why are Leadership and its behaviours so important?
- Overview of the training plan.

Topic	Goal	Activity
Review of the project results	Align the training plan with the results	Exposition by the trainer
Overview of the Leadership current state in schools	Understand the starting point	Exposition by the trainer
Answer to the question: Why are leadership and its behaviours so important?	Understand what can be achieved with the training	Participative: exchange of ideas and debate within the participants
Overview of the training plan	Perceive what will be done in the next sessions	Exposition by the trainer

Session 2: Schools as organisations

- What are organisations?
- Why is it important to perceive schools as organisations?
- How can this specific school benefit from this vision?

Topic	Goal	Activity
What are organisations?	Understand the concept of organisation	Exposition by the trainer
Why is it important to perceive schools as organisations?	Understand how can this concept be adapted to school, namely Public Schools	Exposition by the trainer
How can this specific school benefit from this vision?	Review the way the school is being perceived, and what are the needed steps to achieve an organisational vision, as well as its benefits	Participative: Exchange of ideas and debate between the participants; exposition of concrete measures from the side of the participants

Session 3: Leader vs Manager

- What is the difference between leading and managing?
- Benefits of having leaders
- Good practices and general leadership behaviours
- Concepts' introduction: Functional Leadership and Transformational Leadership

Topic	Goal	Activity
Leading vs Managing	Difference between these two concepts and way of action	Exposition by the trainer
Benefits of having leaders	Understand how the school can benefit from having leaders	Participative: debate
Good practices and leadership behaviours	Understand what kind of behaviours are missing in the school	Practical: in groups, reach to several specific behaviours to adopt in the school
Transformational and Functional Leadership	Exposition of Podsakoff's (1990) vision (Transformational Leadership) Exposition of Morgeson's (2010) vision (Functional Leadership)	Exposition by the trainer

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Sessions 4 & 5: Functional Leadership
Based on Morgeson's (2010) vision

- What is Functional Leadership?
- Functional Leadership competencies
- Specific behaviours to materialize these behaviours
- How can the school benefit from having these kinds of behaviours?

Topic	Goal	Activity
What is Functional Leadership?	Understand the Functional Leadership concept	Exposition by the trainer
Functional Leadership competencies	List and explanation of the different skills	Exposition by the trainer
Specific behaviours that materialize those competencies	Understand what kind of behaviours are aligned with each competence	Practical: create a list of behaviours to adopt; role-play activity
How can the school benefit from these behaviours	Align the behaviours to the school's needs	Participative: debate on the topic

Sessions 6 & 7: Transformational Leadership
Based on Podsakoff's (1990) vision

- What is Transformational Leadership?
- Transformational Leadership competencies
- What specific behaviours materialize those competencies
- How can the school benefit from these behaviours?

| Topic	Goal	Activity
What is Transformational Leadership	Understand the Transformational Leadership concept	Exposition by the trainer
Transformational Leadership Competencies	List and explanation of the different skills	Exposition by the trainer
Specific behaviours that materialize those competencies	Understand what kind of behaviours are aligned with each competence	Practical: create a list of behaviours to adopt; role-play activity
How can the school benefit from having these kinds of behaviours	Align the behaviours to the school's needs	Participative: debate on the topic

Sessions 8 & 9: E-Leadership
Based on Van Wart's (2019) vision

- What is E-Leadership?
- E-Leadership competencies
- What specific behaviours materialize those competencies
- How can the school benefit from these behaviours?

Topic	Goal	Activity
What is E-Leadership	Understand the E-Leadership concept	Exposition by the trainer
E-Leadership Competencies	List and explanation of the different skills	Exposition by the trainer
Specific behaviours that materialize those competencies	Understand what kind of behaviours are aligned with each competence	Practical: create a list of behaviours to adopt; role-play activity
How can the school benefit from having these kinds of behaviours	Align the behaviours to the school's needs	Participative: debate on the topic

Session 10: Final Assessment

- Presentation of a report/plan with a set of specific measures, based on the previous sessions, as well as the respective timeline to implement in the school;
- Feedback on the training.
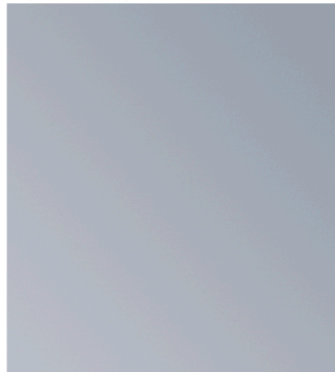
Proposal 3:

Digital Good-practices toolkit

Examples of good digital practices to adopt:

- Establishment of specific times to be online, regarding the School (establish, for instance, an end time at 19:00, if suitable, and turn off notifications and devices when reaching that time);
- Turn off work-related notifications during times which are exclusively dedicated to leisure/family;
- Create two different calendars, each one of them connected with the personal or professional email, depending on the goal;
- Professional calendar must be active only during hours dedicated to work and the school;
- Regarding the establishment of schedules, to manage the expectations of colleagues and students: if something is sent after the established end time, it will only be seen on the following day);
- Disable notifications respecting to leisure, and that can harm the work context;
- Establish specific times to be away from any kinds of technologies.

Proposal 4:

Recovery program

Examples of recovery tips:

- Exercise;
- Look for new hobbies and activities that increase well-being;
- Establish and keep an healthy daily routine;
- Keep an healthy sleeping routine;
- Try new relaxation techniques, such as meditation or mindfulness;
- Try different breathing control techniques;
- Healthy eating and hydration habits;
- Establish goals and objectives not related to professional life;
- Plan and materialize which times will be exclusively dedicated to rest and leisure (such as vacations, weekends, holidays) and comply with them;
- Read a new book.
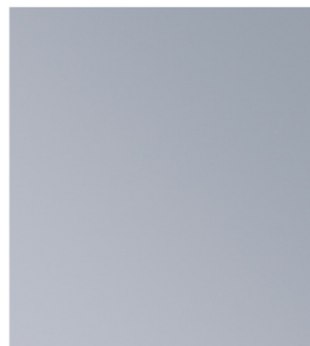
Proposal 5:

360º Feedback

Creation and capacitation of formal spaces to deliver feedback, exclusively for that purpose, comprising three different stages:

- Feedback from the Leadership to the Teachers;
- Feedback from the Teachers to the Leadership;
- Feedback within the Teachers.

It is very important that, inside this space, the recognition of good practices also exists, both by the Teachers and the leadership.

Concerning the students, a similar process should be carried out with the students' representatives, after they gather feedback near the colleagues.
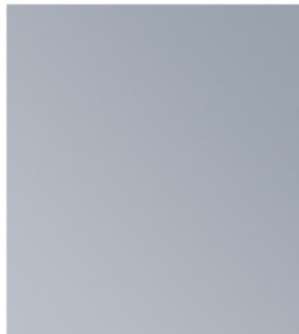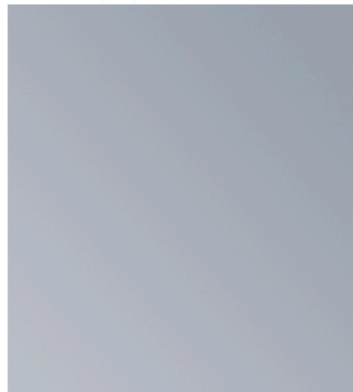
Proposal 7:

Periodic Newsletters

Example of topics to be included in the newsletter:

- Anonymous comments box/suggestions box (Google forms without data gathering);
- Direction's message (motivation for the teachers and other members of the school);
- News and updates concerning law and legislation;
- Important news for the teaching career and the course of the school year;
- Activities to take place soon at the School;
- Recognition of School victories during that period.

Proposal 8:

Periodic well-being Assessments

Examples of questions to ask in the assessment:

Example of an easy-to-review periodic form:

"Rate from 1 to 5 the following aspects, according to your current situation:
- Physical health;
- Mental health;
- General well-being;
- Management of personal and professional life;
- Ability to recover and relax;
- Time management;
- Total number of working hours (from 5, if the number of hours is adequate, to 1, if not);
- Leadership Support;
- Motivation for work."

Thank you!

Annex Y: Proposal's Feedback

Obrigado Catarina

Achei que fizeste um excelente trabalho.

Parabéns pelo excelente trabalho. Vai com certeza ser muito útil.

Annex Z: Intervention's Proposed Chronogram

Table 13 - Interventions' Proposed Chronogram

PHASE	Intervention Proposal	Stages	2021 / 2022 (timeline)
1	Project Results' Presentation	- Present the results to the teachers	
2	Training Program on Leadership Competencies (10 sessions - 3 days a week during 3 weeks and a last session on the 4th week before school starts)	- Introduction to the program (1 session)	
		- Schools as organizations (1 sessions)	
		- Leader vs Manager (1 session)	
		- Functional Leadership Competencies (2 sessions)	
		- Transformational Leadership Competencies (2 sessions)	
		- E-Leadership Competencies (2 sessions)	
		- Final learning assessment (1 session)	
3	Good practices on e-teaching/learning	- Presentation of the booklet to the teachers	
		- Presentation of the booklet to the students	
		- Delivery of the physical materials to the teachers	
		- Delivery of the physical materials to the students	
		- Feedback gathering on the contents	
4	Recovery Program	- Presentation of the program to the teachers	
		- Presentation of the program to the students	
		- Delivery of the physical materials to the teachers	
		- Delivery of the physical materials to the students	
		- Webinar 1 teachers - restfull sleep	
		- Webinar 1 students - restfull sleep	
		- Webinar 2 teachers - general recovering methods and tools	
		- Webinar 2 students - general recovering methods and tools	
		- Feedback gathering on the program	
5	Formal spaces to promote 360º Feedback	- 1st formal feedback space (presentation of the methodology)	
		- Feedback delivery moment every 3 months	
6	Specific spaces for content and methods sharing	- Introduction of the importance of these spaces	
		- Monitoring of their usage every 4 months	
7	Development of periodic Newsletters	- Establishment of specific sections to be integrated on the newsletter	
		- Establishment of the template and sending format	
		- Sending of the first newsletter	
		- Monthly sending	
8	Periodic well-being assessments as follow up on the recovery program	- Introduction and explanation of the 1st assessment (doubts clearing)	
		- Delivery of the assessments every six months	

Timeline headers (2021): June (1, 7, 14, 21, 28), July (5, 12, 19, 26), August (2, 9, 16, 23, 30), September (6, 13, 20, 27), October (4, 11, 18, 25), November (1, 8, 15, 22, 29), December (6, 13, 20, 27)

Timeline headers (2022): January (3, 10, 17, 24, 31), February (7, 14, 21, 28), March (7, 14, 21, 28), April (4, 11, 18, 25), May (2, 9, 16, 23, 30)